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SENTENTIAL COMPLEMENTATION IN MIDDLE ENGLISH  
AND EARLY MODERN ENGLISH: A STUDY OF  
LINGUISTIC CHANGE.

The University of Michigan, Ed.D., 1971  
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SENTENTIAL COMPLEMENTATION IN  
MIDDLE ENGLISH AND EARLY MODERN ENGLISH:  
A STUDY OF LINGUISTIC CHANGE

by  
Eiko Tamano Ito

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Education  
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## INTRODUCTION

Traditional historical linguists tracing changes in syntax from Middle English to Modern English have concluded that the changes are slight, modifying the grammar in no fundamental way. The apparently great changes that altered highly inflected Old English to a largely analytic language relying heavily on word order and function words had taken place already in the Middle English period. Superficially, there seems to be very little left in the grammar to undergo further change. Given such a point of view, it is not strange that few studies of substantive value have been made of syntactic changes after the end of the fifteenth century.

Few scholars, however, have made clear the bases for the above conclusion by systematically comparing the two grammatical systems. What is usually done is to catalog the readily observable differences between Middle English and Early Modern English, namely, various morphological changes, particularly in the pronoun system, and a few periphrastic developments involving function words (see, e.g., Baugh 1951, Nist 1966, Pyles 1964, Robertson-Cassidy 1954). These scholars have rarely explained how individual changes arose and how the whole grammatical system was affected by the changes.

It is clear that historical linguists in the past have been concerned with showing only the differences, and not the similarities, between two grammatical systems. Language does change, but a good deal of it remains unchanged with

time. Otherwise, the language of a much earlier generation could never be understood by the speakers of later periods with very little or no training. This expectation is, however, often refuted by empirical data. To catalog apparent and often superficial differences does not recapitulate the way in which language changes. Traditional historical linguists have partially answered the question of what changes occurred but have left unexplained the questions of how and why these changes occurred, all of which are central to the study of linguistic change.

The concentration of scholars in the past on surface differences has been due to the lack of an adequate theory of syntactic structure. Recent developments in linguistic theory, initiated particularly by the insight that the underlying forms of sentences may be very different from their superficial forms, have called in question many assumptions and conclusions of historical linguistics. The object of the present investigation is to make a contribution to the study of syntactic changes from Middle English to Modern English with insights from recent theoretical developments. The contribution consists in 1) describing a segment of English syntax, i.e., sentential complement constructions, in two historical stages of English, i.e., Late Middle English of the fourteenth century and Early Modern English of the sixteenth century, and 2) comparing these constructions in the two stages to suggest historical changes in the system of sentential complementation which can be reasonably assumed to have taken place during this interval.

For the purpose of the proposed grammatical investigation I have chosen the following corpora:

Corpus A: Harleian MS. 674 (Har) of The Cloud of  
Unknowing c.1380

Corpus B: Ampleforth MS. 42 (Amp) of The Cloud of  
Unknowing<sup>1</sup> c.1580

The Cloud of Unknowing is the principal and most characteristic work of an anonymous author who, together with such writers as Richard Rolle, Walter Hilton, and Julian of Norwich, belongs to the tradition of medieval English mysticism. It was originally composed in the East Midland dialect in the late fourteenth century. Seventeen different texts exist today. The most authoritative edition of the Cloud (Hodgson 1944) uses Harleian MS. 674 as the basic text, on the ground that it is not only one of the earliest existing manuscripts but also the one which represents the author's dialect most closely (xxiii, li).

There also exists a late recension in Early Modern English of the Cloud, which is called the "Baker" version because Father Augustine Baker, the protagonist in the last phase of the English mystical tradition, knew the treatise only in this form. Many copies, both complete and incomplete, are extant, but Ampleforth MS. 42 seems to be one of the two basic manuscripts from which the other existing manuscripts were copied.<sup>2</sup>

Comparing two different versions of the same text provides

almost a control situation for comparing two grammatical systems; difference between the two systems may be explained with the minimum recourse to difference in such extra-linguistic factors as literary genre, subject matter, etc.

These two versions of the Cloud can be regarded as representative of the English language of both periods for several reasons. Since both are prose texts, they are presumably free of any syntactic modifications which might occur in a verse text for poetic exigencies. Furthermore, although a wide acquaintance with several well-known authorities in Latin can be seen in the treatise, there is no reason to suppose that the whole is a translation from Latin. Therefore, the over-all influence of Latin syntax is not likely. Finally, it seems that the idiosyncratic features in the author's language are minimal. The work apparently enjoyed a considerable popularity. The distant-relationship among the seventeen extant copies of the earlier version is an indication that the treatise was copied in many places and that the extant copies represent only a small proportion of the total number of transcriptions. The language of the Cloud must have been one which could be easily understood and accepted by more than a limited number of people. Since the most important motive for any recension is to bring the language of an original text into a closer correspondence with the language of the day, the Baker version may be safely assumed to be not far removed from the English language of the late sixteenth century. It is to be concluded, therefore, that the two versions of The Cloud of Unknowing are

desirable texts for syntactic study.

It is obvious that sentential complementation plays a crucial role in the grammar of a language. The sources of complex sentences in English (and perhaps in all other languages) are: 1) Complementation, 2) Relativization, and 3) Conjunction. In order to gain insight into language creativity--in the sense that there are an infinite number of possible sentences in any language--any linguistic description must face the problem of complex sentence formation and complementation as part of it. There is reason to suspect that there are common properties shared by all of the three systems of complex sentence formation. At the present stage of investigation, however, it is a more urgent task to study and describe grammatical phenomena within each system. I do not mean to say, it must be added here, that a segment of a grammar can be studied independently of others. Without a picture of a grammar as a whole, no portion of it can be adequately analyzed and described. Nevertheless, when the whole grammar has been investigated, a linguist can determine precisely where a particular segment fits within the system and how it interrelates with the other elements. It is only in this sense that a certain segment of a grammar can be isolated and studied in any meaningful way.

In order to achieve the object of this investigation, two things are of vital importance, namely, a theory of linguistic change, and a framework for grammatical analysis and description. The first two chapters discuss the historical and descriptive theories underlying this study. To anticipate the conclusions

of these chapters: I believe that the view of grammar within the generative grammatical framework, i.e., a system of ordered rules, and the concept of linguistic change as modifications of the earlier grammatical system brought about by change in rules, are the most useful for a comparative study which aims at a theory of linguistic change. Generative grammatical theory requires that rules be maximally general and explicit, and that they be ordered with respect to each other. The comparison of two or more sets of such rules is no complicated task like that of a mass of unclassified raw data, which many scholars in the past bravely attempted. It consists simply in looking for the existence of new rules and differences in the details and the order of rules in the later grammatical system. Thus, under generative grammatical theory, comparative work may be maximally simple. The application of these generative grammatical concepts to a specific grammatical problem has been attempted in subsequent chapters. Throughout the present study, familiarity with certain basic assumptions in generative grammar has been assumed, but it is hoped that the reader will be able to evaluate the conclusions of the later chapters on the basis of what has been discussed in the first two chapters.

FOOTNOTES

INTRODUCTION

<sup>1</sup>This manuscript has never been printed in book form.  
It is preserved at Ampleforth Abbey, England, and I obtained  
a microfilm copy of it.

<sup>2</sup>Letter from Dom Placid Spearritt, OSB, of Ampleforth  
Abbey, dated Jan. 4, 1968.

## CHAPTER I

### LINGUISTIC CHANGE AND HISTORICAL LINGUISTICS

#### 1.0 Introductory Remarks

Traditionally, historical linguistics was sharply differentiated from general descriptive linguistics in subject matter and methods. New discoveries in general linguistics, however, have gradually come to be applied to historical data. Such applications presuppose not only that a new linguistic model in general linguistics can be used for the study of historical data, but also that it is necessary to re-evaluate many traditional concepts in historical linguistics, the most important of which is probably the nature of linguistic change. Several successful attempts led to calling into question the sharp separation of descriptive and historical linguistics. Now there is reason to assume that these two linguistics can be profitably integrated within the general field of linguistics. And the study of linguistic change has come to operate from quite different assumptions. Thus the first chapter is devoted to the examination of the concept of linguistic change.

#### 1.1 Dichotomy of Synchrony and Diachrony

It is the Swiss scholar Ferdinand de Saussure that first tried to explicitly state the dichotomy of synchrony and diachrony. Scholars before him questioned which perspective, synchronic or diachronic, could better reveal

the true nature of language. According to Saussure, however, these scholars missed the real point at issue. The facts of language are divided, so he argues (83, 99), into two distinct classes, synchronic and diachronic, each requiring a different method of study. Therefore, what is of utmost importance is to put each fact in its own class and not to confuse the two methods of study.

Central to Saussure's separation of the two linguistic studies is the particular way in which he views linguistic change. First, linguistic changes are all particular. Changes begin with individual speakers and are only later adopted by the whole speech community. That is, changes are part of parole, before they become part of langue (98). Secondly, from the "ever fortuitous nature of a state," it follows that each change is "unintentional" (85). One fortuitous state (e.g., fōt:fēt, pl.) is no better than the older state (fōt:\*fōti) for the purpose of signaling the sg.-pl. distinction. The change of \*fōti to fēt happened to trigger off alteration in the number signaling system, but it came about through sheer accident: the alteration is "a fortuitous and involuntary result of evolution" (86).

Thus Saussure (87) concludes:

Language is a system whose parts can and must all be considered in their synchronic solidarity. Since changes never affect the system as a whole but rather one or another of its elements, they can be studied only outside the system.

This conclusion is right, however, only if we can accept the two presuppositions it is based upon. If all linguistic changes originate in parole and they are all unmotivated, then we should expect to encounter only deviation in performance, i.e., a "slip-of-the-tongue" type of innovation, which happened to be adopted later by the speech community and nothing else. However, counter-evidence for this expectation has been reported from many languages (see below, p.17). Moreover, Saussure's emphasis on absolute intra-systemic solidarity of linguistic elements would lead, if taken literally, to the conclusion that two different systems share no common features except by accident and cannot profitably be related. However, it is empirically observed that the speech (as recorded, for example, in written form) of a much earlier generation can be more or less understood without special training by the members of a later generation (Klima 1964b:73). This indicates that there are certain over-all similarities shared by different stages of a language, rather than the total independence of each. If it is possible to relate two systems in a systematic way, then we can profitably consider how elements in a linguistic system change and why they change the way they do, questions which, for Saussure, would be meaningless to ask, since he assumes that change takes place simply by accident. Indeed it is precisely such questions that motivated the re-interpretation of linguistic diachrony.

## 1.2 New Approach to Diachrony

### 1.2.1 Roman Jakobson

Around the end of the 1950's generative grammarians began to approach the problem of linguistic change within their theoretical framework and have been making important contributions since. Some of these recent developments in historical linguistics, however, were anticipated more than three decades ago in the works of one European scholar.

Roman Jakobson accepts the distinction between synchronic and diachronic viewpoints in language study, but he objects to Saussure's view of linguistic change as particular and unintended. In Saussure's view, the equilibrium of linguistic elements is disturbed each time that change occurs; thus Jakobson (1928a:2)<sup>1</sup> argues that changes as viewed by Saussure are "destructive factors, fortuitous and blind." Yet, in Saussure's position (Saussure 81), as far as the individual speaker is concerned, change does not exist. The speaker cannot grasp the succession of language facts in time. In order to be able to use language, the speaker has to have a static synchronic linguistic system where all its elements are solidly knit together. Therefore, for Saussure, the role of the individual speaker in linguistic change is very limited. In opposition, Jakobson (1928b:5) writes:

Elle [la doctrine de F. de Saussure] ne laisse... à la collectivité des sujets parlants qu'à trouver un sens à l'état de désordre, dans lequel ils se trouvent à un moment donné, en l'interprétant comme un système ordonné.

That is to say, to accept Saussure's position, one would have to assume that the speaker accepts as an orderly system each given state deviating from an earlier one due to changes which have taken place. However, Jakobson goes on to say, this position does not account for the obvious fact that a speech community accepts and sanctions some innovations but not others, which Jakobson (1928a:1) refers to as the "social character" of linguistic change. Saussure's explanation for this "social character" of linguistic change would be that it is ultimately an extra-linguistic phenomenon. In order for the speaker to be able to accept a given state of deviations as an orderly system, these deviations would have to be of a very limited kind, namely, such modifications of speech habits as are imperceptible to the speaker and the hearer. The grammar of language does not have to account for the directions of these imperceptible shifts in speech habits. Jakobson, on the other hand, emphasizes the intention of speakers in linguistic change instead of viewing the problem of the social character of linguistic change as simply mechanical and extraneous to the grammar. When some change disturbs equilibrium within a system, speakers often initiate other changes to restore equilibrium rather than merely accept the state of deviation as an orderly one (Jakobson 1928b:5-6). Thus Jakobson proposes to view linguistic change teleologically: every transition from one system to another necessarily bears a linguistic function. Innovations which are functionless are not sanctioned. There is an underlying principle of purposefulness in the evolution

of linguistic systems. In this view changes are by no means particular but systematic with "l'intention d'exercer une action sur le système" (1928b:6) and should be treated in the grammar of language in a general way.

Since Jakobson's position emphasizes the systematic nature of linguistic change, it becomes now natural to study various linguistic changes in terms of systems which undergo them. In a proposition presented at the first International Congress of Linguists in 1928, Jakobson (1928b:3), together with S. Karcevski and N. Trubetzkoy, suggests that

L'antinomie de la phonologie synchronique et de la phonétique diachronique se trouverait être supprimée du moment que les changements phonétiques seraient considérés en fonction du système phonologique qui les subit. Le problème du but dans lequel ces changements ont lieu doit être posé. La phonétique historique se transforme ainsi en une histoire de l'évolution d'un système phonologique.

It is not the successive development of individual sounds that should be investigated but the succession of whole stages, for unless one knew the relationship of a sound to the other sounds in one synchronic phonological system, one could never understand why sounds changed the way they did.

Jakobson does not discard the Saussurean opposition of synchrony and diachrony. Language can be analyzed either synchronically or diachronically. Re-examining the nature of linguistic diachrony, however, Jakobson (1931:220) objects to the easy equation of "la synchronie, la statique et le domaine d'application de la téléologie d'une part, et d'autre

part la diachronie, la dynamique et la sphère de la causalité mécanique." There is difference in perspective in language study, but the two linguistic studies are by no means in conflict but interdependent. The relationship between the two now is far less neat than in Saussure's theory, but a new course of study may comprehend more details of linguistic phenomena. It is one of Jakobson's many contributions to linguistics to call for a historical linguistics in which the understanding of a synchronic state would play a key role.

### 1.2.2 Structuralists

It is interesting to note that a Jakobsonian emphasis on the systematic nature of linguistic change was correctly accepted, at least in principle, by most of the structuralists of the period 1930-1960. For instance, the following quotation from Lehmann (149-150) echoes Jakobson's position:

In dealing with changes affecting a phonemic system we now require grammars to note not only individual changes but also that they present them within the systems of the two stages.... Since grammars of the past dealt largely with individual phonological entities, they have rarely provided phonological systems of the language under discussion. With our present awareness of the importance of structures and substructures in language, we find such historical grammars inadequate and look forward to improved presentations.

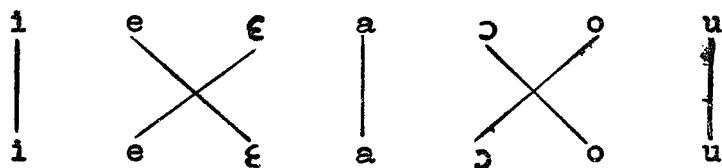
The interest of most structuralists in linguistic change seems to be restricted to the area of phonology. Therefore it is natural that the way structuralists try to handle historical changes is determined by their conception of

phonological structure, which has been referred to as "taxonomic phonemics" or "autonomous phonology (phonemics)" (Postal 1968a:x). This view of phonological structure holds that there is an autonomous level of phonemics, which requires reference to only two sorts of facts: phonetics and the difference between contrast and free variation (Postal 1968a:xi). Therefore, in studying phonological changes, structuralists must distinguish between changes in the phonemic system and modifications or shifts in sounds which may or may not lead to the former. In the structuralist framework, subphonemic changes are studied not for themselves but because the study is prerequisite for understanding changes in the phonemic system. And the results of investigation indeed have been presented in terms of the phonemic systems of successive stages. Thus, on the surface, structuralist assumptions in diachronic phonology have been consistent with the view that linguistic change is systematic.

Phonological changes discussed by structuralists, however, are of a very limited kind, that is, only those which originate in articulatory modifications. Grammatical properties like morphophonemic alternations, grammatical categories, and so on, are assumed to be irrelevant to phonology and are excluded from consideration in the study of phonological changes. Some structuralists are aware that in language are found those changes for which a continuous articulatory shift cannot well be postulated and which seem to involve a direct change from one phoneme to another. Lehmann (159) calls such cases "changes by phonemes." But

even when talking about "changes by phonemes," structuralists still limit themselves to cases which are "governed by articulatory possibilities and can best be understood by observing the underlying changes in articulation" (Lehmann 159); accordingly, such cases as metathesis, assimilation, dissimilation, are favored as typical examples. Thus, the structuralist position asserts that all the regular systematic statements which describe the change of phonological structure must be purely phonetic in both operation and environment. Consequently, this position does not consider the problem of the role of the speaker's intention in linguistic change, which is raised by Jakobson and is to be investigated later by generative grammarians more fully in their theoretical framework. Thus, although from a different theoretical framework, structuralists arrive at the Saussurean constraint on possible linguistic change, that is, mechanical change brought about by deviations or shifts in speech habits of the speaker "without [the speaker] having a hand in it" (Saussure 86).

Nevertheless, cases where this taxonomic phonemics would fail are by no means lacking. For instance, in the dialects of Northern Corsica, the vowels of Vulgar Latin developed in the following way:



(Kiparsky 1965:20, Ch.1)

That is, mid and open vowels have exchanged places with each other. The linguist, investigating this case, would want to explain not only why lowering in one case, and raising in the other, of a vowel took place, but also why this unusual phenomenon should occur both in front and back vowels. However, it would be impossible to do so in terms of articulatory change. Such cases as these would have to be listed as particular sporadic changes in taxonomic theory. Then many cases would be left as exceptions to the view that linguistic changes are systematic.

Most structuralists, in studying phonological changes, operate along the line suggested by Jakobson. Yet, by limiting themselves to those changes in the phonemic system which are phonologically conditioned, structuralists have arrived at the same conclusion as Saussure's as to the constraint on possible phonological changes, namely, those originating in deviations in performance. It seems that no structuralists have asked whether their view of phonological change, ultimately determined by their conception of phonological structure, really agrees with the claim of systematic linguistic change. Recently this question was raised by generative grammarians.

### 1.2.3 Morris Halle

Among generative grammarians, it is mainly Morris Halle who made the first crucial contributions to historical linguistic problems. In his important article published in 1962, Halle makes two particularly significant suggestions

concerning the nature of difference between grammars and the mechanism of linguistic change. First, Halle (343)<sup>2</sup> suggests that, since a grammar is viewed, in the framework of generative grammatical theory, as consisting of a system of ordered rules which generate grammatical sentences of a language, differences among grammars are due to the fact that a) different grammars may contain different rules, and/or b) different grammars may have differently ordered rules. In this view it becomes natural to regard linguistic changes as rule changes, rather than as random changes in the speech habits of the speaker; in other words, linguistic changes originate in langue, not in parole. Thus we can see that Halle's view of linguistic diachrony is in direct contradiction to Saussure's view, i.e., that changes originate in individual speaker's performance, or parole, rather than in langue, the knowledge underlying their performance. By presenting those cases which could not be accounted for by the "performance deviation" view of change, Halle and others following him<sup>3</sup> convincingly have shown, especially in the sphere of phonology, that their position is the more desired one. Secondly, Halle (344-345) suggests that linguistic change is of at least two types. First there is the addition of rules to the grammar. This, he posits, is the only way that the grammar of the adult may change. The addition of rules may result in a grammar that is not optimal (the simplest) for the language of the adult. In such a case the child in the next generation will not learn the grammar of his parent, i.e., "the original grammar plus added rules," but will construct his own optimal grammar. This restructuring

of the grammar is the second type of linguistic change.

The "rule change" view of linguistic diachrony suggested by Halle opened up a new set of interesting questions in historical linguistics. The study of linguistic diachrony is now related, in a significant way, to such more general issues as simplicity considerations, which form an integral part of generative grammatical theory, language acquisition, linguistic universals, and so forth. What is involved in Halle's view of change is the insight that a given set of sentences can be generated by more than one grammar, i.e., a set of ordered rules. Among several alternatives, which include his parent's grammar, the child selects, according to the simplicity criterion, certain formulations of rules that would generate most simply the representative data of the language he encounters. Simplicity is generally interpreted as the shortness of rules, i.e., a fewer number of rules or rules with fewest conditions. When the parent's grammar is optimal, the child chooses essentially the same rule formulations. When the parent's grammar is non-optimal, the child rejects this alternative. And diachronic linguistics began to seek an explanation for not only how languages change but also why they can change in the way that they do. Linguistic universals would help to attack this crucial problem in diachronic linguistics. Since certain types of linguistic structure are often encountered in the languages of the world, whereas certain other types are very rare, there seem to be some general principles, e.g., complexity, according to which human beings value certain

linguistic systems more highly than others. The direction of linguistic change may be determined by tendencies toward such highly valued systems. The facts of linguistic change, on the other hand, would serve as empirical evidence on linguistic universals; that is, what are postulated as linguistic universals cannot be justified if they never function in linguistic change. Clearly the study of linguistic diachrony and that of linguistic universals become interdependent. Thus, it has come to be accepted that diachronic and synchronic linguistics should and can be more integrated within the study of language in general. As noted above, it was phonological problems that were first attacked with this new perspective, since the comparison of phonological systems is relatively easier because it can proceed on the basis of universal phonetic features, whereas the common denominator for syntactic comparison is not yet so firmly established. Recently, however, the number of attempts in the sphere of syntax has been increasing.<sup>4</sup>

#### 1.2.4 Edward S. Klima

Edward S. Klima is one of the first to extend to the sphere of syntax the "rule change" view of linguistic diachrony. Following Halle's suggestion, Klima claims that certain differences between grammars are most simply analyzed as differences in the rules generating syntactic constructions, rather than constructions themselves. If different styles or successive stages of one and the same language<sup>5</sup> are viewed as independent systems not related to each other, one would have

to assume that any structural similarity between them is due to accident. What the linguist could do in studying changes from one style or stage to another is to trace successive developments of individual linguistic constructions, that is, to match elements in two linguistic systems and list them essentially item by item in a rule of the form, "X in  $L_1$  became Y in  $L_2$ ," or "X in  $L_1$  was replaced by Y in  $L_2$ " (X and Y may be a class of elements).<sup>6</sup> However, if the linguist takes one system as basic and the other as derived from it, the description will be simplified because "over-all identity of grammatical elements" does not have to be stated twice. Thus, in Klima's study, the relationship between two grammatical systems is thought of in terms of the rules ( $E_{1-2}$ ) that must be added as an extension to the grammar ( $G_1$ ) of  $L_1$  to account for the sentences of  $L_2$ . From the point of view of  $L_2$  independently, however, the sentences of  $L_2$  may be most economically described by a grammar ( $G_2$ ) differing from " $G_1 + E_{1-2}$ ".<sup>7</sup>

The most significant of Klima's contributions is that he made it clear that the direct comparison of  $G_1$  and  $G_2$  does not reveal historical changes. The set of extension rules " $E_{1-2}$ " would provide the connecting link between  $G_1$  and  $G_2$  and recapitulate the historical development. Essentially the same approach is taken in Elizabeth Closs's study of the history of the English verbal auxiliary (1965). The purpose of her study is "to reconstruct the intermediate steps that account for the types of innovations that can reasonably be assumed to underlie the observed mutations"

(404). Thus Closs also maintains that one stage of a language does not directly change into another. It gives us more insight to assume the existence of intermediate innovations, which may lead to restructuring, or, in Closs's term, mutations.

The general approach to linguistic diachrony developed and applied to empirical problems by Halle, Klima and many others suggests that synchronic and diachronic relatedness between grammatical systems can be specified in the same manner, namely, rules may be provided such that the different systems may be regarded as modifications or extensions of a given basic system. Moreover, the simplicity criterion proposed by generative grammarians insures that in cases where the addition of a single, simple rule does not affect the over-all simplicity of the grammar, the order of rules synchronically established will mirror properly the relative chronology of the rules (Halle 346). Thus, it became even clearer that the traditional separation of synchrony and diachrony was indeed a superficial one. Key issues in historical linguistics are no longer the distinction between elements which form a solid system and particular changes which form no system and cannot, therefore, be dealt with in a general way, but that of innovations--added rules--and restructuring, which notions are crucially related to the simplicity criterion in general linguistic theory.

#### 1.2.5 Paul Kiparsky

As to the precise mechanism of linguistic change, Klima

departs from Halle's suggestion in accounting for the history of the case system in English. Halle (344) limits innovation strictly to rule addition. Klima relaxes the restriction on the possible means of innovation so that it may also include rule inoperativization (the labeling of a rule as non-applicable) (1964b:94)<sup>8</sup> and rule generalization (the broadening of the domain of a rule) (1964b:155).<sup>9</sup> In his dissertation (1965) Paul Kiparsky raises the question of whether or not "innovation--restructuring" is the only mechanism of linguistic change. If innovation and subsequent restructuring were the only way in which linguistic change takes place, so he argues (1, Ch.2), isoglosses should be expected to consist typically of the absence or presence (or, former presence, if re-structuring has taken place) of certain rules. An innovation may not be easily placed at different points of a grammar, since its placement seems to be heavily constrained (Halle 346) and, therefore, difference in the order of rules should be a rare form of dialectal differentiation. This expectation is not confirmed, however, by empirical data. Isoglosses frequently consist of differences in the order of application of shared rules or small differences in the detail of essentially shared rules. This consideration led Kiparsky to posit "imperfect learning"<sup>10</sup> as a mechanism of linguistic change distinct from the "innovation--restructuring" path. Kiparsky (1965:12-15, Ch.2) argues that imperfect learning takes place in two ways: a) fortuitous ignorance, and b) overriding the data.

Fortuitous ignorance contributes to imperfect learning

in the following way. The child has constructed the optimal, simplest grammar for a certain body of his linguistic experience. It is possible that the language has counter-data which would motivate re-analysis. If, for some reason, these counter-data do not register on the child in the language-acquisition stage, no revision of grammar takes place and the grammar of the child is different from the grammars of the people whose speech constitutes the child's linguistic experience. Moreover, the child can, so Kiparsky suggests, actually override the data and construct a simpler grammar than his linguistic experience would justify. If the grammar is altered grossly (in terms of the number and frequency of altered forms, etc.), it is hard to assume that the counter-data have simply by chance not appeared in the child's linguistic experience, and it must be posited that "the simplification has, for some obscure reason, been 'worth' the violation of observational adequacy that the child has committed" (1965:15, Ch.2).

Clearly Kiparsky is trying to refine a theory of linguistic diachrony by introducing the mechanism of imperfect learning where Klma shows a departure from the view of linguistic change as first suggested by Halle. Like Halle, Kiparsky limits innovation strictly to rule addition. In Kiparsky's view, changes due to rule generalization are distinct from those changes clearly caused by "ordinary" rule addition. This distinction is motivated by the empirical observation that changes of the former type show a slow diffusion property, whereas changes of the latter type can

spread over large areas with astonishing rapidity. As for rule inoperativization, Kiparsky (1965:3-5, Ch.2) proposes to consider such examples as the following:

Ex. 1 Reordering in Swiss German dialects

1. Umlaut ([ -consonantal ] → [ -grave ] / ...)
2. Monophthongization (æt → ā except before vowels)  

$$\ast\text{ætli} \text{ 'egg (Dimin.)'} \rightarrow \text{āli} \quad (\text{Umlaut does not apply.})$$

Later reordered as

1. Monophthongization       $\ast\text{ætli} \rightarrow \ast\text{āli}$   
 $\downarrow$
2. Umlaut                    āli

Ex. 2 Loss of devoicing rule in some dialects of  
 Northern Switzerland and of Yiddish  
 Older bunt:bundes changed to bund:bundes

Kiparsky's criticism of rule inoperativization goes this way: if changes such as Ex.2 arise as speakers' instruction not to apply the devoicing rule, they must be matters of parole first,<sup>11</sup> and become part of langue (i.e., the rule has been lost from the grammar) only as the language is transmitted to a succeeding generation of speakers. On the other hand, changes such as Ex.1 involving change in a very abstract property like ordering cannot be considered as originating in anything but langue. Kiparsky (1965:6, Ch.2) concludes that "there seems to be no good reason for...making such a deep distinction between what would appear to be phenomena of a

rather similar kind." Klima's suggestion of treating rule generalization and rule inoperativization as a type of innovation is perhaps ad hoc. He needed them as he went along in his historical account of case syntax. Obviously Kiparsky's suggestion of imperfect learning should be examined carefully, because it has bearing upon the direction of language modification by human beings. For instance, if the child actually overrides the data (which are the representative sample of the parent's language  $L_1$ ) in constructing his own grammar, we hope to be able to specify what are the constraints on this data overriding, because the sentences that the child generates ( $L_2$ ) according to this grammar must be intelligible to the parent. Clearly certain difficulties arise if one tries to account for cases like Exs.1-2 in terms of added rules. But it has not yet been shown that this kind of change involving abstract properties of rules occurs only in child language. In Kiparsky's framework the concepts of rule addition and imperfect learning, that is, simplification, are related to adult and child language, respectively (1968:195). If such changes as Exs.1-2 do occur in adult language, and if we assume that adult language cannot undergo changes affecting the over-all simplicity of the grammar, then we still need to posit a new rule somehow incorporated into the adult's existing grammar as an innovation. As a matter of fact, it seems quite likely that an innovational rule which served to cause a subsequent restructuring was irrecoverably lost, so that an observed change appears to be a counter-example for

"innovation--restructuring."

Both Klima and Kiparsky, in constructing a theory of mechanisms of linguistic change, departed in certain different ways from the initial suggestion by Halle. Preference of one formulation over another should be determined ultimately by our knowledge of what it is that determines possible and impossible processes of language modification by the adult and what constitutes the evaluation measure used by the child in constructing his grammar. But we have only begun to understand some aspects of these problems. Until we get a deeper insight into them than at present, a theory of precise mechanisms of linguistic change may claim to be suggestive but not definitive.

### 1.3 Approach of this Study

We have seen how, as the concept of linguistic change was re-interpreted, particularly within the framework of generative grammatical theory, diachronic linguistics became an integral part of general linguistics. The assumptions about linguistic change within the generative framework may be summarized as follows:

1. Linguistic changes are changes in rules.
2. Linguistic changes are not directly reflected in two optimal grammars which are independently formulated.
3. Intermediate steps that underlie observed changes between different grammars must be reconstructed.

4. This task is done most simply by taking a given grammar as basic and others as modifications or extensions of this basic system.
5. This method of specifying the relationship between different grammars operates both synchronically (different dialects of one and the same language) and diachronically (different stages of one and the same language).

The present study operates in the generative grammatical approach to linguistic change with the above basic assumptions. From these assumptions we can derive our conclusion as to the goal of diachronic linguistics: diachronic linguistics as a structured discipline does not aim to compile optimal discrete grammars which happen to be genetically related and happen to be chronologically arrangeable, but to account for the evolutionary development from one grammatical system to another. The problem chosen for the present study is stated, in terms of this general framework, as follows: if  $L_1$  and  $L_2$  are the two different stages of English, i.e., Late Middle English and Early Modern English, then their grammars are structurally related but different systems and the description of the relationship consists in specifying over-all identity of grammatical elements and the extension rules which can explain differences between the two grammars, i.e., in constructing the  $G_1$ -based grammar of  $L_2$ , " $G_1 + E_{1-2}$ ." Such grammars would reveal with great clarity and in simpler form the same information that the direct comparison of optimal

discrete grammars,  $G_1$  and  $G_2$ , would provide essentially in the manner of listing all cases of item replacements. If the present study, operating in this framework, can succeed in accounting for historical changes in the English complementation system in a systematic way, it will serve to reinforce the correctness of the approach to linguistic change as proposed by generative grammarians.

As to the nature and mechanism of modification or simplification of a grammatical system, Klima's suggestion has been adopted, namely, to extend the means of innovation to rule inoperativization and rule generalization, rather than Kiparsky's suggestion to assign these to imperfect learning as distinct from "innovation--restructuring." I do not claim that I have weighed all the theoretical import of this decision. As stated at the end of 1.2.5, preference of one formulation over another cannot be determined definitively until we have more understanding of possible and impossible processes of language modification by the adult and the evaluation measure used by the child. Klima's formulation has been followed in this study because it seems to give for the purpose of the present investigation a more convenient descriptive framework than Kiparsky's. Kiparsky works on phonological changes in various languages, but Klima attempts to account for the development of one segment of English syntax, which this study also proposes to do, although concentrating on a different segment of syntax. I am aware of ad-hocness in certain parts of the investigation. Yet the question of "Why did a certain change take place in a certain

way?" presupposes the question of "What change took place and how?". My attempt has been to specify what changes occurred and clarify to what extent the question of how these changes occurred could be solved within Klma's framework. The question of why was left untouched, on which, however, more research in linguistic change, language universals and language acquisition will eventually shed light.

## FOOTNOTES

### CHAPTER I

<sup>1</sup>All the citations from Jakobson given below are taken from Selected Writings, I (1962).

<sup>2</sup>Page references below for Halle are to the reprinted version in Fodor and Katz (1964).

<sup>3</sup>E.g., Paul Kiparsky (1965, 1968)  
Paul M. Postal (1968a).

<sup>4</sup>E.g., Edward S. Klima (1964a,b)  
Elizabeth Closs (1965)  
Robin T. Lakoff, Ch.6 "Diachronic Change in the Complement System" (1968).

<sup>5</sup>In his 1964 article in Lg, Klima approaches the pronoun case syntax as reflected in different dialects. His dissertation handles the same problem historically, i.e., the changes in the case system from Late Middle English on to Modern English. Klima suggests that these two types of relatedness can be handled in a uniform way. He writes in his Lg article (1964a:2) that "within different styles of one and the same language...comparison of syntactically differing systems is simplified by overall identity of grammatical elements.... It is hoped that this CONTROL situation may help to clarify more complicated relationships, like those in historical linguistics between successive stages of one and the same language...."

<sup>6</sup>Cf. a statement of phonological change in Hoenigswald (2): ".../#kn.../ has been replaced by, or 'become', /#n.../..." A typical example of this kind of listing in syntax is found in Pyles (160):

The Old English masculine-feminine interrogative pronoun hwā became in Middle English whō, and the neuter form hwæt became what. As with the other pronouns, the dative drove out the accusative (OE hwone) of the first of these, the dative whōm (OE hwām, hwēm) being used in any objective function. Hwæt had the same dative form as hwā in Old English, but, as with other neutrals, this was given up..."

<sup>7</sup>The term "extension rule" is adopted in (1964a). Extension rules ( $E_{1-2}$ ) are those rules added as innovations in a Hallean fashion, which may bring about a non-optimal grammar. If " $G_1 + E_{1-2}$ " is non-optimal, restructuring takes place in a later generation such that the resultant grammar ( $G_2$ ) is optimal.

<sup>8</sup>Klima does not seem to make much use of the principle of rule inoperativization in his two studies, however.

<sup>9</sup>E.g.:

### Case Reduction

Stage One (c.1450)

Case marking is completely a characteristic of grammatical function.

$$\left\{ \begin{array}{l} \langle \text{trans} \rangle \\ p \end{array} \right\} \text{(Det) } \langle \text{pro} \rangle \Rightarrow \begin{matrix} 1 & 2 \\ 1 & 2 + \text{CASE} \end{matrix}$$

Stage Two (End of the 17th century)

1st Case Reduction Rule (Innovation)

$$\left[ \begin{array}{l} \langle n \rangle \\ \text{indet} \end{array} \right]_{\text{wh}} + \text{CASE} \Rightarrow \left[ \begin{array}{l} \langle n \rangle \\ \text{indet} \end{array} \right]_{\text{wh}} \quad \text{(Not applicable to relatives)}$$

Stage Three (18th century)

2nd Case Reduction Rule (Innovation)

$$\left[ \begin{array}{l} \langle n \rangle \\ \text{PRO} \end{array} \right]_{\text{wh}} + \text{CASE} \Rightarrow \left[ \begin{array}{l} \langle n \rangle \\ \text{PRO} \end{array} \right]_{\text{wh}}$$

If we assume rule generalization of the type of removing from the rule of some lexical feature, we do not have to have two separate reduction rules, i.e.,

$$\left[ \begin{array}{l} \langle \text{pro} \rangle \\ \text{indet} \end{array} \right]_{\text{wh}} + \text{CASE} \Rightarrow \left[ \begin{array}{l} \langle \text{pro} \rangle \\ \text{indet} \end{array} \right]_{\text{wh}}$$

See (1964b:155-156).

<sup>10</sup>Later Kiparsky adopted the term "simplification" for this mechanism; see his article in Bach and Harms (1968).

<sup>11</sup>I am not sure what Kiparsky really means by this. The devoicing rule may have the form

$$\left[ \begin{array}{l} +\text{consonantal} \\ \vdots \\ +\text{voiced} \end{array} \right] \Rightarrow [-\text{voiced}] / -\#$$

In Klima's formulation, an innovation would be posited such that the valence of this rule changes from OBL (obligatory) to NON (non-applicable). That is, where there is a structural analysis "  $\left[ \begin{array}{l} +\text{consonantal} \\ \vdots \\ +\text{voiced} \end{array} \right]$  before a word boundary marker," the

$$\left[ \begin{array}{l} \dots \\ +\text{voiced} \end{array} \right]$$

devoicing rule must not apply. I do not see why this innovation should be interpreted as occurring in parole, which I take to mean deviation in performance. What seems to be crucial here is the consideration of generality of theory; the loss of such rules as the devoicing rule does not generalize to re-ordering or rule generalization. See Kiparsky (1968:191).

CHAPTER II  
LINGUISTIC MODEL FOR SENTENTIAL COMPLEMENTS

2.0 Introductory Remarks

As can be readily seen from such sentences as "John said that she was a fool" or "that she is a fool is obvious," sentences can be embedded within other sentences to form complex sentences. The processes of complex sentence formation in language are: 1) sentential complementation, 2) relativization, and 3) conjunction of sentences. In this study we are interested in the first of these processes, sentential complementation.

Sentential complementation has been discussed rather extensively in literature since the early days of generative grammar. The concept of sentential complements<sup>1</sup> and the way to handle them has changed significantly in the course of time. Therefore it has been felt necessary to include the survey of the treatment of sentential complements within the framework of generative grammar before the discussion of the model of analysis and description for the present study.

The brief survey reveals that Noam Chomsky's Aspects of the Theory of Syntax (henceforth cited as Aspects), which proposed a significant revision of generative grammatical theory as a whole after ten years of existence, changed the treatment of sentential complements altogether. In the following discussion, therefore, relevant works are classified as 1) pre-Aspects, 2) Aspects, and 3) post-Aspects.

2.1 The Treatment of Sentential Complements within the Framework of Generative Grammar

2.1.1 Pre-Aspects

2.1.1.0 In the earlier version of generative grammar, the "complement" is treated as an unexpanded constituent on the phrase structure (PS) level. It is introduced by a PS rule essentially of the form

$$V \rightarrow \left\{ \begin{array}{l} \dots \\ V_T + \text{Comp} \\ \dots \end{array} \right\} / -NP$$

This unexpanded constituent Comp is subsequently specified by a transformational (T) rule. Thus, in this version of generative grammar, complex sentence formation due to complementation is a property assigned to the transformational component of the grammar.

2.1.1.1 Noam Chomsky. 1957. Syntactic Structures.

Chomsky (77) proposes, without going into detail, that most of the verb + complement forms introduced by a PS rule be excluded from the kernel and derived transformationally from some other source sentence.

2.1.1.2 Chomsky. 1958. "A Transformational Approach to Syntax."

The problem of transformationally derived sentential complements is studied more closely in this sketch at the 1958 Texas Conference. This sketch includes an elaborate rewrite rule for the subcategorization of complement verbs ( $V_T$ ) (1964 reprint:225-226):

$$V_T \rightarrow \left\{ \begin{array}{l} V_{Ta} \\ V_{Tb} \\ \dots \end{array} \right\} \quad /-\text{Comp}$$

$V_{Ta} \longrightarrow \text{consider, believe, ...}$

$V_{Tb} \longrightarrow \text{know, recognize, ...}$

.

.

.

Subcategorization is based on different transformational processes for inserting S into Comp: e.g., the class  $V_{Te}$ , includes verbs like persuade, force,..., which require the introduction of to; the class  $V_{Tg}$  includes verbs like avoid, begin,..., which require the introduction of ing; etc. The classes  $V_{Te}$ , and  $V_{Tf}$ , even though to is introduced for verbs of both classes, are distinguished, because the subject of the inserted sentence undergoes different transformations under identity with the subject of the matrix sentence: for instance,

- (1) I forced myself to speak ( $V_{Te}$ ,) (Reflexive transformation)
- (2) I wanted to speak ( $V_{Tf}$ ,) (Equi-NP Deletion transformation)

This approach, however, misses certain generalizations about sentential complements; for instance, it does not relate

- (3) I consider the assistant able
- (4) I consider the assistant to be able
- (3) is not considered as formed by the deletion of "to be" from (4). Since, in this early version of generative grammar,

subcategorization is handled in terms of branching rules, it is necessary to give such a rewrite rule for the category of  $V_T$  as given in the above. Thus sentences (3) and (4) are instances of different subclasses of  $V_T$ , although there are many similar pairs which might profitably be handled in a uniform way.

Chomsky's early treatment of the complement as a constituent on the PS level results in another more serious problem. Since Comp is introduced by a rewrite rule for V, it cannot be extended to embedded sentences in such sentences as

- (5) to err is human
- (6) seeing is believing

Thus, another category Nom (Nominalization), as distinct from Comp, must be posited on the PS level, although there are striking similarities in the syntactic phenomena called complementation and nominalization.

#### 2.1.1.3 Robert B. Lees. 1960. The Grammar of English Nominalization.

Since his purpose in this work is to study nominalization, Lees (9) dismisses the problem of complementation by saying that "there are also verbal constructions with passives, treated by Chomsky as verb + 'complement' transforms, for which we shall not provide any deeper analysis here." However, his study includes certain interesting insights for complementation. For instance, his analysis of "Factive Nominals" enables him to see structural differences among such super-

ficially similar sentences as the following:

- (7) Bill is persuaded to work by John (Complement)
  - (8) he is thought to be rich by everyone (Factitive Nominal)
  - (8) is related to
  - (9) everyone thinks that he is rich
- but (7) has no such paraphrase
- (10) \*John persuades that Bill (should) work
- Lees correctly notices structural identity among cases of nominalization involving that, for-to, and POSS-ing. But he is still a pre-Aspects grammarian in that he does not yet suspect complementation and nominalization might be treated in a uniform way.

#### 2.1.1.4 Charles J. Fillmore. 1963. "The Position of Embedding Transformations in a Grammar."

Fillmore's treatment of sentential complements in this study is also essentially the same as Chomsky's suggestion, but he contributes to the study of complementation by directing serious attention to what has come to be known as complementizers, especially in discriminating "genitive ING nominalization" and what he calls "telescoped progressives." Thus, in spite of their overt similarity, the two sentences

(11) I heard Mary playing my song

(12) I objected to Mary playing my song

are structurally quite distinct. (11) is the result of a transformation deleting "Tense + be"; therefore, corresponding to (11) is

(13) Mary was playing my song

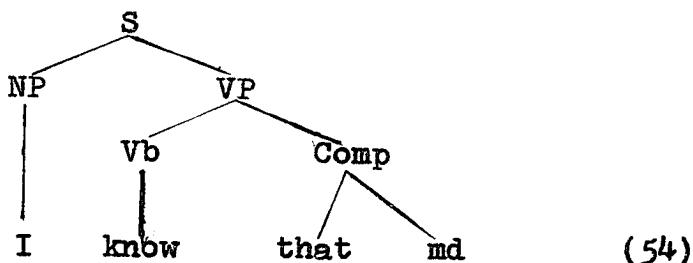
(12), on the other hand, is an instance of genitive ING nominalization from which the genitive morpheme has been dropped. Therefore, corresponding to (12) is not (13) but

- (14) Mary played my song

2.1.1.5 Jerrold J. Katz and Paul M. Postal. 1964. An Integrated Theory of Linguistic Descriptions.

Katz and Postal maintain (48) that certain nonterminal symbols of the PS subpart, or the base component, are a specific set of constituents which are developed into an occurrence of a matrix dummy (md) as their terminal representative. Then an embedding transformation operates to substitute a constituent sentence for some occurrence of md.

Thus, the treatment of complements in this study is essentially the same as other pre-Aspects works. Yet the authors' conception of verbal complements is more general than any of the previous authors: such Phrase-markers (P-markers) as the following



seem to indicate that Katz and Postal include in complementation what has been treated as nominalization.

The authors (48) point out also that "it is likely that Rel and Comp can be identified as a single 'Complement' constituent and that each of a certain set of constituents

dominates such a 'complement' which serves to provide the basis for recursive expansions." The logical extension of this insight would be an alternative conception of the syntactic component which would eliminate generalized transformations from the syntactic component. The authors (67) are aware of this possibility, although it is not further pursued in this work. In this sense, this work is a bridge between the earlier (pre-Aspects) and the revised (Aspects) version of generative grammar.

### 2.1.2 Aspects

#### 2.1.2.1 Chomsky. 1965. Aspects of the Theory of Syntax.

In this work Chomsky suggests a restructuring of the syntactic component. Now wherever a base P-marker contains a position in which a sentence transform is to be introduced, this position is filled with the category symbol #S#, which initiates derivations. The PS rules are thus allowed to apply cyclically, preserving their linear order. Therefore #S# now appears on the right in certain PS rules, where previously an unexpanded dummy symbol like Comp had appeared. In other words, the property of complex sentence formation is assigned to the base, rather than the transformational, component. The immediate result of this reformulation is that it is now possible to eliminate Comp from the set of category symbols. "Complement" can be defined as a functional or relational notion in the manner that other functional notions like "Subject" or "Object" are defined.

Although Aspects is not concerned exclusively with

complementation, there are many useful hints on this grammatical problem. In particular, the fundamental distinction between

(15) I persuaded a specialist to examine John

(16) I expected a specialist to examine John  
 is first noted in this work (22-23). Chomsky (1958) noted that different transformations--Reflexive or Equi-NP Deletion--would apply to these verbs when the subject NP's of the matrix sentence and of the sentential complement were identical. Although this significant feature might have been the indication of a deeper systematic difference, he did not pursue this problem any further. In his new version, Chomsky gives the underlying deep structures for (15) and (16) as the following:

(17) I persuaded a specialist a specialist will examine John

NP ————— Vb ————— NP ————— S

(18) I expected a specialist will examine John

NP ————— Vb ————— S

This insight led Rosenbaum to posit NP and VP complementation in his study of Modern English.

#### 2.1.2.2 Peter S. Rosenbaum. 1967. The Grammar of English Predicate Complement Constructions.

Rosenbaum applies the revised transformational theory of syntax, as developed in Aspects, to the particular grammatical problem of sentential complementation. It may be said that this is the first extensive work on the subject.

Central to Rosenbaum's study are two PS rules (1):

PS Rule 1     VP → V (NP) (PP) { S }  
     PP }

PS Rule 2     NP → DET N (S)

In this formulation cases of what have been called nominalization and complementation are no longer handled as the results of separate transformations. Nominalization and complementation are now defined as a relational or functional notion: cases of "nominalization" are sentences embedded in NP's ([S, NP]); some cases previously treated as "complementation" are sentences embedded in VP's ([S, VP]), although some "complements" seem to require NP complement analysis.

The tests offered by Rosenbaum (14) to distinguish the two types of sentential complementation are a) passivization of the entire sentence and b) the presence of a pseudocleft sentence. Thus in the paradigms

- (19) a. everyone preferred to remain silent
- b. to remain silent was preferred by everyone
- c. what everyone preferred was to remain silent
- (20) a. John tended to play with his little brother often
- b. \*to play with his little brother often was tended by John
- c. \*what John tended was to play with his little brother often

(19a) is an instance of NP complementation, whereas (20a) is an instance of VP complementation.

Rosenbaum's second PS Rule asserts that NP can dominate

S as well as N. In some cases this N is a true noun, as in

- (21) Columbus made the claim that the world was round

(Example from Jacobs and Rosenbaum 1968:171)

In other cases, however, it seems that there is no noun head, as in

- (22) Columbus demonstrated that the world is not flat  
 (Rosenbaum 10)

For cases like (22) Rosenbaum posits the existence of the pronominalized noun head it in the deep structure, which is subsequently deleted by a transformation. The justification he offers for this decision is that one is forced to a more complicated formulation of certain other transformations, e.g., Passive, if NP can dominate only S (10). Moreover, in certain cases, this it actually appears in the surface structure, as in

- (23) a. Columbus demonstrated that the world is not flat  
 b. that the world is not flat was demonstrated  
 by Columbus  
 c. it was demonstrated by Columbus that the world  
 is not flat (Rosenbaum 11)

Thus Rosenbaum makes it possible to handle in a uniform way those constructions involving sentential complements which are superficially unrelated but in which many regularities have been observed.

### 2.1.3 Post-Aspects

Although Rosenbaum's work provided a useful framework for studying sentential complementation, several of his

conclusions in it have been called into question by recent findings. The studies which appeared after Rosenbaum's and which present refinements over Rosenbaum's theory in some way or other include the following:

1. George Lakoff. 1966. "Deep-Surface Grammar."
2. Paul M. Postal. 1968b. "On Coreferential Complement Subject Deletion."
3. Robin T. Lakoff. 1968. Abstract Syntax and Latin Complementation.
4. Judith A. G. Johnson. 1969. "A Transformational Analysis of Ælfric's Lives of Saints."

These works are the result of increased insight into grammatical phenomena which were not fully understood nor investigated at the time of Rosenbaum's study. They all point out some inadequacies in Rosenbaum's analysis and present alternative analyses. Of these the most significant is perhaps the elimination of VP complements. At the end of his book (120-125) Rosenbaum gives a list of verb classifications in terms of the complement structures in which particular verbs may occur. Re-examinations of these verb classifications have revealed that Rosenbaum's "VP complement" constructions are either wrongly classified<sup>2</sup> or actually cases of NP sentential complements, involving deep structure prepositional phrases or verb-particle combinations.<sup>3</sup> A piece of information must be incorporated into the grammar of a language if there are generalizations statable with such information which are not statable without it. The VP complement analysis may considerably

reduce the number of restrictions that have to be stated for such rules as passive or pseudocleft sentence transformations, as Rosenbaum (15-16) points out, but only considerably, because the non-occurrence of such sentences as

- (24) a. \*for you to sing is loved by everybody
- b. \*to go there was wanted by me

and the occurrence of

- (25) for you to sing is preferred by everybody
- must be somehow accounted for. The most serious drawbacks are, however, 1) the arbitrariness of choice one is forced into, for instance, in discriminating Tr. Oblique NP complementation and Tr. VP complementation (indeed coax, force, warn, are classified under both categories by Rosenbaum (122-123); 2) the theory does not recapitulate the relationship between sentences with sentential NP complements and those with non-sentential NP's (Johnson 192). Thus the category of VP complementation has been eliminated, and post-Aspects works on sentential complementation operate along this line.

Other modifications of Rosenbaum's theory of complementation involve the ordering and formulation of some rules. G. Lakoff (1966:12-29) refutes Rosenbaum's relative ordering of Extrapolation and It Replacement, and presents a new formulation of the latter transformational rule.<sup>4</sup> Postal (1968b:16-35) suggests that Equi-NP Deletion is dependent on coreferential pronominalization and rejects Rosenbaum's "minimal distance" principle of the erasing and the erased NP's.<sup>5</sup> R. Lakoff (21-23) suggests, although rather

tentatively, that all the complementizers are not equal in rank. She argues that that insertion before the embedded sentence is basic and after its application complementizer-changing rules may apply to change that to for-to and other complementizers according to the subcategorization features of the matrix verb. Johnson's dissertation, which is an exhaustive study of Old English within the framework of generative grammar, essentially follows the theory of complementation as proposed by G. Lakoff. By successfully incorporating the concept of lexical features into her grammar, however, she makes it possible to treat sentential complements in a less ad-hoc way than before.

Johnson decides to represent as features of lexical items such things as preposition, determiner, tense, mood, aspect, which have been treated as morphemic symbols that actually occur in the deep structure.<sup>6</sup> Therefore they do not appear in the set of phrase structure rules posited by her (see p.52 below). Although the difference between the set of phrase structure rules in this feature analysis framework and the set posited in more traditional generative grammars is, in Johnson's words, "more apparent than actual" (20), there are decided advantages in her framework. For instance, certain rather ad-hoc symbols like PP and ADV, are now eliminated from the set of morphemic symbols. Non-clausal adverbs (prepositional phrases) are derived from NP dominated by VP if prepositions are considered segmental features of nouns. With regards to complementation, it is no longer necessary to posit Rosenbaum's Oblique sentential complement

categories. So-called Oblique sentential complements are merely a special type of NP complements, that is to say, those NP constituents of VP's into which prepositions may be subsequently incorporated in appropriate environments.

Corresponding to Rosenbaum's first PS Rule

$$\text{VP} \longrightarrow \text{V } (\text{NP}) \text{ (PP)} \quad \left\{ \begin{array}{l} \text{S} \\ \text{PP} \end{array} \right\}$$

is, in Johnson's grammar, simply

$$\text{VP} \longrightarrow \text{V } (\text{NP}^n)$$

Thus it is now possible to state that all sentential complements occur in NP's either in the subject position (NP immediately dominated by S) or roughly in the object position? (NP immediately dominated by VP) in the basic underlying structure.

## 2.2 Model of Analysis and Description

In this study we will follow the general theory of sentential complementation as developed by Rosenbaum and refined by G. Lakoff and other post-Aspects grammarians and adopt the framework of feature analysis as suggested by Johnson in her dissertation. The following is the recapitulation of some basic assumptions about sentential complementation in this framework of analysis and description:

1. Sentential complementation is one of the processes of embedding sentences inside other sentences.
2. Sentential complements are sentences embedded in a different way from relativized sentences. Roughly speaking, relativization requires the identity of appropriate NP's inside the embedding and embedded

sentences (Jacobs and Rosenbaum 200-201). This identity requirement is lacking in sentential complementation.

3. These sentential complements are marked by a unique set of markers taking the form of single and paired morphemes, which are called complementizers.
4. The function of these complementizers is to indicate that the sentence marked by them is no longer functioning as an independent sentence.
5. The major complementizers in Modern English are the following:
  - (a) I think that Fords are too expensive (that or clausal complementizer)
  - (b) I am concerned about John's being so lazy (POSS-ing or gerundial complementizer)
  - (c) I should like very much for you to reconsider your refusal (for-to or infinitival complementizer)

(Examples from Rosenbaum 24)

6. These complementizers are transformationally introduced into the underlying structure. Which complementizer is to be introduced depends on the subcategorization features of the matrix verb.
7. Sentential complements occur as either the subject or the object<sup>8</sup> of the matrix verb, alongside of the abstract pronoun it,<sup>9</sup> in the underlying structure.
8. From an underlying structure containing a sentential complement may be derived various related surface

structures, whose relationship is explained by different transformations which have applied. In subsequent chapters we will apply this framework to sentential complement constructions we find in Middle English and Early Modern English.

## FOOTNOTES

### CHAPTER II

<sup>1</sup>Sentences embedded within other sentences by the process of complementation are called sentential complements.

<sup>2</sup>E.g., such verbs of permission and causation as allow, let, cause, which are classified as Tr. VP Comp, are better analyzed as NP Comp verbs which take the whole sentential complement in the direct object position. In Rosenbaum's Intr. VP Comp category are included verbs of beginning, continuation, or final point. The subject NP complement analysis for them has been suggested to explain certain peculiar facts about them which cannot be explained by Rosenbaum's interpretation: e.g., García (1967:867); G. Lakoff (1968:20).

<sup>3</sup>Johnson's dissertation gives an excellent discussion of the subject in the appendix entitled "Sentential Complements: Are Two Categories Necessary?" (166-194).

<sup>4</sup>G. Lakoff (1966:18) states that the critique of Rosenbaum's rules and the alternative analysis presented in this paper has been worked out jointly by John Robert Ross and himself.

<sup>5</sup>See below, footnote 15, Ch. III.

<sup>6</sup>Johnson (21) states that her decision was motivated "partly by the desire for maximally simple rules and partly by the conviction that the concept of Charles Fillmore's case grammar can be assimilated into a more traditional generative grammar as lexical features (nominative, objective, benefactive..., etc.)."

<sup>7</sup>"Object" here is to be understood loosely, because it is used as a cover term for NP's with various features like [+Direct Object], [+Direction], etc., which occur within VP's as constituents.

<sup>8</sup>See footnote 7, above.

<sup>9</sup>In this study we will disregard sentential complements with a true N head.

## CHAPTER III

### SENTENTIAL COMPLEMENTATION IN MIDDLE ENGLISH

#### 3.0 Introductory Remarks

In the preceding chapters we have discussed the historical and descriptive theories underlying this study. Now we will apply the framework of analysis and description established there to the sentential complementation system in Middle English and Early Modern English. First, the present chapter discusses the rules to generate sentences containing sentential complements as they are in the optimal grammar of Middle English, which is viewed as the basic, or original, system,  $G_1$ , in our historical investigation. Then, the next chapter will discuss the rules for sentential complementation in Early Modern English, viewed as the extended grammar, " $G_1 + E_{1-2}$ ," i.e., the basic grammar plus innovations. Lastly, the final chapter will consider the sentential complementation system in the restructured optimal grammar of Early Modern English,  $G_2$ .

In the syntactic component of a generative grammar are two sets of rules: phrase structure rules and transformational rules. Phrase structure rules generate underlying, or deep, structures and transformational rules operate on deep structures of the correct form to produce appropriate surface structures. In the remainder of this study, phrase structure rules are discussed briefly because they are simple rewrite rules which expand immediate constituents of a sentence and are used to generate the deep structures of all the possible sentences of

a language, not only of sentences containing sentential complements; transformational rules are discussed at some length because it is precisely the operations of these rules that account for various syntactic phenomena of sentential complementation.

### 3.1 Phrase Structure Rules

The five phrase structure rules posited for Old English by Johnson (20) work also for the generation of deep structures of Middle English sentences. These rules are:

1.  $U \rightarrow \text{CONJ } S^n$   $(n = 1, 2, 3, \dots)$
2.  $S \rightarrow (\text{PreS}) \text{ NP AUX VP}$
3.  $\text{PreS} \rightarrow (\begin{cases} Q \\ \text{IMP} \end{cases}) \text{ (NEG) (EMPH)}$
4.  $\text{VP} \rightarrow V \text{ (NP}^n\text{)}$
5.  $\text{NP} \rightarrow N \text{ (S)}$

With this set of more general, simpler rules than proposed before (see 2.1.3 above), Johnson (19) is able to claim that "one component of the syntactic rule set [phrase structure rules] has not changed in over a thousand years."<sup>1</sup> I have accepted this claim as a valid one in my decision to work with her rules, and the fact that they indeed serve as a model for Middle English sentences is a support for her claim.<sup>2</sup>

It should be mentioned here that P-markers in the following sections are by no means intended to represent

the "deepest" underlying structure. They mostly represent certain much abbreviated intermediate structures, which are given only to facilitate discussion. The grammatical properties and categories which are immediately relevant to sentential complementation have been analyzed as closely as seems profitable, but other properties and categories have been taken for granted in the belief that it will not affect the substance of the findings and claims of this study.

### 3.2 Transformational Rules for Sentential Complements

The transformational rules relevant to sentential complements include at least the following:<sup>3</sup>

1. Complementizer Placement
2. Equi-NP Deletion
3. It Replacement
4. Reflexivization
5. Passivization
6. Flip
7. Extraposition
8. IO Shift
9. It Deletion
10. Complementizer Deletion

Of these rules, Flip is not posited by Johnson for Old English. Its existence in Modern English is suggested by the Lakoffs (see 3.8 below). There is reason to believe that it was operating in Middle English as well. IO Shift is not

given an independent status in Johnson's work.

### 3.3 Complementizer Placement

#### 3.3.1 The Rule

I posit the following as major complementizers in Middle English:

1. Clausal Complementizer, lexically realized as: bat
2. Infinitival Complementizer: [+Obj] -  $\left\{ \begin{array}{l} \text{to} \\ \text{for to} \end{array} \right\}$  ([+Inf])
3. Gerundial Complementizer: [+Poss] - [+Ger]

Examples are:

- (1) pou schalt wel vnderstonde bat I fynde...foure degrees & fourmes of Cristen mens leuying  
(H13.8-10)<sup>4</sup>
- (2) & herfore it is wretyn bat schort preier peersip heuen  
(H75.4-5)
- (3) bot in pis sorow nedep bee to haue discretion on pis maner  
(H83.14)
- (4) alle feendes...prouen for to felle it in alle bat pei kun  
(H16.12-13)
- (5) for trewly I do bee wel to wyten bat I can not telle bee  
(H69.1-2)
- (6) I...lete bee se my bodily stondyng  
(H109.18-19)
- (7) for I hope it schuld more cleerly com to his knowyng  
(H88.11)

The transformation which places a complementizer before

an embedded sentence has two phases:

1.  $[X \text{ it } [NP \text{ AUX VP}]_S \text{ Y}]_S$

1 2 3 4  $\Rightarrow$

1 2 C + 3 4

2. a.  $[X [C_{[+Cl]} Y]_S Z]_S$

1 2 3 4  $\Rightarrow$

1 2 bat + 3 4

b.  $[X [C_{[-Cl]} NP \text{ AUX VP}]_S \text{ Y}]_S$

1 2 3 4 5 6  $\Rightarrow$

1 2 3  $\left\{ \begin{array}{l} \text{to} \\ \text{for} \end{array} \right. \text{ to} \left. \begin{array}{l} 4 \\ ([+Inf]) \end{array} \right\} 5 6$

c.  $[X [C_{[-Cl]} NP \text{ AUX VP}]_S \text{ Y}]_S$

1 2 3 4 5 6  $\Rightarrow$

1 2 3  $\left[ \begin{array}{l} 4 \\ [+Poss] \end{array} \right] \left[ \begin{array}{l} 4 \\ [+Ger] \end{array} \right] 5 6$

### 3.3.2 Clausal Complementizer

When the sentential complement is marked by bat, in a certain sense, the surface structure is the closest to the deep structure, because there is no deletion of NP under identity as with the other complementizers;<sup>5</sup> that is to say, the feature [+Clausal] blocks Equi-NP Deletion, discussed below. This is why the symbol C is retained after Complementizer Placement. When we describe constraints on a certain transformation, we can refer to features of C.

It has been suggested by R. Lakoff and others that

indicators of mood per se are not present in the deep structure, but only transformationally introduced, depending on the co-occurrence features of other lexical items. For instance, certain verbs, e.g., of ordering/requesting, necessity, wishing/expectation, but not of communication, require that the lower verb in the sentential complement be in the subjunctive mood.<sup>6</sup> In this new analysis of the subjunctive mood, the problem properly belongs in the sphere of sentential complementation. When the verb of the matrix sentence is such that it requires the subjunctive in the sentential complement, the feature [↑Subjunctive] is added to AUX in the sentential complement, which is ultimately realized as the inflectional, or less often periphrastic, subjunctive. Examples are:

- (8) I rede pat þu do pat in þee is (H87.20)
- (9) God forbede pat I schuld departe pat God hab  
couplid (H90.16-17)

The approximate underlying structure of this surface structure may be the following:

I 'optate'<sup>7</sup> pat God forbede pat I schuld departe  
pat God hab couplid

- (10) for I hope it schuld more cleerly com to his  
knowyng (H88.11)
- (11) it suffisib inowȝ vnto þee pat þou fele þee  
steryd (H70.18-19)

### 3.3.3 Infinitival Complementizer

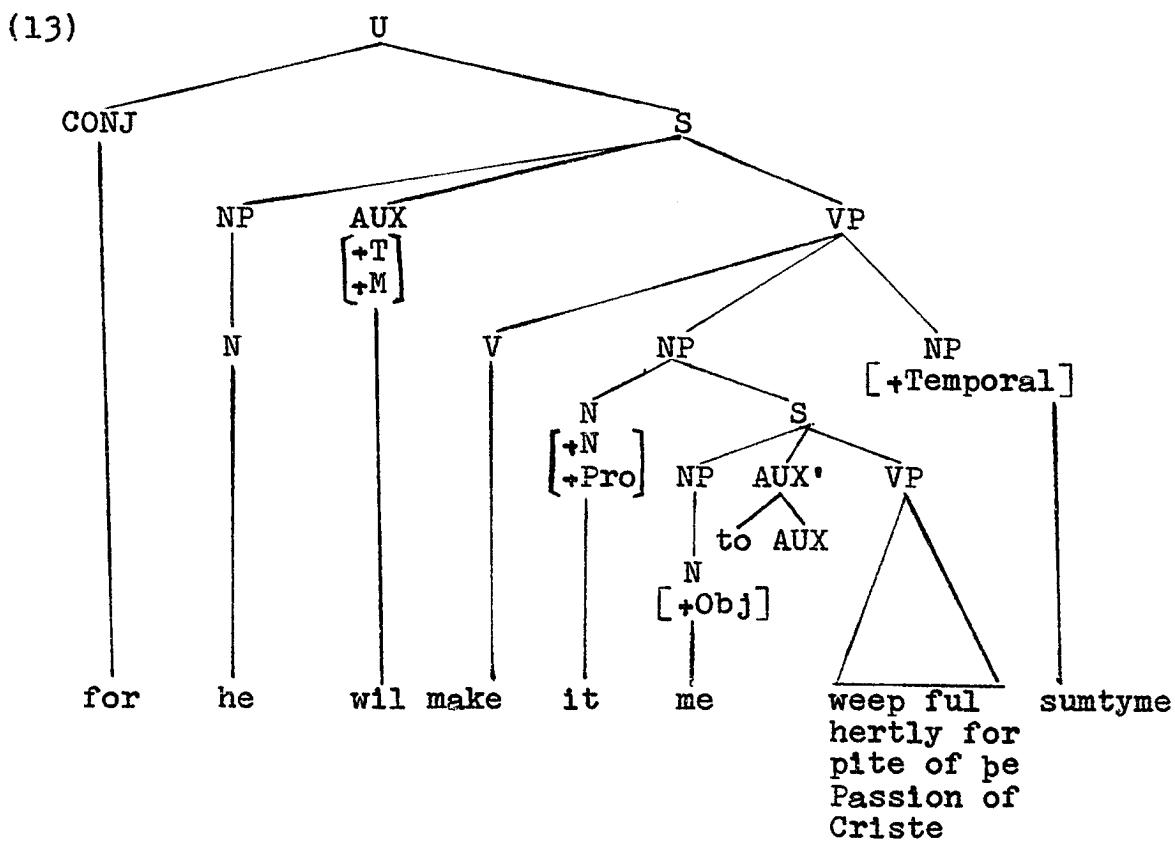
To and for to are morpheme variants of the infinitival

complementizer in Middle English. From the end of the thirteenth century there was no longer any difference of meaning between them (Mossé 101). In the present corpus the same verb co-occurs with both forms of the infinitival complementizer.<sup>8</sup> The infinitival ending -(e)n is optional. At this stage of Middle English, it is no longer possible to ascertain whether -(e)n is a descendant of (to)-enne or of -an of Old English. And its occurrence is not very frequent in the present corpus.<sup>9</sup> This seems to indicate that the transition of the original gerundial signal to in to彭enne to a mere sign of the infinitive was almost complete, so that any other infinitival indicator became redundant.

The effect of selecting the infinitival complementizer is the addition of the feature [+Obj] to the subject NP of the sentential complement and the insertion of (for) to- [+Inf] to AUX. This operation yields what is traditionally called the "accusative with infinitive" construction. Thus, the sentence

- (12) for he wil sumtyme...make me weep ful hertly  
 for pite of þe Passion of Criste (H29.11-13)

has the more basic structure



In (12) the "accusative with infinitive" construction occurs in the object position. This type of sentential complementation is often found in Middle English just as in Modern English. However, there is no genuine example of the "accusative with infinitive" construction occupying the surface subject position.<sup>10</sup> We find instead two other constructions. First, there are those constructions in which the subject NP of the sentential complement is deleted by the Indefinite Pronoun Deletion transformation (not listed separately in this study): e.g.,

- (14) it is a passing counforte to listen after his tales  
(H29.11)

In (14) the subjectless sentential complement is extraposed by the Extrapolation transformation (see 3.9 below). Secondly,

we find those constructions where the (pro)noun before the infinitive is a constituent of the matrix sentence, i.e., an indirect object. The subject of the complement, being identical to the indirect object, is deleted by Equi-NP Deletion (to be discussed in 3.4). Examples are:

- (15) 3e, & 3it it is impossible a sinner to gete, or  
 $[+IO]^{it}$

to kepe when it is getyn, þe parfite vertewe of  
 meeknes wip-cuten it (H41.20-22)

- (16) it is not leueful men to sette hem to serue God  
 $[+IO]$

in contemplatyue liif, bot 3if... (H57.7-8)

In (15)-(16) the noun before the infinitive may be taken as the subject of the sentential complement. If this is correct, the more basic structure of (15) is [it is impossible [a sinner to gete...]<sub>NP</sub>] rather than [it is impossible a sinner [to gete...]<sub>NP</sub>]. This analysis, however, can be refuted on several grounds. First of all, there is one very general characteristic about the construction under discussion: it always involves ethical predicates which require the animate noun as a reference point. There is no evidence for the existence of sentences corresponding to Modern "it is very likely for John to fail in the exam," in which "for John" belongs to the complement, not the matrix, sentence.<sup>12</sup> Aside from this deep structure semantic consideration, there is supporting evidence in the form of the surface structure. First, if the animate noun is a constituent by itself, it is not strange that it can be shifted in word order, as in:

- (17) beter bee were for to haue it (H34.10)  
 (by IO Shift; see 3.10 below)

Secondly, the animate noun of the relevant construction can occur with the preposition which indicates the direction toward the indirect object: e.g.,

- (18) it is sittyngly & semely to hem bat ben meek  
[+IO]  
wib-inne for to schewe meek & semely wordes &  
 contenaunce wib-outyn (H101.14-16)
- (19) it is bot a foly to bee to stryue any lenger  
[+IO]  
 wib hem (H67.2-3)

The noun phrase without a preposition seems to be the earlier form. With the reduction of inflectional endings the preposition incorporation into the indirect object NP became obligatory in the structure in question. But at this time of Middle English the change is not yet complete.

### 3.3.4 Gerundial Complementizer

The effect of selecting the gerundial complementizer is to add the [+Poss] feature to the subject NP of the sentential complement and the [+Ger] feature to AUX. The latter feature is ultimately realized as -ing (also written as -yng).

This gerundial complementizer must be distinguished from the present participle, also ending in -ing, which is the product of the Relative Clause Reduction transformation. In the following sentences containing participles

- (20) I rede pat þu do pat in pee is, refreynyng be rude  
& be grete steryng of bi spirite (H87.20-21)

- (21) pees heretikes...be whiche ben wel licedn to wode  
men hauyng pis custume (H107.17-18)

the direct object of the verb in -ing directly follows the participial form. The intermediate structures for (20) and (21) contain a non-restrictive, and a restrictive, relative clause respectively:

- (22) I rede pat þu, (pat arte) refreynyng be rude & be  
 grete steryng of þi spirite, do þat in þee is  
 (23) pees heretikes...be whiche ben wel licedn to wode  
men (pat are) hauyng pis custume<sup>13</sup>

This pattern, however, is not possible with the -ing complementizer at least for the author of the Cloud:

- (24) of þees semely bodely obseruaunces, as is liftyng  
up of our i3en & oure handes vnto heuen (H108.2-4)  
 (25) pat with hem men schuld haue knowyng of alle  
outward bodely binges (H124.17-18)

In the above sentences the direct object of the verb marked by -ing is preceded by the preposition of. It does not seem that this preposition incorporation was obligatory in Middle English. Visser (1966:1208) says that the constructions with and without of co-existed in Middle English. But the author of the Cloud always chose to incorporate of. The application of the optional rule each time that the condition is satisfied constitutes a characteristic of the author's dialect.

### 3.4 Equi-NP Deletion

Equi-NP Deletion, as posited by Rosenbaum, Ross and G. Lakoff, and others, is also operative in Middle English.<sup>14</sup>

The rule deletes the subject NP of the sentential complement when it is identical to an NP of the matrix sentence. Thus the rule may be stated:

W (NP) X [ C NP Y ]<sub>S</sub> (NP) Z  
           [-Cl]

1 2 3 4 5 6 7 8  $\Rightarrow$

1 2 3 4 5 6 7 8 when 2 or 7 = 5

In the sentence

(26) before I pink to answer perto so febeli as

## I can (H30.1)

the subject NP of the sentential complement, "I," is deleted because it is identical to the subject NP of the matrix sentence. In the sentence

(27) it is not leueful men to sette hem to serue God  
in contemplatyue liif, bot 3if... (H57.7-8)

the subject NP of the sentential complement, "men," is deleted under identity with the indirect object of the matrix sentence.<sup>15</sup>

### 3.5 It Replacement

When the complementizer is [-Cl], It Replacement may apply. This transformation does two things. First, it replaces the pronoun head of the NP which contains the sentential complement, namely it, with the subject NP of the sentential complement. The second stage of the transformation moves the subjectless sentential complement from underneath the NP which dominated it and reassigned it under the domination of the higher VP. Since there are two kinds of sentential complements, i.e., subject complements and

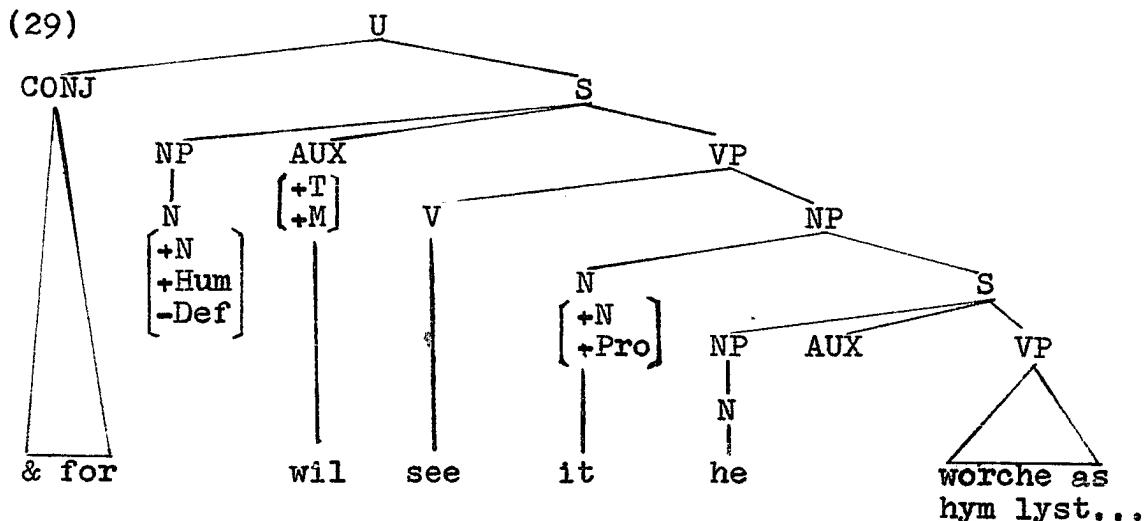
object complements, it is not possible to give a single rule which covers both cases. G. Lakoff (1966:26) collapses the two cases of It Replacement into a single rule by adopting a double structural description. However, since what the transformation accomplishes is clear and rule sophistication is not our present concern, the rule is left unformalized.

In the sentence

(28) & for he wil be seen to worche as hym lyst...

(H69.10)

It Replacement has been applied. The approximate underlying structure may be



To generate (28), prior to Passivization It Replacement must raise the subject NP of the sentential complement, "he," to the N node of the NP which dominates the sentential complement and reattach the remainder of the complement to the higher VP; for, otherwise, the whole NP, "it plus S," not just "he," would be made the surface subject of the passive sentence.

If we exclude such sentences as (28), with the structural description (SD) appropriate for Passivization, the instances

of It Replacement are not very numerous in our Middle English corpus.<sup>16</sup> Among the other examples of this transformation are:

- (30) þof he seme to þee ri3t holy (H27.1)
- (31) seme it [=a maner of dewe] neuer so holy (H105.21-22)

The derivation of (30) is roughly as follows:

1. þof [[it]<sub>N</sub> [he AUX ri3t holy]<sub>S</sub>]<sub>NP</sub> [<sub>AUX</sub>  
[+Subj] seme  
[to þee]<sub>NP</sub> Base  
[+IO]
2. þof [[it]<sub>N</sub> [he [+]Obj to AUX ri3t holy]<sub>S</sub>]<sub>NP</sub> AUX seme  
to þee Complementizer Placement
3. þof [he]<sub>NP</sub> AUX seme to þee [to AUX ri3t holy]  
It Replacement

The Complementizer Deletion transformation (see 3.12.2 below) and other necessary morphological rules convert this string to the surface structure (30).

### 3.6 Reflexivization

In Middle English, this transformation operates obligatorily when an NP has the feature [+Emph] and optionally when the simple S contains two coreferential NP's. Examples of the first are:

- (32) a. bi-self arte...maad vertewos by no werk so  
mochel (H16.15-16)
- b. ...þee lope to penk on ou3t bot on hym-self  
(H16.4-5)

Examples of the second are:

- (33) a. & so schuldest þou deceyue bi-self (H43.2-3)

- b. pou schalt in bis werk for3ete bope bi-self  
 & also bi dedes for God (H82.4-5)
- c. for it is be condicion of a parfite louer,  
 not only to loue bat ping bat he loued more  
 ben him-self; bot also in maner for to hate  
him-self for bat ping bat he loued (H82.6-9)

Our corpus abounds in cases where optional Reflexivization is not applied, so that the coreferential NP is the same as the personal pronoun in form, which would be ungrammatical in Modern English; for instance:

- (34) a. lat him dispose him booldly bot meekly perto  
 (H63.15-16)
- b. alle seintes & aungelles...hasten hem to  
 helpe it in al here mi3t (H16.10-12)

Since in Old English the reflexive function was performed exclusively by the simple personal pronoun and -self was used simply for emphasis (Quirk & Wrenn 72), it seems that the extension of the -self transformation was added as an innovation sometime between Old English and Middle English.

### 3.7 Passivization

From the early days of generative grammar Passivization has been extensively studied. Yet this transformation is still considered one of the most mysterious rules (R. Lakoff 43). We do not know enough about the precise relationship between active and passive sentences to formalize the rule. But this should not deter us from discussing the matter. We know that active and passive sentences are somehow related

and approximately what is accomplished by the transformation.

Passivization is no less common in Middle English than in Modern English. The following are passive examples in the Middle English corpus.

- (35) & herfore it is wretyn pat schort preier peersip  
heuen (H75.4-5)

(35) derives from the string

1. & herfore NP AUX write [it [pat schort preier  
[+Hum]  
[-Def]  
peersip heuen]S]NP

Passivization converts this string to

2. & herfore [it [pat schort preier peersip heuen]S]NP  
[PRES be + en]AUX write NP  
[+Hum]  
[-Def]  
[+Ag]

Passivization operates on a structure to switch the subject and direct object NP's, adding the feature [+Ag] to the postposed subject NP, and introducing the feature [+Pass] into AUX, which is later realized as be + en (Johnson 69-70).

Two more transformations, i.e., Extraposition (see 3.9 below) and Indefinite Pronoun Deletion are necessary to convert this intermediate structure to the surface structure.

- (36) & parauenture pou mayst be steryd for to loue  
God for hem (H93.18-19)

This derives from the more remote structure

1. & parauenture NP AUX stere pou [for to loue God  
[+DO]  
for hem]NP  
[+Direction]

After Passivization the string would look like

2. & parauenture pou [PRES 2nd Pers M be + en] <sub>AUX</sub>  
 stere [for to loue God for hem] <sub>NP</sub> <sub>NP</sub> [<sub>+Ag</sub>]

It seems that the subject and indirect object NP's cannot be switched by Passivization before Modern English (see Jespersen 1927:302, but see also the discussion below in 3.8). That is, there is no

- (37) \*pou art for3ouen <sub>pi</sub> sinnes

but only

- (38) <sub>pi</sub> sinnes ben for3ouen bee (H45.1)

### 3.8 Flip

Flip is a transformation posited by G. Lakoff, who discussed the subject briefly in (1965:A15-16), and by R. Lakoff, who discussed it more closely in (38-43), to account for the relationship between pairs of sentences such as:

- (39) a. what he did amused me  
 b. I was amused at what he did
- (40) a. what he did surprised me  
 b. I was surprised at what he did
- (41) a. his explanation satisfied me  
 b. I was satisfied with his explanation

(Examples from G. Lakoff 1965:A15)

We can see from these sentences that, approximately, Flip switches two NP's in a sentence in a different way from Passivization. True passives usually occur with the preposition by. (b)-sentences in the above occur with at or

with.<sup>17</sup> I suggest that Flip also operates in Middle English, although in the opposite direction to the one suggested by the Lakoffs.

First, a question arises as to which of the two sentences, e.g., (39a) or (39b), is more basic. The Lakoffs' choice is (39b); that is to say, they claim that the animate noun is the deep structure subject. About the following pair of sentences

- (42) a. what he had done pleased her
- b. she liked what he had done

which seem to be related in the same way as (a)-sentences and (b)-sentences are in the above (39)-(41), G. Lakoff (1965:A16) argues "from the nominalization of (b) Her liking of what he had done [and possibly he also had in mind \*What he had done('s) pleasing of her?] it is clear that (a), not (b) has undergone FLIP."<sup>18</sup> The source of ungrammaticality of the nominalized version of (42a), however, seems to be not that nominalization is applied to the derived structure, because passive and active sentences

- (43) a. I was kicked by Mary
- b. Mary kicked me

can be equally nominalized:

- (44) a. my being kicked by Mary
- b. Mary's kicking (of) me

but rather that the animate noun is not the direct object.

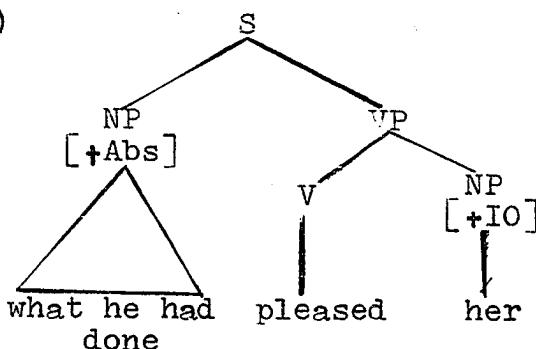
Slightly different nominalizations seem to work:

- (45) a. what he had done being pleasing to her
- b. John's shooting Mary being surprising to me

There may be dialects in which these two are not readily acceptable; but at least they are decidedly better than the sentences with of.

I suggest that the sentential complement is the deep structure subject and the animate NP is the indirect object. Thus, the following is the approximate underlying structure of (42a):

(46)



This analysis accounts for the ungrammaticality of \*"what he had done pleasing of her": "her" is not the direct object of "pleased," so the DO indicator of cannot occur before "her" in nominalization. This analysis also explains why not only by but also other prepositions like with, at, etc. can occur in such sentences as "she was pleased by/with what he had done," which is not the case with true passives; e.g.:

- (47) a. what he had done influenced her greatly
  - b. she was greatly influenced by what he had done
  - c. \*she was greatly influenced with what he had done
- (48) a. she praised his deed
  - b. his deed was praised by her
  - c. \*his deed was praised with her

If (46) is a deep structure of the correct form, then

Passivization does not apply to it because in Modern English

the indirect object can be made the derived subject of the passive sentence only when there is a co-occurring direct object. Thus the preposition by in "she was pleased by/with what he had done" is not an agent indicator introduced as a result of Passivization, but one of those prepositions which, when Flip applies, have to be introduced according to the subcategorization features of the verb.<sup>19</sup>

Furthermore, what is peculiar about flip sentences is the fact that an animate noun is required to make the meaning of the verb complete and verbs in this construction form natural meaning classes, mental state, necessity, etc., unlike those verbs whose idiosyncratic features require an animate noun, e.g., nurse, educate, emancipate. This is also true of the indirect object of verbs of communication, transfer, etc.; e.g.:

- (49) a. \*I told the desk that our cat had been missing
- b. \*I gave the ocean my precious necklace (not  
            in a metaphorical sense)

It seems reasonable that the animate noun after the flip verb is not different from the indirect object in these sentences. Semantically, both are affected, as a recipient of some sort, by the state or action indicated by the verb.

Historically, constructions corresponding to (a)-sentences in (39)-(41) are earlier and the change from (a) to (b) slowly occurred over an interval between the Late Old English and the Early Modern English periods. This phenomenon has been traditionally called a transition from the "impersonal" to "personal" construction. If we assume that (b)-sentences

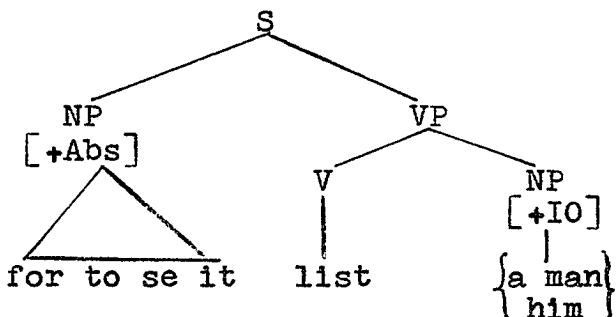
are more basic, we would have to say that in earlier English the surface structure involving the flip verb was more removed from the deep structure due to the Flip transformation, and that somehow the scope of the transformation narrowed until the deep structure was recovered. However, the Flip transformation is very common in Modern English and it seems unreasonable to suppose the transformation has become less general than before.<sup>20</sup>

Although the Flip transformation cannot be stated formally, I suggest that the SD for this rule requires a construction with a subject which is [+Abstract] and an indirect object which is [+Animate, -Pronoun], and that the transformation transposes the [+Anim, -Pro] indirect object and [+Abs] subject NP's.

At this point, I must call attention to the condition [-Pro] in the SD. In Middle English, even if the sentence contains a flip verb, Flip does not apply if the indirect object is a pronoun. Thus we have a surface contrast between "a man list for to se it" and "him list for to se it" (the latter by IO Shift; see below). It would be possible to generate these sentences in a uniform way if we take "a man" as a pre-posed [+IO] NP, not a surface subject NP. This must be the case for older generations. Their original grammar contained the rule which optionally forwarded the indirect object, whether [+Pro] or [-Pro], to a sentence-initial position. Then an innovation was added to the effect that the non-possessive case endings of the noun were neutralized. That is to say, for older generations "a man"

in the sentence "a man list for to se it" is a pre-posed indirect object minus case ending. When younger generations hear the same sentence, there is no reason why they should still interpret the initial NP, "a man," as an indirect object, since its form no longer shows its indirect object origin.<sup>21</sup> It is plausible that they take the initial "a man" as a subject with the [+Nominative] feature, because that is what normally occurs in this position. If this is the case, they need a new rule to explain the relationship between this sentence and the one with the clear indirect object, "him list for to se it," which obviously share the same deep structure. Therefore, I assume that younger generations created the rule which, given a deep structure like the following

(50)



checks if the indirect object NP is [-Pro] and, if so, transposes the subject and the indirect object NP's.

In short, the grammar of older generations had a rule which optionally forwarded an indirect object NP whether [-Pro] or [+Pro]. Then the case marker neutralization for nouns was added as an innovation to the grammar, to which a forwarded [-Pro], but not a [+Pro], indirect object was subject. Consequently, a forwarded [-Pro] indirect object

came to be indistinguishable from a subject in form. Thus the surface contrast which had not existed before was brought about. Younger generations did not learn this grammar but created a new grammar which could generate the same set of sentences more economically.<sup>22</sup> The condition [ $\pm$ Pro], i.e., [-Pro] for Flip and [+Pro] for IO Shift (see below), complicates the description of the rules considerably, but this is the reflection of the linguistic reality of the late fourteenth-century English, which was undergoing various changes.<sup>23</sup>

Thus, the sentence

- (51) a man list for to se in þe Gospel wretyn þe  
wonderful & þe special loue... (H56.3-4)

derives in the following way:

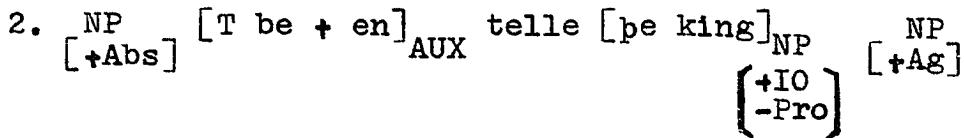
1.  $[[it]]_N [a \text{ man } \text{ AUX } se \text{ in } \text{ þe } \text{ Gospel } wretyn \text{ þe }]$   
[wonderful & þe special loue...]<sub>S</sub><sub>NP</sub> AUX list  
[+Abs]  
  
[a man]<sub>NP</sub> Base  
[+IO]  
[-Pro]
2.  $[[it]]_N [a \text{ man } for \text{ to } \text{ AUX } se \text{ in } \text{ þe } \text{ Gospel } wretyn]$   
[+Obj]  
  
[þe wonderful & þe special loue...]<sub>S</sub><sub>NP</sub> AUX list  
  
[a man]<sub>NP</sub> Complementizer Placement
3.  $[[it]]_N [for \text{ to } \text{ AUX } se \text{ in } \text{ þe } \text{ Gospel } wretyn]$   
[þe wonderful & þe special loue...]<sub>S</sub><sub>NP</sub> AUX list  
  
[a man]<sub>NP</sub> Equi-NP Deletion
4.  $[a \text{ man }]_{NP} \text{ AUX list } [[it]]_N [for \text{ to } \text{ AUX } se]$   
[+Nom]  
  
[in þe Gospel wretyn þe wonderful & þe special loue...]<sub>S</sub><sub>NP</sub>  
Flip

It Deletion, which will be discussed below, and the morphological rule, convert this derived structure to the attested surface structure.

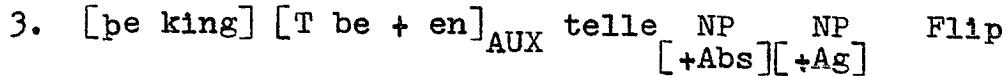
There is additional ground for positing this condition of [-Pro] in the SD; that is, if we posit this, we can explain a certain fact about the Middle English passive construction without any more new rules. As noted above, in Middle English the indirect object cannot be made the surface subject by the Passive transformation. Instead we find such sentences as "it was told me to rede it" or "me was told to rede it." But if the indirect object is not a pronoun, we have the sentence resembling Modern English "the knight was told to read it." If we complicate the description of the Passive rule by providing two cases, i.e., [-Pro] indirect object made the surface subject, and [+Pro] indirect object simply forwarded to the front position, we enter essentially the same information twice in the grammar: once for the description of Passivization and once for that of Flip. We can simplify the description, however, if we assume Passivization and Flip are applicable in this order. Passivization operates on the structure containing the subject and the direct object. If there is a retained indirect object in the derived passive sentence, and if this indirect object is [-Pro], then Flip operates to switch the derived subject and the deep indirect object NP's. The rule operates as follows:

1. NP AUX telle [be king]  

$$\begin{array}{c} \text{NP} & \text{NP} \\ \left[ \begin{array}{c} +IO \\ -Pro \end{array} \right] & \left[ \begin{array}{c} +DO \\ +Abs \end{array} \right] \end{array}$$
Base



## Passivization



The fact that the developments of the flip construction and the passive construction containing an indirect object were similar and occurred about the same time was noticed by Jespersen (1927:303) and Visser (1952:683). They did not attempt to explain how this came about, although Jespersen went on to explain why. He argued that the new construction, in which the indirect object is made the subject of the passive verb and the direct object is retained as such, was brought forth by the same force "which assisted in changing the construction of many verbs (dream, like, etc....), namely the great interest felt for the person."

Interesting to note here is that in Middle English there are no sentences corresponding to Modern English "I like him to be there" or "it pleases me for him to be there," where the subject of the sentential complement is explicitly stated, i.e., not deleted under identity with an NP of the matrix sentence. If our analysis of sentences like these as sentential complements in the subject position is correct, then the problem of the subject of the infinitive in the subject position, discussed earlier in 3.3.3, and this peculiarity of flip verbs, can be seen to be the same phenomenon. What we have with regard to flip verbs are also cases in which the subject of the sentential complement is identical to the (deep) indirect

object and is subsequently deleted. Thus it seems that, at this stage of Middle English, the sentential complement marked by the infinitival complementizer in the subject position has the surface constraint that its subject NP be deleted by appropriate transformations. Where the deletion is not possible, the infinitival complementizer should not be selected.

### 3.9 Extraposition

This transformation operates as follows:

$$\begin{array}{cccccc} X & [it & S]_{NP} & Y \\ 1 & 2 & 3 & 4 & \Rightarrow \\ 1 & [2]_{NP} & 4 & 3 \end{array}$$

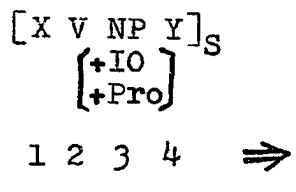
(52) shows the effect of the rule:

- (52) 1.  $[[it]_N [pat pou fele pee steryd likyngly]_S]_{NP}$   
           suffisib inow3 vnto pee                      Base  
 2. it suffisib inow3 vnto pee pat pou fele pee  
       steryd likyngly (H70.18-19)   After Extraposition

It is rather difficult to determine whether the rule was obligatory or optional in the latter half of the fourteenth century. Although examples of the non-application of the rule have been found (see Visser 1966:953), none are attested in our corpus.<sup>24</sup> At least for the author of the Cloud the rule must be obligatorily applied. The application of optional Extraposition, if it is indeed optional, each time its SD is met constitutes another idiosyncracy of the author's dialect.

### 3.10 IO Shift

The rule may be stated as follows:



It is obvious that Flip and IO Shift are complementary.

Flip applies to the structure containing the [+IO, -Pro] NP; IO Shift applies to the structure with the [+IO, +Pro] NP. The difference is that Flip indeed switches the indirect object and the subject NP's so that the pre-posed [+IO] NP loses its [+Obj] feature and acquires [+Nom], whereas IO Shift merely forwards the [+IO] NP and, accordingly, the [+IO] NP maintains its [+Obj] feature in a new position.

The following shows the effect of this transformation:

- (53) & perfore me pinkip pat he schuld on no wise be  
iuel (H29.14-15)

1. & perfore [[it]<sub>N</sub> [pat he schuld on no wise be  
iuel]<sub>S</sub>]<sub>NP</sub> pinkip me Base  
[+IO]

2. & perfore [it]<sub>NP</sub> pinkip me [pat he schuld on  
no wise be iuel]<sub>S</sub> Extraposition

3. & perfore me it pinkip pat he schuld on no  
wise be iuel IO Shift

This derived structure is not yet the same as the attested surface structure. One more transformation, It Deletion, is necessary.

### 3.11 It Deletion

The rule may be stated as:

a.  $[X \text{ it } S \text{ Y}]_S$

1 2 3 4  $\Rightarrow$

1  $\emptyset$  3 4

b.  $[\text{NP it X S Y}]_S$   
 $\begin{cases} +\text{IO} \\ +\text{Pro} \end{cases}$

1 2 3 4 5  $\Rightarrow$

1  $\emptyset$  3 4 5

The following examples show the effect of the rule:

(54) 1. I rede [[it]<sub>N</sub> [bat pu do pat in bee is]<sub>S</sub>]<sub>NP</sub>

Base

2. I rede pat pu do pat in bee is (H87.20)

After It Deletion

Case (a) of It Deletion stipulates that the pronominal head it be deleted when it is contiguous with the sentential complement. Thus, from

(55) & herfore it is wretyn bat schort preier peersip  
heuen (H75.4-5)

it cannot be deleted because it is separated from the sentential complement by Extraposition.

To generate the sentence

(56) him list not worche in bi wille (H15.16-17)  
the rule operates in the following way:

1. [[it]<sub>N</sub> [him to worche in bi wille]<sub>S</sub>]<sub>NP</sub> list him not  
 $\begin{cases} +\text{IO} \end{cases}$

Base

2. [[it]<sub>N</sub> [ to worche in bi wille]<sub>S</sub>]<sub>NP</sub> list him not  
 Equi-NP Deletion

3. [it]<sub>NP</sub> list him not [ to worche in bi wille]<sub>S</sub>  
 Extraposition

4. him [it] list not [ to worche in bi wille]

IO Shift

5. him list not to worche in bi wille It Deletion

The result is a grammatical sentence. One more transformation, Complementizer Deletion, may optionally apply to produce the attested sentence "him list not worche in bi wille." Case (b) of It Deletion depends on the prior application of IO Shift.

(56) should be compared with

(57) it suffisib inow3 vnto bee pat pou fele bee steryd  
likyngly (H70.18-19)

on which It Deletion cannot operate because the indirect object is not shifted.

### 3.12 Complementizer Deletion

#### 3.12.1 Pat Deletion

Case (a) of the rule, which concerns the deletion of pat complementizer, may be stated as:

X V (NP) pat S Y  
[+IO]

1 2 3 4 5 6  $\Rightarrow$

1 2 3 Ø 5 6

When the sentential complement marked by pat follows the matrix verb with or without the intervening indirect object, pat may be optionally deleted.

The following are examples:

(58) & sekirly I behote bee (pat) it schal not fayle  
on hym (H62.3)

(59) nay, God forbede (pat) pou take it pus (H90.15-16)

- (60) & gamenly be it seyde, (pat) I rede pat þu do  
þat in þee is (H87.19-20)
- (61) sekirly it is good (pat) þei be ware (H97.20)

### 3.12.2 (For) To Deletion

Case (b) of the rule has to do with the problem of the bare infinitive or to-infinitive. Since there is reason to believe that the to-infinitive became the norm for the [-Cl, +Inf, -Ger] complementizer due to restructuring in the lexicon at least in the dialect of the author of the Cloud, we cannot simply say that the bare infinitive derives from the Old English infinitive in -an and the to-infinitive from the inflected or dative infinitive in to-enne. I suggest that (for) to is deleted by the Complementizer Deletion transformation under certain circumstances.

Case (b) of the rule may be stated as follows:

$$\begin{array}{ccccccccc} X & [[NP & \left\{ \begin{array}{c} \text{to} \\ \text{+Obj} \end{array} \right\} \text{AUX VP}]_S]_{NP} & Y \\ & [\text{for to}] & & & & & & & \\ 1 & 2 & 3 & 4 & 5 & 6 & \Rightarrow & & \\ 1 & 2 & \emptyset & 4 & 5 & 6 & & & \end{array}$$

(62)-(66) show the effect of the operation of the rule:

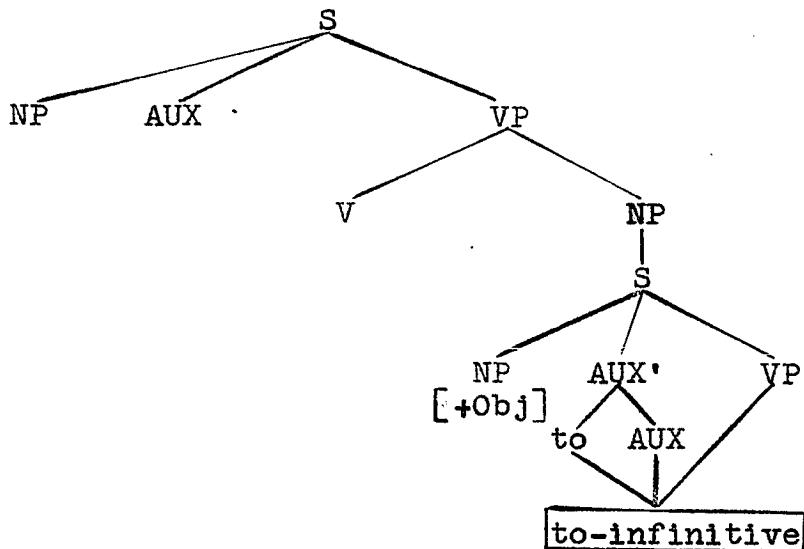
- (62) when þei schul here any aungelles (to) synge  
oute of heuen (H105.8-9)
- (63) ...neiper þou...ne ȝit suffre it (to) be red,  
wretyn, or spokyn, of any or to any (H1.12-14)
- (64) for he wil seende a maner of dewe--aungelles  
foode þei wene it (to) be-- (H105.17-18)
- (65) bot of þat werk...list me wel (to) telle þee  
(H62.21-23)

(66) bee þar bot meekly (to) put apon him wib preier

(H15.20-21)

In the first three sentences in the above, the infinitive is part of the "accusative with infinitive" construction. The underlying structure can be abbreviated as:

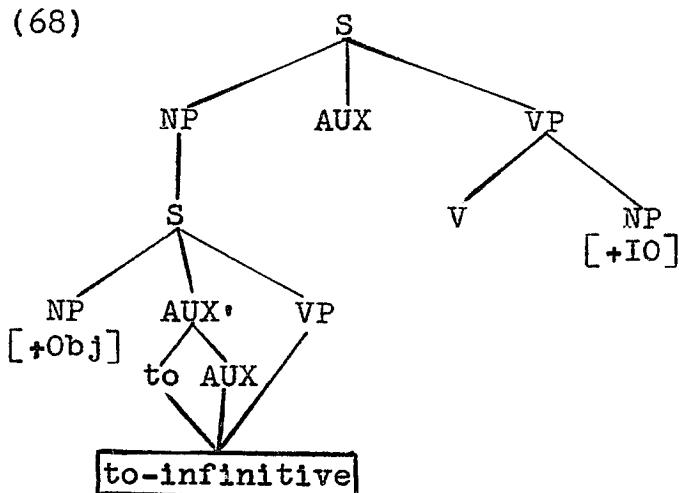
(67)



The subject NP of the sentential complement is not deleted by Equi-NP Deletion. Thus the subject NP node of the lower sentence is not deletable.

The next two sentences (65)-(66) represent the so-called "impersonal," or our "flip," structure. The underlying structure for them is roughly as follows:

(68)



Even though, as we have said before, there is no instance of \*"*me liked þe kni3t to sing*" nor of \*"*þe kni3t liked me to sing*," in which the subject NP of the sentential complement and the indirect object NP of the matrix sentence are not identical, this is not due to the deep structure constraint. If the subject of the sentential complement is not identical to the indirect object, the infinitival complementizer is not selected. Thus, we may argue tentatively that the subject NP node of the sentential complement is not deleted even though its lexical representation is deleted by Equi-NP Deletion.

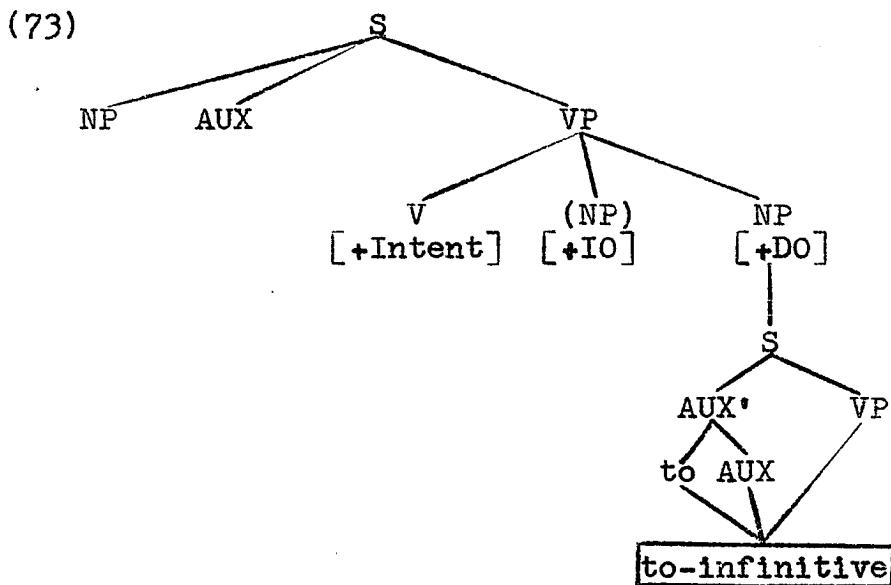
This conclusion was reached through the comparison of the structure on which the rule operates and those structures on which the rule does not seem to operate. There are two kinds of sentential complements from which (for) to is never deleted.

#### 1. Intention

- (69) I þink not to telle þee at þis tyme (H91.20-21)
- (70) ne hote he þee neuer so weel for to help þee  
in þi purpos (H33.10)
- (71) ...profryng to help þee in þis werk (H30.3)
- (72) for sekirly what beestly herte þat presumip  
for to touche þe hi3e mounte of þis werke...  
(H87.9-10)

There is a semantic constraint on this structure: the subject of the matrix sentence and that of the sentential complement must be identical. There is no \*"*I þink (=intend') him to telle þee at þis tyme*."<sup>25</sup> Equi-NP Deletion obligatorily

applies to delete the subject of the sentential complement. It seems reasonable to believe that at a certain point of derivation, the intermediate structure may have the form



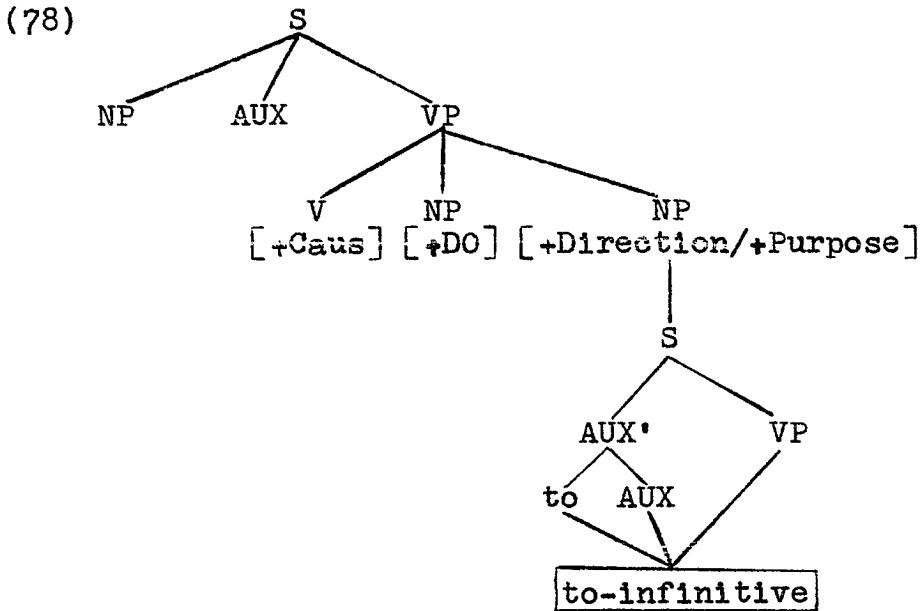
where the subject NP node of the sentential complement has been deleted. In other words, to-infinitives are derived from the S-node, whereas in (62)-(66) they are derived only from the AUX-VP node.

## 2. Causation

- (74) & parauenture pou mayst be steryd for to loue  
God for hem (H93.18-19)
- (75) as he wolde help bee to seke hym (H27.2)
- (76) ...whether he be clepid or not to worche in pis  
werk (H132.10)
- (77) alle seintes & aungelles...hasten hem to helpe it  
in al here mi3t (H16.10-12)

The surface structures of these sentences are the same as those with "accusative with infinitive." Yet (for) to is not deleted here. As a matter of fact, these sentences have

the following more basic structure



The subject of the sentential complement, being obligatorily identical to the direct object of the matrix sentence, is deleted by Equi-NP Deletion. Therefore the infinitive in this structure is also derived from the S node, not just from the AUX-VP node. Thus it seems plausible that (for) to deletion operates optionally when the infinitive is derived from the AUX-VP node, but it does not operate when the infinitive is derived from the S node.<sup>26</sup>

In object complementation, after to deletion, be incorporation may optionally be blocked regardless of the origin of be, whether it is from [+Copula], or from [+Pass], etc. It is admitted that the so-called predicate nominative, as in "sin is a foul stinking lump," is a problem in the interpretation of be as transformationally introduced. Jacobs and Rosenbaum (113) argue that "is" in a sentence like "John is a hero" exists in the deep structure as a peculiar type of transitive verb. Nevertheless, even this be behaves like

transformationally introduced be in object complementation:  
it can be deleted after to deletion.

The following are examples:

- (79) & perto it makib a soule (to) (be) abil to  
resseive pat ioye (H84.4-5)
- (80) when pou schalt alweis fele synne (to) (be) a  
foule stynkyng lumpe (H82.14-15)
- (81) ...pat any soule...schuld rede it, or speke it,  
or elles here it (to) (be) red or spoken (H129.22-24)
- (82) ...to haue God himself mi3tely (to) (be)  
descendyng (H67.10-11)

Be elimination thus operates on the structure which can undergo to deletion. Therefore, from "soche one pat hap (bi bi supposing) in a trewe wille & by an hole entent, purposed him to be a parfite folower of Criste" (H1.14-2.2),  
[+DO]                    [+Direction]

"to be" cannot be deleted.

### 3.12.3 [+Poss] Deletion

According to Visser (1966:1172, 1183), [+Poss] deletion existed from Early Middle English with the constraint that the noun preceding the form in -ing is not a pronoun. From the few examples like

- (83) pinkyng may not goodly be getyn wip-outyn reding  
or heryng comyng before (H71.20)
- (84) & kepe pou be windowes & pe dore for flies &  
enemies assailyng (H15.19-20)

I cannot determine whether [+Poss] deletion is operative (it is possible that the form in -ing in (84) is a reduced

relative clause) or, in case it is, what it is that governs the deletion. Visser does not consider the latter problem.

## FOOTNOTES

### CHAPTER III

<sup>1</sup>This claim cannot be made in the framework which handles things like voice, aspect, etc., as morphemic symbols in the deep structure; e.g., Elizabeth Closs (408, 410) had to posit that the PS rule expanding AUX had changed between OE and ME in order to account for difference in co-occurrence restrictions of aspect and voice within AUX.

<sup>2</sup>In connection with the constraint on linguistic change, Halle argues that innovations seem usually to occur at points where there are natural breaks in the grammar; for example, "at the end of the cyclical rules which eliminate the immediate constituent structure of the utterance from the representation; before the phonological rules that eliminate boundary markers (junctures) from the representation" (346). From this we might infer that PS rules, which come at a higher point in the order, are unlikely to change with time. If this inference turns out to be correct, then we could re-state the linguistic continuity between different stages or styles of a language as due, partly at least, to the continuity of PS rules. The implication of Halle's proposal, however, has been examined mainly in connection with phonological change. There have been few attempts to test it in the light of syntactic change. Therefore, the continuity of PS rules cannot be presented, for lack of sufficient evidence, as a well-established theoretical position on the nature of syntactic change in general. More research on this question must be done.

<sup>3</sup>The two transformational rules, i.e., Segment Feature Incorporation and Affix Shift, are not included in this list. In the framework of feature analysis, it is assumed that lexical items cannot be directly substituted for features. Thus Segment Feature Incorporation is posited in order to develop unordered features into proper linear combinations and convert them to the string of symbols. Affix Shift is required to switch the position of an affix before the morpheme to which it will be suffixed to the position after it, since rules are simpler if this position of an affix is assumed and, accordingly, rules are so written. These two are important rules, which derive a string of properly ordered symbols on which lexical insertion can operate to produce a proper surface structure. However, they are ordered toward the end of the rule set and the effects of their operations are not immediately relevant to sentential complementation. Therefore their operations should be understood but are not specially mentioned in the following discussions. For details see Johnson (131-136; 143-144).

<sup>4</sup>Page and line references are to the EETS edition of the Cloud.

<sup>5</sup>This seems to be part of the reason that R. Lakoff (21) posits that is the basic complementizer and that insertion must occur before the other complementizers can be introduced into the underlying structure. However, this treatment of Complementizer Placement means that we have to posit one more rule and the merit of this analysis for practical purposes is not so great. Therefore, this suggestion has not been adopted.

<sup>6</sup>If the verb marked as subjunctive has no higher verb (the so-called "independent subjunctive"), it is posited that there is a higher verb in the deep structure, which, however, has been subsequently deleted. This view accounts for the fact that most "independent subjunctives" are ambiguous and it is impossible to give their semantic characterization, in spite of the fact that they have the same form. Their various meanings, optative, "true" subjunctive, etc., are attributed to the meaning of the deleted abstract verb. See R. Lakoff (157-161).

<sup>7</sup>A short form for an abstract verb with [+Optative, ...] in the manner suggested by R. Lakoff.

- <sup>8</sup>E.g., (1) a. & 3it in al þis sorow he desireþ not  
to vnbe (H84.20-21)  
b. þof al þat he desire vnse singly for to  
lakke þe wetyng & þe felyng of his beyng  
(H85.1-2)
- (2) a. a þing...þat sterib pee to wilne & desire  
þou wost neuer what (H70.8-9)  
b. & perfore take þou none oper wordes to  
preie in...þot soche as þou arte sterid  
of God for to take (H77.21-22)

- <sup>9</sup>E.g., (1) of his sittynge...nedip it not to wetyn  
(H108.21-22)  
(2) for trewly I do pee wel to wyten þat I can not...  
(H69.1)

It is interesting to see that, although the infinitival -(e)n occurs only rarely, the examples of the plural verbal ending -(e)n abound.

<sup>10</sup>See Rodolfo Jacobson (207): "it is inconceivable for Middle English, as it would be for Modern English too, to have a D.O. + Inf construction in the subject position of a sentence."

<sup>11</sup>Throughout this study the feature [+IO] should be understood as a short form for [-Subject, -Direct Object] plus at least one of [+Recipient], [+Benefactive], [+Referential], though these three features may not be mutually exclusive. The meaning and the syntactic behavior of the so-called indirect object are very involved. One might ask whether [+Recipient], [+Benefactive], etc. should be taken as subtypes of a more basic feature or are independent features in the same status as other [-Object] features like [+Temporal], [+Locative]. To put the conclusion of the arguments below: the first

solution is followed in this study, since we can account for Equi-NP Deletion in certain constructions most economically and relate peculiar facts about the pronoun movement in certain passive and impersonal, or "flip," sentences if we assume this. That is, nouns may be [+Subject] or [-Subject]. [-Subject] nouns may be [+Object] or [-Object]. The choice of [+Object] requires further choice between [+Direct Object] and [-Direct Object]. [-DO] (or [+IO] as a short form) may be [+Recipient], [+Benefactive] or [+Referential].

12 The only suspicious case is:

& ri3t as it is impossible to mans vnderstondyng a man  
to come to be hi3er party of actyue liif (H32.17-18)  
 But "to mans vnderstondyng" itself is a transform of "man  
 vnderstondep." It seems probable that the author mixed the  
 constructions such that [it is impossible man to vnderstond  
 [+IO]  
 [a man to come...]].

13 In Modern English, the verb have would not co-occur with [+Prog] except for such sentences as "I'm having a good time tonight," where have does not mean 'possess.' However, semantically the progressive in Middle English is rather different from that in Modern English. It is used to express an idea of duration and also of characterization: for insrance,

- (1) when pou were leuyng in be comoun degree of Cristen mens leuyng in companie of pi wordely freendes (H13.18-19)
- (2) & alle semely bodely obseruaunces pat is [be] acordyng & not lettyng be werke of be spirite (H107.23-108.1)

14 The valence of the rule in Modern English as OBL was recently questioned by R. Lakoff (36-37). She maintains that Equi-NP Deletion and It Replacement are mutually exclusive (occupy the same rule slot). Compare the sentences:

- (1) I like to go (Equi-NP Deletion)
- (2) I like myself to go (It Replacement and OBL Reflexivization)

If Equi-NP Deletion must always obligatorily operate on the appropriate structure, the second sentence would never be generated.

15 We know approximately on what kind of structure the rule operates and what it accomplishes. But which NP of the matrix sentence erases the subject NP of the sentential complement is not so simple a question as Rosenbaum conceived it. Postal (1968b:24-30), for instance, notices that the principle of minimal distance between two NP's, posited by Rosenbaum, is violated in such sentences as

- (1) Harry talked to Bill about kissing Greta
- (2) Harry wrote to Bill about not voting for Humphrey

Here the erased subject can be understood as either "Harry" or "Bill," if we discard one more possibility. Postal suggests this fact can be explained in terms of Ought (Should) and Will-

Would Modal Constraints. That is, 1) when the sentential complement has the underlying modal sentence containing ought (should), Equi is applicable if there is an expressed indirect object and the coreference must be to the indirect object and not to the subject; 2) when the sentential complement has the underlying modal sentence containing will-would of intention, the coreference is to the subject of the main sentence and not to the indirect object even if it is expressed. There is no doubt that such constraints are operating. Our two examples can be accounted for this way. But we do not know how to state this formally.

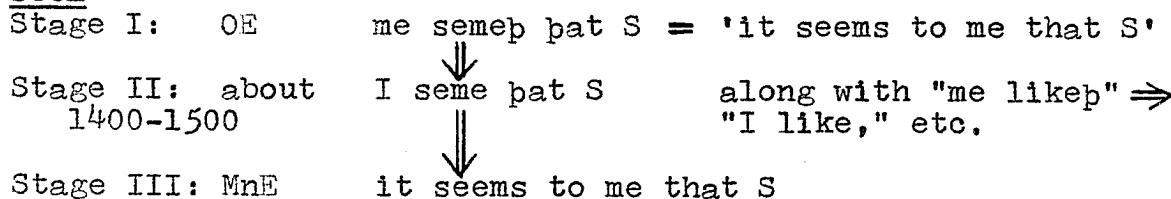
<sup>16</sup>Cf. Jacobson (216): "the PRO-filler of highest frequency in ME is probably the transform THAT+NP+VP (ADV) [to which It Replacement cannot be applied.] In Modern English there seems to be a considerable increase in frequency in the use of TO+ Inf and Nominalization [our gerundial complementizer] transforms to the expense of THAT-strings."

<sup>17</sup>Such sentences containing a [ $\neq$ Anim] NP after by as  
 (1) I was amused by the singers (during the whole party)  
 (2) I was surprised by John (from behind the curtain)  
 are grammatical; they are true passives. The verbs "amused" and "surprised" in (1) and (2) do not have the same meaning as they would in flip sentences with at, with, etc. Cf. R. Lakoff (38-39).

<sup>18</sup>R. Lakoff's examples to illustrate the same point are  
 (1) my surprise at John's shooting Mary  
 (2) \*John's shooting Mary's surprise of me (40)

<sup>19</sup>There seem to be dialectal differences concerning the choice of prepositions. In some dialects the preposition by rarely occurs in flip sentences, whereas in some other dialects it is completely interchangeable with other prepositions.

<sup>20</sup>A particular example to illustrate the case in point:  
seem



"I seem" in the sense of 'it seems to me' is no longer grammatical in Standard English; but Jespersen (1927:211) reports that the form "I zim" occurs in Somerset with that meaning.

Let us suppose "I seme" is more basic: in Stage I, Flip obligatorily operated to make it into "me semep" and then in Stage II, Flip ceased to operate on seme; later, in Stage III, Flip became obligatory with seem once again. This seems to be a rather unlikely linguistic development. It is more plausible if we assume that "me semep" is more basic and it optionally became "I seme" in Stage II because the rule was

operative in the meaning class [+Mental State] (e.g., "me likeþ" transformed to "I like"), but that this option was not preserved in case of seem and only the one closer to the deep structure remained.

<sup>21</sup>Indeed, at this stage of Middle English, an NP whose form is neutral as to case (that is, [-Pro]) but which is clearly an indirect object does not occur in a sentence-initial position. That is to say, there are no such sentences as \*"a man I wil telle be story," \*"man it is impossible to kepe it," etc., although an indirect object clearly marked by a preposition does occur in the initial position, as in "to a man I wil telle be story," "to man it is impossible to kepe it," etc.

<sup>22</sup>This type of linguistic change is mentioned by Klima (1964b:98): "an innovation may result in a linguistic change that results in the presence in the new optimal grammar of a rule without a correspondent in the optimal grammar of the previous generation."

<sup>23</sup>This must not be taken as the claim that we should be able to account for all the data without any residues. Since language acts never change uniformly, it is impossible to give the precise date when examples of a certain rule ceased to exist or began to be found by analyzing actual linguistic data. Often these data are full of contradictory pieces. Our purpose in this study is not to give descriptions of actual data but to reconstruct a logical path of the change of one grammatical system into another. Thus we have to assume an idealized situation in face of contradicting data, discerning which piece of evidence really reflects change in the grammar of language, not in the use of language.

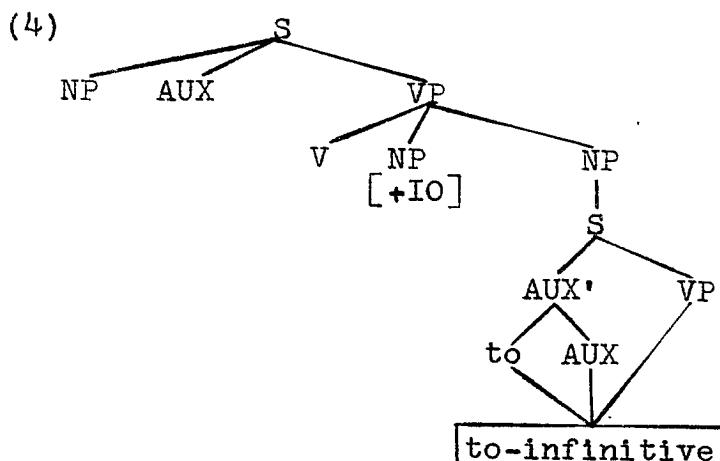
<sup>24</sup>Sentences like "bat þis be sop, it semip by þe Gospelle" (H47.1) are not an example of Extraposition unapplied. They are due to a much later stylistic word order shift for emphasis (not specially studied in this work). Otherwise, as we shall see later, It Deletion would apply, and we should have \*"bat þis be sop semip by þe Gospelle."

<sup>25</sup>Cf. Postal's argument of the Will-Would constraint on Equi-NP Deletion; see footnote 15 above.

<sup>26</sup>There is one problem not explained by this account. Of the so-called "linguistic verb" of asking, beseech, pray, bid occur in the corpus: e.g.,

- (1) I beseche pee for Goddes loue fulfille in bi partie  
bat lackip of myne (H129.11-12)
- (2) I preye pee par charite do as I sey pee (H2.18)
- (3) ...for to bid Mary rise & help hir (H51.18)

(For) to deletion seems optionally applicable to these verbs, even though the infinitive seems to be derived from the S node:



The subject NP of the sentential complement is deleted under identity to the indirect object. There is no \*"I bid Mary him (to) rise and help hir." Yet, unlike cases of verbs of intention and causation, (for) to is optionally deleted. At this point I do not have the explanation for this except that (4) may not be the correct intermediate structure for these verbs of asking, or the apparent infinitive without to may be the direct command. Since next to nothing is known about the way similar sentences were pronounced at the time, whether "fulfile," "do," "rise & help" in (1)-(3) above are infinitives or not is an open question. But that the analysis of them as direct command is not implausible can be seen from such a pair of sentences as:

- (5) & perfore I preye bee help me (H67.18)  
 (6) do on þan, & trauayle fast awhile, I preie bee  
 (H67.20)

CHAPTER IV  
SENTENTIAL COMPLEMENTATION IN THE  
 $G_1$ -BASED GRAMMAR OF EARLY MODERN ENGLISH

4.0 Introductory Remarks

In this chapter I will describe the complementation system in the grammar of Early Modern English in relation to the original system,  $G_1$ . The purpose of this chapter is to specify what remained unchanged and what innovations were added to the original grammar as extensions in the sphere of complementation.

The five phrase structure rules for Middle English generate also the deep structures of those sentences which occur in the corpus chosen for Early Modern English, i.e., the Baker version of the Cloud. Innovations occurred in the transformational component of the grammar. These innovations are, more specifically, of the following types:

1. Change in the valence of the rule
2. Modification of the details of the rule
3. Change in the lexical realization

In the first category are Case (b) of Reflexivization, IO Shift, Case (b) of It Deletion, Case (b) of Complementizer Deletion, and possibly Extraposition. In the second category is Flip. In the third category, which is the least interesting type, is the infinitival complementizer.

#### 4.1 Complementizer Placement

##### 4.1.1 The Rule

The major complementizers in Early Modern English are essentially the same as those in Middle English:

1. Clausal Complementizer, lexically realized as: that  
(graphemic variant: y<sup>t</sup>)
2. Infinitival Complementizer: [+Obj] - to
3. Gerundial Complementizer: [+Poss] - [+Ger]

The rule operates in the way described for Middle English complementizers. Examples are:

- (1) thou shalt understand, y<sup>t</sup> I find...y<sup>t</sup> there are four degrees & forms of christian life (A4.18-5.2)<sup>1</sup>
- (2) and therefore it is written, that a short prayer peirceth the Heavens (A81.27-82.1)
- (3) I shall not need in this place to tell thee any thing of the qualityes of them (A77.6-7)
- (4) ...such that shall...or else hear it to be read or spoken (A3.6-8)
- (5) some may not Come to feel y<sup>e</sup> perfection of y<sup>s</sup> work but in their being ravished from their senses (A141.Title)

##### 4.1.2 Clausal Complementizer

The introduction of [+Subjunctive] into AUX, triggered off by the presence of a specific higher verb, remains unchanged, although the realization of the feature by the periphrastic subjunctive seems to have increased. The inflectional and periphrastic subjunctive now occur with

almost equal frequency. Examples are:

- (6) and so I reed, that thou do also (A85.16)
- (7) sometimes because he shall not Conceive over homely  
of ye matter, imagining yt it were in great part in  
his own power to have it (A147.30-148.1)
- (8) all those, yt set themselves to be Spirituall  
workers inwardly, imagining, yt they should either  
hear, smell, see, tast, or feel ghostly things,  
either w<sup>th</sup>in themselves or w<sup>th</sup>out (A139.19-140.1)
- (9) it remaineth only, that thou set upon Him meeekly  
w<sup>th</sup> praier (A8.5-6)

#### 4.1.3 Infinitival Complementizer

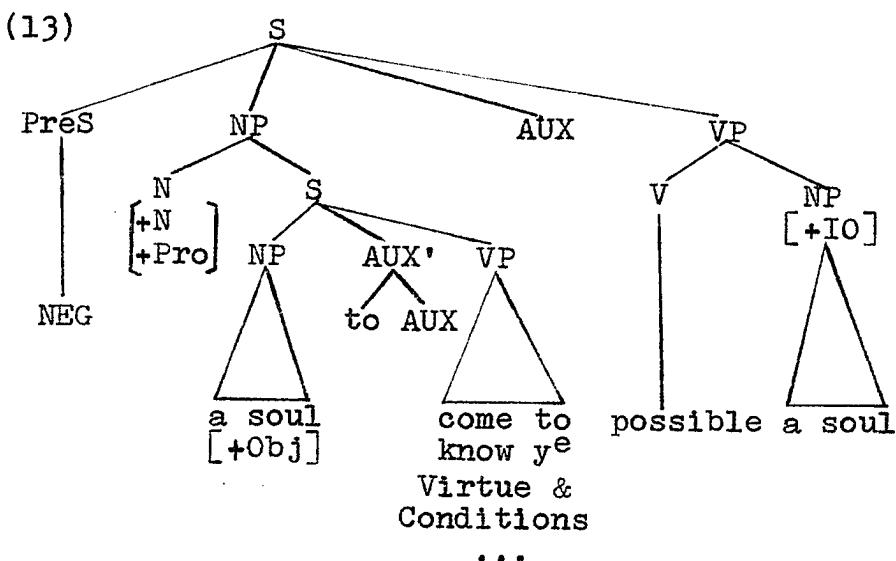
With regard to the infinitival complementizer, there is an innovation which changed the details of its lexical realization. For to became obsolete by the beginning of the Modern English period. And so did the final -(e)n infinitive affix. Thus alternatives in the lexical realization of the infinitival complementizer were reduced to just one, which has remained until the present day.

As I implicitly stated in 4.1.1, the effect of selecting the infinitival complementizer in the dialect of Early Modern English with which we are concerned, is still the same as in Middle English. The bi-morphemic complementizer for-to posited by Rosenbaum for Modern English, as in "I like for John to be there," did not exist in the latter part of the sixteenth century. There is no positive evidence for its existence in our corpus. Superficially, the following

sentences appear to contain it:

- (10) it is not possible for a soul to Come to know y<sup>e</sup>  
 Virtue & Conditions of bodily Creatures or y<sup>e</sup>  
 Cause of their Being & Creation (A130.7-9)
- (11) it is not lawfull for Men to sett themselves to  
 serve God in Contemplative life, unlesse...  
 (A58.5-6)
- (12) and as it were a very troublesome thing for a man  
 that had set himselfe to y<sup>e</sup> Exercise of Meditation,  
to be distracted & Called at that time (A28.10-13)

The closer examination would reveal, however, that they all involve ethical predicates which require the indirect object (cf. the discussion above in 3.3.3). Since to-phrases after such ethical predicates, which are unequivocal indirect objects, in the Middle English corpus were replaced by for-phrases in the Early Modern English corpus,<sup>2</sup> the for-phrases in (10)-(12) may well be taken also as indirect objects. If this view is correct, the abbreviated basic structure of (10) may be



from which the subject NP of the sentential complement, "a soul," is deleted by Equi-NP Deletion. For is later inserted as a realization of the [+IO] feature.

The sentential complement marked by [+Obj] - to, or the "accusative with infinitive" construction, occurs in the object position as it did in Middle English. Examples are so many that it is not worthwhile to list them specially. On the other hand, this construction still does not occur in the surface subject position. In this connection, the following sentence is interesting:

(14) but I like not, y<sup>t</sup> they should Counterfeit &  
shew it in broken & mensed words (All4.12-14)

(14) may indicate that, when the subject NP of the sentential complement is not identical to an NP of the matrix sentence, the infinitival complementizer still cannot be selected.<sup>3</sup>

Thus, the distribution of the "accusative with infinitive" construction is quite uneven in Early Modern English. The few attested examples of a "(pro)noun in the nominative + infinitive" in the subject position (although none are found in our corpus) may be an attempt to remedy this. This construction began to appear in Late Middle English but clear enough examples concentrate on the first two centuries of Modern English. Among the examples of this construction collected by Visser (1966: 956-957) are:

- (15) 1470-85 Malory, M.d'A. 453, thow to lye by our  
moder is to moche shame for vs to suffre  
(16) c1475 Partenay (EETS) 3485, hit I to beleue is  
but fantesy

- (17) 1607 Shakesp., Timon IV, iii, 266, I to bear this  
is some burden

We need not posit any new rule to generate such a structure.  
The derivation may be in the following way:

- (18) he to go there is strange

1.  $[[it]_N [he \text{ AUX go there}]_S]_{NP}$  is strange      Base
2.  $[[it]_N [he \text{ to AUX go there}]_S]_{NP}$  is strange  
 $[+Obj]$     Complementizer Placement
3.  $[he]_{NP} [+Nom} [to AUX go there]_S$  is strange  
It Replacement

The subject NP of the sentential complement loses its  $[+Obj]$  feature and picks up  $[+Nom]$  when it replaces the pronominal head it. The innovation is not to apply the second part of the It Replacement transformation, which moves the remainder of S to the VP-final position. If it were applied, we would have "he is strange to go there."<sup>4</sup> This innovation, however, did not remain in English. After Shakespeare, Visser does not cite any example.

The construction "(pro)noun in the nominative + infinitive" thus disappeared after the stage of the language with which we are concerned. Then another construction "for + (pro)noun + infinitive" seems to have been established at least in the subject position about the same time. At this point the language no longer has the constraint on the surface structure which, earlier, made it impossible to generate such sentences as

- (19) for John to go there would be a farce

- (20) I would like for John to go there

in which the explicitly stated subject and the remainder of

the sentential complement occur as a single constituent NP.

It may be profitable to posit, as Rosenbaum did, for-to as the basic infinitival complementizer both for object and subject complementation in Modern English, from which for is deleted under certain circumstances. If we accept this position, then we would like to suggest that an innovation occurred sometime after the beginning of the Early Modern English period to the effect that the [+Obj] feature addition in subject complementation was replaced by the addition of the morpheme for.

This account goes well so far. The problem lies in object complementation. It would be a very neat hypothesis if we could argue that the new construction with for extended to object complementation. Nevertheless, it is a fact that many Modern English sentences containing the morphemic pair for-to, which are derived as a result of Complementizer Placement, are ungrammatical: e.g.,

- (21) \*I heard for him (to) sing a folk song
- (22) \*I believe for John to be a fool
- (23) \*I allowed for Mary to be interviewed by my secretary

Another possibility would be to posit [+Obj] - to as the basic complementizer unchanged and to insert for in appropriate contexts (perhaps when the NP dominating the sentential complement is [-Object]?) This would account automatically for the ungrammaticality of the above sentences and the grammaticality of sentences like (19) and (20). And maybe such sentences as the following are accountable this way:

(24) I opened the door for John to come in

(25) the tea was too hot for him to drink immediately

But this alternative is not without problems. This account leaves exceptions like

(26) \*for John to leave for Ann Arbor tomorrow is true

(27) \*it appeared for Mary to love John

We may be able to dismiss them by maintaining that they must be handled in terms of co-occurrence restrictions between lexical items and complementizers. In some dialects, however, are sentences like

(28) everybody expects for me to do what is right

(Rsoenbaum 69)

(29) everyone would prefer for you to come early

(Rosenbaum 53)

Are these real counter-examples?<sup>5</sup> Or, are expect and prefer not object complement verbs? But it is beyond the scope of the present work to attempt to choose definitively between the two alternatives. Therefore I merely point out some problems in accounting for the development of the infinitival complementizer in the Modern English period and leave the question open.

#### 4.1.4 Gerundial Complementizer

The of incorporation into the direct object NP of the verb in -ing remains optional in Early Modern English. However, unlike the author of the Middle English Cloud, who never fails to incorporate the preposition, the author of the Early Modern English Baker version chooses one or the

other alternative. Examples without of are:

(30) a. & in holding them under y<sup>e</sup> clowd of forgetting

(A64.15-16)

(b. & in holdyng of hem vnder pe cloude of for3etyng

(H61.23-24))

(31) a. to continue in guarding y<sup>e</sup> motions of his will

(A13.3-4)

(b. to continow in keping of pe sterynges of pe wille

(H19.14-15))

Examples with of are:

(32) a. greater joy of finding of it again (A148.22-23)

(b. more ioie of pe fynding ber-of (H132.15))

(33) a. to pray for y<sup>e</sup> removing of evills (A85.1-2)

(b. preie for remowyng of yuelles (H77.8))

#### 4.2 Equi-NP Deletion, It Replacement, and Extraposition

These three rules operate in the same way as they do in Middle English. (34)-(36) show the effect of applying Equi-NP Deletion and Extraposition, It Replacement, and Extraposition respectively. Clear examples of It Replacement are more numerous in the Early Modern English corpus than in the Middle English corpus.

##### (34) Equi-NP Deletion and Extraposition

it behoveth him to be in truth & depth of spirit

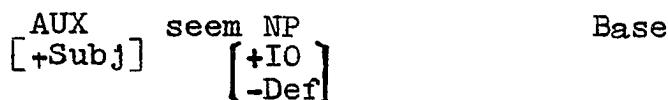
(A99.16-17)

1. [[it]<sub>N</sub> [him to be in truth & depth of spirit]<sub>S</sub>]<sub>NP</sub>  
 behoveth [him]<sub>NP</sub> Base  
 [+IO]

(35) It Replacement

for though He seem to be right holy (A21.14-15)

1. for though [[it]<sub>N</sub> [him to be right holy]<sub>S</sub>]<sub>NP</sub>






## It Replacement

3. for though he AUX seem to be right holy

## Indefinite Pronoun Deletion

(36) Extrapolation

it remaineth only, that thou set upon Him meekly  
w<sup>th</sup> prayer (A8.5-6)

1.  $[[it]_N [that thou set upon Him weekly w^{th} praier]_S]_{NP}$  remaineth only Base
  2.  $[it]_{NP}$  remaineth only  $[that thou set upon Him weekly w^{th} praier]_S$  Extraposition

Although the valence of Extraposition is somewhat doubtful in Middle English, it is clearly optional in the late sixteenth century. The following are examples of the non-application of Extraposition, of which there is no instance in the Middle English corpus:

- (37) a. sometime in this travail it seemeth to a man.

y<sup>t</sup> to look upon it, is as it were, to look upon

Hell

(A137.26-138.1)

- (b. sometyme in pis trauayle him pink bat it is to  
loke per-apon as on helle (H123.3-4))

- (38) a. to have this blind stirring (I say) in thy  
soul & to feel it inwardly in thine Affection,  
is far better, y<sup>n</sup> to have y<sup>e</sup> Ey of thy Soul  
opened in Contemplation (A30.7-11)

- (b. & beter pee were for to haue it & for to fele it  
in pin affeccion goostly, pen it is for to haue  
pe i3e of bi soule openid (H34.10-11))

#### 4.3 Reflexivization

There are only a few examples in the present corpus where Reflexivization is not applied when there are coreferential NP's in a simple sentence.<sup>6</sup> They are sporadic examples from earlier chapters, where the language seems to be more archaic than in later chapters.<sup>7</sup> It is not inconceivable that the author of the Early Modern English recension is trying here to follow the original as closely as possible because the early chapters contain what is rather formulaic, e.g., prayers, advice, and more general discussions of the subject, which readers might want to read or even memorize in the original form. Therefore I do not believe that these sentences with unreflexivized pronouns should be regarded as support for the optionality of the rule at this stage of English. The examples of Reflexivization occur throughout the corpus, in earlier and later chapters alike, and far outnumber examples of its non-

application. I suspect that in the late sixteenth century Reflexivization is already obligatory as it is today. -The author, remembering the older grammar, leaves some coreferent pronouns as they are in the earlier parts of the work, where, for some reason, he makes an attempt at a conservative modernization, but he uses his own grammar and reflexivizes all coreferent pronouns where he is not paying attention to them especially.

The following sentences show the effect of Reflexivization:

- (39) a. a soul disposeth Himselfe effectuall to work  
in this work (A127.10-11)
- (b. a soule disposep him effectuely to bis werk  
(H113.13-14))
- (40) a. saying some Good words, such as thou feelist  
thyselfe to be stirred to say (A101.13-15)
- (b. & sey som good worde as pou felist bee sterid  
(H90.13-14))

#### 4.4 Passivization, Flip, IO Shift, and It Deletion

##### 4.4.1 Flip

We stated in 3.8 that in Middle English the Flip transformation operated on a structure with a sentential complement in the subject position and a [+Anim, -Pro] indirect object. The rule remains but the details of the rule changed sometime between Late Middle English and Early Modern English. What happened is the generalization of the rule. The condition [-Pro] was struck out from the SD, so that the rule now applies to [+Pro] and [-Pro] indirect objects alike. At this

point the so-called transition from the impersonal to the personal construction is complete. We have not only such sentences as

- (41) and if any man list, he may see... (A56.19)
- (42) a. God will not fail to do his part (A64.21-22)
- (b. it [be werk of God] schal not fayle on hym [God])  
(H62.3))

but also

- (43) a. they will make a God, as they list (A118.19)
- (b. bees men wil make a God as hem lyst (H105.11-12))
- (44) a. y<sup>t</sup> we shall be as swiftly, where we list  
to be, w<sup>th</sup> our body (A123.21-22)
- (b. bat we Schul be pan swiftely where us liste  
bodely (H110.6-7))
- (45) a. the more he loveth, the more he longeth to  
love (A43.19-20)
- (b. euer be more he loueb, be more him longeb  
for to loue (H45.21))
- (46) a. God is y<sup>e</sup> thing, y<sup>t</sup> thou wantest (A91.1-2)
- (b. God woldest pou haue...God wanteb bee (H81.18-19))

#### 4.4.2 Passivization

In the G<sub>1</sub>-based grammar of Early Modern English, the Passivization rule itself remains essentially the same, except that the [+Ag] NP, so indicated by of in Middle English, came to be marked by by as well as of, as in

- (47) ...we be both Called of God to work in this work  
(A144.28-29)

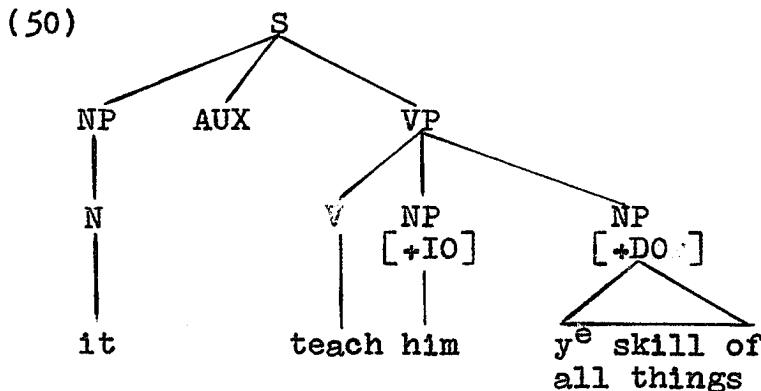
(48) if thou be moved by God to take these (A85.23)

However, possible surface structures of the passive sentence changed due to the generalization of the Flip rule. As discussed in 3.8, there was a surface contrast between "me was told pat..." and "pe kyng was told pat..." in Middle English. In Early Modern English Flip can operate equally on [+Pro] and [-Pro] indirect objects. Accordingly the structures underlying the above sentences may both undergo Flip and "I was told that..." is now as grammatical as "the king was told that..." There is not attested, in the present corpus, any clear case of the deep structure indirect object turned into the derived subject. But the modernization seen in the pair of sentences

(49) a. in it & by it, he is taught y<sup>e</sup> skill of all things (A137.14)

(b. of it he is wel lernid to kon skyle of alle binges (H122.15-16))

may be an indication of this. In (49b) it is not impossible to interpret the infinitive as a [+Dir] NP whereas in (49a) it is difficult to interpret the NP "y<sup>e</sup> skill of all things" in the same way. The more basic structure of (49a) may be



If this is correct, then the derivation of (49a) may be roughly as follows:

1. it PRES teach him [ $y^e$  skill of all things]<sub>NP</sub> Base  
 $\quad\quad\quad$  [+IO] [+DO]  
[+Abs]
2. [ $y^e$  skill of all things]<sub>NP</sub> PRES be + en teach him [+IO]  
 $\quad\quad\quad$  [+Abs] Passivization
3. [he]<sub>NP</sub> PRES be + en teach [ $y^e$  skill of all things]<sub>NP</sub> Flip  
 $\quad\quad\quad$  [it]<sub>NP</sub> [+Ag]

#### 4.4.3 IO Shift

Flip is not obligatory in Early Modern English. Therefore, if it does not apply, we might assume that IO Shift may apply exactly as in Middle English. However, the instances of IO Shift are limited to few verbs--list and think with some frequency, and need sporadically only once.<sup>8</sup> Perhaps cases like these are felt to be relics rather than the productive pattern. The spelling methinketh--as one word rather than two--might be an indication of this. The only one occurrence of "him needed" may very well be due to merely copying down what is in the original text. If this is correct, then we must state that IO Shift has become inoperative and such constructions as given above are the idiosyncratic property of the verbs in question, which Early Modern English speakers learned as special items and which should be so described in their respective entries in the lexicon.

#### 4.4.4 It Deletion

With the inoperativization of IO Shift, the structure satisfying the SD for Case (b) of It Deletion can no longer be generated. As a result, Case (b) becomes inoperative as well. The effect of the inoperativization of these two rules can be seen in the following:

- (51) a. and if it like thee to have y<sup>e</sup> intention lapped up & folden in a word (A23.9-11)
- (b. & 3if bee list haue bis entent lappid & foulden in o worde (H28.10))
- (52) a. when it pleased our Lord to shew it (A144.9-10)
- (b. whan hym likid to schewe it (H128.16-17))
- (53) a. for it seemeth to them y<sup>t</sup> it is nothing y<sup>t</sup>  
thou doest (A136.19-20)
- (b. for hem pink it nou3t bat pou doste (H121.20))

#### 4.4.5 Summary

The following chart summarizes the foregoing discussions of Passivization, Flip, IO Shift, and It Deletion in the grammar "G<sub>1</sub> + E<sub>1-2</sub>" of Early Modern English:

4.4.5 Table

S. No.	Base S	$I_0$ [ $\pm$ Pro]	$G_1$ : ME	Innovation	$G_1 + E_{1-2}$ : eMnE
1,2	he told {me pe kyng} [[it][x]]NP	+	A. Passivization [[it][x]]NP was told {me pe kyng} of him (3,4)	A. Passivization [[it][x]]NP was told {the me kyng} by him	
5	[[it][x]]NP likep me	+	B. Flip -	Generali- zation: operates on [+Pro] (A)	B. Flip I like [[it][x]]NP
6	[[it][x]]NP likep pe kyng	-	be kyng likep [[it][x]]NP		the king liketh [[it][x]]NP
3		+	-	(A)	I was told [[it][x]]NP by him
4		-	be kyng was told [[it][x]]NP of him		the king was told [[it][x]]NP by him
5,6		+	C. Extrapolation [[it]NP likep {pe kyng} [x]] (7,8)	C. Extrapolation [[it]NP likep {the me kyng} [x]]	

3,4		[it] <sub>NP</sub> was told { me   pe kyng } of him [x]	[1t] <sub>NP</sub> was told { me   the king } by him [x]
7	+	D. TO Shift me [1t] <sub>NP</sub> likep [x] (11)	Inoperativi- zation (B)
8	-	-	-
9	♦	me [1t] <sub>NP</sub> was told of him [x] (12)	(B)
10	-	-	-
11		E. <u>It</u> Deletion, Case (b) me likep [x]	Inoperativi- zation (C)
12	†	me was told of him [x]	(C)

#### 4.5 Complementizer Deletion

##### 4.5.1 That Deletion

The rule that deletes the clausal complementizer that remains unchanged. Examples are so numerous that it is not profitable to give them.

##### 4.5.2 To Deletion

We suggested in 3.12.2 that in Middle English the (for) to part of the infinitival complementizer might be optionally deleted when the subject NP node of the sentential complement is retained (thus the infinitive is only "AUX-VP-derived.") The bare infinitive without to occurs to a lesser degree in Early Modern English. First of all, to deletion no longer applies to flip verbs. As for the "accusative with infinitive" verb, to which the rule applied quite extensively in Middle English, many of them no longer permit its operation--e.g., make, suffer, imagine. Some occur with the infinitive with or without to, like have, bid, hear. Even with these verbs, however, examples of to retained are more numerous. The only verb on which the rule seems to operate regularly is let. But there is one example of "let + to-infinitive":

(54) a. and if thou do let any such men to see it

(A146.4-5)

(b. & 3if þou schalt late any soche men see it

(H130.6-7))

If we regarded the rule as still operative but to a lesser degree and included it in the list of transformational

rules, we would either have to give a very complicated SD so that the generation of ungrammatical sentences may be avoided, or have to mark in the lexicon most "accusative with infinitive" verbs as not undergoing the rule. Therefore it is more profitable to assume that the second case of the Complementizer Deletion transformation has become inoperative by Early Modern English. Only a handful of verbs which can optionally undergo to deletion must have this information stated as their idiosyncratic property in their entries in the lexicon.

The following are examples in which to is no longer deleted. Structures corresponding to them could undergo (for) to-deletion in Middle English.

- (55) a. because thou wilt not suffer him to feed himselfe  
w<sup>th</sup> such Meditations, as is before mentioned  
(A24.8-9)
- (b. for pou wilt not late him fede him on soche  
          swete meditacions touchid before (H29.5-6))
- (56) a. because he will...make it to be more esteemed  
(A148.11-13)
- (b. for he wol...make it growe & be had more in  
          deintee  
(H132.6-7))
- (57) a. any matter...y<sup>t</sup> thou wouldest have to be more  
          plainer set out, then it is  
(A146.15-16)
- (b. any mater per-in pat pou woldest haue more  
          openid þan it is  
(H130.14-15))
- (58) a. yet would not I bid thee so to do (A136.4)
- (b. me list not byd þee do so  
(H121.9))

- (59) a. for he will send a kind of dew, like Angells  
food, they imagin it to be as it were Coming  
out of y<sup>e</sup> air (All9.1-3)

(b. for he wil seende a maner of dewe--aungelles  
foode bei wene it be--as it were comyng oute  
of pe eire (H105.17-19))

(60) a. him listeth not to work in thy Will (A7.27-28)  
(b. & him list not worche in bi wille (H15.16))

#### 4.5.3 [+Poss] Deletion

There is still no clear example in the Early Modern English corpus in which the [+Poss] feature has been deleted. The following pair of sentences are interesting:

- (61) a. & let thee see me here bodily standing (Al23.4)  
          (b. & lete pee se my bodily stondyng (H109.19))  
 (61a) might be an instance of the construction in question.  
 Yet "standing" in this example seems to be from the progressive  
 from which "to be" has been deleted, because there is no \*"my  
 here bodily standing," from which [+Poss] could be deleted.  
 Thus "me" in (61a) is better analyzed as due to the infinitival  
 complementizer [+Obj] - to.

There is no doubt that the rule is operating in Modern English. We have such sentences as

- (62) everybody was talking about John getting married  
(63) I was surprised at him studying so hard

Since, as mentioned in 3.12.3, [+Poss] deletion from the [-Pro] subject NP of the sentential complement is on record since Early Middle English, we have to assume that at some point

there occurred an innovation to generalize the rule so that it might operate on a [+Pro] NP (cf. Visser 1966:1183). But it is beyond the scope of the present work to trace the details of this development, since the rule certainly is not important in the dialect of the author of the Cloud recension.

## FOOTNOTES

## CHAPTER IV

<sup>1</sup>Page and line numbers are given as they are in Amp. MS. 42.

- <sup>2</sup>E.g., (1) a. it is very seemly for them that be indeed  
meek w<sup>th</sup>in, to shew ye same outwardly in  
 words & Countenances answerable to ye  
 meeknesse y<sup>t</sup> is w<sup>th</sup>in the heart (A114.9-12)  
 (b. it is sittyngly & semely to hem bat ben  
meek wib-inne for to schewe meek & semely  
 wordes & contenaunce wip-outyn (H101.14-16))  
 (2) a. it is but a folly for thee to strive any  
 longer with them (A71.11-12)  
 (b. it is bot a foly to bee to stryue any lenger  
 wip hem (H67.2-3))

According to Visser (1966:963-970), the to-phrase and the single (pro)noun after the matrix verb for indirect objects became obsolete around the end of the Middle English period, so that the for-phrase became the sole possibility after 1500.

<sup>3</sup>The Amp sentence is not a word-for-word modernization of the Har original, which is  
 bot I sey not pat bei schul panne be schewed in brokyn  
 ne in piping voices (H101.17-18)

<sup>4</sup>This derivation suggests that "he" and the following infinitive are not a single constituent. Cf. Visser's remark (1966:956) that "it is as if the infinitive is an adjunct to the (pro)noun."

<sup>5</sup>In some other dialects sentences like (28)-(29) do not seem to be grammatical. Professor Robinson's comment: "example (28) is completely ungrammatical for me, and I would never say (29), although I don't think it would strike me as terribly strange if I heard it."

<sup>6</sup>Clear cases of non-application of Reflexivization are:  
 A2.18, 3.2, 3.27, 8.23, 31.22, 38.15, 39.13.

<sup>7</sup>E.g., the for to variant of the infinitival complementizer occurs only three times in the corpus, but two occurrences are found in the prologue.

- <sup>8</sup>E.g., (1) him listeth not to work in thy Will (A7.27-28)  
 (2) ...right so methinketh, y<sup>t</sup> ...our Lord hath of  
 his great mercy & goodnesse Called thee  
 (A5.10-12)  
 (3) surely him needed not... to go more upwards  
 y<sup>n</sup> downwards (A125.28-126.2)

CHAPTER V  
SENTENTIAL COMPLEMENTATION  
IN THE OPTIMAL GRAMMAR OF EARLY MODERN ENGLISH

5.1 Restructuring

Sentences of Early Modern English, of which the Baker version of the Cloud is the representative sample, can be accounted for by the extended set of rules, "the original grammar  $G_1 + \text{innovations } E_{1-2}$ ," as was shown in the previous chapter. The very same sentences, however, are most economically described by an independently formulated grammar,  $G_2$ , of Early Modern English. The addition of certain innovations to the grammar of Middle English resulted in a non-optimal grammar and younger generations restructured the grammar in order to make it optimal again. In this new optimal grammar,  $G_2$ , the phrase structure rules of  $G_1$  (and also of  $G_1 + E_{1-2}$ ) remain the same. The differences between  $G_1$  and  $G_2$  ascribable to  $E_{1-2}$  are represented by the following:

1. Deletion of transformational rules
2. Simplification of transformational rules
3. Change in the ordering of transformational rules

In the first category are those rules which became inoperative and then were lost from the grammar. They are IO Shift and, to some extent, It Deletion and Complementizer Deletion. There is no longer a special rule for moving the pronoun indirect object to a sentence-initial position. It can be shifted only by a stylistic word order shift for emphasis, which can affect other elements in a sentence as

well, not just an indirect object. The portion of It Deletion dependent upon the prior application of IO Shift was also lost from the grammar, because the structure on which it could operate was no longer generated. Case (b) of Complementizer Deletion, dealing with to deletion, ceased to operate on independent grounds and was deleted from the rule set.

In the second category are Passivization and also It Deletion and Complementizer Deletion just mentioned. It is no longer necessary to provide two different cases for It Deletion and three different cases for Complementizer Deletion because of the loss of their respective case (b). This means that the rules were simplified. Thus these two rules may also belong in this category.

As for Passivization, what was simplified is the description of the structure on which it operates. What it accomplishes remains the same. Although we cannot formalize the rule, we know that in Middle English it operated on the structure with [+Subject] and [+Object, -IO] NP's to switch them. The indirect object NP could not be converted to the derived subject. In order to account for the contrast between "me was told pat..." and "be kyng was told pat..." we posited that Flip applied to the latter to switch the [+Abs] derived subject and [-Pro] indirect object. Somewhere between Late Middle English and Early Modern English the generalization of Flip occurred so that both "I was told that..." and "the king was told that..." became grammatical. Independently of the previous grammar, however, there is no reason to generate

these two sentences by first applying Passivization and then Flip. Passivization switches the subject and direct object as seen in "someone told me/the king the story" and "the story was told me/the king by someone." Why cannot "I/the king was told the story by someone" be generated in the same way? To younger generations of Early Modern English speakers, Passivization is the rule which operates on the structure with [+Subject] and [+Object] NP's; that is, [-IO] was struck out from the SD to the effect that both [-IO] and [+IO] NP's can be made the derived subject of passive sentences. Thus the rule was simplified and its operation is more general now.

Relative to the third category are Passivization and Flip. Passivization and Flip were once strictly ordered with respect to each other but, with the restructuring of the Passivization rule, the two rules became mutually exclusive: if one applies, the other cannot. Thus in G<sub>2</sub> they are not ordered relative to each other but occupy the same rule slot. The other rules, however, were not affected by this change. Accordingly, the ordering of transformations as a whole remains unchanged.

### 5.2 Linguistic Change

Diachronic differences between Middle English and Early Modern English are not many. The empirical observation that the later generation can understand the earlier speech with little training is indeed confirmed within the sphere of complementation.

Nevertheless, language does change and the comparison

of two optimal grammars cannot reflect how language changed, no matter how slight the changes are. If we had only  $G_1$  and  $G_2$ , we could never understand how the rule of Passivization changed between Middle English and Early Modern English. Extension rules  $E_{1-2}$  are the link that connects the two grammatical systems. By positing the innovation which altered the scope of the Flip transformation it is possible to explain how the later Passive rule "evolved" from the earlier one, instead of merely stating that the later rule "replaced" the earlier one.

Intuitively, language seems to change in the direction of simplification. The result of the present study supports this view.  $G_2$  is simpler than  $G_1$ : it has fewer rules; its rules are simpler. We have said that after Late Middle English IO Shift ceased to operate. From the point of view of the SD, there is no necessity for this. Flip is not obligatory in Early Modern English, so that there are found both "I like to go" and "it liketh me to go." The structure on which IO Shift can operate continued to be generated. In the present state of linguistic investigation we do not know much about why languages change the way they do. Therefore, if there is no structural explanation for the inoperativization of a certain rule, we have to say that the rule became inoperative independently of other rules. But it might be the case that IO Shift ceased to operate to reduce the number of alternatives. For the generalization of the Flip transformation reduced the number of derivations in one respect ("me likep/be kyng likep"  $\Rightarrow$  "I/the king like(th)"), but in another respect it also

increased the number of variants by permitting the generation of "I like," which was not possible before ("it likep me/me likep"  $\Rightarrow$  "it liketh me/me liketh/I like"). Now, if IO Shift became inoperative, one variant would be eliminated and, consequently, the number of variants would become the same as before ("it liketh me/me liketh/I like"  $\Rightarrow$  "it liketh me/I like"). When we have more studies of linguistic changes between related grammatical systems--what these changes are and how they came about--they will help us to understand better what is simpler linguistically for human beings and eventually why languages change the way they do.

## APPENDIX

TRANSFORMATIONS FOR SENTENTIAL COMPLEMENTATION  
IN THE THREE GRAMMARS

G <sub>1</sub>	Innovation	G <sub>1</sub> * E <sub>1-2</sub>	G <sub>2</sub>
1. Rule A: Complementizer Placement		1. A*	1. A*
a) <u>bat</u>		a)	a)
b) [+Obj] - ( <u>for</u> ) <u>to</u> - ([+Inf])	Lexical: >[+Obj] - <u>to</u>	b*)	b*)
c) [+Poss] - [+Ger]		c)	c)
2. Rule B: Equ1-NP Deletion		2. B	2. B
3. Rule C: <u>It</u> Replacement		3. C	3. C
4. Rule D: Reflexivization		4. D*	4. D*
a) Emphatic OBL		a)	a)
b) Coreferential OPT	>OBL	b*)	b*)

5. Rule E: Passivization [+SUBJ]~[+OBJ, -IO]		5. E	5. E'
6. Rule F: Flip [+SUBJ, +Abs]~[+IO, +Anim, -Pro]	Generalization: > [+SUBJ, +Abs]~ [+IO, +Anim]	6. F'	6. F'
7. Rule G: Extraposition (OBL?)	> OPT?	7. G	7. G
8. Rule H: IO Shift	Inoperativization: > NON	8. H'	8. H'
9. Rule I: <u>It</u> Deletion a) OBL b) OBL	Inoperativization: > NON	9. I'	8. I'' a) b'')
10. Rule J: Complementizer Deletion a) <u>bat</u> OPT b) ( <u>for</u> ) <u>to</u> OPT (c) [+Poss] OPT	Inoperativization: > NON	10. J'	9. J'' a) b'') (c) (c)

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