

## TOWARD A BASE FOR LATE OLD ENGLISH

Stephen H. Goldman  
University of Kansas

Within the last few years there has been a number of attempts to apply contemporary linguistic models developed for the description of modern languages to historical stages of these languages. There now seems to be a growing awareness among linguists that the separation of synchronic and diachronic descriptions is a tenuous one and that quite often the insights one method affords the investigator are useful when applied to the second. The following study is an attempt to show the usefulness of using modern, generative theory in trying to recreate the grammar of tenth-century Old English. This stage of English is particularly interesting in that it contains specific problems not encountered within modern English which demand a solution based on the logic of the model the particular investigator brings to his analysis and, at the same time, demand an analysis which will be consistent with later historical stages of the same language.

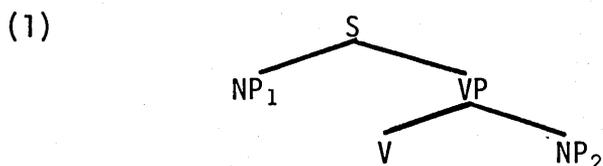
The manuscript used to supply the data for this study is the Vercelli Book.<sup>1</sup> It appears to have been written by a single hand during the last half of the tenth century. Aside from the poetic pieces, which were not used for this report, the manuscript contains twenty-three homilies written by various authors. The scribe who collected these homilies had a very broad taste in subject matter, and the topics of the different pieces range from such calendar subjects as Christ's nativity and the Last Judgment to monitory themes upon the eight head sins.

Such a varied collection, written at what was the beginning of the high point of Old English prose, is tailor-made for the type of analysis attempted here. The chance of working with a number of different authors who wrote probably during the same period on various topics within one specific genre ensures that, first, individual stylistic deviations will not color the data too strongly and, second, a more rounded view of the language of that period can be obtained than by working only with an individual writer (e.g. Ælfric or Wulfstan) no matter how superior a stylist he may be.

The specific aim of this study is a description of the phrase-structure rules for the base component. The description makes use of Paul Bacquet's division of possible Old English sentences into basal order, that order which presents information with no specific part of the sentence emphasized for rhetorical effect, and marked order, that order which has been specifically marked for rhetorical emphasis. The basal patterns were first isolated, and the description of the phrase-structure rules is based on these sentences.

While Bacquet's descriptions are, for the most part, followed, his method of description is not. A transformational model has been

chosen instead which is based on Noam Chomsky's work in generative grammar (1965). This model, however, has been modified to include Charles J. Fillmore's deep-case theory. Aside from the obvious interest in testing Fillmore's theory when confronted by a language which seems to use a system of prepositions and affixes to mark cases for the nouns, there is an extremely important advantage gained by using deep-case theory for this particular study. The major difference between Fillmore's theory and Chomsky's later model involves the grammatical relationships between noun phrases and verbs. Chomsky (1965: 68-74) states that the grammatical function "subject of" is defined on the basis of a noun phrase being directly dominated by S, and that the grammatical function "object of" is defined by a noun phrase being directly dominated by VP. Thus, in the example below, NP<sub>1</sub> is a subject while NP<sub>2</sub> is an object.



The question Fillmore raises is whether or not "subject of" is actually a deep-structure concept. Fillmore claims that the so-called relation "subject of" is a derived relation; that is, there are certain labeled NP's that follow the verb and are related to the verb by certain case relationships. The NP's are labeled according to these case relationships (e.g., instrumental, dative, agent) (Fillmore 1968:17). A transformational rule then takes one of these NP's and derives the subject of the sentence from it.

The elimination of the "subject of" relationship, and by implication the "object of" one as well, overcomes a serious problem in setting up a base for Old English. According to Chomsky, two of the major phrase-structure rules needed for languages that have subjects and objects would be (2) and (3):

(2) S → NP AUX VP

[A sentence (S) can be expanded to noun phrase (NP), auxiliary (AUX), and verb phrase (VP).]

(3) VP → V NP<sup>2</sup>

[A verb phrase can be expanded to a verb (V) and a noun phrase.]

Both these rules are necessary, because the first sets up the "subject of" relationship and the second, the "object of" relationship. The rule presented in (3), however, creates a serious problem for Old English syntax because of its further claim that the object of the verb must follow the verb. For Old English, such a claim is simply not true if the object is a pronoun:

(4) (a) he us fet (22. 120r. 22)<sup>3</sup>  
 (b) 7 mīn gast me hatað (22. 116v. 21)

- (c) he us gegearwað galnesse. (19. 107v. 19)  
 (d) 7 hie me hyrdon georne (10. 67r. 9)  
 (e) 7 ic eow sylle ecne gefean in heofonum  
 (10. 68r. 22)  
 (f) Ic þe halsige þurh lifigende god þæt ...  
 (1. 3v. 8)

The rule, however, cannot be reordered as

- (5) VP → NP V

because when the object is a noun, it must follow the verb:

- (6) (a) 7 he demð rihtne dom. (10. 66v. 7)  
 (b) 7 þæt wolcen bewrydð ealne heofon. (15. 82v. 9)  
 (c) He hæfde hiht in þe (4. 19v. 18)  
 (d) 7 hio laðað englas to fylste. (3. 16r. 6)  
 (e) 7 hie þonne drifað þa synfullan 7 þa cearfullan sawla  
 to helle (15. 85r. 3)  
 (f) 7 se soðfæsta dema ðonne demeð eallra manna ...  
 (21. 115r. 21)

The insistence that the phrase-structure rules contain the definition for the "object of," therefore, leads to the question of how the object NP is to be ordered for Old English. The data are evenly split on each position, depending on whether the object is a noun or a pronoun. Given Chomsky's model, an arbitrary decision must be made as to the choice of (3) or (5).

If, however, the grammatical relation "object of" is also only a surface-structure feature reflecting a deep-case relationship, no such problem exists. The relationship is simply brought about by a set of transformations that operate on a particular NP to bring about one order for noun objects and a second order for pronoun objects. In this way, one type of object does not have to be subordinated to another type which seems to have no superior claims. The use of Fillmore's deep-case theory, therefore, avoids a problem of arbitrary ordering brought about by Chomsky's original model.

Since this paper will follow Fillmore, the phrase-structure rules in (2) and (3) will have to be rewritten to eliminate the claims they make for the relationships "subject of" and "object of." First, the phrase-structure rules must start with a rule that expands the symbol S; thereafter, each following rule will expand more general categories into more specific categories until the ultimate constituents of a sentence are reached.

$$\text{PS 1}^4 \quad S \rightarrow \# \left\{ \begin{array}{l} \text{CONJ} \quad S \quad S \quad (S) \quad * \\ \text{MOD} \quad \text{PROP} \end{array} \right\} \#$$

[S(entence) may be rewritten as a CONJ(unction) plus an infinite number of sentences (infinite possibility is indicated by \*) or as MOD(ality) plus PROP(osition).]



- 7 þam beswicendan diofle. (8. 60v. 4)  
 (e) Se engel hie þa frēfrede 7 swa cwæð ... (5. 25v. 8)
- (9) (a) Þa manfullan wealdap nu on heora rice. (22. 117r. 18)  
 (b) ic bio symle on hira midlene. (12. 74v. 18)  
 (c) 7 we hyrdon ær on þæm godspelle ... (5. 28r. 4)  
 (d) Ac hie bioð sona fordemde. midþyþe hie deaðe sweltað. (8. 59v. 21)

Among the sentence-level adverbs that appear before the verb are swa, swipe, þær, þa, and þonne. These adverbs are classed as ADV<sub>L</sub> in the analysis. Eac, ærest, ær, eft, nu, oft, giet, simle, þeah, sona,<sup>6</sup> þa, and þonne appear after the inflected verb and are classed as ADV<sub>H</sub>. These adverbs are placed immediately behind the verb by a later transformation.

The placing of these short adverbs into one group that precedes the finite verb is not, however, a rejection of Bacquet's classification. There are, indeed, good reasons for accepting it. There are, on the other hand, equally good reasons for treating them as a single group and, later, transformationally removing some of them from their pre-verb position to a post-verb position.

All of these adverbs seem to have been equally light (that is, pre-verb) at one point in the early history of English. In discussing the Anglo-Saxon Chronicle, J. Fourquet (1938:39) does group them together:

En fait cette règle s'applique à tout un group d'éléments que l'on pourrait appeler légers: ce sont de petits mots, pronoms ou adverbs, qui dans les langues germaniques, sont faiblement accentués, hors du cas où ils portent une insistance exceptionnelle. Le pronom de la 1<sup>re</sup> et de la 2<sup>e</sup> personne est rarement représenté dans ce texte; mais on trouve des exemples très nombreux du pronom de la troisième personne dont le nominatif est he, heo, hit, et du pronom dont le nominatif est se, seo, þæt. Les adverbs formés sur ces mêmes radicaux démonstratifs, comme her, þa, þær, sont traités comme les pronoms. A ce groupe s'ajoutent quelques petits adverbs comme ær, eft, eac.

All these adverbs, furthermore, have a common characteristic: they have no sentence-level restrictions. Unlike various other types of adverbs, they can all appear in imperative and question constructions.

#### (10) Imperative<sup>7</sup>

- (a) Do swa ðu wille.  
 (b) help no þinum earmun.  
 (c) fer ærest æfter him.  
 (d) ac sege gyt hwæthwugu swetolor ymb þæt.  
 (e) Gecier eft to me.  
 (f) Befæste hit þa bocstafum, and awrit hit.

## (11) Question

- (a) Wost þu þa genoh ...?  
 (b) Wene ge nu ðæt ic ...?  
 (c) Hwæper þu giet ongite ...?

For these two reasons, therefore, the adverbs have been grouped together in order to simplify the grammar. A later transformational rule will move the adverbs marked [+ heavy] to a position after the verb. The classification [+ heavy] is used to designate those adverbs which are now too heavy to come before the verb.

There seems to be a special problem with þa and þonne because they frequently appear in either position without any clear indication of one position being more emphatic than another.

- (12) (a) þa hyrdas him þa ondredon swiðe ac se engel hie fre-  
 frede 7 swa cwæð (5. 28r. 14)  
 (b) Se hælend þa andswarode iohanne (16. 86v. 13)  
 (c) 7 he þonne drifað þa synfullan 7 þa cearfullan sawla  
 to helle (15. 85r. 3)  
 (d) 7 se soðfæsten dema þonne demeð ealra manna ...  
 (2. 9v. 21)
- (13) (a) hie besawon þa in þone. þe hie sticedon.  
 (1. 8v. 11)  
 (b) hie onfoð þonne þa heofonlican (22. 120r. 10)  
 (c) hie gefeoð þonne on þam heofonlican brydbure.  
 (22. 120r. 11)

Bacquet (1962:90-91) suggests the following solution:

L'adverbe þa se place naturellement entre le sujet et le verbe s'il traduit une simple succession chronologique; mais il suit le verbe lorsqu'il exprime une succession motivée et revêt une nuance causale.

L'adverbe þonne, au contraire, suit le verbe s'il traduit une simple succession. On le rapprochera dans ce cas des adverbess de localisation examinés plus haut. Mais il précédera le verbe s'il revêt une nuance causale et équivant approximativement à for þam (= therefore).

If the contexts for (12) and (13) are examined, this same relationship will be seen to hold true. The sentence immediately preceding (12b), for example, gives the speech of John the Baptist; the þa simply states that Christ's speech follows. The sentence given in (13a), on the other hand, states that what is about to happen is a fulfillment of a prophecy and these words are given. In this case, therefore, þa can be seen as establishing a causal relationship. Following Bacquet, the case for þonne is the exact opposite. (12c) is preceded by a statement by Christ that damns the evil souls to the keeping of Satan. The causal connotation of þonne in this sentence, therefore, is quite obvious. (13c) is preceded by a clause with nu (ðape nu be sylfwille gode þeowiað), and a contrast seems to be set up between what is now and what will succeed. Thus, the þonne in this sentence should be trans-

lated as "then."

While the above examples are certainly too brief to characterize all of the Vercelli homilies, they are sufficient to show that at least in their case the distinction made by Bacquet still holds. The solution to the problem of þa and þonne can be tentatively stated to be that there is only a seeming difficulty: there are actually two þa's and two þonne's.

(8a) illustrates one final point about ADV: it is possible to have more than one member of ADV<sub>L</sub> in the sentence. When this occurs, þa (or þonne) precedes any other member of ADV<sub>L</sub>. There is no instance in the Vercelli homilies of an adverb other than þa or þonne appearing with a second member of ADV<sub>L</sub>.

- (14) (a) he þonne þær asette godes circan ... (18. 98r. 4)  
 (b) 7 he þa swa dydon; (19. 108v. 32)
- PS 4<sup>8</sup> AUX → T  $\left( \begin{array}{l} \left\{ \begin{array}{l} \text{Habb-} \\ \text{Wes-} \end{array} \right\} \\ \text{(M - Infin)} \end{array} \right. \left. \begin{array}{l} \text{-PP} \\ \text{(BE - PRP)} \end{array} \right) )$

Tense (T) is the only obligatory element in AUX; it can be rewritten as either past or non-past. Of the elements that are optional, the first is the past participle (PP) with either habban or wesan. Habban generally occurs only when the main verb is transitive:

- (15)<sup>9</sup> Ac him hæfdon Pene þone weg forseten.

With intransitive verbs, however, wesan is usually used:

- (16) (a) Hu Orosius sæde þæt he wære cumen.  
 (b) Ider hi þa mid fierde gefaren wæron.

The past participle with habben/wesan can only co-occur with T in the AUX.

The modals (M), cunn-, mag-, scul-, and will-, require that the infinitive marker be added to main verb:

- (17) (a) Ac þær hie hit georne ongitan cupen.  
 (b) Ic mæg eac on urum agnum fidum gelic anginn þam gesecgan.  
 (c) For ðon þe hie hyre firenluste fulgan ne moste.  
 (d) Ic sceal eac niede þara monegena gewinna geswingian ...  
 (e) [þ]a he 7 þa consulas hie attellan ne mehton.

The modal plus infinitive can co-occur with (T) and with BE - PRP. It cannot co-occur with habb-/wes- - PP.

There are three auxiliaries for the formation of the progressive: beon, wesan, and weorðan. They are, for the sake of convenience, all

implied in the symbol BE. No satisfactory explanation has, as yet, been found for choosing one over the others in any given situation.

- (18) (a) 7 him æfterfylgende wæs.  
 (b) þæt seo ea bið flowende ofer eal Ægypta lond.  
 (c) Ðin eagan weorðað gesionde ðinne

Unlike the perfect constructions, the progressive can occur with the modals:

- (19) (a) Nu ic wille eac þæs maran Alexandres gemunende beon.  
 (b) Ic sceal feohrende beon.

(M - Infin) (BE - PRP) has, therefore, been placed in co-restriction with the past participle and habb-/wes-. The parentheses allow for the choice of one, both, or neither for a given construction.

PS 1 and PS 2 present an analysis of AUX and its ordering in relation to the main verb, which is in PROP, that rejects earlier discussions. Mrs. Traugott, citing Emmon Bach's treatment of German (1962), places AUX in sentence-final position:

Most linguists consider the order subject (SU) - object (O) - main verb - Auxiliary (AUX) which is typical of coordinate and dependent clauses is a reversal of the "normal order" SU - AUX - MV - O. In terms of simplicity of description and explanatory power, however, it is by far the simplest to set up the Old English phrase in the order SU - (O) - MV - AUX. This will automatically account for most coordinate and subordinate clauses. A rule will then specify that in independent clauses the last helping verb is moved to a position before MV .... Furthermore, this analysis obviates the necessity of an affix switch rule, a rule which has no motivation, especially as T never has to be blocked from MV in Old English to generate a dummy carrier (Traugott 1965: 283).

She then proposes the following phrase-structure rules (Traugott 1965: 285):

$$4.1 \quad S \rightarrow NP - VP$$

$$4.2 \quad VP \rightarrow MV - AUX$$

$$4.3 \quad MV \rightarrow \left\{ \begin{array}{l} NP - V_t \\ V_i \\ \cdot \\ \cdot \\ \cdot \end{array} \right\}$$

$$4.4 \quad V_i \rightarrow \left\{ \begin{array}{l} V_{i\text{move}} \\ V_{i_x} \end{array} \right\}$$

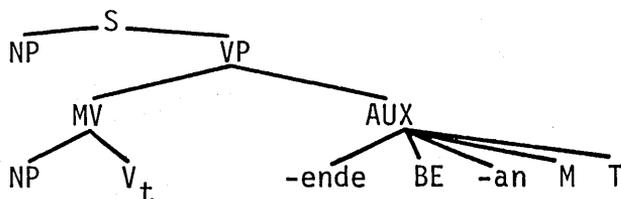
$$4.5 \quad \text{AUX} \quad \left( \begin{array}{l} \text{PP - habb/V}_t, \text{ V}_{i\text{move}} \text{ —————} \\ \text{PP - wes/V}_i \text{ —————} \\ \text{(PRP - BE) (Infin - M)} \end{array} \right) \text{ T}$$

Mrs. Traugott's reasons for positioning AUX after MV are, on face value, very compelling. The formulation of the rule for AUX in this study complicates the grammar by two rules. First, an affix-switch rule is necessary which, indeed, has no motivation other than the positioning of AUX in the phrase-structure rules. Second, a rule is needed to move all verbs but the inflected verb of a sentence to a sentence-final position. Neither of these two rules is necessary in Mrs. Traugott's analysis, and, therefore, if simplicity is the only criterion, her formulation must be considered better.

Simplicity, however, is not the only criterion. Every rule written for a language makes certain claims about that language. Since Mrs. Traugott is, furthermore, describing an early stage of English, the rules she sets up here will also make claims about the later history of English. There are, however, several consequences of her position that are not desirable when one tries to compare her rules for the AUX in Old English with those for AUX in later stages of English.

Using Mrs. Traugott's analysis of the phrase-structure rules of Old English, PS rules 4.1-4.5, the following underlying structure could be produced:

(20)



If this is indeed the proper underlying structure, a claim is being made that, at some point in late Middle English, a sweeping change occurred which completely reversed the order of AUX in English. Such a change is necessary, because with the addition of the empty auxiliaries do and gin as tense carriers, affix-switch is necessary. Since affix-switch is necessary to explain the behavior of do in questions and emphatic statements, MV and AUX must change places, and the ordering of the elements in AUX and MV for (20) must now be exactly reversed. This is a serious restructuring of the entire verb phrase, yet it is brought about by elements that did not exist before as empty auxiliaries and, because there was no affix-switch rule for Old English, had no motivation or mechanism to become such.

In the same article, however, Mrs. Traugott presents the following intelligibility criterion defined by Halle (1964:66):

Linguistic change is normally subject to the constraint that it must not result in the destruction of mutual intelligibility

between the innovators -- i.e. the carriers of the change -- and the rest of the speech community .... This restriction clearly affects the content of the rules to be added .... the number of rules to be added must also be restricted, for very serious effects on intelligibility can result from the simultaneous addition of even two or three otherwise innocuous rules.

It may be somewhat less obvious that the requirement to preserve intelligibility also restricts the place in the order where rules may be added. All other things being equal, a rule will affect intelligibility less if it is added at a lower point [near the surface] in the order than if it is added higher up.<sup>10</sup>

In terms of the VP change under discussion, what is being radically changed is the highest part of the grammar: the base.

If the causes for this radical change are examined, moreover, the case for Mrs. Traugott's phrase-structure rules and the related underlying form (20) becomes untenable. According to the evidence presented, the appearance of do and gin in Middle English triggers the modifications. The question must arise whether it is probable that these two forms would ever appear in the language if they, in themselves, demanded an almost complete restructuring of the PS rules: Can an element appear in a language when the conditions of its appearance do not already exist? The required conditions are those already described as the changes Mrs. Traugott is forced to make in the VP of English once these auxiliaries appear. The changes, however, are forced upon her because she would not complicate the grammar of Old English by allowing for an affix-switch rule. She must, therefore, make the claim that elements not in the language suddenly appear out of nowhere and re-make the base. Yet again, how can they appear if there is no provision for them in the original grammar? It may seem unfair to say that Mrs. Traugott is claiming that do and gin appear as empty auxiliaries suddenly and without warning. That, however, is exactly her claim. Without do and gin, according to her, there is no reason for setting up the PS rules so as to require an affix-switch rule, but once they appear there is every necessity to do so. Such a claim seems misguided, for it places undue emphasis on the importance of two elements whose function as tense carriers could not exist previous to the so-called changes.

To Bacquet and Fourquet, the word-order of Alfredian prose is very strongly set as  $S^{11} - V - (0)$ . Thus Fourquet (1938:106) states:

Le fait central est l'extension du verbe second, quel que soit le premier élément, léger ou non; le groupe nom - verbe [i.e., (0) - V] cesse d'avoir un sens, il n'apparaît que dans de rares survivances, et disparaît même de la principale - annexe.

Bacquet disagrees with Fourquet only in that he feels this new order arose a century earlier than Fourquet would have it. His data seem to argue overwhelmingly for the earlier date (Bacquet 1962:64-126).

Following Fourquet and Bacquet, then, the order used here is AUX - V - (0). This order, with the necessity for an affix-switch rule, set

the stage early in the history of the English language for the appearance of do and gin. The fact that several centuries passed before they appeared is not alarming: Languages all have potential for changes in many directions; some of these changes require a great amount of time to occur without disrupting mutual intelligibility; others simply never occur.

While Mrs. Traugott has given a description of the Old English verb phrase which has to its credit the simplest possible form, it does not seem to reflect what must have happened to English during its various historical changes. What is seen here, therefore, is a case of the simplest rule violating the nature of the language. The simplicity criterion is not enough.<sup>12</sup>

With the discussion of AUX, the last constituent of MOD has been presented, and it remains now to examine the constituents of PROP. It was stated before that PROP contains the verb of the sentence and a series of deep-cases that bear a relation between the verb and the NP's dominated by each case. The concept of deep-case should not be confused with what are commonly called the cases of a noun in a paradigm. Such cases are the surface-structure realization of the deep-cases, but they often do not have a one-to-one relationship with one another. According to Fillmore (1968:21), the term case (or, in this study, deep-case) is used "to identify the underlying syntactic-semantic relationship" that a NP shares with a verb; that is, NP's are categorized on the basis of the syntactic and semantic bonds they might have with a given verb.

For Old English, the following categories have been set up on the basis of the data in the Vercelli homilies:

ESS(ive) is used for predicate nominals. In the surface structure it commonly appears in the nominative surface-case after the verb BE:

- (21)
- |     |  |               |
|-----|--|---------------|
| (a) | <u>þæs mannes nama</u> <u>wæs</u> <u>cyrinus</u>                   | (5. 25r. 15)  |
| (b) | lc eom <u>se ælmihtiga dryhten</u> 7 <u>eallra gasta nerigend.</u> | (15. 82r. 18) |
| (c) | <u>þæt is þæt ilcan fæsten</u> þe we nu foran to eastрум<br>fæstað | (12. 74r. 14) |
| (d) | 7 heo ys <u>unoferwinnendlic weall</u> ymb þa sawle.               | (20. 110v. 2) |
| (e) | þis is <u>min se leofa sunu</u> in þam me wel licade.              | (16. 88v. 18) |

ESS will be ordered immediately after V(erb) in PROP for the convenience of the later object- and subject-producing rules. In order to write the most general transformations possible, all the deep-cases have been ordered after V according to the order in which they are most likely to appear after the verb in the surface structure. ESS is the most likely of all the cases to appear in this position when other cases are also present in PROP.

If ESS is not present, NEUT(ral) is the next most likely to ap-

pear after the verb in the surface structure, and has therefore been ordered after ESS. NEUT represents those noun phrases in a sentence which symbolize things that are in some way affected by the action or state of the verb. If NEUT follows the verb, its surface-case representation is usually the accusative. If, however, the subject transformation has operated upon it, its surface-case is the nominative:

- (22)<sup>13</sup>
- (a) sio ælmesse geondfærð þone heofon. (3. 16r. 8)
  - (b) 7 he demð rihtne dom. (10. 66v. 7)
  - (c) 7 sio clænness us gehæt heofona rice. (22. 119v. 17)
  - (d) 7 he geseah eal þa diofulgild on eorþan licgan. (6. 56r. 8)
  - (e) Hie sendað hira handa on me ... (22. 117r. 1)
- (23)
- (a) þysse worulde welan wiorð to nahte (10. 69v. 22)
  - (b) Ac se min þearfa aswærnde æt þinre handa (10. 68r. 8)
  - (c) manegu wundor gelumpon in augustes rice. (5. 26r. 14)
  - (d) eall þa diofulgild gehuran beforan marian fotum (6. 56r. 4)

DAT(ive) is placed after NEUT in PROP because if neither ESS nor NEUT appear, it is the most likely case to follow the verb. It is defined as the class of nouns in the sentence that symbolize animate beings affected by the action or state described by the verb. If NEUT is not present in PROP and DAT becomes the object of the verb through the operation of a transformational rule, its surface-case is usually the accusative:

- (24)
- (a) 7 hio awecð þone engel ongeancumende. (3. 16r. 9)
  - (b) 7 hio alyseð þone mannan fram deape. 7 fram wítum. (3. 16r. 3)
  - (c) ic þonne hate eowerne cyning ahon (1. 6v. 20)

If, however, the NP in DAT is accompanied by a preposition such as to, with or without NEUT in PROP, the surface-case is the dative:<sup>14</sup>

- (25)
- (a) he þa dryhten crist cwæð to þam welegan men (10. 67r. 16)
  - (b) he spræc to eallum his werode (6. 56r. 10)
  - (c) se cliopað to me (10. 68r. 4)
  - (d) ic þis eal fremede for þe (8. 60r. 16)

Finally,<sup>15</sup> if DAT is selected by the subject transformation, the surface-case will, once again, be nominative:

- (26)
- (a) þas wiht habbað deofla onlicnesse (18. 100r. 12)
  - (b) 7 þa hyrdas getocnoden þa godan lareowas ... (5. 28r. 7)
  - (c) he hæfda hiht in þe (4. 19v. 18)

INS follows DAT in the surface structure and has therefore been placed after DAT in the deep structure. This case is normally associated with the prepositions mid and purh. INS is defined as that class of nouns which designate inanimate forces or objects that are involved in the action or state described by the verb. When INS is found in the surface structure after NEUT and/or DAT and is immediately preceded by a preposition, its surface-case is the dative/instrumental:

- (27) (a) he hine gegyrede mid hærene hrægle ... (18. 98v. 2)  
 (b) he hine genyðerað purh unrihtþanded. oððe purh oðer yfel (7. 58v. 15)  
 (c) ... ic þe geworhte of eorðan lame mid minum handum (8. 60r. 2)  
 (d) ... ac he me þonne onsacað mid swiðe mycle facne mode. (15. 80v. 18)

INS, however, is very susceptible to the subject transformation and therefore frequently appears in the nominative surface-case:

- (28) (a) sio ælmesse geondfærð þone heofon (3. 16r. 8)  
 (b) 7 sio clænnesse us gehæt heofona rice. (22. 119v. 17)  
 (c) 7 þæt wolcen bewrygð ealne heofon. (15. 82v. 9)

AGT (agent) is that class of nouns in PROP that represent animate beings seen as the instigators of the action described by the verb. As such, this case is the most susceptible of all the cases to the subject transformation and rarely appears in any surface-case other than the nominative:

- (29) (a) 7 he þa dryhten crist cwæð to þam welegen men (10. 69r. 16),  
 (b) God is seo sope lufu. (3. 12v. 14)  
 (c) 7 eall helwarena mægen cymð to þam dome ... (4. 18v. 24)  
 (d) 7 se halega gæst wumode in þam æðelan innoðe ... (10. 65v. 13)

The Vercelli homilies have few examples of the AGT in any position other than that of the subject. In the few examples, however, that do exist of AGT following the verb in a case other than nominative, the AGT NP is in the dative/instrumental surface-case and is immediately preceded by the preposition bi:

- (30) þin sawl on þisse ilcan niht bið be minre hæse of þinum lichoman ælæded (10. 69v. 15)

LOC(ative) is the final case that has been identified for this study. It usually appears last in the sentence and is usually accompanied by a preposition. Depending on the nature of the preposition, the surface-case for a LOC NP can be accusative or dative:

- (31)
- (a) 7 he aras of his cyne setle (19. 108v. 29)
  - (b) manegu wundor gelumpon in agustes rice. (5. 26r. 14)
  - (c) 7 se hælæn wyrð on swiðe ongryslicum hiwe. ofer þam forworhton. (4. 21r. 15)
  - (d) sio fyrwetgyrnes besencð þone mannum on helle (22. 119v. 17)
  - (e) 7 se hafað geweald ofer middangeard. (15. 81v. 19)

LOC is defined as that class of nouns which indicate location or direction of the state or action of the verb.

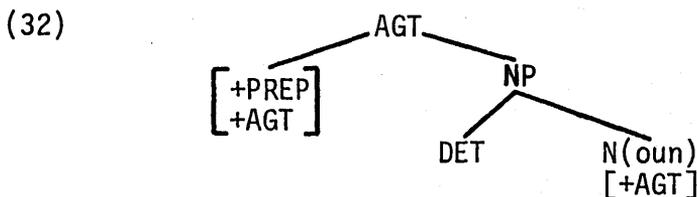
The six deep-cases discussed above and the verb are the constituents of PROP. The phrase-structure rule which gives the expansion of PROP, therefore, can be written as follows:

PS 5 PROP → V (ESS) (NEUT) (DAT) (INS) (AGT) (LOC)

[PROP(osition) can be rewritten as V(erb) plus a number of specified cases following V. Each case is optional, but at least one must be selected.]

V(erb) has two basic sub-categories: [+V, -A] and [+V, +A]; that is, adjectives are included under the category V (Lakoff 1965). When [+V, +A] is used, a late spelling rule will add the proper form of BE to the sentence in order to carry tense.

In discussion of the cases placed in PROP, several prepositions were pointed out as being somehow associated with each case. Fillmore proposes that for each case in modern English there is a preposition attached to the NP before certain transformations operate upon the case. For example, if one of the cases in PROP is AGT, the following would be its ultimate structure (Fillmore 1966: 365-373):



Fillmore, in other words, believes that just as there are surface-case inflections that reflect deep-case relationships, there are prepositions which also point out these same relationships:

Prepositions in English -- or the absence of a preposition before a noun phrase, which may be treated as corresponding to a zero or unmarked case affix -- are selected on the basis of several types of structural features, and in ways that are exactly analogous to those which determine case forms in a language like Latin. (Fillmore 1968:15)

The prepositions, moreover, fall into two classes: natural and marked. Natural prepositions consist of those prepositions which are

constantly associated with a particular case. For modern English, for example, to would be considered the natural preposition for DAT. Marked prepositions, on the other hand, are those prepositions that only occasionally are associated with a case and require some special marking in the deep structure before they can appear in the surface structure.

Including a preposition for each deep-case in Old English is not a problem even though Old English also maintains a system of affixes to indicate surface-case: "After accepting the fact that the conditions for choosing prepositions are basically of the same type as those for choosing case forms, we merely agree that the determining conditions may simultaneously determine a preposition and a case form [i.e., an affix]" (Fillmore 1968:15).

The natural prepositions for Old English deep-cases as presented in the Vercelli homilies are the following. Each was selected on the basis of statistical frequency for a particular deep-case, since there can be no native-speaker intuition to confirm or reject the proposed forms.

NEUT, as is true for modern English, does not seem to have a natural preposition. If there is a natural preposition with this class, it is always obligatorily deleted by the time it goes through to the surface structure.

DAT contains the natural preposition to:

- (33) (a) he þa dryhten crist cwæð to þam welegan men (10. 67r. 16)  
 (b) he spræc to eallum his werode (6. 56r. 10)  
 (c) se cliopað to me (10. 68r. 4)

There are, however, marked prepositions also attached to the dative:

- (34) (a) 7 ic gefeah on him (4. 19v. 6)  
 (b) he swanc for me (4. 19v. 6)  
 (c) 7 he weop for me (4. 19v. 11)

In such cases the verbs would be marked [    <sup>+DAT</sup> <sub>+on</sub>] or whatever the particular preposition called for might be, and a later rule would write on into the node provided for the DAT preposition.

The natural preposition for INS in mid:

- (35) (a) eala man hwæt ic þe geworhte of eorðan lerne mid  
 minum handum (8. 60r. 2)  
 (b) he hine gegyrede mid hærene hrægle ...  
 (18. 98v. 2)

Again, instances of prepositions other than mid would have to be specially marked:

- (36) he hine genyðerað oððe purh unrihtþanded. oððe purh oðer  
 yfel (7. 58v. 15)

It was unfortunately not possible to isolate the natural preposition of AGT through the data presented in the Vercelli homilies. Since AGT is typically the NP that functions as the surface subject, the only occasion in which the preposition usually does appear is in passive sentences. Almost all sentences discovered in the Vercelli homilies made use of the optional transformational rule that deletes the unspecified agent, and thus the preposition could not be recovered. The passive construction on the whole seems to have been unpopular in Old English writing and, when used, was specifically chosen to emphasize the NEUT or DAT NP. This use would logically lead to dropping the AGT NP.

LOC is an extremely complex class, and no single preposition can be isolated as natural to it. It would seem, in fact, that all prepositions in this class, unlike those in the previous classes, contain semantic importance (i.e., they convey meaning as well as syntactic relationships) (Stockwell 1968:47-58). If such is the case, all prepositions in this class must be marked (Stockwell 1968:51-52). For Old English, furthermore, it is necessary to sub-categorize LOC:

PS 6 LOC → (LOC<sub>ORIG</sub>) (LOC<sub>TO</sub>)

LOC<sub>ORIG</sub> indicates where or from where an action begins or takes place. LOC<sub>TO</sub> contains expressions of where an action ends if it differs from where the action began. The sentences in (37) are examples of instances using both sub-classes (cf. Bacquet 1962:85-87, 121).

- (37) (a) 7 steorran feallað of heofenum on eorðan. (15. 82r. 1)  
 (b) ic was gast fram gode on þe sended. (4. 21r. 23)

The following rule, PS 7, will expand each case in PROP into its constituent preposition and NP:

PS 7 ESS → PREP NP  
 [+ESS] [+ESS]

NEUT → PREP NP<sup>18</sup>  
 [+NEUT] [+NEUT]

DAT → PREP NP  
 [+DAT] [+DAT]

INS → PREP NP  
 [+INS] [+INS]

AGT → PREP NP  
 [+AGT] [+AGT]

LOC<sub>ORIG</sub> → PREP NP  
 [+LOC<sub>ORIG</sub>] [+LOC<sub>ORIG</sub>]

LOC<sub>TO</sub> → PREP NP  
 [+LOC<sub>TO</sub>] [+LOC<sub>TO</sub>]

The above rules in PS 7 obligatorily expand each labeled class into a preposition and a noun phrase. The prepositions and noun phrases are, furthermore, marked by the class they appear under so that the lexical rules that insert prepositions and nouns to the phrase structure can operate simply with a minimum of special marking.

Finally, two rules are necessary to expand NP into its constituents:

PS 8      NP      →      (D) N (S)  
                   $\left[ \begin{array}{l} +\text{ESS} \\ +\text{NEUT} \end{array} \right]$

[The rule limits the occurrence of an embedded complement S to instances of NP's marked [+ESS] or [+NEUT], since such sentences are limited to NP's that are subjects of intransitive verbs or objects of transitive ones.]

PS 9      NP →  $\left\{ \begin{array}{l} \text{NP} \quad \text{S} \\ (\text{D}) \quad \text{N} \end{array} \right\}$

[Any noun phrase can be expanded as a noun phrase plus an embedded S or as an optional determiner plus an obligatory noun. When the embedded S has a NP in it that is identical with the NP which is the sister constituent of that S, the first option of this rule will lead to relativization.]

PS 1-9 are the rules for the base of Old English as found in the Vercelli homilies. These rules will produce a string of formatives (when combined with the lexical rules) upon which the transformational rules will operate. With such a base, individual sentences can be treated solely in terms of the rules used and the later transformations that are applied. In this way, generalizations can be made on the basis of what all these sentences have in common; that is, a generative grammar can stress the generalizations that are possible within a given corpus. If these rules, furthermore, take into account historical development as well as synchronic information, the possibility exists that the base for one stage of a language may be extended to a later stage of that language as well.

#### NOTES

<sup>1</sup>For the most authoritative discussion of the Vercelli Book, see Förster, 1913A.

I am indebted to Prof. Jon L. Erickson of the University of Wisconsin Department of English for the text of the Vercelli homilies used here.

<sup>2</sup>This rule has been extremely simplified for the purpose of the discussion.

<sup>3</sup>In the notation used for the Vercelli homily references, the first number refers to the homily, the second to the folio of the MS., and the final to the line.

<sup>4</sup>The notation used in this and all following rules has been adapted

from Stockwell, 1968.

<sup>5</sup>The terms "light" and "heavy" are adopted from Bacquet. They are used here simply to designate those adverbs that precede the verb (light) and those that follow the verb (heavy).

<sup>6</sup>Bacquet classes sona with the first group, but the evidence in the Vercelli homilies seem to argue for inclusion in the second. See (9).

<sup>7</sup>Examples are from Bacquet, pp. 186-192, 237-248.

<sup>8</sup>This rule is based on Traugott, 1965.

<sup>9</sup>Examples are from Traugott, 1965:281.

<sup>10</sup>cf. King, 1969:45-46.

<sup>11</sup>As will be seen in the discussion of PS 5 below, subject *is*, in fact, derived by a transformational rule from one of the NP's in PROP.

<sup>12</sup>Mrs. Traugott has, since this conclusion was originally reached, repudiated her description. See Traugott, 1969.

<sup>13</sup>Because NEUT and DAT pronouns, when they are objects, involve a special reordering, only nouns in these cases are used as examples.

<sup>14</sup>The presence of prepositions such as to is described below.

<sup>15</sup>The instance of both DAT and NEUT being objects of the same verb is not taken into consideration.

<sup>16</sup>See (31).

<sup>17</sup>At least one of the two types must be chosen.

<sup>18</sup>For the sake of consistency, NEUT has been allowed to contain a preposition.

#### REFERENCES

- Bach, Emmon. 1962. "The Order of Elements in a Transformational Grammar for German," Lg. 38:263-269.
- Bacquet, Paul. 1962. La Structure de la Phrase Verbale à l'Epoque Alfredienne. Paris.
- Chomsky, Noam. 1965. Aspects of the Theory of Syntax. Cambridge, Mass.
- Erickson, Jon L. Forth-coming. "The Vercelli Homilies." Madison, Wis.
- Fillmore, Charles J. 1966. "Toward a Modern Theory of Case," as reprinted in Modern Studies in English, ed. David A. Reibel and Sanford A. Schane. New Jersey, 1969, pp. 361-375.

- \_\_\_\_\_. 1968. "The Case for Case," Universals in Linguistic Analysis, ed. Emmon Bach and Robert T. Harms. New York, pp. 1-88.
- Förster, Max. 1913A. "Die Vercelli-Codex CXVII," Festschrift für Lorenz Morsbach, Halle, pp. 20-179.
- \_\_\_\_\_. 1913B. Il Codice Vercellese. Rome.
- Fourquet, J. 1938. L'Ordre des éléments de la phrase en germanique ancien. Paris.
- Halle, Morris. 1962. "Phonology in Generative Grammar," Word. 18:54-72.
- King, Robert D. 1969. Historical Linguistics and Generative Grammar. New Jersey.
- Lakoff, George. 1965. On the Nature of Syntactic Irregularity, The Computation Laboratory of Harvard University Mathematical Linguistics and Automatic Translation, Report No. NSF-16. Cambridge, Mass.
- Stockwell, Robert P., Paul Schacter, and Barbara Hall Partee. 1968. Integration of Transformational Theories on English Syntax. 2 vols. Los Angeles.
- Traugott, Elizabeth Closs. 1965. "Diachronic Syntax and Generative Grammar," as reprinted in Readings in the History of the English Language, ed. Charles T. Scott and Jon L. Erickson. Boston, 1968.
- \_\_\_\_\_. 1967. "Deep and Surface Structure in Alfredian Prose," PEGS 14. Washington, D.C.
- \_\_\_\_\_. 1969. "Toward a Grammar of Syntactic Change," Lingua. 23:1-27.