

SPEECH PERCEPTION & LANGUAGE CHANGE IN OLD & MIDDLE ENGLISH

An analysis of methods and models in historical linguistics: specifically, the utilization of speech perception methodology with respect to the evolution of the structure which in modern English denotes progressive aspect.

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ABSTRACT

A major part of this work deals with the establishment of a viable model for language change which represents the fact that language is essentially a communicative skill, and therefore that language change should be dealt with at the level of speech performance. Various existing models are examined critically in the light of the above premiss.

It is suggested that speakers utilize certain perceptual mechanisms to effect 'remedies' for systemic malfunctions which occur to hamper communication. It is further proposed that both language learners and adult users may effect these changes.

The data chosen for examination concerns the development of the expanded 'continuous tense' in English from the Old English to the Middle English period. Brief mention is made to confirming evidence from other Germanic languages, and from present-day English. It is argued that language change will occur where speakers discover in communication that there are surface structure gaps in the representation of underlying semantic information. The development of the Old English expanded form consisting of the verb BE in conjunction with the present participle is discussed in the light of this hypothesis. It is further argued that this development signifies a new form for marking aspectual distinctions in English. Analysis of the expanded form is continued into the Middle English period where it is argued that the development of the expanded form with participial form in -ING is the result of the merger in markers of the TO infinitive in -ENNE, the deverbal nominal in -ING and the present participle in -ENDE, and the subsequent changes arise from a resultant functional or communicative confusion. Some small attention is given to the development of the expanded form into modern English, essentially, the controversy of the origin of the

modern form.

Further, some critical reviews are given of the notion that the Germanic languages are 'drifting' from synthetic to analytic structure, especially with regard to the development of the English verbal system.

I declare that the use, presentation and organization of material and arguments in this work is original, developed from the three year work period involved in its production. Data has been chosen eclectically from various text-books quoted in the bibliography.

A dedication to the author: myself

"Shall I teach you the meaning of knowledge?", said Confucius. "When you know a thing to recognize that you know it, and when you do not, to know that you do not--that is knowledge".

I hope for the sake of myself and those who read this work that I have been true to Confucius. On the other hand, I confess to another aphorism delivered to me by my supervisor: "Knowledge is bias". Perhaps I have been guilty of this. Only those who read this can tell whether this is good or bad.

A dedication of the thesis: to Donald
with all my love

Prelude for acknowledgements

Although I have stated that the presentation and argument in this thesis are original, I have to admit to myself that this statement must be slightly emended. No man is an island, and even though I am no man, other people have been involved in the development of this thesis and must be acknowledged here. The production of a thesis is a long business, and sometimes very thankless. Without the following it would, in my case, have been impossible.

To my parents, thanks for help, encouragement and financial support. Without this latter, I would not perhaps have had paper to write on ...

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To friends and colleagues go my thanks for criticisms of various points made in the thesis, and for the intellectual stimulation that comes from criticism. Especial thanks go to Alison Macrae, Dave Roberts and Colin Ewen for listening and criticising even when busy with theses of their own.

To Anne McDonald goes my thanks for typing what seemed to me an almost illegible manuscript. Her job appears to have been even more gargantuan than my producing the actual thesis...

Lastly, to my husband. No thanks can ever compensate him for the final year of "production" when his wife became a humanoid typewriting machine creature, muttering wild linguistic arguments, instead of washing dishes and making meals. To him I promise never, ever to open a can of meat-balls again, and never to ask him again how to spell 'competence'.

ABBREVIATIONS (as given in the Linguistic Bibliography
Permanent International Committee of Linguists,
Utrecht & Brussels.)

Abbreviations quoted in the text

OE	Old English
EOE	Early Old English
LOE	Late Old English
ME	Middle English
EME	Early Middle English
LME	Late Middle English
ModE	Modern English
OS	Old Saxon
OFr	Old Frisian
OHG	Old High German
MHG	Middle High German
Go	Gothic
PGmc	Proto-Germanic
PIE	Proto-Indo-European
PRES PART	Present participle
INF	Infinitive
BE + PRES PART	BE and the present participle
BE + ING	BE and the present participle in -ING
BE + AN + ING	BE, locative marker AN and the present participle in -ING
TGG	Transformational-generative grammar
GRs	Grammatical relations
PS	Phrase structure
SC	Structural change
SI	Structural index

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CHAPTER ONE

Transformational-Generative grammar - a brief overview

1.00 Introduction to the model

Transformational-generative grammar emerged ten years ago as the paradigmatic model in the investigation of linguistic phenomena, at first within the U.S. and subsequently throughout the world. Historical linguistics was already 'on the bandwagon'. Thus research into both synchronic and diachronic data was, and still is, carried out within the same theoretical framework. The transformational-generative approach to language study was considered in itself a revolution; what seems even more revolutionary is that the study of language change over time and space could be constrained within the same theoretical framework as the study of synchronic language systems. Prior to the development of the transformational-generative model, linguistics in the U.S. had been concerned with the systematic classification of synchronic and observable data--with discovering which elements within the language system were in functional relationship with which other elements. It was held that research could only be properly concerned with the inter-relations of elements within a synchronic system, and concomitantly that there could be no dynamic relationship between elements of systems separated in time. Thus historical linguistics was relegated to the status of a poor relation during the heyday

of this school of linguistics. To understand how historical linguistics came to be seen as 'part and parcel' of language study within the transformational-generative framework necessitates a brief excursus into the theoretical framework of this model.

1.01 Some theoretical constructs

Transformational-generative grammar (henceforth "TGG") shares with other schools of linguistics the common goal of the construction of the grammar of a language. However, in Chomsky (1965) it is proposed that an adequate grammar of a language must go beyond the classification of observable primary data. Rather, it is proposed that in addition to accounting for primary data, the grammar must also account for the native speaker's intuitions about the language. Further, it is proposed that the intuitions taken into account are those of an 'ideal native speaker', living in a homogeneous speech community. Thus a grammar may be established as adequately accounting for the language of all speakers within that particular language community.

The incorporation of the native speaker's intuitions about his language means that the grammar set up for a speech community will be more abstract in nature than the older structuralist grammar discussed above in 1.00. That this is a plausible hypothesis may be seen from the following. Linguistics is the study of a subpart of human behaviour, language. In most other scientific

studies into human behavioural organisms, a distinction is drawn between what the organism DOES (in language, the primary data or more precisely, the primary data is the result of what the organism does) and what the organism KNOWS (the incorporation into the grammar of the native speaker's intuitions about his language). In TGG this is labelled as the distinction between competence and performance. The grammar set up within the constraints of the TGG model is formulated as part of the speaker/hearer's competence, that is, is unaffected by the vagaries of performance, such as memory limitation, false starts and incompleted sentences.

Following from the proposal that the speaker/hearer's grammar is internal is the hypothesis that the extrapolation of generalizations from the grammatical descriptions of particular language systems may in some way lead the linguist to a set of linguistic universals. It has been argued in the literature that these generalizations may in fact be the content of a specifically linguistic mental schema, the blueprint for language acquisition. Chomsky (1965) distinguishes between two sets of linguistic universals, one formal, one substantive. The study of substantive universals preceded the development of TGG; the discovery of (e.g.) the Greenberg universals came about by applying implicational tests to a wide range of data, and their existence does not depend on their being part of the internal grammar, or competence, of the speaker.

On the other hand, Chomsky (1965) argues that formal universals must be part of the innate schema of language, a given property of the mind. This later is arrived at in the course of an argument in Chomsky (1965: 18-27). There it is proposed that to learn a language the child must have a method for devising an appropriate grammar, given the primary data. Further, and most importantly, Chomsky states that

as a precondition for language learning, (the child) must possess, first, a linguistic theory that specifies the form of the grammar of a possible human language, and, second, a strategy for selecting a grammar of the appropriate form that is compatible with the primary linguistic data.

(1965: 25)

The argument that as a precondition for language acquisition the child must possess a device which evaluates possible theories for grammar construction is of crucial importance in lending credit to the existence of formal universals. Consider the following statement from Chomsky (1965: 29):

The property of having a grammar meet certain abstract conditions might be called a formal linguistic universal, if shown to be a general property of all human languages.

With the addition of this latter hypothesis, TGG leaves the realms of observational and descriptive adequacy in accounting for the native speaker's grammar of his language, and crosses into the territory of explanatory adequacy. Explanatory adequacy evaluates the status of the theory of TGG, and the theory purports to explain how human language systems are acquired. Chomsky (1965: 30) gives the following as conditions on a theory to meet the

level of descriptive adequacy ((i)-(iv) in his numbering, with explanatory note added).

- (i) an enumeration of the class S_1, S_2, \dots of possible sentences [a technique for representing input signal in the child's innate linguistic specifications - S.M.M.]
- (ii) an enumeration of the class SD_1, SD_2, \dots of possible structural descriptions [a technique, innately specified, utilized by the language learner in utilizing structural information about the signals specified in (i) above - S.M.M.]
- (iii) an enumeration of the class G_1, G_2, \dots of possible generative grammars [utilized by the language learner and innately specified to delimit a class of possible hypotheses about language structure]
- (iv) specification of a function f such that $SD_{f(i,j)}$ is the structural description assigned to sentence S_i by the grammar G_j , for arbitrary ij [a specification again innate utilized by the language learner to determine what each hypothesis determined in (iii) implies with respect to each sentence. - S.M.M.]

However, Chomsky (1965) also maintains that a speaker's knowledge of his language, as it is determined by his innate grammar goes beyond primary data, and is not an inductive generalization from such data. Given this fact, Chomsky holds that there is further level which must constrain a generative grammar, the level of explanatory adequacy. This, simply, is a method whereby the language learner may select one of infinitely many hypothesis allowed by the specifications of (iii) above, and which is compatible with primary data. Formally, Chomsky defines explanatory adequacy as

- (v) a specification of a function m_i such that in m_i (i) is an integer associated with the grammar G_i

as its value, (with, let us say, lower value indicated by higher number).

(1965: 31).

The addition of the level of explanatory adequacy must therefore be seen in terms of both specifying theory, and outlining a possible acquisition model, with the above-mentioned specifications (i)-(v) as conditions of the innate linguistic specifications utilized by language learners in acquiring the grammar of their language. In summary, Chomsky (1965: 35) states that

for the construction of a reasonable acquisition model, it is necessary to reduce the class of attainable grammars compatible with given primary linguistic data to the point where selection among them can be made by a formal evaluation measure. This requires a precise and narrow delimitation of the notion 'generative grammar' - a restrictive and rich hypothesis concerning the universal properties that determine the form of language, in the traditional sense of this term.

The premiss that there is a specifically linguistic area of the mind, governing language acquisition and grammar formation is of crucial importance to the theoretical implications of TGG. Consider Herriot (1970), who notes that

(Generative linguists) see no objection to the concept of specific innate ideas, and find no difficulty in internalizing in the language user the rules of language they have derived by intuitive linguistic analysis. Their procedure therefore differs from the empiricist approach in that they do not derive their inferences about the language user's production or perception from his behaviour. Rather they derive linguistic descriptions from their own intuitive analysis of language.

Within the theoretical framework of TGG it is legitimate

to draw an analogy between the language acquirer and the linguist: they face the same, or at least similar, task in constructing a grammar of a language. The crucial difference is, of course, that within the theory of TGG it is held that the child comes 'wired-in' for language acquisition, whereas the linguist must deduce generalizations about the grammar of the language from the data and from the ideal speaker's intuitions about his language. The linguist seeks to give representation, in the steps toward establishing an explanatorily adequate theory of language, to what the child possesses innately, and what the adult native speaker cannot describe about his internal grammar: that is, the establishment of formal linguistic universals. In summary, Chomsky (1968a: 14) states that linguistics is

typically concerned with data not for itself, but as evidence for deeper, hidden organizing principles that cannot be detected 'in the phenomena' nor derived from them by taxonomic data-processing operations.

1.02 Linguistic Intuitions and Linguistic Competence

Linguistic competence, or the speaker's internalized grammar, is therefore to be seen as consisting of underlying principles of linguistic organization. The linguist can reconstruct these principles through utilization of the native speaker's intuitions about his language. From generalizations seen to hold between grammars of individual and distinct languages, the linguist can then proceed toward establishing what may be linguistic universals, and

from that hypothesize that these universals are available to the child during the period of language acquisition.

As we have seen, TGG establishes the grammar of a language both from the primary data and through native speakers' intuitions about their language. There are, however, some linguists who are sceptical about the crucial status of linguistic intuitions in TGG.

Derwing (1972: 160) asks

why should an entire 'science of language' be built up around (linguistic intuitions)? Of all things that speakers DO, it seems odd that it should be their ability to introspect on aspects of their own linguistic performance which should be regarded as the most fundamental (to the theory).

However, initially at least it seemed that by utilizing linguistic intuitions as 'tools of the trade', it was possible to propose that a grammar of a language, and by extension a theory of language could account for and explicate the organization of language. That is, the native speaker (and that includes the linguist), intuitively 'know' when a sentence of their language is or is not acceptable, is or is not grammatical. In terms of the latter, that is, intuitions about grammaticality, linguists could build rules of grammar (syntax) which could be tested against the data as possible formal representations of the processes ongoing within the speaker's internal grammar to produce the structures in question. This hypothesis was enthusiastically received by psychologists and psycholinguists alike. However, the initial interest of the psychologists was a result of

the Chomsky/Miller statement in 1963 that in any theory of language there should be an intrinsic link between underlying competence and performance. Tests were instantiated to discover if the link between the language system and language-in-use could be explicated within the generative model. Consider the experimental outline utilized in Fodor and Garret (1966):

If ... the grammar (i.e. TGG) is involved in sentence processing in anything like the way the analysis-by-synthesis models suggest, then we have a right to expect a very general correspondence between such formal features of derivational histories as, for instance, length in rules, and such performance parameters as perceptual complexity, ease of recall and so on.

Such proposed lines of investigation as those of Fodor and Garret would have, if successful, enhanced the theoretical status of TGG. However, as psychologists proceeded to test the "derivational theory of complexity", it became obvious that there was no such intrinsic connection between the underlying rule operations and their performance manifestations.¹ In fact, Fodor and Garret (1966) conclude that on the basis of the discrepancy between competence and performance, the competence model (i.e. TGG) cannot, a priori, have any useful function. They state in fact that the competence-based model is well considered as nothing but an arbitrary device which merely describes a corpus of data. In addition, the pilot tests were followed by more critical analysis from the psychologists, especially that of Bever (1968) which sought to determine whether a 'performance model ought to

consist of a model of linguistic competence plus some further component or components at present unknown.

Consider Bever's Summary:

The result of these studies is that behavioural processes manipulate linguistically defined structures but do not mirror or simulate grammatical processes. The import of this is to invalidate the perceptual interest of any speech recognition routine which attempts to incorporate directly linguistic process... That is, linguistically isolated structures are reflected in behaviour, but not linguistically postulated processes.

(1968: 15)

In 1971 Fodor also obtained further corroborative evidence against the position within TGG that the most interesting linguistic processes are within the competence component. He claims that

The mental operations which underlie the behaviour of the speaker-hearer are not identical to, and probably do not include the grammatical operations involved in generating sentences.

Thus if the results of these experiments are accepted, it must be concluded that the underlying rules of the grammars of particular languages, and by extension, linguistic universals pertaining to the TGG theory of language have no empirical status as part of the speaker's linguistic competence. This calls into question the empirical status of the whole theory of transformational-generative grammar. And if the rules held to be part of the speaker's underlying grammar, or competence, are at best descriptive artifacts, this then calls into question the validity of the primary heuristic tool, the linguistic intuition.²

The results of these experiments conducted to find the link between competence and performance being negative, psychologists in the main lost interest in the position held in TGG that certain specifically linguistic processes are innate.

In abandoning the notion of innateness, these psychologists adopted a semi-mechanist approach to language and language acquisition, while maintaining the notion of linguistic generativity in speech process and production. That is, they retained the proposal that a grammar of the language should assign a correct structural description to each sentence, while constructing a model of language which was based on factors of performance. Thus, rather than proposing that the primary construct in the investigation of linguistic phenomena should be underlying competence, with performance the carpet under which is swept all the factors of speech in use, they proposed that competence, or grammar, can only be evaluated with respect to those very features of performance. Schlesinger (1971b) puts the argument succinctly:

It would be just as reasonable ... to argue that a theory specifying how language is learned can serve to evaluate theories describing what is learned.³

1.03 Linguistic competence - is it necessary as a primary theoretical construct?

Thus, if we accept the findings of the tests on the generative analysis-by-synthesis model, we have to accept that the rules abstracted from data through the application

of the tool of intuition have little reality, and that a grammar based primarily on competence factors will have only shallow explanatory powers.

How then, if we have to reject the thesis that the language learner comes to data with certain linguistic powers of deduction 'wired in', do we account for language learning? The answer is waiting for linguistics in the field of cognitive studies. Instead of assuming that there is a distinct mental area for language, distinct from all other cognitive processes, it can be assumed that linguistic processes are a particular subset of general cognitive ability. Following Piaget (1926, 1971, 1973) it is held that cognitive development proceeds from the interaction of cognitive mechanisms (e.g. motor activity, perception etc.) with the surrounding environment. Thus, the performance approach to language does not hypothesize that linguistic functions are innate; rather, as a subset of general cognitive development and function, they are described as developing from a skeleton schema, which in itself is phylogenetically human. This latter would appear to be the capacity for behavioural operations on the epistemological level. Thus linguistic capacity develops from phylogenetic cognitive processes, and will be manifest at a critical stage of intellectual and motor-coordination.⁴

1.04 Review

We have reviewed, although very briefly, the

theoretical propositions made by the transformational-generative model. We have seen that TGG as a competence based grammar, with the rules of grammar derived from primary data by means of the heuristic tool of linguistic intuitions, and theoretical constructs derived through generalizations of particular grammars of particular languages, does not offer an adequate account of these rules and principles actually being performed. We therefore must abandon the theoretical position that the primary goal of linguistics should be the establishment of an underlying grammar, and that language performance is of only secondary importance. We do however retain the notion of generativity, that is, the pairing of phonetic and semantic representations over an infinite range of structures. The failure of the derivational theory of complexity made manifest that the rules of grammar established within the TGG framework are no more than artifacts; TGG has not progressed much further from the structuralist method of collection and classification of data.

Footnotes to Chapter One

¹See further Slobin (1973); Miller and McKean (1964); Savin and Percheneck (1965); Fodor and Bever (1965); Bever and Mehler (1966a).

²Fodor and Garret (1966): 'Part of what is wrong with the analysis-by-synthesis model is precisely that it uses grammatical information in the same form in which the information is represented in the grammar.'
 Uhlenbeck (1967: 284): 'It is necessary to bear in mind that this assumption of the intuitive and unconscious knowledge on the part of the native speaker is a hypothesis for which no proof is available at the moment.'
 See also Bach (1964: 184); Lyons (1968: 988); and for a view defending the use of the linguistic intuition, see Botha (1967: 69-78).

³Schwarcz, (1967) argues that it should be recognised that a performance model is needed to show how the non-verbal infant progresses to having the ability for linguistic description and perceptual procedures for sentence recognition and production. Further, see Putnam (1967: 16) and relevant sections on cognitive and linguistic development from general cognitive studies carried about by Piaget. These latter proposals are found neatly summarized in Ginsberg and Oppen (1969). In brief, general cognitive development sets the stage for linguistic development, a situation where there is no need to postulate phylogenetic, that is, genetically transmitted, linguistic rules, but neither do we have to postulate that language learning is carried against the background of a cognitive tabula rasa.

⁴Slobin (1966: 88) argues also that the child is not born with a set of predetermined linguistic categories, but with some sort of cognitive process mechanism. Slobin proposes that the cognitive processes relevant to linguistic behaviour will be a set of procedures and inference rules which the child will utilize to process and classify primary data.

CHAPTER TWO

Transformational-Generative Grammar and Historical Linguistics

2.00 The paradigm of transformational-generative grammar and its extension into historical linguistics

It is crucial that any critique of recent work in historical linguistics must be prefaced by some excursus into the nature and theoretical status of the TGG model. It is crucial firstly because in the mid-sixties TGG achieved paradigmatic status in linguistic science, and thus many linguists had at least an attempt at working within the theoretical constraints, for the very reason, in particular, that it seemed that the mechanisms of TGG gave further advancement to the question of HOW language was acquired. But TGG offered a further bait to the historical linguist in particular. Prior to the development of TGG, historical linguistics, or the study of language change, was not treated methodologically as were synchronic language states. TGG being a competence based theory offered historical linguists a chance to work with differing languages states, and to show the dynamic relationship between them. This was possible because the concept of competence, or the native speaker's underlying grammar, allowed the linguist to talk of language change as the difference between components of underlying grammars of speech communities separated over time. That is, although linguistic universals remain unchanged, and therefore the process of language acquisition remains unchanged, the underlying

rules of grammar of particular languages could change, resulting in a change in the form of the grammar.

This study of diachronic change is unique to TGG. The structuralist position, for example, did not allow that there could be any dynamic correspondence between language systems, or elements of language systems, across temporal distance.¹ Saussure, the eminent structuralist, adopted a position such that only the analysis of single 'espace de temps' was permitted. He stated that the study of 'langue', or the language system, could only permit the examination of relations between elements in one particular language system at one particular point in time. Thus, in accordance with this position, the grammatical system of an historical 'espace de temps' could in no meaningful way be compared with the language system of another period, let alone the linguistic system of the present day. This position was adopted by Saussure for the following reasons: 'langue' was held to be an abstraction from 'parole' (language in use), and, as the parole of earlier stages of a language can no longer be established, a fully documented account of that langue is technically no longer possible. That is, it was held that linguistic relationships can only be established within 'langue' if they can be extrapolated from parole. However, the structuralist school did permit the analysis of earlier language systems, but, to repeat the point, no comparison

could be made between language systems separated in time with the structuralist methodology, because, to quote Saussure, this would imply a false notion of movement where only a state is present. (Cours: 219). In summary, the structuralist methodology holds that

qui dit grammatical dit synchronique et significatif
il n'y pas pour nous de 'grammaire historique'

(Cours: 185)

There were, however, problems for the structuralist linguist working within a framework which defines language as a unique and closed organized system. One set of problems were raised by Weinrich (1954) in his article 'Is a Structural Dialectology Possible?' There he notes (1954); Keiler (1972: 254):

To designate the object of the description which is in fact a subdivision of the aggregate of systems which laymen call a single language, the term "dialect" is used. But if dialect is defined as the speech of a community, a region, a social class, etc., the concept does not seem to fit into narrowly structural linguistics because it is endowed with spatial or temporal attributes which do not properly belong to a linguistic system as such.

In comparing dialects, the linguist studies systems which are partially related. But structuralism carried to its logical extremes, would not allow this; it could only study relations within systems. Weinrich proposes that this methodological difficulty could be overcome by using "procedures for constructing systems of a higher level out of the discrete and homogeneous systems that are derived from description and that represent each a

unique formal organization of the substance of expression and content". That is, the diasystem, '...' may be constructed out of any 2 systems which have partial similarities (if these similarities make it different from the sum of the 2 systems). Weinrich argues that if structuralists accept this method of comparison (albeit 2 systems within 1 diasystem are being compared, not the relations holding within 1 system), then dialectology may gain from structuralism. That is, he argues that the utilization of the diasystem will show the structural relations holding in one language: the relations between dialects of the one language system.

Essentially, however, a major flaw exists in diasystemic structuralism in that only descriptions of oppositions are given. That is, no explanation is offered as to why, for instance, one subsystem is more close to the diasystem than another, nor is an explanation given of how the divergences occurred. These latter contentions will be seen to arise within the TGG model as outlined below.

2.01 Historical data & theory construction

We have noted that the development of TGG offered a theoretical framework to the historical linguist whereby he could make a comparison between language states separated by time and space. It also turned out that historical linguists offered support for certain hypotheses concerning the construction of the rules of grammar

of a particular language. Rules of grammar are constructed by the linguist to mirror the capacity which the native speaker uses to obtain certain grammatical constructions. It is of crucial importance that these rules are constructed on empirical evidence from the data, and that they account for the speaker's competence. It is held that if a rule is corroborated by these two checks, then there is a fair chance that it is empirically justifiable. A further possible check on the adequacy of a rule in the grammar of a synchronic system is finding that an identical rule appears at some point in the grammar of an earlier stage of the language in question.

By extension of the role played by historical linguistics in establishing theoretical constructs for an explanatory theory of language, linguists began to use historical data indiscriminately to establish rules for synchronic grammars, i.e. using historical data as the underlying form in the grammar which purports to describe the native speaker's linguistic ability. This latter step is not consonant, however, with the general methodology of the TGG model. In the process of language acquisition, it is held in TGG that the child comes to his language with certain formal linguistic universals and proceeds to apply them to the data, and thereby deduces what the form of the grammar of his speech community actually is. It seems rather far-fetched to believe that as well as his innate blue-print for language the child is

blessed with a knowledge of the proto-forms of elements within his particular language system. Consider Lightner (1967: 51) who argues against the hypothesis that children have access to proto-forms in the acquisition of the phonology. He states:

Since native speakers normally know neither the proto-forms of their language nor the corresponding forms in related languages, a grammar which uses such diachronic/comparative information is not a true reflection of the native speaker's internalized knowledge of his language.

Utilization of data such as proto-forms cannot reflect what the child brings to bear on the sounds of his language when he is establishing the underlying phonological relationships of sounds. Rather it seems that this type of data is utilized merely as a convenience for the linguist to construct an optimally simple and determinate theory.

Despite this methodological discrepancy, the trend has continued that diachronic data be invoked in the construction of synchronic rules.² But it still remains true that if TGG claims to explain language acquisition and language ability, then it is difficult to explain away proto-forms (and indeed comparative data) as part of the speaker's 'wired in' linguistic universals.³ Moreover, the discrepancy is made even more manifest on consideration of how children construct their own internal grammars for the language community of which they are members. When the child is in the process of language acquisition he has as fodder for his linguistic blue-print the data available

from older, linguistically more mature members of the speech community. He does not, however, inherit the grammatical competence of the other members of the speech community, but by deduction constructs his own grammar to account for the data available in such a way that he can communicate with the other members of this community. So if his parents don't have the proto-forms in their speech, and he has no access to their underlying grammar, from where on earth can the proto-forms be derived? Kiparsky (1968b: 187) summarizes the dilemma:

The fact that the children of each generation in learning their language take a fresh look at the facts means that there is no reason for underlying representations to be transmitted except when the synchronic facts warrant it.

A further area in which historical linguistics has legitimately affected the development of TGG theoretical proposals is found in Kiparsky (1968a), and concerns the brace convention as an abbreviatory device.

Kiparsky notes that the notion of theoretical conventions which are essentially abbreviatory in nature can be troublesome. That is, there is a real problem in discerning whether any empirical justification for them can be found. He states (1968a: 171-2) that "a grammar can always be replaced by another, descriptively equivalent one, in which any one of these abbreviatory notions is not made use of". If this is the case, exactly what empirical justification can be given to such notational conventions?

We will here be concerned with the brace convention, and the justification found by Kiparsky for it. He notes that most linguists would concur on the fact that if two rules occur with no rule intervening, and are of the form

$$X \longrightarrow Y$$

$$Z \longrightarrow Y$$

then an abbreviatory brace notation may be used to indicate their common result, as

$$\left\{ \begin{array}{l} X \\ Z \end{array} \right\} \longrightarrow Y$$

Thus may be shown a linguistically significant generalization about these 2 rules. The problem then is to find data which gives empirical justification to this hypothesised convention.

Kiparsky finds a criterion for the psychological reality of the above convention in a diachronic consideration of a ME alternation, (a) Where underlying long vowels were e.g. keep: kept, realized as short in two contexts

before 2 or more consonants and (b) in the third syllable from the end of the word (vain: vanity) (1968a: 179). Keeping Kiparsky's numbering (a) is realized as

$$5' \quad V \longrightarrow [-\text{long}] / \text{--- CC}$$

and (b) as

$$5'' \quad V \longrightarrow [-\text{long}] / \text{--- C ... V ... V}$$

and by the brace convention, i.e. factoring out their common part and enclosing the remainder in braces, we have

$$5. \quad V \longrightarrow [-\text{long}] / \text{---} \left\{ \begin{array}{l} C \quad C \\ \quad \dots V \dots V \end{array} \right\}$$

Kiparsky further notes that in OE vowels were shortened

(a) before three or more consonants ($g\bar{o}dspell \rightarrow godspell$), and (b) in the third syllable from the end provided they were followed by two consonants ($bl\bar{e}dsian \rightarrow bledsian$). The following are the rules, for (a)

$$6' \quad v \rightarrow [-long]/ \text{--- CCC}$$

and for (b)

$$6'' \quad v \rightarrow [-long]/ \text{--- CC ... V ... V}$$

and again these can be collapsed as

$$6. \quad v \rightarrow [-long]/ \text{--- CC } \left\{ \begin{array}{c} C \\ \dots v \dots v \end{array} \right\}$$

Kiparsky further notes that rule (5), that found in ME is related to the OE (6), in that the only difference would appear to be that (5) has lost one of the consonants in the environment. Rule (5), then, is a simplified version of (6) in that it extends the domain of applicability. Without the brace notation, however, no generalization about the extension of 6' and 6'' to 5' and 5'' could have been: they would have been seen as disparate processes.

On the assumption that sound changes are natural processes, it is hypothesized that the brace mechanism has reality. Since there is no counter-evidence to this claim (i.e. that 5' and 6', being disparate processes could produce disparate simplified reflexes at a later date which could not be abbreviated by the brace convention), Kiparsky claims that the convention

$$\left\{ \begin{array}{c} x \\ y \end{array} \right\} \rightarrow z$$

does have empirical justification, and can therefore be included in a theory of language.

Thus evidence from diachronic material allowed Kiparsky to justify the use of the brace in the theory in general, and historical study is again shown to prove relevant to the building of a theory of language.

2.02 Language change & the classical transformational-generative model

We have seen that diachronic investigation has been helped by the theoretical proposals instantiated in the TGG model. We have also seen that diachronic data has been used, correctly or incorrectly as the case may be, to corroborate some rules governing the description of synchronic data. Whether for good or for bad, the emergence of the model and theory of TGG gave a new direction to historical linguistics. Let us now turn to the mechanisms of historical linguistics as a subpart of the general theory of language advanced by TGG.

For many years in linguistics there has been a controversy over language change, some linguists stating that change is gradual, others that change must be instantaneous. It has also been regarded in the literature as being regular. In viewing language change over a period of time, it has been found to be relatively simple to display descriptively the facts of the change, but complex to establish exactly what (or who) caused the language to change. Concomitantly, the linguist has to know, or, at least in the process of his investigations, to discover whether language change is purposive or random. Further, if language change

is purposive, the linguist must discover what mechanism directs the change. The linguist must also ask if social factors effect the actuation of the change, or if language change is purely systemic, whether by systemic is meant pertaining to underlying competence factors or whether change is affected by features of performance.

Let us concentrate initially on the nature of linguistic change as viewed within the framework of TGG. It seemed that in the early beginnings of research into historical linguistics in the past decade the TGG model had much to offer in the way of explanatory formal mechanisms for adequately accounting for language change. Recent developments in generative dialect phonology seemed to offer an interesting hypothesis. This ran as follows: certain related dialects seemed to share a common set of phonological rules, with a few important distinctions between the systems. Taking the simplest case it was found that Dialect A could be different from Dialect B in that one rule in Dialect A was formally ordered in the set of all phonological rules in a different way from its formally ordered position in the phonological system of Dialect B. By extension, Halle (1962) postulates that 'different grammars' may have different rules, rule parts, or rule orders. We understand by different grammars either the grammars of related dialect areas, or the grammars of successive stages in the evolution of one language. Thus within the TGG theoretical framework language change was held to be no more than rule change, between successive grammars of successive language systems.

As research into diachronic language change came to utilize more sophisticated methods of investigation, Halle's (1962) proposal that language change is rule change was extended. King (1969) gives a useful summary of the types of rule change which can be invoked to account for change in the underlying grammar of a particular language. King gives as the four major types of rule change the following: rule addition, rule loss, rule re-ordering and rule simplification. He argues that, as far as research done has shown, all change may be categorized as one of the above four types and that, further, rule loss and rule-reordering and rule simplification would seem to be subtypes of simplification in its broadest sense, that is, simplification of the internal grammar.

We have seen that the theory of TGG purports to offer an explanation of language acquisition. Halle (1962) put forward the interesting hypothesis that diachronic change (seen as rule change) might well be connected with the acquisition process. The basic hypothesis for this interesting proposal is that young children alone, and not adults, have the ability to construct an optimal (simplest) grammar from exposure to a finite set of primary data. Conversely, the hypothesis states that the grammars of adult speakers may change, if at all, by minor alterations in rules 'late' in the rule inventory of any component of their grammar.⁴ Further, the hypothesis states that diachronic change resulting from acquisition by a new generation will always result in increased simplicity of

the underlying grammar. Rule addition, then, was taken to be characteristic of change within the grammar of an adult, and was thought to involve additions such as new words for the lexicon, acquisition of prestige pronunciations, and hypercorrection. This type of change is considered to be trivial in comparison with types of change which may result from the actual language acquisition process. Further evidence that the adult is incapable of making radical changes to his grammar is found in considering the difficulty most adult speakers have in acquiring a new language: it does seem that there is some acquisitional 'cut-off point' in speakers around puberty when grammar construction becomes complex compared with the 'relative ease' with which children can acquire their native language.⁵

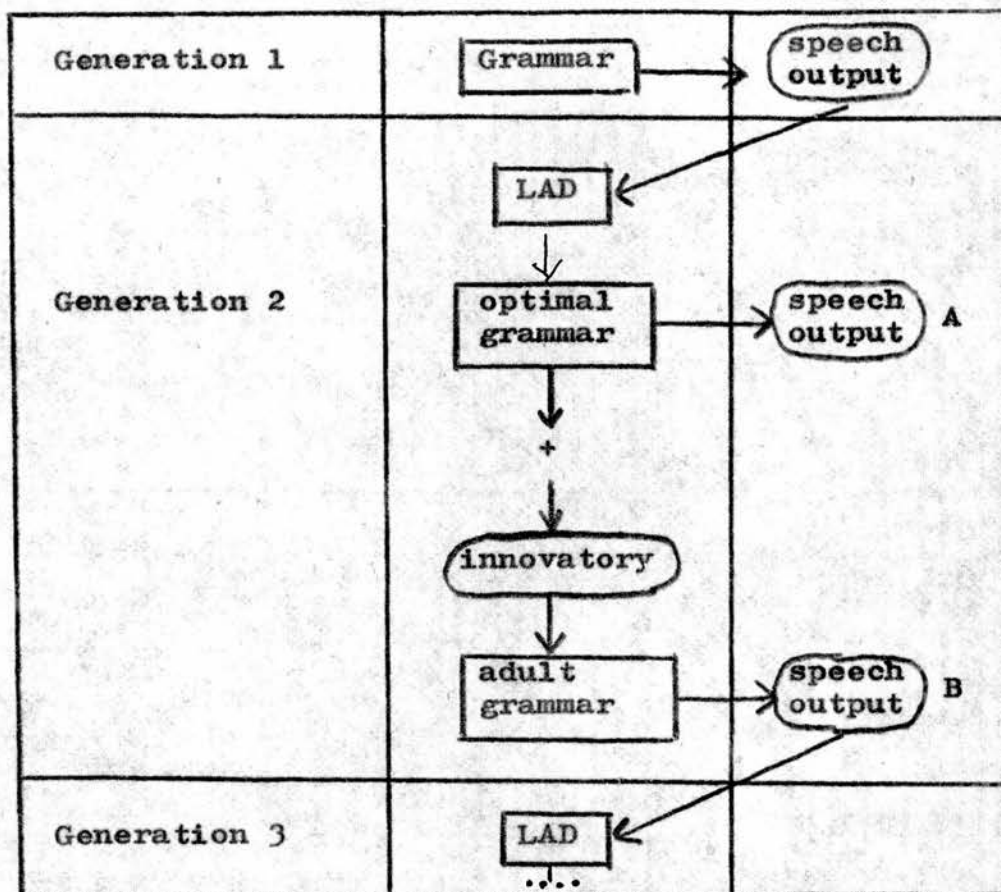
Let us then consider how children are said to acquire their language according to the theoretical principles of the TGG model. TGG does NOT hold that children learn to talk by imitation, as do some mechanist schools of linguistic thought. A major argument against this proposal is that even at an early stage, for example two years, children already possess the essentially human characteristic of linguistic creativity. It is an empirically tested fact that a child's linguistic inventory soon goes far beyond imitation of the corpus of data to which he is exposed. Rather it is proposed that the child comes 'wired-in' for language acquisition, i.e. has an innate set of linguistic universals which he applies to

the corpus of data available to him, and by process of testing these innate principles against the data, he comes up with a first, relatively simple grammar of his language. He cannot stop here, however, because this first grammar is not a full grammar of his language. By a process of testing, operating the hypothesis developed, and testing again, he goes on until he has constructed a grammar which approximates that of his parents.

If the adult grammar congeals at a certain stage, and the child produces a grammar which optimally accounts for the data he hears (i.e. the simplest grammar possible with the most generalizations), how then do we account for language change?

Within the framework of TGG, it is proposed that language transmission goes from parent to child. The parent has an internalized competence underlying his speech output. Although the adult speaker cannot radically restructure his grammar, he can however add to his grammar with innovations of the form of rule additions and very minor rule changes. The child develops his grammar from the speech output of his parents. Thus the child's grammatical competence will reflect not only the original grammar of the adult, but will also have to take into account the innovations which the adult grammar may have undergone. The child will optimalize, or create the simplest grammar from both these overt features of the adult's competence, and in the process linguistic change may result.

Consider now this hypothesis about language acquisition, as set out diagrammatically in King (1969: 85):



A model of linguistic change, King (1969: 85)

LAD = Language Acquisition Device

As King notes (1969: 84), it is crucial to understand that the model of language change proposed within the constraints of the TGG theory does not postulate that one speech output changes into a successive speech output with certain salient differences between them equalling linguistic change. Rather, it is hypothesized that what does change is the grammar of generation two in comparison

with generation one. That is, what is changed is not performance, but competence: it is change in the grammar itself, not change in the output of the grammar.

A further point worth noting is that though adult innovation may result in the child constructing a grammar which incorporates these innovations into the body of his grammar, simplification, or the construction of an optimal grammar does not have to be preceded by innovation in the adult grammar. King comments on this point, stating that

Children seem to simplify spontaneously. They merely build a grammar based on what they hear. They can have no notion of what the adult grammars look like. A child, in other words, couldn't care less how his parents' grammars got the way they are.

(1969: 86)

2.03 Language change and the notion of the homogeneous language community

Having discussed the role of language acquisition in language change, there remains to be asked the major question--why should all the children in a community suddenly re-structure part of their grammar at a particular time in the same particular way. If the parents of a re-structuring child had been able to construct a particular rule from data acquired from their parents, why do the re-structuring children suddenly simplify the rule? Presumably, much the same data is available to them as to their parents.

To partially answer this critical question entails a deeper investigation of the notion of the ideal native speaker with his accompanying intuitions and grammatical

competence. We must firstly ask who the ideal native speaker is, and where he can be found. He seems to be an artifact, a generalized notion of all the speakers of the speech community, and he lives in a homogeneous speech community where all the inhabitants have the same underlying grammar. We are not, moreover, concerned with his speech performance. That is, the ideal native speaker exists solely for the purposes of the linguist in establishing an observationally and descriptively adequate grammar of the language.

In many cases the ideal native speaker is the linguist himself, speaking (he hopes) authoritatively about the language of the speech community. It seems, however, that to take a mythical body as representative of the speech community is unnecessary, and in fact lowers the explanatory power of theoretical principles behind the establishment of a grammar of a language community. To ignore considerations of speech performance may allow the linguist to establish underlying rules which 'govern' speech production, but it seems that to ignore features of performance omits from the explication of the language system certain important features of that system.

Perhaps the most searching criticism of the notion of the ideal native speaker and the homogeneous speech community is that presented by Weinrich, Herzog and Labov (1968). Considering Halle's (1962) seminal proposals concerning the link between diachronic change and language acquisition, they find firstly that 'the generative model

for the description of language as a homogeneous object is needlessly unrealistic' and that 'it is quite pointless to construct a theory of change which accepts as input descriptions of language states that are contrary to fact and unnecessarily idealized' (1968: 144). They proceed to develop their contention against the notion of the homogeneous speech community, and the notion of language transmission between parent and child also comes under fire by extension. Consider:

The image of the parent-to-child relationship as a model for language change is a plausible one in the context of a structural model based on the study of individuals (or of a 'homogeneous community' which is simply an individual under a group label). Furthermore, it seems clear that children restructure their grammars not once, but many times as they mature. But the model depends upon the unexamined assumption that the children's grammars are formed upon the data provided by their parents' speech. Yet there is a mounting body of evidence that the language of each child is continually being restructured during his preadolescent years on the model of his peer group.

(1968: 145)

This brings into line of fire the notion of the homogeneous speech community. What is it? Does it exist anywhere in this world? In effect, it is the land where the linguistic intuition lives. The critique above also entails that the question as to whether all adult speakers add the same innovations to their linguistic competence (all in time for the next generation to account for them in their optimal grammar) must be asked and critically examined.

The answer could of course be yes, but it could just

as well be no: in any case since the notion of the ideal speaker and the homogeneous speech community may well misrepresent the actual linguistic state of affairs in the speech community, the proposition entailed in the question must essentially be unrealistic, and also non-empirical.

Weinrich, Herzog and Labov consider further implications of the Halle model of language change and language transition/acquisition. They find that

... a further weakness of Halle's model is the implication that a change is complete within one generation, the product of a specific relation between parents' and children's grammars. But this implication is not borne out by the empirical evidence of change in progress... These investigations have described changes that continue in the same direction over several generations.

(1968: 146)

The work of Labov (1966a, 1966b) suggest strongly that the notion of a homogeneous speech community is not only unrealistic, but does not take account of the fact that there is empirical evidence that speech communities are variegated with respect to language systems. However, they agree that within the theoretical constraints of TGG it is possible to consider a language community to be homogeneous, since the model purports to describe a representation of the ideal competence of the speakers in its boundary. The point, however, remains that this ideal competence may misrepresent actual linguistic states-of-affairs within that community, and therefore, since the data does not corroborate the hypothesis, the hypothesis itself should be dropped as not being

empirically adequate. Thus, Weinrich, Herzog and Labov find that they disagree with Chomsky (1965: 3-4) that

no cogent reason for modifying it (the notion of the homogeneous speech community) has been offered.

In fact the authors argue that there is all the evidence in the linguistic world that it should be modified.⁶

The authors of this important paper thus argue that there can be no reason at all for constructing a grammar so abstract that it must NOT account for systematic variation in a speech community. Empirically, both synchronic and diachronic language states are variegated within one community. Thus they argue that:

deviations from a homogeneous system are not at all error-like vagaries of performance but are to a high degree coded and part of realistic description of the competence of a speech community.

(1968: 125)

Contrary to the claims of TGG, Weinrich, Herzog and Labov argue that command of language includes as a necessary function of speech ability the control of heterogeneous structures.

2.04 Rejection of the notion of the homogeneous language community

Given what has been said about the TGG model of language, especially with respect to language acquisition, transmission and change, we have left the TGG competence-based model standing on shaky, non-empirical ground. We have seen that from work on change in progress, Labov can establish that language change is not complete within the span of one generation. Further, given that the TGG

model for language acquisition proposes that children will construct an optimally simple grammar from data received from their parents, how then can we account for them acquiring a variegated, and thus more complex system as part and parcel of their language ability. Also, if we adhere to the notion of the ideal native speaker and the homogeneous speech community, how could we explain a position such as the following. Supposing adult A has a particular structure within his grammatical competence which his child also takes into his underlying grammar, but adult B does not have this particular structure and therefore does not pass it onto his child. Do we have to say that these two families cannot possibly live within the same speech community? Of course, they might well live in different dialect areas, but if they do live within the one community, then the TGG model cannot account for the difference. It seems that the TGG model cannot explain some crucial linguistic facts, and therefore the classical theoretical principles of the ideal grammar, the ideal native speaker and the homogeneous speech community must be either dropped or revised.

Unwilling to drop the model in totality, linguists began to examine the theory and to revise certain shaky points, as well as those we have discussed above, with a view to salvaging the relationship between historical linguistics and TGG.

2.05 Grammar simplification and language change

As we have noted, the 'slogan' in TGG style historical linguistics seems to be 'language change is rule change', and that rule change optimally leads to simplification of the grammar. Further, Halle's (1962) statement that change 'must not result in the destruction of mutual intelligibility between the innovator and their parents, the data source' must also be noted as a crucial premis.

Grammatical simplification by children as the 'cause' of language change was accepted in the early days of TGG-style historical linguistics as a valuable working hypothesis. It was held that children alone could perform major re-structuring of their grammar while in the process of acquiring their native language. Essentially, children account in their grammar for all the data available to them, whether in their parents' grammars the data could be accounted for with rules from their original underlying grammar, or whether late innovations.

However, it is all very well to say that in the acquisition process children will construct an optimally simple grammar. We have to ask what exactly this means. We ask: Simplicity where, why, and for whom?

Traugott (1969) proposes that simplification may operate on different components of the grammar with differing surface structure results. She further claims that simplification will most commonly occur in the transformational component of the grammar, i.e. affecting either the

input to or the output of a transformation. Her argument is somewhat complex. She observes that simplification of the structural index of a rule (S.I.) will result in that rule being generalized over a wider range of data. She also notes that while simplification may occur in the internal grammar, the result of the application of the simplified rule may be elaboration in surface structure. As an example of simplification in the S.I. of a transformational rule, she views the development of the passive verb phrase from OE to English of the modern period. Thus: in OE, in addition to tense, only modals could occur in the domain of the S.I. of passive formations. There is no record of perfects or progressives appearing in passive formations. Thus, we have examples such as in Traugott (1969:12-13):

Alfred.Oros. 128, 5.

þa Darius geseah þæt he oferwunnen (main verb)
 been (passive marker) wolde (modal).
 When Darius saw that he would be defeated.

but not

*þa Darius geseah þæt he oferwunnen (main verb)
 gewesen (passive marker) hæfde (perfect)
 When Darius saw that he had been defeated.

*þa Darius geseah þæt he oferwunnen (main verb)
 wesende (passive marker) was (progressive)

However, by ME perfects had become available too:

Chaucer. Tale of Melibee 2210

By cause of the wrong and the wikkednesse
 that hath (perfect) be (passive marker)
 doon (main verb).

and progressives finally became available by the end of the 18th century.

Southey Vol. 1 249.24 (Letter 9th Oct. 1975)

Like a fellow whose uttermost upper grinder

is being torn out by the roots by a mutton-fisted barber.

Simplification of the structural change (S.C.) may involve reductions of additions if the T-rule involves adjunction, or it may involve more extensive deletion if the T-rule is of the deleting type. Again, Traugott returns to the passive transformation in the history of English for evidence of this type of simplification. Thus, in OE there were three auxiliary formatives, BEON, WESAN, WEORÐAN, and also several prepositions marking agent function, notably MID, FRAM and ÐURH. By Middle English WEORÐAN was eliminated from the set of passive auxiliaries, BEON and WESAN coalesced at a later period, and GET was added to the inventory, although this latter need not concern us here. Also by ME the agentive preposition markers were replaced by WITH and BY, with the subsequent loss of WITH when a human agent was denoted. Traugott proposes that simplification of the structural change, which governs the output of a transformation is more a surface structure phenomenon, than one of deep structure, and therefore that simplification of the S.C. leads to simplification at the level of surface structure.

The two latter types of simplification investigated by Traugott have their domain in the transformational component of the grammar only, and they in no way affect the base structure of the grammar. She considers that simplification in the base component of the grammar would be more radical, stating that

ideally, the phrase structure (P.S.) of some grammar may be regarded as a subset of a language-universal set of categories and relationships (cf. Katz & Postal 1964; Chomsky 1965); hence changes in the P.S. ideally involve the development of a new subset of the universal grid.

(1969: 7)

However undesirable changes in the P.S. might be, Traugott acknowledges that in the history of English there do seem to have been alterations in the underlying structure of the grammar, i.e. modification of the P.S. rules, assuming that the P.S. rules are of the nature proposed in Chomsky (1965: 102). She comments on changes in feature hierarchy and feature assignment, giving as exemplification the loss of grammatical gender in LOE and EME: for example, in OE the noun *WIF* (woman) was grammatically neuter, with adjectives and determiners taking the neuter case ending when in agreement with *WIF*. However, pronouns, coreferential with *WIF*, could take either neuter gender in agreement with *WIF*, or could be feminine according to the natural gender of *WIF*. During LOE and EME it seems from textual evidence that grammatical gender was lost, and all that remained as a feature specification was natural gender, as reflected in both the pronominal class and determiners and adjectives.

Traugott (1969) also proposes that simplification of the P.S. occurred with respect to the co-occurrence of modal verbs and perfect tense. This simplification process is described as a change from mutual exclusion to mutual co-occurrence. In OE, the following is deviant:

*He wolde (modal) gefeohten (main verb) habban (perfect)
he would have fought

while sentences such as the following are common:

Alfred Oros. 88.26

Ic hæbbe (perfect) nu geseð (main verb) hiora ingewinn
I have now told of their ancient battles.

Simplification thus does seem to play a major part in language change. However, Traugott extends the notion of grammatical simplification to include both simplification of the rules of the grammar, and simplification of the surface reflex of the grammar. Thus it may be seen that the definition of simplification offered by King (1969) and discussed above is not adequate, in that it does not account for differing types of simplification, one working on the level of the internal grammar, the other on that of the output of the grammar. Traugott's hypothesis that simplification of the (underlying) grammar may result in surface structure elaboration, and that simplification of the surface structure may result in elaboration of the (underlying) grammar seems borne out by evidence from the history of English.

Traugott's advance in her 1969 paper on the generally held stances concerning the definition of simplification is that in describing the mechanism of simplification in full, she has taken into consideration performance factors as well as those of competence in accounting for proposed changes in the underlying grammar.

2.06 More on simplification

In comparison with Traugott (1969), King (1969), as we have noted, considers that simplification is the restructuring of the underlying grammar only, and that simplification is the prime necessary condition for language change. As exemplification of his position, he offers the following rule re-ordering as an instance of simplification of the underlying grammar resulting in language change. German acquired a rule of final devoicing of obstruents at some point in the early 11th century, and in the 14th century acquired another rule, one of vowel lengthening before voiced obstruents. In MHG, as far as can be told from the data available, the rules of final devoicing and vowel lengthening appeared in the following order, with the output as shown below:

<u>Underlying forms</u>	veg	vegə
Final devoicing	vek	inop
Vowel lengthening	inop	ve:gə
Phonetic shape	vek	ve:gə

However, in Modern German the order of application of these rules is the reverse of that in MHG. Thus:

<u>Underlying forms</u>	veg	vegə
Vowel lengthening	ve:g	ve:gə
Final devoicing	ve:k	inop
Phonetic shape	ve:k	ve:gə

In the grammar postulated for MHG, each of the above rules applies to only one of the two sets of forms at each step of the derivation. But in the re-ordered grammar of Modern German, the vowel lengthening rule affects both sets at its point of application, where it applies to a

greater number of forms than it did before. Thus it would seem that the motivation behind the re-structuring is such that maximum use is made of the rule of vowel lengthening.

It is thus proposed that re-structuring affords the underlying grammar the widest possible use of the rules, i.e. the grammar economizes by having a particular rule apply to a more general set of data. Kiparsky (1968b) suggests further that in order to make manifest in the theory the greater degree of utilization of one order as greater brevity of the grammar, a distinction should be made between marked and unmarked application of rules, and sets of rules. Unmarked order or application is optimal, simplifies the grammar, and accounts for the widest possible set of data, while marked order or application is elaborate in terms of the underlying grammar in that it will account for only a constrained set of data. By extension, therefore, it is proposed that rules tend to extend their environments, and sets of rules shift in to an order which allows their fullest utilization in the grammar, i.e. it is optimal that the simplest rule account for the fullest set of data.

Both King (1969) and Kiparsky (1968b) consider that the criterion of simplicity in both language change and language acquisition is in effect an evaluation measure on the kind of grammar the language learner 'prefers'. That is to say, if the language learner (the child) clings to an early optimal grammar, then he will carry to linguistic maturity a grammar which differs in output from that of the

'model' adult speakers from whose output he derives his primary data.

However, should we allow that the notion of an optimally simple grammar be considered as part of a hypothesis on the nature of language and language learning in general? Within the theoretical framework of TGG, notational conventions^{and axioms} for ideal grammar construction are held not only to be descriptive devices for explicating linguistic phenomena of particular and individual languages, but also hypothetical steps, hopefully representing the nature of language, and also language acquisition, and by extension, language change. That is, the notational conventions are hoped to be in some way representative of the innate linguistic principles language learners bring to bear on raw data in the process of language acquisition.

Given that the above is an empirical question, what empirical content can be found to corroborate the notion that optimal grammatical simplicity may be allowed as an evaluation metric on the form of a grammar? Kiparsky (1972) suggests that there are absolute and relative formal constraints on the notion of optimal simplicity. Absolute constraints limit the form of grammars. Relative constraints give an indication within the set of permitted rules of a particular form of grammar which rules are 'simpler' than others. In other words, Kiparsky holds that simplicity (and simplification) has to have a psychological correlative; simplicity can mean no more than simple for the acquisitional device.

Kiparsky (1974: 263) pursues further his investigation into the status of the notion 'simplicity', and by developments from his (1972) paper proposes that the evaluative function of simplicity on the underlying grammar is only partly correct. Rather simplicity (and by extension, simplification) crucially involves the relationship between rules of grammar and surface forms. This Kiparsky terms the relative 'degrees of opacity'. In addition to this, requirements of perception and production will also dictate other aspects of linguistic form, and thus linguistic evolution.⁷

An 'opaque' rule, then, is one which is in terms of the underlying grammar not optimally simple. In effect, it applies only to a small, non-general subset of data. Thus in terms of the set of rules of the underlying grammar it is marked, that is, will produce a surface structure form which is not natural in terms of the rest of the language system. Thus we might take as an example of an opaque operation allomorphic variation in certain contexts. The importance of the proposed degree of opaqueness is as follows: Kiparsky proposes that the greater the opaqueness, the more susceptible the rule is to change till in terms of the system it is optimally transparent, i.e. natural within the set of rules comprising the language system. Taking our example of allomorphic variation, it is widely recognized that this type of variation is highly susceptible to levelling, thus, in terms of Kiparsky's

'degree of opacity', removing an unnatural output from a marked rule.

The addition of the notion 'degree of opacity' as an integral function of the criterion of simplicity is, of course, an extension of the notions of simplicity and simplification as previously postulated in King (1969) and Kiparsky (1968b, 1972). The earlier restrictions of the notions of simplicity and simplification to formal criteria operating with application and result seen only in the underlying grammar did not account for the results of linguistic change in surface structure. The only real effect had been to provide further refinements for the TGG competence model. The extension proposed in Kiparsky (1974) purports to show how underlying functions, and changes in these functions, affect surface structure and therefore the hitherto ignored performance factors.

2.07 Simplification as a feature of performance, not of competence.

The criterion of simplicity is central in the methodology of the classical TGG model, and the notion of grammatical simplification is concomitantly central in diachronic studies conducted within the framework of classical TGG also.

In the preceding sections we have seen how the formal notions of simplicity and simplification have been extended in more recent research within the paradigm. It is becoming more clear that linguists working within the TGG framework became aware that simplification was not quite

so simple as earlier research had proposed. Traugott (1969) has shown that simplification in the internalized grammar may actually result in more complex surface structure outputs. Kiparsky (1974) allows that complex surface structures, the output of opaque, or non-natural, rules may well be the catalyst for simplification from rule opacity to rule transparency. Both these accounts of an extended notion of simplification propose that features of performance seem to be vital to the understanding of changes within the internal grammar.

What then IS simplification? For example, is the loss of inflection and the establishment of a fixed word order a language change which may be termed simplification? Is the absence of a grammaticalized system of aspect in the early attested periods of the Germanic languages a simplification of the older Indo-European system which did have grammaticalized aspect? Can it be said at all that the child in the language learning process found it optimal to construct a grammar without inflections? It should rather be said that the only time that a massively simplified⁸ grammar can be postulated is when the child is at the holophrastic stage of linguistic development, when his grammar is minimal but when he can still be understood. This we might term the peak of simplification, or more technically, global simplification: in effect, the child has, in terms of the grammatical system of the language, simplified the whole grammar. Later differences which

are manifest between the grammar of the adult and the grammar of the child, and these must be considered local simplification: these are the fodder for diachronic investigation. Only these latter changes could remain, and be recovered by the linguist as part of an innovation: if we had total re-organization of the grammar of the child, then mutual unintelligibility would result and there could be no communication between two generations of speakers.

From the later work of Kiparsky (1974) and from Traugott (1969) we have seen that to explain language change as change within the internal grammar may not cover all we need to know to discover what exactly the cause and effects of language change may be. In chapter one and in this chapter we have seen that many of the criticisms against, and problems within the TGG model seem to stem from the fact that it is concerned only with grammatical competence, the speaker's underlying grammar. It should be noted that in chapter one we discussed tests conducted by psychologists on the empirical content of competence, and that it was concluded that in fact the empirical content was totally negligible. However, if we do retain the major hypothesis that language acquisition and language change are in some way intrinsically linked, then perhaps a brief look at more recent research into language acquisitional processes is warranted at this point. Bloom (1970) states that the situation of utterance is an important variable in interpreting child language data. Many investigators are now researching into the viability

of the hypothesis proposed by Campbell and Wales (1970) that, at least in the case of children, research should be conducted into studying their communicative competence rather than merely their linguistic competence as defined by Chomsky (1965). Both these latter proposals essentially conclude that in studying child language acquisition, researchers should concern themselves more with performance factors than with features of the underlying grammar alone.

Thus it seems that perhaps some further and more conclusive information about language change and the mechanisms of linguistic change may be elicited if the starting point is the language system as a whole, is communicative competence. We propose to return to a fuller critique of research into language change and communicative competence at a later point in this study.

Footnotes to Chapter Two

- ¹There were, however, exceptions to this, as Hoenigswald (1960) points out. He promotes the method of internal reconstruction, that is, discovering the comparative analysis of features of related languages the language system of the common ancestor. He holds that essentially each backward step toward the proto-system of the ancestor language must be regarded as a dialect in time of that system, but not a dialect over space.
- ²See Wang (1968: 705); Stankiewicz (1966: 501)
- ³Derwing (1972: 116-119)
- ⁴See King (1969: 66-71)
- ⁵C. Chomsky (1968)
- ⁶Again, see the work of Labov (1963, 1964a, 1964b, 1966a, 1966b)
- ⁷Kiparsky (1972); Traugott (1969); Bever and Langendoen (1972)
- ⁸Even then, moreover, the grammar cannot be considered as 'optimally simplified'. This grammar would bear no relation in output to the primary data utilized as input.

CHAPTER THREE

Language change and language families:
typology & drift

3.00 Language change as part of the generation gap

Equal in importance to the major proposal within the TGG framework that language change is grammar simplification is the hypothesis that language change is complete within a generation. That is, within the TGG-style diachronic model, large scale grammatical change is discrete: the grammar of the parent does not have the modification, the grammar of the child does. Moreover, it is hypothesized that this change will have occurred uniformly throughout the speech community. The assumption that language change is yet another instance of the generation gap does, however, seem to be contrary to fact. As we have seen earlier in this study, studies into change in process (Labov (1966a,b, 1968) especially) suggest that language change spans generations before it can actually be said to be completed. Thus it would seem that the axiom of discrete language transmission, and therefore change, effectively limits the kind of diachronic research which can be carried out within the TGG framework.

The limitations of the above-mentioned method, within which the TGG model is bound, must therefore be seen to have a severe effect on diachronic research. In effect, TGG-style historical linguistics can only study isolated language change, given these self-restrictive theoretical boundaries.

The study of isolated language change is of course of interest in that it provides an insight into the language system of a particular language at a particular time, or rather more widely, how two grammars of one language from different stages may be compared, and what changes can be elicited. However, perhaps more interesting for a general theory of language and language change is a mode of research which can, methodologically, look at changes over a wider area of time than just one generation: i.e., that can study change in process. This mode of research will hopefully provide insights into the general characteristics of the language system per se, and from further comparative study, give insight into the formation of language systems in general.

3.01 Comparative studies & language change

Comparative research is of course no new area of study in linguistic science. The eighteenth and nineteenth century saw much activity in the utilization of this method. The discovery of Sanskrit, and other 'lost' Indo-European languages, and work in Greek and Latin and the Germanic languages meant that by comparing attested roots and morphemes of the languages of the Indo-European group, linguists (or rather philologists) were able to reconstruct a 'proto-language' for the Indo-European group.¹

The methods of research were, in general, close scrutiny of the data: relationships between morphemes were adduced through comparison of shape and meaning.



August Schleicher set out to map relationships between the languages of the Indo-European group which mirrored the work on language relationships done by the pioneers of comparative philology.² Based on the analogy of the genealogical tree, his 'Stammbaum' or 'Branching Tree' was the outcome of the method of comparative work he himself had developed. Briefly, the 'Stammbaum' is composed of nodes labelled as particular 'états de langue' which are hierarchically ordered with respect to the relative age of the languages (or 'états de langue'). The closer the proximity to the trunk, which represents Proto-Indo-European, the older the language. That is, a main branch of the tree has a closer relationship to the trunk (is more nearly related to PIE) than a branch developed from a main branch. The obvious disadvantage of this model is that it shows only a two-dimensional 'picture' of what the linguists knew or had hypothesized. This kinship model came to be replaced by a more adequate but still descriptive model based on the analogy of the outward spread of waves in a pond (or a similar area where water spreads outwards in ripples when disturbed). This theory was proposed by Schmidt, and known rather obviously as the 'Wave Theory'. It is superior in descriptive quality to that proposed by Schleicher in that it shows the spread and dispersal of the original proto Indo-European language as being kinetic in source, whereas the Stammbaum model shows an essentially static picture. Moreover, in conjunction with the 'Wave Theory' Schmidt proposes that language relationships need

not necessarily progress in step with proximity relationships. That is, a daughter language to PIE may be significantly and more radically divorced from the language system of PIE than a niece or granddaughter language.³ Previous to Schmidt's proposals, no account had been given of varieties within the parent language, and therefore no account of why certain forms were present in a more distant relative but did not seem to be present in closer relatives and in the main form of the parent itself, PIE. It was thus a major breakthrough in comparative studies to discover that variations in descendant languages may well be the direct result of there having been dialect varieties in the parent language, PIE.

Following the general trend of Schmidt's argument, Meillet (1926) noted that the development of structures related in shape and grammatical usage often appear after the breakup of the parent language. The hypothesis brought to bear on evidence such as Meillet proposes is that related languages may change in a related or 'similar' direction. These related changes, operating over spatial and temporal distances within a language group, seem to suggest that linguistic relationship, or 'group membership', gives a language of that particular group accessibility to a common core of paths of change. This accessibility would seem to be governed by descent from the parent language, the common source. It remains to be resolved what accessibility involves.

Late nineteenth century linguistic research turned towards explication of linguistic change in terms of HOW it came about. Paul (1880) considers that language change is accomplished through the summation of a series of shifts in idiolects moving in the same direction. Paul's work was representative of the period: the conviction that the individual is the centre of all linguistic change, that somehow the speech of the individual is representative of the whole linguistic community. Saussure also proposes that the idiolect, or speech system of the individual, is the basis of language and thus the language system, in effect, that language systems are composed of parallel idiolects. The major flaw in the arguments of both Paul and Saussure is that they do not attempt to distinguish between innovations which enter into the language system through the idiolect and which survive, and those which enter into the language system and die a quick and painless death.

The methodology utilized by both Paul and Saussure must, of course, come under the same battery of fire as that of TGG, with respect to the notion of the homogeneous speech community. It is questionable that all members of a specific linguistic community should all at the 'correct time' adopt an innovation into their respective idiolects so that the whole community in effect brings about a 'linguistic change'. This particular criticism, has however, been dealt with earlier in this study.

3.02 Drift as the result of governed language variation

A notion implicit in the work of both Paul and Saussure is that the language system has some internal dynamic force which determines the direction of language change. This proposal is taken up in more detail by Sapir (1921, 1949). By deduction from data, Sapir notes that languages seem to change in a particular direction guided by some governing principle, and that thus language change cannot be considered free nor random in its movement. The methodology and rationale behind his work is akin to both that of Saussure and Paul in that his discussion of governed change is preceded by a discussion of dialectal variation: he points out that in dialectal variation there seems to be a levelling force at work bringing variation in the main back to the norm. The major difference between Sapir and the 'idiolectal school' would seem to be that Sapir considers that individual linguistic variation alone cannot be the underlying cause of language change. He holds this opinion because 'we should be at a loss to explain why and how dialects arise, why it is that a linguistic prototype gradually breaks up into a number of mutually unintelligible languages' if the latter argument were the case.

To explain why languages change, and, by extension, why those that are related change in related directions, Sapir postulates that

Language is not something that is spread out in space, as it were--a series of reflections in individual minds of one and the same timeless picture. Language moves down time in a current of its own making. It has a drift.

(1949: 150)

The crucial premise which Sapir adopts is as follows; 1949: 154-155

If the historical changes that take place in a language, if the vast accumulation of minute modifications which in time results in the complete remodelling of the language, are not in essence identical with the individual variations that we note on every hand about us...are we not imputing to this theory a certain mystical quality? ... It by no means follows that the general drift of a language can be understood from an exhaustive description of these variations alone. They themselves are random phenomena, like the waves of the sea, moving forward and backward in purposeless flux. The linguistic drift has direction. In other words, only those individual variations embody it or carry it which move in a certain direction, just as only certain wave movements in the bay outline the tide. The drift of a language is constituted by the unconscious selection on the part of its speakers of those individual variations that are cumulative in some special direction. This direction may be inferred ... in the main from the past history of the language.

The salient point of Sapir's hypothesis is this: variations of all sorts may appear in any synchronic stage of a language. However, only those variations which fit with the general direction of change within the system (i.e. with the system at that time) will survive to change that system. It would appear that Sapir's hypothesis may be directly related to those proposed by Meillet (1926), and may be seen as an extension of them. That is, Meillet leaves open the question of the accessibility of related languages to related changes, while Sapir offers a more extended proposal as an explanation; the conditions and factors which control 'drift'.

3.03 Drift and transformational-generative grammar

Within a more recent work, RT Lakoff (1972: 172) claims 'that it has been intuitively recognized that a given language will prefer certain types of superficial forms to

others'. She notes that there seem to be 'targets', diachronic in nature, whereby 'something is happening to the language as a whole', but that it 'should be noted that there is no mechanism within the present theory (TGG) ... that would allow an explanation'. Lakoff considers that the 'diachronic target' is governed by some metacondition on the language system as a whole, but within the framework of TGG no explanation can be given for this metacondition. She cannot allow that it could be part of any synchronic description of a language, nor that it could be learned as part of the language acquisition process. Further, since she notes that the direction of drift is quite disparate in different language families, she cannot allow that it is a formal linguistic universal, a formal condition of language per se. She is reduced to calling it a linguistic pendulum, feels sure that it is part of language ability, but cannot fit it into her paradigm, and therefore cannot offer any valid explanation of it.

However, the mode of investigation that is adopted in Lakoff (1972) is interesting and is an advance on other studies in diachronic change carried out within the framework of TGG. Lakoff is concerned with change as it affects the whole language system over a span of time, and not just with change of a part of the system and one point in the history of a language. She states that at least if her paper has ended in a theoretical dead-end, she has proposed serious lines of research which go further than other studies within the TGG framework have so far gone:

When the historical linguist talks, as some have, about 'simplification' and 'elaboration' of rules or parts of the grammar as a mechanism of syntactic change ... he is missing the point if he views the naming of these phenomena as an end in itself. Neither the fact that a rule (or component) has been simplified nor the fact that it has been elaborated is interesting in itself unless we know other facts about these processes: whether there are reasons for the simplification or the elaboration, whether there are constraints on what can be simplified or elaborated, and whether there is a limit in the grammar as to how much of either of these processes can be tolerated: whether these terms can be strictly defined as they ought to be; and under what conditions each tends to arise. Until these questions have been explored, historical linguists would do well to treat these terms as words of no more explanatory power as the word 'change' itself.

(1972: note 6)

Within the particular variety of TGG to which Lakoff subscribes, she proposes to account for the different realizations of pronouns, causative verbs, auxiliaries, comparatives, adjectives and adverbs in the Romance languages, English and Latin. She notes that in Latin anaphoric and emphatic pronouns are not obligatory, that AUX is normally realized as an inflection on the stem/root of the verb, that causative verbs are normally realized by suffixes on the stem of the non-causative verb: in short, in Latin many features of the semantic base are realized in surface structure in Latin as inflections or suffixes, while in modern descendants of Latin, i.e. the Romance languages, and in English, which is related to Latin, these functions are normally expressed by isolative segments. Lakoff proposes to account for this difference in surface structure realization in terms of the "metacondition" on the Indo-European language family directing the languages in the

group to greater surface segmentalization and from SOV to SVO word order. However, in terms of integrating the account of the drift into the model of TGG within which she is working (i.e. generative semantics), she finds that there is a major theoretical drawback. Accepting the Postal/Ross/McCawley arguments for a universal base which may only differ in the order assigned by the initial re-write rules (i.e. either $S \rightarrow NP + VP$ or $S \rightarrow VP + NP$), she holds also that which set of re-write rules is applicable to a particular language may be determined from the shape of the transformations of that language. Lakoff's (1968, 1972) work has shown that in terms of her theory Latin, Romance and English share the same shape of transformations, the difference in surface realization being due to the operation of redundancy rules in Latin. For example, in Latin anaphoric and emphatic pronouns need not be realized in surface, whereas in English they must. Lakoff argues that the rule which results in their overt realization in English is present in the rule inventory of Latin, but operates vacuously, and thus no surface form is produced.

However, the major difference between Latin and the later Romance languages would appear to be one of word order, and Lakoff is aware that many of the other surface structure differences between the Latin and the later languages may well be connected with the fact of word order.

Essentially, it would appear that the base order in Latin is SOV, that of Romance and English SVO. Given that one of the major tenets of the universal base hypothesis is just that the shape of transformations of a language will determine which of the 2 initial re-write rules a language will have, then Latin, Romance and English should share the same base order. From primary data it would seem that they do not. She states (1972: 197):

Since in Latin and English these [transformations] - S.M.M.] rules are the same ... one would conclude that English and Latin share the same underlying word order-- but ... perhaps they do not. If we adopt the view that the order has changed, many if not all of the arguments given by the universal base theorists must be abandoned. This is an unattractive prospect, especially since their theory is what^{has} enabled us to formulate for an SOV to SVO change in the first place.

However, it is problems concerning Lakoff's choice of theory which halt her rather than intractability of the data. As we have noted, the crux of her argument is 'the fact that the languages within the Indo-European group which she chooses to study all seem to have changed in a related manner, i.e. from synthetic to analytic structure, and from SOV to SVO. She states that this change must be governed by some metacondition on the language family in question. We have to ask what this metacondition may be, and where in the theory it can possibly 'live'.

Using a methodology similar to that of Lakoff (1972), Roger Lass (1974) proposes that what is known as Aitken's Law in the phonology of Scottish English is part of an orthogenetic conspiracy in the phonology of English. He proposes that the operation of Aitken's Law (briefly that

all long vowels remain long in the environment /r v z ɔ # / while all short vowels, except the reflexes of Middle English /i / and /u/, become long in the same environment) is a further step in the transition from lexical vowel length to natural vowel length in English. That is, he believes that something is directing the appearance and operation of certain phonological rules in the history of English such that the appearance of each successive rule deletes another environment where lexical length can occur.

But with both Lakoff and Lass's papers we have to ask what this metacondition, or orthogenetic director IS. As Lakoff states, it cannot be part of the synchronic description of any stage of the language, nor can it be part of the language acquisition process. Lass argues that

there are cases where effects (in time) precede their (final) causes. The classic instance will be where a given synchronic state will be insightfully interpretable (on interpretable at all) only as the aimed-at result of a series of past events or as a stage in the implementation of that result. And the past events themselves--i.e. without reference to their ultimate goal--will be 'irrational', that is unconnected, inexplicable. They must be viewed, in order to make sense, as steps in the implementation of the synchronic state to be explained, and that state itself serves as their explanation.

(1974: 312)

The notion of a metacondition of the language system as a whole, or in the case of Lass (1974), of a guiding orthogenetic factor, does not offer any empirical explanation of the facts. A metacondition cannot be described as part of language ability and neither can orthogenesis be

seen as part of each speaker's underlying or communicative competence. Rather, considering that change can be seen as directed by some 'Ortho' or metacondition living somewhere apart from the speaker is in fact retrogressive from Sapir's (1921) proposals concerning drift, or connected changes within a language. Sapir states that only those variations permissible in terms of the synchronic language system will survive to effect changes in that system later discernable by the linguist. It seems obvious, then, that to explain directed change by stating that it seems to be directed in no way solves the problem. Moreover, and most interestingly, there is no way within TGG to explain that language change may be related to the state of the language system at a particular point in the development of the language.

3.04 Typology and deep structure in a transformational-generative model

To return to the problem laid bare in Lakoff (1972). There it was shown that TGG can in no way explain why Latin word order should differ from that of English given the fact that the two languages share the same set of transformations. The major problem seems to lie in the fact that TGG has an ordered base structure. Fillmore (1968) notes that recently in linguistic research there has been speculation on the possibility of a universal base structure, as in Lakoff (1972), and notes that these investigations have concentrated on the question as to whether the elements in the base are ordered or not. He notes that a common

assumption 'is that the universal base specifies the needed syntactic relations, but the assignment of sequential order to the constituents is language specific'. Further, he notes that

many recent and not-so-recent studies have convinced us of the relevance of grammatical qualities lacking obvious 'morphemic' realizations but having a reality that can be observed on the basis of selectional constraints and transformational possibilities. We are constantly finding that grammatical features found in one language show up in some form or other in other languages as well, if we have the subtleties it takes to discover covert categories.

(1968: 3)

He further proposes that ordered constituent structure should not be part of a hypothesis describing a possible universal base structure underlying all languages. (Cf. Tesnière 1959; Halliday 1966; Anderson 1971).

Concomitantly, he abandons the notion that there is validity in assuming a deep structure division between subject and predicate, which is of course axiomatic in classical TGG.

The concept of the covert category mentioned above in conjunction with Fillmore's outline of a possible grammar without constituent order in base structure has great relevance in the study of language change. Hjelmslev (1961, 1966) suggests that it is at the level of category relationships that correlations between related languages will be manifested. Hjelmslev further defines as a typological relationship between certain languages a function obtaining between those languages where certain categories found in any one language of a particular group

may be correlated with a set of corresponding categories in other languages of the group.

Let us firstly consider the term 'category'. Within Fillmore's (1968) framework, it would seem to be a feature of the semantic base, such as a case node such as AGENT, or a feature of gender such as FEMININE, or a feature of the verb such as PERFECT, or such like. Fillmore argues that the concept of the covert category, the category which is there in the base, whether or not it is given surface realization, allows us to establish a working hypothesis that there is such a thing as a universal base, and concomitantly, a universal grammar. Moreover, if the base of this universal grammar is unordered then we can generate any language of the world simply by applying language specific order rules.

In languages which are genetically related, i.e. are of the same language family, then, it is empirically proven that languages of roughly the same relationship to the parent will realize categories of the base in roughly the same mode, i.e. will have more or less the same features of the base explicitly realized, and will have roughly the same covert as categories. This is deducible by deduction from selectional constraints and transformational operations.

However, Birnbaum (1970) rejects Fillmore's sweeping statement about universal categories of the base, and asserts that:

many ... deep structure characteristics can be shown to belong not to all (natural) language but only to a specific language type ... while still others may

turn out to be ascertainable only in the covert (deep) structure of one particular language. It is out of such considerations that I have suggested elsewhere that deep structure is to be conceived of as forming a multilayered system of levels of various semantic depth ...

(1970: 25)

From his assertion that not all deep structure characteristics are universal,⁴ Birnbaum progressed to stating that not all semantic features can be considered as universal either. Birnbaum considers that the linguist should also account for, in any description of a language, the type of language group to which it belongs. This latter brings in the criterion of typological relationship. Thus, Birnbaum considers that the linguist must be able to establish in a grammar which purports to describe language per se, i.e. a universal grammar, the following three levels of description. Firstly, the model must be able to distinguish which semantic features of a language are specific to that language. Secondly, the model must distinguish which features distinguish that language as belonging to a particular group of languages with similar realization of certain underlying categories, e.g. whether a language is isolative or agglutinative. Thirdly, the model must be able to account for those categories of language which would seem to be language universal.

Thus Birnbaum proposes that instead of the classical TGG stance of a uni-layered deep structure, what is necessary in adequately accounting for the grammar of a language, and its relation to a possible universal grammar

is a deep structure consisting of three levels. Firstly, there is the level of infra-structure, which is that level of deep structure which accounts largely for the generation of the sentences of a language, and which notes which features of the base are realized explicitly and which covertly. Secondly, he proposes that there should be a typological level which he defines as that level of deep structure accounting for 'certain deep-seated properties characteristic of a variety of particular, typologically-definable groups of languages. Thirdly, he defines the level of profound structure, the level of greatest depth and generality, 'encompassing all (natural) languages, or rather Human languages per se, as distinct from other semiotic systems of communication'.

The proposed relation between the three levels is as follows: infrastructure is language specific and closest to surface structure, and includes all those properties and features of the language which are represented in surface structure and a description of the possible sentences of that language, and the transformational relations between the structures. Some of the relations found in infrastructure will be restricted to that level only; others will be reflections of categories and relations found at the deeper typological level: their presence in the language will be accounted as relating that language to other languages with realizations of these categories also. . The third level, that of profound

structure, will account for those properties of a specific language which may be defined as language universal, a characteristic of language per se. Birnbaum states that

... the immediately underlying, shallow 'infra structure' will be the richest and the most varied, and, consequently, the least generalized of the deep structure layers ascertainable below the surface of any one language. Conversely, 'profound structure' ... will be the system most depleted of structural characteristics and relatively poorest as regards multiformity and diversity of semantically based categories and relations ... As regards the deep dimension of language, it is thus only at the 'profound' level of semantics-related structure that we can gain any insight into the nature of language per se, while our better understanding of deep structure at the typological and 'shallow' levels could only help us to adequately assess and characterize a particular language type or an individual language.

(1970: 29)

3.05 Metaconditions, metalinguistic models & the prediction of language change

The proposals outlined above from Birnbaum (1970) might possibly provide a predictive and explanatory device which brings the problems of typological comparison within the perspective of a TGG-type model. Certainly, an extension of the model as outlined in 3.04 could in some way provide for Lakoff's (1972) dilemma concerning the changing base order of the Indo-European group from SOV to SVO. Some device could be incorporated into the Birnbaum model such that a prediction could be made that, at a certain point in the history of the Indo-European group, the sequential order of the base structure would change because of certain typological characteristics now inherent in the language systems within that group. This would be

possible within this model because ordering relations, as in Fillmore (1968) would not be part of the profound structure of language. Perhaps the change would first be evidenced at infra-structure, and then, as the characteristics of the language changed, its typology would change, and so the ordering principles of the language at surface structure would be governed by new sets of underlying controlling criteria.

However, the proposals outlined in Birnbaum (1970) in no way explain the persistence of typological features over time and space within a language family and, as with the classical TGG model, can only deal with one language at one particular point in its history. Moreover, the proposed predictive device, that of installing both a profound and typological level of deep structure as part and parcel of the synchronic description of each language is open to the same criticism as Lakoff's (1972) metacondition, and Lass's (1974) notion of orthogenetic direction. That is, what possible status can the typological level of deep structure have within the model? Can it be given any psychological status? Can it be learned? As with both Lass and Lakoff's proposals, it is very doubtful that the level of typological deep structure can be given any status of having some sort of empirical reality as part of the synchronic description of a language. However, Birnbaum's research does present itself as somewhat in advance of that of Lakoff, in that it does propose that the

base structure, or rather, within the terminology of the Birnbaum model, the profound structure, is essentially unordered. Thus, Birnbaum does not have the same problems as Lakoff does, in having the empirical facts confound her theoretical outlines.

Birnbaum does, however, in the later parts of his (1970) work, go on to underline the predictive status of a typological model in diachronic studies. He notes that, in general, the position of the historical linguist is, that of a prophet prophesying backwards. Crudely, the historical linguist can predict or rather "postdict" what has happened, and possibly account for it, but he cannot predict what will happen to a language--and with regard to his "postdicting", he cannot be disproved.

Birnbaum proposes that a typological model which can predict what a language will become would be a great advance on the type and nature of the models which have been proposed thus far in the literature of diachronic studies. He considers that such a forward predicting model has been established by B.A. Uspenskij. Uspenskij (1968) introduces the notion of the metalinguistic model, which is defined as an abstract model to be used as a standard, where degree of typological resemblance between languages is measured in their respective proximity to, or conversely, deviational distance from this conventionally adopted metalinguistic norm. The degree of resemblance or deviation is discovered by correlating the deep structures of the language(s) in

question with the abstract structure of the metalinguistic model. Thus the deep structure of a particular language is seen in relation to a particular language type. As seen by Uspenskij, this model for typological research in diachronic studies has no more predictive power than that of hindsight prediction alone. Birnbaum, however, on the strength of some evidence elicited from study of Balkan typology, proposes that this type of model may enable the linguist to predict with a great amount of certainty future developments in typologically related groups of languages. To state his hypothesis more strongly, Birnbaum proposes that such an abstract metalinguistic model may underlie and direct the future developments of typologically definable groups of languages. This latter he qualifies with the caveat that factors of human intervention, political, social and cultural upheavals, and other 'man-made' disturbances may alter the course of a language development. He considers, further, that the predictive powers attributed to the metalinguistic model are only possible if the structural and semantic properties of the mechanism are not formulated as a closed system, but rather open-ended, with possible additions to the typological features constrained by the format of the elements already present in the abstract description of the linguistic typology of the group.

3.06 Refutation of metaconditions/metalinguistic models on empirical & ontological grounds

The type of device proposed by Birnbaum and outlined in 3.05 above is, mildly, subject to those criticisms we have laid at the door of Lakoff's metacondition, Lass's notion of linguistic orthogenesis, and Birnbaum's own earlier notion of a typological level of deep structure. The primary criticism is therefore that we cannot accord any ontological status to the abstract typological metalinguistic model. While such a degree of abstraction is possible for the linguist on the basis of the availability to him of typological data, it is hardly possible that the child has a similar accessibility to such information during the language acquisition process. Secondly, if the abstract metalinguistic model can be given no ontological status, and therefore no empirical reality, how do speakers of these various languages in the typological group have access to the common directions for change? If the speakers themselves have no access to it, it can hardly be possible that the languages themselves somehow gain access to it independent of the speakers.

However, if we accept for the very brief moment that the metalinguistic model is an explanatory and predictive device, underlying and directing the development of typological groups, then we may perhaps say that this type of generative mechanism has extended the classical notion of generativity as embodied in classical TGG. That is, that the grammar of (all) language must be represented by a

device which mirrors the speaker's ability to create infinite numbers of new sentences, grammatical in terms of the language system, on the basis of his internalized grammar of rules accounting for the data of his language. The basic difference between the classical theory and the metalinguistic model is that the classical predicts the speaker's ability to create grammatical and acceptable sentences from processes which account for the data of his language at that particular point in its development, while the metalinguistic model predicts backwards with respect to attested historical processes within a language, and forward with respect to attested historical processes which it forecasts for the typological group of which the language in question is a member. Forecasting is possible from deduction of the kind of processes which are the natural result of the processes which are already attested in the language group.

As we have seen, however, both Birnbaum's own proposals for the incorporation of a dynamic typological device in a TGG model and the metalinguistic model do not seem to have any ontological status within the model as a result of their distinct lack of empirical reality. This is basically the case since they cannot in any way be incorporated as part of the synchronic description of any language system. Birnbaum's notion of the typological level of deep structure may well be instrumentally adequate in accounting for data which, as he quite rightly states, cannot possibly be part of the 'invariable' set of

features which in the TGG model constitute language universals, but which are generalizable at this level of typological comparison. However, in terms of the criticisms we levelled at the notion of deep structure per se in chapter one of this study, the notion of a typological level has even less psychological motivation. The assertion of the theoretical necessity of a typological level may at first glance seem to allay the empirical dilemma outlined in Birnbaum (1970), but it is ad hoc in terms of the theory of TGG, and in terms of the criticisms which may be levelled at the theory itself. In terms of the theoretical constraints of TGG, it is arbitrary to insert a typological level into that component of the model which is held to be a representation of innate functions, and which is held to have psychological reality as the unique specification representing the human ability for the production and understanding of speech. It would therefore seem that any attempt to represent typological generalizations within any model of TGG is impossible.

Much the same criticisms, and in a stronger form, may be levelled at the notion of the metalinguistic model. As we have noted, this variation of a typological generative device bases its abstract metric on the underlying structures of all the languages which constitute the typological group. Thus its form is an abstraction from an abstraction of the surface structures of the languages, the deep structure, which we have already have had cause to criticise in chapter one. The predictive power of this

device is vitiated simply because it is ontologically improbable that speakers of the group of languages in question have any access to the abstract metalinguistic schema. Therefore it is most improbable that the language group changes along typologically defined lines because each speaker has a typological device within him, directing the movement of possible change. In addition, this model cannot explain why related languages (genetic as well as typologically related) change in related directions over both time and space. Birnbaum's typological level falls under the same criticism.

Thus neither the model of change proposed by Birnbaum, nor that advocated by Uspenskij and streamlined by Birnbaum can explain Lakoff's (1972) problem: why languages within a particular group should change in similar directions. However, the questions raised about typology are not entirely to be dismissed; rather, the problems we have seen and discussed are largely due to defects in the particular varieties of the TGG model as a theory of language and language change. In the following pages alternative accounts of language typology and alternative explanatory devices will be explored for their adequacy in accounting for historical and typological facts of language and language change.

Footnotes to Chapter Three

- ¹Rask, Grimm, Verner, Schmidt, Scheicher were some of the foremost philologists working with comparative studies. See Pederson (1931) for further details.
- ²Schleicher: 'A compendium of the comparative grammar of the Indo-European, Sanskrit, Greek and Latin languages'.
- ³Mixed metaphor--but not mixed theories!
- ⁴However, Birnbaum's assertion is not accompanied by data to prove his point; that is, no concrete examples were given in the chapter dealing with this point except perhaps for his comments on the ablative absolute construction as an Indo-European phenomenon, and not a deep structure category. The only other possible concrete example might lie in his statement that the way Indo-European languages manifest negation is particular to them i.e. is typological and must not be considered as belonging to deep structure (1970: 47). One of the major problems of Birnbaum's work seems to lie in the fact that his terminology is confusing. For example, although he discusses the manifestation of negation in Indo-European (with his data drawn from E.T. Lakoff (1968)) in terms of his typological classification of underlying structure, he actually calls it part of deep structure in his general discussion. Problems such as this make it difficult to assess his work adequately.

CHAPTER FOUR

Typology, and the Problem of word order
and word order change

4.00 Typology - an overview

To define linguistic typology as the study of isomorphisms is to restrict research to a limited area.

Typology has been defined as the study of implicational universals by Roman Jakobson, whereby 'types', whether grammatical, morphological or phonological, are isolated:

consider the following statement from Jakobson (1968), in Keiler (1972: 301-302):

Typology discloses laws of implication which underlie the phonological and apparently the morphological structure of languages: the presence of A implies the presence (or on the contrary the absence) of B. In this way we detect in the languages of the world uniformities or near-uniformities.

This type of research leads into the search for language universals through systematic and comparative analysis, and leads ultimately to the kind of theory of language which, as for example TGG, seeks to explain these features of language which seem to be common to all languages within some kind of framework which ascribes to the processes of deduction some kind of ontological status.

However, restriction of the establishment of typological correlates to one language family is also of interest to the linguist. The question which has frequently been asked still remains to be answered: why should one language group have the surface realization of a particular semantic category represented by isomorphic or semi-isomorphic structures?

These two questions, the isolation of universals of typology, and language group correlations will be those which will concern us in the following sections.

4.01 Implicational typology and universals of language

The method of establishing linguistic typologies as presented by Jakobson does of course have import for historical linguistics as well as for the establishment of language universals. The Jakobsonian method can only add to the predictive power of a statement made by the historical linguist since, given the system of implicational testing, the linguist will be able to predict from a synchronic system which developments will be highly likely within a particular system, and which need to be given the minimum of consideration.

Greenberg (1966) sets out to outline 'some universals of grammar with particular reference to the order of meaningful elements'. The study of word order patterns is chosen as primary because firstly it is obvious that it is a universal feature of all language that they have some form of surface ordering of constituents within the phrase or sentence. It is also obvious that serial ordering is in some way utilized by speakers in the encoding and decoding of utterances in the speech situation.

The methodology utilized in Greenberg (1966) is that proposed by Jakobson, and discussed briefly in the preceding section, i.e. that of the implicational test.

This then takes the form of the following: if x, then y. The discovery procedure is as follows. Greenberg isolates three major defining criteria in discovering the major typological groupings in which the languages of the world may be classified. Firstly, he isolates as the dominant criterion the respective serial order pattern types of the languages of the world. Six possible logical orders may be deduced from the group subject, object, verb, but it is found that of these six only three are found in Greenberg's own investigation. These three are SOV, VSO and SVO. Secondly, Greenberg uses as a defining criterion the presence versus the absence of prepositions in a language system. Greenberg hypothesizes that if a language does not have prepositions, it is most likely to have postpositions. Thirdly, he adopts the position of the qualifying adjective or phrase relative to its head noun as a major defining criterion.

We have seen that of the six possible logical orders of S(ubject) O(bject) V(erb), the three that appear as dominant orders in the languages of the world (according to Greenberg's sample) are SVO, SOV, VSO. An important deduction has been made available through Greenberg's study: VSO languages would seem characteristically to be associated with prepositions, with adjectives and relative clauses following their head nouns. SOV languages, on the other hand, seem to be characteristically postpositional, with adjectives and relative clauses preceding their head

nouns. SVO patterns are seen to be found as alternative serial orders within languages which otherwise are VSO, but may occur as the dominant orders of languages other than those which are predominantly VSO. SVO languages in effect seem to be 'halfway' between VSO languages and SOV languages in that they share the characteristic of having 'S' initial with SOV languages, but, with respect to the rest of their typological characteristics, seem to be more closely related to VSO types, in that they are for the most part prepositional, with adjectives and relative clauses following the head noun. That SVO order is in some sense intermediate between that of SOV and VSO will be seen to offer an interesting hypothesis for historical linguistics and language change.

4.02 Criteria for the establishment of types in natural language

Greenberg's (1966) study has been particularly definitive in determining the syntactic characteristics of individual languages, and their relationship to a typological group. From the sample study presented by Greenberg, it would seem that the basic opposition in type between the languages of the world is that of OV versus VO. We may arrive at this conclusion from evidence that suggests that the link between the strictly OV languages (characteristically SOV, postpositional, inflectional, and having adjectives and relative clauses precede their heads) and the strictly VO types (characteristically VSO,

with prepositions, isolative structures, and relative clauses and adjectives following their heads) is the intermediary SVO type. We have already noted that it should in some ways be considered the intermediate type between SOV and VSO, given that apart from its having 'S' initial, as do SOV types, in most other respects delineated above it has the characteristics of a VSO type. It is thus most probable that the defining element in the language adopting "type" is the position of the object relative to the verb; in this respect, we can propose that SVO are typologically closer to VSO because they share the serial order pattern VO, as opposed to OV.

The importance of the verb in the establishing of the serial order patterns of the language 'types' of the world may in fact stem from its linguistic primacy. Fillmore (1968) proposes that the verb is the propositional centre, and all other semantic categories in the base are defined with regard to it. As we have seen, his basic premise is that the base component does not generate order but contains only 'formulae' which indicate the abstract relation between the verb and the (abstract) nominal categories. This premiss is not new, of course: it was the major hypothesis in the Sanskrit linguist Panini's case grammar, and has from time to time figured as a viable method of linguistic analysis--consider Winkler (1896), Maximus Planudes (c. 13th century), Robinson (1969, 1974), Anderson (1971). (However, it is worth noting here that Fillmore now does hold that the base is ordered)

Evidence has also been adduced for the verb as the linguistic prime in several experiments conducted by the neurologist, Gazzaniga. In his (1970) work it has been shown that the left (or speech) hemisphere of the brain alone is capable of defining verbal relations, whereas the right (or spatial) hemisphere can only operate in terms of nominal relations. This would seem to suggest the linguistic specificity of the verb, that it is the essential constituent in human language, as this form of communication is compared with other non-human forms of communication which can make use of only nominal oral symbolization.

Lehmann (1972a, b, 1973) argues that the basic order relation of the object to the verb is of great importance in the study of diachronic change within both typologically defined groups of languages, and also language families. He proposes that a shift in the basic verb position will concomitantly, or progressively, bring about change in other syntactic patterns, according to the OV versus VO typological characteristics mentioned in 4.01. Briefly, if the verb position changes from OV to VO, then predictably in that language system changes will occur diachronically so that the other syntactic characteristics follow the new VO pattern. Moreover, he argues that analysis of the internal syntactic order relations such as the position of adjectives and relative clauses and the presence of prepositions or postpositions will allow the typological classification of a poorly attested language such as

Sanskrit, and allow the linguist to classify reconstructed languages, such as Proto-Indo-European and Primitive Germanic. He allows that this is possible on the basis of the typological classification outlined in Greenberg (1966), in that if postpositions are found, then it is likely that the language is SOV, and so on. Thus, following this hypothesis, he defines Sanskrit, and also PIE as being SOV in type. He gives as evidence various pieces of data available which suggest the SOV type, such as the fact that in Vedic the comparative marker is 'standard-adjective'

ghrtat svadiyah

Rigveda 8.24.20

than ghee sweeter

characteristic of an SOV language type, rather than the modern English 'equivalents' which are 'sweeter than ghee'.

Lehmann (1973) outlines a 'rule' whereby the basic type of language may be determined. Note that Lehmann, following Greenberg (1966) considers that the basic relation of the object to the verb determines the kind of serial order pattern types available, i.e. that the type VO is opposed to the type OV. He proposes that the correlation between contrasting syntactic patterns and characteristic morphological structures may be explained thus: modifiers are placed on the opposite side of a basic syntactic element from its primary concomitant. The primary concomitant of V(erb) is O(bject), and thus any modifier will go on the opposite side of V from O. The

definition of modifier is restricted, however, to those features of verbal modification outside the propositional nexus of the sentence, i.e. modality, interrogativity, and negation. Tense and aspect are relegated to a separate subclass which in Lehmann's system of classification do not affect typological determination. Thus the rule for the definition of language type is (1973:49)

$$\# \ Q \ V \ (N^{obj}) \ \# \ \longrightarrow \ \left\{ \begin{array}{l} \# \ Q \ V \ (N^{obj}) \ \# \\ \# \ (N^{obj}) \ V \ Q \ \# \end{array} \right\}$$

where Q = Qualifier or verbal modifier, with status as defined above.

The value of this classificatory rule would seem to be that it stands as another criterion for the identification of the two major types of surface structure serial order in the languages of the world. That is, Lehmann claims that not only does the basic order relation of the object to the verb affect syntactic patterns within the propositional nexus, but affects the positions of verbal modifiers, or qualifiers outside the proposition. The fact that sentence qualifiers such as negation and interrogation are placed before the verb in consistent VO languages such as Spanish and Portuguese, and after the verb in consistent OV languages such as Turkish allows the identification by implication of other sentence qualifiers such as 'potential', 'desiderative' and 'reflexive'.

The actual status of Lehmann's rule, however, must be called into question for two reasons. Firstly, it is not

clear whether Lehmann considers his rule to have anything more than descriptive status. However, he does state that 'the rule applies to an unordered string consisting of sentence boundaries, sentence qualifiers, verb and potential object. The rule indicates that in consistent OV languages sentence qualifiers are placed after verbs, while in consistent VO languages they are placed before the verb'. From this we may deduce that he intends that the rule be considered in some way generative, operating on the deep structure of some language at some sort of typological level. This can only lead to the same kind of criticisms we have levelled at Birnbaum and Uspenskij in Chapter three, namely that such a rule can have no ontological status. In any case, it seems that the rule itself is non-empirical, since there are languages which do not meet the conditions of the quantifier placement argument¹; although it could be argued that this is the case because they have "mixed type".

In short, we have to conclude that Lehmann's rule of qualifier placement does not in fact offer further criteria of ontological import in the classification of language types. Moreover, in so far as it purports to be part of some kind of generative grammar which accounts for language types, we have to dismiss it out of hand as having no status in the grammar to which it purports to belong. It seems that what is needed in typological studies is a set of principles drawn up outside the TGG model, and outside any other model which is a near relative of the classical theory.

4.03 Typology change in word order, and postulated verb shift

Venneman (1973b, 1974a, 1974b, 1975) proposes that an understanding of word order typology is crucial for the understanding of language change, especially for change within one language family. In his (1974a) paper he criticizes Lehmann's description and classification of the basic Greenberg types (VSO, SVO & SOV) on the basis that although Lehmann reformulates Greenberg's typological classification in terms of correlating basic serial order with the position of the object vis-a-vis the verb, he does not explicate any further. In brief, Lehmann does not offer any explanation of change in serial order except that the crucial change is that the position of the verb in the sentence is shifted. Venneman considers that some explanation is necessary for the fact that following verb change of order, other syntactic combinations within the sentence change relative order in agreement with the new position of object and verb. Further, Venneman argues that there should be an explanation offered as to why exactly the verb should change position, in the first instance, which causes a major typological reclassification in a language.

Thus, Venneman (1974a) offers the following as a hypothesis concerning change in the serial position of the verb. He claims that an understanding of sequencing relations can be reached through a reformulation of three generalizations made by Otto Behagel in the fourth volume

of his *Deutsche Syntax* (1923). Thus:

Behagel's First Law: 'Das oberste Gesetz ist dieses, dass das geistig eng Zusammengehörige auch eng zusammengestellt wird'

(1923: 4)

'The most important law is that which belongs together mentally (semantically) is placed close together (syntactically).

Behagel's Second Law: 'Es stehen die das Vorhergehende aufnehmenden Satzglieder vor den nichtaufnehmenden, d.h., es stehen die alten Begriffe vor den neuen'.

(1923: 4)

'Sentence elements that take up preceding material stand before those that don't, i.e., the old concepts precede the new ones'.

Behagel's Third Law: 'Ein drittes Gesetz fordert, dass das unterscheidende Glied dem unterscheidenen vorausgeht'.

(1923: 5)

'A third law demands that the differentiating element precede the differentiated one'.

The first law deals with the interrelation of syntax and semantics, the second with syntax and pragmatics, and the third is a generalization appropriate only for the German language, both synchronically and at earlier stages of the language.

Venneman argues that these laws, reformulated within a more modern framework can offer the study of word order and typology a most natural framework. In Bartsch and
and Venneman (1974a: 339)

Venneman (1972), it is argued that Behagel's First Law may be translated into a rule of grammar such that

'elements belonging together in the hierarchy of semantic representation tend to be lexicalized and serialized in the surface representation in such a way that hierarchical dependencies are directly reflected in categorial

operator-operand relationships and closeness of constituents to each other in the surface string'. Further, it is proposed that this principle of 'natural constituent structure' is extended thus: that the operator-operand relationship is expressed by uni-directional serialization. That is, this principle of 'natural serialization', an extension of Behagel's Third Law, may be formulated as follows: Operator (Operand) tends to be serialized in a language according to type as either [Operator [Operand]] throughout, or as [[Operand] Operator]. Venneman argues that the vital difference between Behagel's Laws 1 & 3 and the proposals offered by Bartsch and Venneman (1972) is that the latter may be thought of as principles governing all natural language, whereas Behagel's Laws were formulated for German alone. Application of the Bartsch/Venneman principles is according to type as set out in Greenberg (1966). As can be seen, Behagel's Third Law concerning the relationship between operator and operand, (or specifier and specified, *déterminant* and *déterminé*, depending on terminology), must be restricted to German only, and for other languages specifically SOV in type. In fact, Venneman (1974a) notes that the Third Law does not even hold true for German. Consider relative clauses such as

der Mann, den ich gestern getroffen habe
 'the man who I met yesterday'

According to Behagel, this clause should rather precede

the head noun, whereas in fact in speech it follows the headnoun. (For other similar inconsistencies in modern German, see Venneman (1974a).)

The crucial factor in the work of Bartsch and Venneman on natural serialization is that they allow that the operator-operand relationship be serialized as either left-to-right, or right-to-left, depending on the type of the language. This then is correlated with the work of Greenberg (1966) and Lehmann (1971, 1972a,b, 1973) to generalize over the serial relations in languages, according to the two major types VO and OV. Their work is in advance of Lehmann's research, in that the principle of natural serialization accounts for serial order patterns in general, and does not require that syntactic patterns within the propositional nexus necessarily follow from the relative basic position of the object and the verb. This is not a contradiction in terms of what has been said about Venneman's hypothesis about typology and word order change earlier in this study. Bartsch and Venneman's principles of natural constituent order and natural serialization are basically derived from Greenberg's typological classification system. However, Venneman extends the argument to languages which seem to be in transition from one language type to another. Thus, with the two principles of natural constituent order and natural serialization, Venneman claims that it is possible to analyse a language in such a way that it is possible to

predict that irregularity of type will be 'removed' as the language adjusts according to the new serial order, given that the language seems to be changing from one type to another.

Venneman's stance on word order typology, and by extension, change in basic word order, is however, like Lehmann's proposals, based in part on the change in the basic position of the main verb. He notes, following Greenberg (1966), that a language with an unambiguous, consistent subject-object morphology (S-O) is most characteristically SW,² or as in Lehmann's outline SOV, with the finite verb in sentence final position. He notes that this is the only one of Greenberg's three dominant serial orders where S is sentence initial, and the verb sentence final, where, crucially, 'aspectual, temporal and modal sentence operators can be added to it without disturbing the propositional nexus'. Thus, Venneman considers that SXV order is the most communicatively efficient of the three dominant word order types, since in it the topic of the sentence appears first (the subject is normally the topic) followed by the comment, or material new in discourse, and the sentence is delimited perceptually by the verb. The fact that sentences optimally have topical material sentence initial was the second of Behagel's Laws, and indeed is borne out by Greenberg's sample data, where languages of the types SOV and SVO are more common than those which are VSO in serial order.

If the serial order SXV is the most communicatively useful of the three types, why then should many of the languages of the world patently not have this order? Venneman argues that a characteristic of human language is that it is continuously in flux between one order type and another. He argues specifically from the point of change from SXV type to SVX. Change in the basic serial order of an SXV language comes about, according to Venneman (1974a, 1975) primarily through the operation of 'phonological reductive processes' on the morphological markers of subject and object.³ When the subject-object morphology reaches a critical stage of attrition, Venneman argues that the verb position is shifted from sentence final position to medial between subject (or rather topic) and object (or rather comment) to obviate any perceptual confusion between these two semantic entities. Thus the old SXV language becomes what Venneman terms a TVX language, where V marks topical material off from 'the rest' of the information in the sentence. By re-interpretation, new language learners will come to consider the sentence initial slot as that for the subject of the sentence, and the comment slot as that for all the other material in the sentence. This hypothesis would seem to be confirmed by evidence from Czech, whereby the verb does not necessarily appear after the grammatical subject of the sentence, but may appear, postponed in the sentence, after all the topical material. Similarly, there

is evidence from French that it went through a TVX stage in its development to SVX; examples such as 'Il le lui a donne', where all the pronominal enclitics precede the verb in contrast with VX equivalents as 'Il a donne le livre à Jeanne'. Thus Venneman argues that the predicted path of change for an SXV type will be through T(heme) VX language to an SVX, and possibly further to VSX, (see Greenberg 1966 for the similarities between SVO and VSO languages, and above).

Venneman considers that the most plausible hypothesis which can be offered for the total reorganization of a language type subsequent to shift in the position of the main verb is quite simply that the change in the position acts as a catalyst for other intra-sentential syntactic patterns, and following the principle of natural serialization, these also reorganize according to the new serialization pattern.

If change in the serial patterns of intra-sentential syntactic combinations is effected 'on analogy' with change in verb position, Venneman (1974a, 1975) claims that the primary causation of the change from the type SXV to SVX is the process of phonological reduction, and that a concomitant of the change from SXV to SVX is the intermediate stage TVX. He notes that a TVX language, the 'youngest' member of the VX group, will manifest many features of the SXV parent from which it is derived. Subordinate clauses in a TVX language may well still

precede their heads, as may adjectives, and the serial order SXV may still operate as a marker of subordination. As a case in point, Modern German would seem to be a TVX language. There, certain types of relative clause still precede their head nouns, the order of subordinate clauses at least in literature is SXV (although there is evidence from spoken German that SVX, or at least TVX, is acceptable as the order in subordinate clauses), and the so-called 'brace' construction in the main clause is still serialized as following the XV type.⁴ Old English also is seen by Venneman as a TVX language, having all of the features mentioned in connection with Modern German above. Further, 'impersonal' constructions, as him lician, etc. are found with a preverbal topic rather than subject which gives further substantiation to the hypothesis that OE was TVX rather than SVX. As Marchand (1951) notes, these impersonal constructions are recessive if not lost in the ME period, when THEME is grammaticalized as SUBJECT, disallowing preverbal themes as opposed to subjects. Certainly, by 1200 the serial order SVX was dominant in English, with SXV order patterns remaining purely in subordinate clauses.

Venneman further argues (1975) that an 'old'SXV language, in transition to the new order type TVX, will develop characteristic syntactic structures necessary in indicating the topical material. For example, he proposes that passive structures surviving in SVX languages

are remnants from TVX days, and were evolved specifically for allowing a piece of information not by nature topical to appear in the topic slot. Furthermore, he argues that the appearance of deictics, and relative pronouns and clause complementizers derived from these deictics, is natural in a language type where expressing topical material clearly is the overall goal. For example, he argues that the appearance of deictics in Old English (such as 'sum', 'an', 'þe' etc.) is natural and predictable given that it is analysable as a TVX language, developed from an SXV type with a worn subject-object morphology. Similarly, he proposes that the Old English relative pronoun 'þæt' and the clause complementizer 'þæt' (both notable Late Old English developments) are naturally derived from the definite article, in that they denote specific and pragmatically important antecedents.

It is of course very apparent that Venneman's research is limited to change in type from SXV to SVX, and that moreover he has limited his data mainly to the Germanic branch of the Indo-European language group, with some evidence from French. He has claimed that the principle of natural serialization accounts both for language types, and why, given a change in verb position, all other syntactic combinations in the sentence change also to the new order. In short, he claims that he has answered Sapir's problem of drift, and moreover that the principle of natural serialization has empirical status

far beyond RT. Lakoff's 'metaccondition' or Lass's linguistic orthogenesis.

The basic premisses from which he derives his theories are not, however, in any way universally applicable: they do not seem to accord with evidence from languages other than those of the Indo-European group. Let us briefly restate his three major premisses:

1. The principle of ambiguity avoidance--phonological reduction in a language with S-O morphology will result in ambiguities, thus necessitating a shift in verb position to mark the subject from the object.
2. The universals of word order classified by Greenberg (1966).
3. The assumption that word order change is the result of reorganization of constituents (S,V,X) in declarative clauses caused by the levelling (and presumably the creation of) morphological affixes.

Li and Thompson (1974) question the validity of premisses

1. and 3. To take the case against 1. first, it is very questionable whether languages cannot tolerate ambiguity.

Li and Thompson point out that

while it is true that the organization of a grammar will not perversely favor ambiguity, the string statement that language will not tolerate syntactic ambiguity is questionable. It is a matter of fact, well known to the students of syntax and semantics, that structural homonymity and hence, syntactic ambiguity, is found in a large number, if not a vast majority of sentences in any language.

(1974: 211)

Thus, although ambiguity may well play a part in change of serial order, Li and Thompson cannot accept that ambiguity can be a central causal mechanism. They do, however,

admit that phonological reduction of the morphological suffixes in the languages of the Indo-European group does indeed seem to have played a large part in bringing about a situation where ambiguity was so great that some linguistic resolution of the complexity was needed.⁵ However, with regard to premiss 3., they evidence the typological development of Russian, which has changed type from SXV to SVX without losing its case markings--in fact, having increased the number of cases in the language. Venneman answers this in his (1975) study by stating that the criterion for a language retaining consistent SXV serial order is a consistent subject-object morphology, and he further argues that the Russian case system is far from consistent.

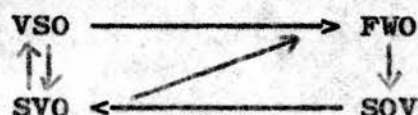
However, the death-blow for Venneman's hypotheses as a generalization for all language is found in evidence from languages of the Niger-Congo group. These languages seem originally to have been SXV in type, and have since evolved, or are in the process of evolving to SVX. They did not have case markings at the stage when they were typologically SXV. Thus the notion that loss of case endings is primary in the change from SXV to SVX is untenable, at least as a type-universal generalization.

The conventions against Venneman's theory of change outlined above may be in some way mitigated in stating that we are as yet a long way from any completely comprehensive hypothesis for typological change. Venneman's model is

adequate for the Indo-European group, and as such may be seen as a step towards the establishment of a more comprehensive theory. Moreover, the principles of natural constituent order and natural serialization do indeed seem to offer a natural explanation of linguistic fact⁶ and should not be dismissed with the general principle of Venneman's theory of word order change that phonological reduction underlies all serial order reorganization.

4.04 Word order change without shift in verb position

We have noted some of the contentions of Li and Thompson, contained in their (1974) study. There they also present data from Chinese which suggests that it has developed from SVO in Ancient Chinese to SOV in Modern Chinese (they adopt the Greenberg/Lehmann forms as in SOV, rather than Venneman's X form). In the first instance this type change is not predictable with Venneman's (1973a) schema, which outlines as the pathways of possible type change the following:



(where FWO = free word order)

In the second instance, phonological reduction of morphological markers would not seem to have played any part in

the switch from SVO to SOV in Chinese. Venneman (1974) does, however, allow and attempt to explain $SVO \rightarrow SOV$, precluding Li & Thompson's attempt to dismiss his work.

Li and Thompson present two major factors in the

history of Chinese which seem to have played a part in effecting the above-noted shift. Firstly, they have discovered that in the Archaic stage of Chinese, SVO, there are certain syntactic structures which are serialized according to the OV mode, (1974: 206-207) including relative preceding head nouns, modifiers preceding heads, and the position of the yes-no question marker, which appears at the end of the sentence (Greenberg 1966; Lehmann 1973). They propose that these OV characteristics in the Archaic language may well have provided the necessary catalyst to shift the language to the SOV type. They also propose that the presence of these OV characteristics in Archaic Chinese would suggest that at an even earlier stage, Pre-Archaic Chinese was most probably SOV in type. Thus they propose the following: Pre-Archaic Chinese was SOV, and by the 3rd-10th centuries it had become SVO. However, before the language could settle into fully mature SVO status (i.e., eradicated all OV characteristics), the presence of the OV features was the catalyst for a switch back to SOV.

However, they do not consider that this pathway of change was the major operational route for the change in Chinese from SVO to SOV. They argue that more significant is that the verb in an SVO language (here Chinese) can develop into a case marker thus collapsing SVO complex sentences into SOV simplex sentences. They argue that there are two distinct instances of this in Chinese, the

development of the bǎ- construction and the bèi- construction.

The bǎ-construction began to emerge as a syntactic unit in the late Tang dynasty (9th century ad). Prior to the Tang dynasty, bǎ was a verb meaning 'to take hold of', and it occurred more often in serial verb constructions than in simplex sentences. Thus an illustration of its older, verbal usage is

Yù qīng bǎ tiān zhǐ rùì-lìng

'Yu himself take heaven possessive mandate'

yǐ zhēn yǒu Mǎo

'to conquer particle Miao'

Yu himself took the mandate of heaven to conquer Miao

(Li and Thompson 1974: 201 (5))

Li and Thompson note, however, that in modern Chinese bǎ has become a particle functioning as an objective case marker, and give as example (1974: 201 (7)):

Zhāng-sān bǎ Lǐ-sì pīping le

'Zhang-san ba Lisi criticize aspect marker'

Zhang-san criticised Lisi

Similarly, the bèi-construction began to emerge in the last part of the third century B.C., and as in the case of bǎ, bèi was originally a verb, meaning 'receive'. Thus, it is exemplified in use in Archaic Chinese as

Bào zhě bèi hǔi-chǒu

'immoral people receive punishment'

those who are immoral will receive punishment

(1974: 203 (13))

The bèi-construction in modern Chinese is found as the agentive case marker in passive constructions. In Archaic Chinese, the passive construction had the form

NP (patient) V preposition NP (agent)

which is according to SVO type, and exactly identical with the modern English passive construction. But in Modern Chinese, the structure of the passive is

NP (patient) bèi NP (agent) V

exemplified by

Zhang-sān bèi Lǐ-sì pīping le

'Zhang-san bei Li-si criticise aspect'

Zhang-san was criticised by Li-si

(1974: 209 (12))

Concomitantly, Li and Thompson also note that the order changed from S+V+PP (where PP = preposition + NP) to S+PP+V, and that there have emerged compounds, postpositions and verbal suffixes, all of which are characteristic of SOV languages.

To examine Li and Thompson's major premiss for (at least) the change in order in Chinese from SVO to SOV, it is imperative to note that they reject the Venneman stance that reorganization of elements in a clause is brought about by the change in order of constituents in a simplex sentence. They do not however deny that this may be part of the explanation of word order change. They argue that 'it is much more reasonable to imagine, as the facts in Chinese bear out, that simple sentences of a new

word order arise from complex sentences as a result of morphological or lexical change' (1974: 209). They suggest that new sentences with the new order will co-exist with sentences with the old order, and eventually replace the latter. Thus they argue that the situation in Chinese was brought about by complex sentences in Archaic Chinese becoming SOV in type, while simplex sentences remained SVO for much longer; thus the complex sentence reduction may be expressed diagrammatically as

$$\text{SVOV} \longrightarrow \text{S} \left[\begin{array}{c} \text{V}_1 \\ \text{case} \\ \text{marking} \\ \text{particle} \end{array} \right] \text{O} \text{V}^2$$

This then explains why certain SVO order patterns still remain in modern Chinese, and why certain case markers in Chinese are pre-nominal rather than postpositional, as would normally be expected in an SOV language. They state that prenominal case markings are natural in an SOV language derived from an SVO, and that this development is made explicit by the diagram above.

Li and Thompson contend, further, that a model of serial order change such as has been proposed by Venneman will not explicate some of the shifts in order type which are possible. Thus, his model would fail completely to account for the shift which has taken place in Chinese.⁷ Further they propose that accounts of serial order shift based primarily on phonological reduction wearing away morphological endings and thus producing ambiguity is an over-generalized statement of possible paths of change, and

in fact is counter-empirical.

4.05 More theories on word order change

Hyman (1975) and Givon (1975) have also found evidence which suggests that a pathway of serial order change is, as was claimed by Li and Thompson (1974), through the collapse of complex sentences into simplex giving a new order.

Givon (1975) notes that the majority of languages of the Niger-Congo group have effected a change from SOV to SVO by a development similar to the Mandarin Chinese example, but in the opposite direction. Thus the position in the Niger-Congo languages can be represented schematically as

SVOV \longrightarrow S V O v (case marker)

Givon also notes that the evidence for the shift in the Niger-Congo group would seem to directly contradict Venneman's position (1973b, 1974a, 1975) that phonological reduction on the crucial morphological markers in an SOV language, i.e. those distinguishing subject and object, is the crucial causative factor in a shift from SOV to SVO order. He shows that one case marker which is ABSENT in some of the Niger-Congo languages, while they are still SOV in order, is the accusative or objective case marker. Moreover, in those languages which have now fully completed the change to SVO serial order, there are a few languages, as Bambara, Kpelle and Wara where the

accusative case marker has been retained fully. In addition, it seems that in this group of languages it is locatives, datives and instrumentals which shift first to the innovating VO position, rather than, as we would expect from an analysis based on Venneman's hypothesis, the accusative.

Within this group of languages, it seems that verb-reduction-to-case-marker may take place either before or after the language has essentially shifted to SVO. Thus, there is evidence that in some of the Niger-Congo group, the verb-reduction results in prepositions, while in others it results in postpositions, depending whether the reduction was effected preceding or after the shift to SVO. For example, Ijo is 'serializing' (the term for case markers derived from full verbs) while remaining SOV, while the rest of the Benue-Kwa family, of which Ijo is one, are SVO and serializing.

Givon considers that the shift involved in creating serial verbs is crucially the depletion of semantic material from the verb: it thus arrives at $\bar{\text{I}}$ adposition status. He also argues that in a language where there is an ongoing process of verb serialization, the shift will be gradual, and that intermediate cases will be found where the 'verb' in question seems by some criteria a $\bar{\text{I}}$ adposition, with appropriate stages of the development being notable for the scale of "verbness" or " $\bar{\text{I}}$ adposition-ness" of the erstwhile verb. More simply, however, the

following exemplifies a particular stage of verb-serialization in one of the Voltaic (Moore) languages where there is a linguistic situation whereby the verb 'give' is in the first example a 'full verb', and in the second a 'preposition'; 1975: 58 (47, 48)

u dika ligdã n kõ aKulga

he took money-the cons give Kulga (where cons =
consequence)

he gave the money to Kulga

a tumda-me n kõ haabã

he work-asp cons give chief-the (where asp = aspect)

He worked for the chief

Givón further argues that there are certain morphological and syntactic criteria which may be invoked to characterize a serial verb, and its later degeneration to prepositional or other status (erstwhile serial verbs also may become conjunctions). With respect to morphological criteria, he states that one of the first things to affect a serial verb is that it becomes incapable of taking verbal affixes, such as modality, subject agreement or object pronouns. That this is the case is corroborated from other evidence in Li and Thompson (1974) and Pike (1970). With respect to syntactic criteria, Givón argues that the serial verb will remain for some time in serial position; thus in Yoruba he argues that while sí is not a verb, it holds the position of a serial verb, and thus in Yoruba neither VP conjunction nor gapping is allowed; 1975: 85 (Yoruba, Elimelech, 1973):

John je èwà Bill si je eran
 John ate beans Bill and ate meat

In brief, Givon argues that while verb serialization is a pathway for type change, it need not necessarily precede the total shift to the new order. Thus the seemingly messy situation in the Niger-Congo languages where some languages are still SOV and yet serializing, and others are SVO but with limited serialization is, according to Givon, completely natural. He proposes that only some verbs will be realized as serial at any particular point in the development, so that if a high proportion of verbs are serialized while the language is SOV, then they will appear as prepositions, and if it has moved to SVO, then new serializations will appear as postpositions. In the former case this is a catalyst for a reinterpretation of other features into that type which characteristically has prepositions, i.e. SVO, whereas in the latter case there is an outlet for the rebuilding of an SOV type language.

Hyman (1975) considers the following as possible paths for serial order type change, and discusses them critically with a view to his own proposals. Briefly, then, he firstly considers the possibility of contact as a prime source for order change, but estimates that if this is considered apart from other paths, then it offers no real hypothesis, since it would then necessitate acceptance of the theory that all languages are derived from

one original proto-type. This he rejects.

Secondly, he considers Venneman's (1973b, 1974a, 1975) proposal that language orders change to avoid ambiguity, but this he dismisses as unempirical as a universally holding hypothesis, since in the case of the Niger-Congo languages this is not a major criterion. He further shows that it perhaps leads to a false hypothesis about the Indo-European group of Venneman's sample, positing that if the Germanic languages were open to ambiguous reading due to loss of distinct morphological endings, there should be a linguistic situation where a state of mixed syntax occurs. Consider. At a certain stage a language has case markings and SOV syntax, but in certain situations cases do not mark off subject from object, as in the case of Standard German. Thus while

die Mutter den Sohn liebt (DEN = ACCUSATIVE)
is unambiguous

die Mutter die Tochter liebt (DIE = NOMINATIVE &
ACCUSATIVE)

is, since subject and object markers are not distinct.

Nyman states that according to Venneman's theory, if SVO word order comes about as a disambiguating factor then the former unambiguous SOV example should remain, while the latter ambiguous SOV example should shift to either

die Mutter liebt die Tochter
or

die Tochter liebt die Mutter
depending on the reading. In brief a state of "mixed

syntax" should result but, Hyman holds, a language with such features has not yet been found, and therefore Venneman's theory should not be highly considered as a viable proposition for explaining word order change. However, Middle English DOES show such mixed syntax (kyow telle) which vitiaes Hyman's argument against Venneman.

Thirdly, Hyman considers the process of grammaticalization of a lexical item, as illustrated by Li and Thompson (1974) with Chinese data where the lexical item in question is the category of VERB. Further work on verb-grammaticalization or verb-serialization has of course, also been done by Givon (1975) with Bantu data. With respect to verb-serialization as a path for word order change in the Niger-Congo languages, Hyman confirms that (a) serialization of verbs does occur; 1975: 118

IJO erí, dúma tun-ní, a-píri
 he song sang her-GIVE
 he sang a song for her

(where píri is morphologically verbal, semantically a benefactive [adposition])

and (b) that these serial verbs (as illustrated above) may degenerate into pre- or postpositional status. Hyman, however, holds that grammaticalization of serial verbs as pre/postpositions cannot be considered as the primary and definitive path for change from SOV to SVO order, at least with respect to the Niger-Congo group of languages. This statement is of course supported by evidence from the Niger-Congo group whereby it is seen that a language which develops SVO order with postpositions may then return to

SOV order with the postpositions acting as catalyst. That an SVO language can develop postpositions at all is a result of a situation where the verb undergoing serialization is final in the group, that is, an order of SVOV, which then develops to SVOV. That this has happened in the Niger-Congo group is documented in Pike (1967, 1970) and Lord (1973). However, since Proto-Bantu, the 'ancestor' of the Niger-Congo group of languages cannot have had verb serialization, and concomitantly since there are languages of the Niger-Congo group which proceeded to change from SOV to SVO without verb-serialization yet in operation, it is impossible to credit the change (seen in general within the whole group) to the process of verb serialization followed by grammaticalization of the serial verb.

The proposal which Hyman adopts as being the most viable (at least within the Niger-Congo group) is that known as 'afterthought syntax'. He exemplifies this principle in operation in Kru, a language of the Niger-Congo group. Kru is essentially still dominantly SOV in type, but in certain special conditions constructions are found where the language seems to be intermediate between SOV and SVO. For example, in the case of conjoined nominals in negative sentences, the conjunctive NP normally precedes the V... However, it is possible to find examples such as the following; 1975: 126f:

5	se	sua	tē,	taí	kɔ
1	2	3	4	5	6
	he	NEG	fish	buy,	and rice
	1	2	3	4	5
			6		

where 'and rice' is an example of 'afterthought syntax', marked off by a special intonation pattern, and giving the resulting sequence a quasi-SVO appearance. In Kru, this type of afterthought syntax is also found with adverbs, adverbial phrases, relative clauses, and certain oblique cases. Hyman suggests that, given the case in Kru, there should be some language where the sequence S+O+V+ELSE appears without the special intonation pattern, i.e. further advanced in development. This is the case in Mande, and Kpelle, where locative instrumental, manner, benefactive and dative case markers are post-positional and nominally derived. He argues that if these cases in Kpelle, for example, had been verbally derived, then this would be an instance of serial verb grammaticalization, in the style of Li and Thompson. However, in an example the following from Kpelle

e sɛŋ - kâu tee kɔlɔŋ - pɔ
 he money sent chief-to

the postposition 'to' is obviously derived from the noun 'presence', and therefore appears to corroborate his proposal that 'afterthought syntax' is a causal factor in type change. He holds that this is in fact the case, arguing that these nominally derived cases are examples of 'morphological erosion' of a nominal once moved to an 'afterthought syntax' position.

To return to Kru, however. Hyman argues that an especially interesting case of 'afterthought syntax' in a

basically SOV language such as Kru is found in negative sentences, which contain also relative clauses embedded within other relative clauses.

An example of a basic negative sentence from Kru might be

5 sé kɔ̃ ná dí

he NEG rice DEF ate

S O V

(he didn't eat the rice)

Hyman argues, however, that if a speaker wishes "to add more" he will have recourse to afterthought syntax. Thus

5 sé kɔ̃ ná dí, jú ná tẽ à ná

he NEG rice DEF ate child DEF bought REL DEF
quasi-SVO

(he did not eat the rice .. that the child brought)

Now, specifically with regard to negative sentences with relative clauses embedded within relative clauses, we might think that in an SOV type language they should be formed as

5 sé kɔ̃ ná jú ní jé á ná tẽ à ná dí

he NEG rice DEF child I saw REL DEF bought REL DEF ate

(he didn't eat the rice that the boy I saw bought)

but in fact native informants told Hyman that this sentence is "Real Kru", and thus perhaps archaic, because the verb dí is 'delayed too long'. The preferred sentence structure seems to be

5 sé kɔ̃ ná dí jú ní jé á ná tẽ à ná

he NEG rice DEF ate child I saw REL DEF bought REL DEF

which again has a quasi-SVO structure. In effect, SOV languages in transition, Hyman argues, display afterthought syntax in circumstances such as above, keeping O close to the V, but moving all the rest "to the end". It would appear, therefore, that the positioning of this 'left-over' information sets up a new syntactic/serial frame, and brings about a situation where speakers re-interpret the serial order of their language, (in the above case as SVO) because of the new frame.

Thus Hyman argues that serial order change, at least change from SOV to SVO is brought about primarily by afterthought syntax, rejecting either in part or in whole the paths of change proposed by Venneman (1974a, 1975), Li and Thompson (1974) and Givón (1975). However, he argues further that a real contact between related languages will facilitate change in order, allowing first that the principle of afterthought syntax be adopted through contact, and that all other concomitant change comes about through reorganization of elements on the basis of the new type order, which may lead to such developments as verb serialization and change in the type of elements which represent sentence functions, internal and external.

However, Venneman (1975) points out that in some languages such as Japanese sparing use is made of afterthought syntax. Therefore Venneman questions the argument outlined in Hyman (1975) above, stating that in OV languages where afterthought syntax is not common, it

is curious to understand how it suddenly becomes so important as to change the type to VO.

4.06 The comprehensiveness of existing theories of word order change - a brief criticism

In the above section we have noted various contentions concerning Venneman's analysis of how language type may change, and seen other possible paths of language change, mainly verb serialization (Li and Thompson, (1974) and Givon (1975) and afterthought syntax (Hyman 1975)). It would appear that all possible paths of change outlined above have some empirical reality, and therefore it would be wrong to dismiss any as not worthwhile explanations, or not worthwhile sources for future research plans. However, it seems that essentially all the theories proposed so far are lacking in a crucial factor: that of taking into account the systems of the languages in questions as fully as seems necessary in this field of research. Further, all of the accounts so far are ambiguous or even omit any mention of how the speaker actually goes about accommodating type change within his general use of language as a form of communication. Neither of the arguments studied above, moreover, attempt to give an explanation in terms of why language should change at all, and why, if it does change, certain types of serial order are chosen in human language. It is to these questions and others that we shall address ourselves in the next chapter.

Footnotes to Chapter Four

¹Such as Basque, which is "typologically" SOV, with pre-verbal negation and interrogative markers.

²As opposed to Lehmann and Greenberg, Venneman does not define the non-subject, non-verbal as OBJECT (which may technically exclude indirect objects, prepositional phrases etc.). Rather he utilized the concept X, which he defines as non-subject (non-thematic) and non-verbal.

³Venneman considers that phonological reduction operates universally in the languages of the world to "reduce" unstressed syllables. See Venneman (1975) for a full discussion.

⁴Consider the main clause 'Hans ist jedes Jahr nach Edinburg gefahren!' There the ~~Aux~~ verb is in second position, according to the VX serial order, but the ordering and placement of the finite verb follows the order XV type order. Old English had a similar construction.

⁵Venneman (1975) notes (following Kuno 1974) that because of perceptual difficulties inherent in centre-embedding, a consistent verb final language tends to place subordinate clauses at the beginning of a sentence. Thus in an SOV language where the morphological markers have become worn, sentences with the patterns

(rel) NP_{Obj} NP_{Subj} V

and

(rel) NP_{Subj} NP_{Obj} V

will in effect be realized uniformly as (Rel) NP NP V, for which Venneman argues that 'it is systematically unclear whether it represents the basic SOV order or OSV. He claims that such a situation is untenable, and given that it is perceptually complex, speakers of the language will evolve other devices whereby the situation is made clear, such as passives, demonstratives and postposed clarificational sentences.

⁶cf. Anderson (1975), for an extension and exemplification of these principles within the framework of dependency grammar.

⁷Venneman does, however, allow that an SVO language can become SOV by an argument analogous to Li and Thompson's proposal that OV characteristics in the language will lead to rebuilding of the OV characteristics. But this does not fully account for the loss of verbal status in e.g. the bă and bèi constructions.

CHAPTER FIVE

Why word order? Why word order change?
 Why do related languages change in word
 order type in related directions?

5.00 Drift is determined by language systems

To return to Sapir's (1921) seminal study on language change, or 'drift', we find that he considers that the phenomenon of drift comes about through the cumulative variation of elements in a special direction, with the condition that only those variations in accord with the body of the system at that particular point in the history of the language will survive to alter the course of the language.

On similar lines to Sapir is Koch's (1974) paper which offers the hypothesis that parallel developments and change within in a language group are due to the fact that they share a common ancestor, and thus a common ancestral language system. She further argues that an understanding of related change in related languages will only be available on understanding fully the language system of the parent language, including dialect variations within that parent.

5.01 Evidence for the hypothesis that drift is determined by language systems

Koch chooses to exemplify her hypothesis from the Indo-European language family. Following Delbrück and Lehmann, she holds that PIE was dominantly SOV in type. She does note, however, that PIE has further complications

in its order patterns. Miller (1975) gives evidence which suggests that PIE itself was in transition from VSO to SOV, and, further, that before it matured into a consistent SOV type, it changed to SVO. He draws this conclusion from the fact that it seems that in PIE the subject person markings on verbs for example, are derived from postposed personal pronouns. Thus, the reconstructed first personal singular pronoun in PIE is thought to be 'egom' (of Sanskrit 'aham', Latin and Greek 'ego'), and 'm' and 'mi' would seem to be the first person singular endings of verbs in PIE (of Greek 'eimi').¹ That this is the case is corroborated independently by evidence in Bantu and Hebrew, where the personal endings on the verbs are transparently personal pronouns. Thus it seems likely that the suffixation of the personal pronouns as verb person markers indicates an older VSO order.² Further, Koch follows Lehmann's (1973) proposal, also holding that PIE was in transition from VSO to SOV. His proposal is based on the assumption that the adoption of the SOV serial order superimposes a pitch accent on the older stress accent; further, he notes that negative and interrogative particles are never postposed, as is characteristic of an SOV language. Thus, Lehmann holds that PIE has residual traces of an older VSO serial order.

Koch (1974) proposes that if PIE was in transition from VSO to SOV, then this may well explain the increase

in morphological complexity which is well attested in classical Greek. That is, Homeric Greek inexplicably is simpler morphologically than classical Greek, unless it is accounted that in Greek SOV is only maturing, and not yet mature. Further, Kurylowicz (1964, ch. VII) corroborates this in noting that while the earliest possible reconstructable stage of PIE seems only to have six cases, Sanskrit, a later development, has eight. This increase in morphological complexity accords with the development of SOV as dominant serial order (Greenberg 1966).

From the above and similar evidence, Koch proposes that change(s) in the basic order of the parent language will determine that there will be parallel changes in the development of descendants. Further, if this analysis is extended to language families other than Indo-European, it would make unnecessary a predictable and uniform direction of type change, as, for example, Venneman (1973b, 1974a, 1975) has outlined. Rather, the specific drift of any one language group would be determinate from the serial order type, both dominant, residual and innovative, of the parent language. Moreover, given the fact that change within the language family is determinable by those changes undergone by the parent, this is further corroboration for the proposal that language type change is indeed very gradual.

5.02 A set of principles for word order change - review
 Koch's proposals certainly constitute inviting theory,

and certainly they would seem to account for developments within the Indo-European group in a more general fashion than do Venneman's. However, the problem with Koch's account again lies in the ontological status of her proposals, or just how the speakers have access to the structural state of the parent language so that the variations that succeed in becoming established are related to those variations permitted within the parent language. Problematic in Koch's theory is the following: given that the descendants of the parent language are structurally affected by its type, when does a descendant language reach a state of no longer being affected by that type, and the concomitant implications for possible change?

Of the studies in type change outlined in chapter four, it is only that of Venneman which sets out definite principles which define how language type may change. These principles, those of natural constituent structure and natural serialization, outlined in Bartsch and Venneman (1972) perhaps come closest to according type change ontological status within a particular framework. We have already noted that these two principles do indeed seem to have empirical motivation (see also Anderson MS 1975). The account of type change given by Venneman (1973b, 1974a, 1975 especially) has however been shown to be vitiated by two of its major premisses: that phonological reduction is the basic motive in type change, and that there is a certain defined cycle of change.

Certainly this latter is blatantly non-empirical, as has been shown by Li and Thompson (1974), Givon (1975) and also Hyman (1975). Moreover, though Venneman's theory is (allowing for the minute that his broad generalizations are empirically founded) possibly descriptively adequate, it is difficult to see how a speaker at any one point in the development of a language has access to the particular path of drift that his language is set on. Thus though the principles of natural constituent order and natural serialization can describe phenomena occurring in the synchronic grammar, it is difficult to accord them ontological status in that they depend on the first principle that it is the order of the object relative to the verb that determines the operator/operand relationship. Diachronically, this relationship has been shown not always to be the catalyst in motivating type change, and synchronically they (Bartsch and Venneman 1972) offer no explanation as to why speakers should be primarily concerned with the relationship in serial position of the object to the verb. They merely state, over strongly,

... that the tendency of all operator-operand relationships to serialize on the model of the serialization of (O(V)) originates in language acquisition where the (O(V)) constituent is acquired first and generalized.

(1972: 148)

Further, no explanation is offered at all as to why there should be natural serialization in the first place.

5.03 Word order, grammatical relations & the 'serial position effect'

On the question of order patterns in human language, Pullum (1975 MS) states that

human languages manifest a phenomenon that I shall refer to as basic word order. In any language, even if order in surface structure is very largely free, texts of most types show a statistical preponderance of certain linear orders of major constituents ... hearers interpret strings in terms of a particular order where word order is known to be variable but potentially disambiguating cues are missed or obscured by noise; Word order is modified in certain directions when special simplicity is needed..and so on.

(1975: 1)

Although Pullum does not claim the above as evidence for a notion of deep structure linear order, but rather as evidence that at least in surface structure languages have linearization, the evidence above does suggest that linear order has some real perceptual (at least) function.

Pullum notes that in recent research in linguistics, there has been a move to abandon the classical TGG position of linear (precedence) relations³ and replace this with hierarchical constituent structure. However, Pullum considers most interesting and crucial some recent research which proposes not only to abandon classical precedence relations, but also holds that they should be replaced by the introduction into syntax of relational terms such as 'subject of', 'direct object of', etc. In this type of grammar clauses are described as unordered structures with a verb and a number of NPs associated with it. One of these NPs will stand in the relation of

SUBJECT OF to the verb, and if the verb is transitive, then another NP will stand in the relation of OBJECT OF. With other types of verbs the relation INDIRECT OBJECT OF will be possible, and other NPs will bear no significant relation and will be NONTERMS, as opposed to the former relation-bearing NPs which are designated TERMS. For further explication of this model, see Pullum (1975 MS), Perlmutter, (unpublished lectures, 1974 Linguistic Institute) and Johnson (1974). It is argued that only after all the cyclic rules have applied, but prior to the application of non-cyclic rules, would the linearization sequence for any language apply.

One of the results that have emerged from work with grammatical relations is that there seems to be a hierarchy among Grammatical Relations (henceforth GRs). For the purposes of this study, we will adopt the degree of delicacy proposed in Pullum (1975:17), i.e.

SUBJECT (S) > DIRECT OBJECT (O) > OTHER NPs (X)
 where ">" may be defined as 'is more syntactically active than', or 'is more accessible to the actions of syntactic processes than', or 'participates more readily in process P than'.

Pullum suggests that linearization is dependent on the GR hierarchy. The linearization of a particular language will mirror in left-to-right order the abstract order of the hierarchy. He thus suggests the following schema as that underlying all language linearization:

1. Term Linearization

The NP constituents of a clause are placed in left-right order according to rank on the GR hierarchy.

Further, he proposes that no language has other than 1. as the basic rule for linearizing NPs.

2. Verb Linearization

The verb of a clause is placed EITHER (i) at the left periphery OR (ii) at the right periphery.

Pullum proposes that the combination of the GR hierarchy, and 1. and 2. provides for straightforward V-S-O-X and S-O-X-V orders, which are derived surface structure for some languages (cf. Greenberg 1966). For other languages, Pullum proposes that there is a further optionally available universal linearization rule:

3. NP Prominence

3. A single NP constituent which outranks all others on the GR hierarchy but is linearly non-peripheral may be adjoined to the root-node of its clause at EITHER (i) the left OR (ii) the right periphery.

He argues that this allows the subject NP to be assigned additional prominence and yields the orders [S -[V-O-X]] and [[V-O-X] -S]. Given the derivation of these orders, he argues that his schemas will then derive all the linearizations available as dominant orders in human language.⁴

Further, Pullum offers in his (1975) paper a partial explanation of why human language should prefer the linearization orders SVO, VSO, SCV and VOS. He notes that in psychology there are reports of a phenomenon known

under several names, here called the 'serial position effect'. This phenomenon has been researched mainly in connection with learning theory, and it consists basically of a downward bowing of the curve denoting performance on a learning exercise, representing higher efficiency rating at the beginning and the end of the exercise, and lower efficiency in the middle.⁵ Pullum proposes that [1975:16]:

the presentation of a sentence to an interlocutor is, if the hearer is expected to understand and act on or profit from the utterance in any way, the presentation of a task which will to some extent call into play her memory... It would ... not be at all unexpected if 'normal', i.e. basic word order ... reflected an attempt to optimize the presentation of constituents in terms of the following principles:

- I Early presentation is more favoured than later presentation.
- II Peripheral presentation is more favoured than medial presentation.
- III Grammatically significant constituents should be placed in favoured positions as defined by I and II.

Thus it can be seen that Pullum's schemas of linearization, defined according to the GR hierarchy, allow the placing of grammatically significant constituents according to the proposal laid out in III immediately above. Pullum states that thus 'the two most grammatically significant elements in a clause are the verb and the highest ranked NP associated with it', i.e. the grammatical subject. He then draws up a chart showing that of the six logical orders for language as defined by Greenberg (1966), only the four he has outlined as dominant order types, SVO, VSO, SOV and VOS, optimally place these elements above-mentioned in the perceptually optimal

positions defined by principle III. (Pullum 1975: 17).

5.04 The 'serial position effect' communication and word order change

It would seem then that the theory of grammatical relations (GRs) has much to offer in the study of the isolation of types, and in suggesting why certain linearizations should be chosen by human languages as their form of realizing information linguistically. Pullum's paper in outlining verb and subject as primary clause terms, would suggest that it would not be relevant in the study of type change to consider the relation of the object to the verb as determining serial order patterns, and as motivation for serial order change. Rather, the motivation must be seen to come (extending Pullum's hypothesis) from shift in either the verb or subject. However, Pullum's paper does not offer any essential reason why languages should change type at all, and, further, his principle of NP Prominence seems suspect in terms of its motivation within his theory of GRs.

From what we have said earlier, we hold that in any linguistic sequence the verb is linguistically primary, and from the point of view of speech mechanisms seems to have dominant linguistic specificity. Pullum argues that (a) NPs are placed linearly in a left-to-right order according to their prominence on the GR hierarchy and (b) that the verb is placed on either the Rightmost or leftmost periphery of the clause. This latter prominence accords with the linguistic specificity of the verb,

and is in accordance with the 'serial position effect' for crucial material. However, with regard to the principle of NP prominence, which appeals neither to verb prominence or order of NPs according to rank on the GR hierarchy, it would appear that it is motivated solely in order that [S-[V-O-X]] and [[V-O-X]-S] (SVO & VOS) may be derived within the GR hypothesis, that this should be a problem for the GR hypothesis of linearization is seen in that according to Pullum's 'positioning principles' 1-2 the verb should be placed first at either outer periphery with other NPs in GR rank. SVO and VOS clearly violate these principles.

Given that Pullum appears to give no ontological justification to his rule of NP prominence, it seems that we have reached an impasse with his general theory of serial order in natural language. However, let us consider more fully the phenomena known under the rubric of 'serial position effect'. This hypothesis holds that in learning situations, material presented early is best recalled from memory storage, and that peripheral presentations are recalled more easily than medial. If we extend these hypothesis to cover Venneman's (1974a, 1975) contentions concerning initial presentation of thematic material covering both SXV and SVX languages, then the impasse in Pullum's theory may be obviated. Pullum's [S[V-O-X]] order, on which NP prominence operates to position S at the leftmost periphery is in Venneman's

theory that order which has developed from the intermediate type T-V-X, where T= topic / = theme, that is where the initial slot is filled with thematic material, not necessarily just a grammaticalized subject. The path of development of SVO languages, at least within the Indo-European group, seems to be through this intermediate stage of initial theme or topical material, and other languages, such as modern Czech maintain a pattern where initial slot is filled by thematic (topical) material. Thus it would seem that subjecthood is essentially a subtype of the general category, theme. Given the fact, then, that thematic material is by definition important in discourse, the import and justification of Pullum's rule of NP prominence becomes more obvious. Thus with respect to [S-[V-O-X]] order, 'prominent S' may be dealt with strictly in terms of 'serial position effect'. That is, given that S is more often than not topical or thematic, then it is a discourse pivot, and thus it is natural that speakers place it in a slot which is favoured for ease of recall and import within the discourse. We may argue also that even if S is not topical or thematic, it is still linguistically (and in terms of the discourse also) important, being the agent of the action represented by the verb, which as we have seen earlier appears to be the prime clausal element. For further details on this latter argument, see Gaszda (1970), Anderson (1971, 1973b, 1976). We may utilize a similar argument to deal

with Pullum's [[V-O-X]-S] type where NP prominence has operated to place S at the rightmost periphery. As we have seen, VOS order has only recently been established as a basic serial order by Pullum (1975) and by various linguists studying the word order of Zeneyze. Zeneyze utilizes VOS order when no element in the sentence is topical, that is, when the sentence is rhematic. If a theme is marked, Zeneyze appears to utilize an SVO type of order. Thus it would appear that with respect to VOS order, S here is placed in a slot favoured by 'serial position effect' simply because it is the agent of or that which is specified by the action represented by the verb, and thus important within the clause. With respect to Zeneyze SVO order, the arguments provided directly above for S prominence in SVO order will apply here. Thus, it would appear that S has a favoured prominent position in SVO and VOS orders simply because in SVO orders it is usually thematic and thus crucially important in discourse, while if not topical, it is, still the most important element in the clause, being the agent of or that which is specified by any action or situation described in the utterance.

Given this latter hypothesis concerning NP prominence, it would appear that it is possible to justify the rule ontologically in terms of prominence for discourse value, in that their being prominent in position is in accordance with 'serial position effect' for ease of recall. Moreover, this hypothesis would seem generally to accord with Pullum's own analysis (1975: 17). There he displays a

table marking the communicative value of his four basic types of serial order in terms of their rank according to his three rules of serial order placement and the 'serial position effect'. OSV and OVS, the other two of the six logical serial orders possible (from permutation of O, S, and V; see Greenberg 1966) score badly on this table, according with the fact that no natural language has been found which utilizes them as basic orders.⁶

However, the fact still remains that Pullum offers no proposals as to how or why languages should change in serial order type. It seems, though, that Pullum's appeal to the 'serial position effect' may give some clue to a possible theory, though it is not appropriate to discuss this in detail here. The four basic serial order types SOV, SVO, VSO and VOS are ontologically justifiable in terms of perception the 'serial position effect' and therefore are most useful in discourse, giving prominence to those discourse categories that speakers will most obviously want or need to recall. We follow Venneman (1974a, 1975) in accepting that phonological reduction is a universally operational process, and accept that its operation will affect surface markers of underlying semantic categories. Similarly, we follow Traugott (1972, 1974), and hold that segmented structures most naturally will replace surface structure affected by phonological reduction. Further, we accept, following Li and Thompson (1974), Givon (1975) and Hyman (1975) that processes of grammaticalization of otherwise semantically

full elements may occur, and that 'afterthought syntax' may also affect the order and function of elements of surface structure. Given these phenomena, all of which may alter surface structure, and, crucially, serial order (see above for evidence), We may then postulate the following. Speakers in a language will at any time utilize important order positions filled by important elements to compensate for any communicative disorders arising out of the phenomena affecting surface realization of crucial underlying semantic relations. Moreover, speakers will produce new orders and elements from existing patterns within their language, and always strictly in accordance with serial position effect. This would seem to be a reasonable hypothesis, given that fact that language is a communicative system, and therefore memory recall of important material must be a crucial factor in establishment of word order. It also serves to explain why language has four basic types where S and V, most important for discourse, are either at the periphery or in secondary peripheral position.

5.05 Preview - communication, communicative disorder and language change.

In the material which follows from this chapter, we will be concerned, not crucially with problems of serial order but rather with the problem of communicative disorder resulting in what is termed 'a linguistic change'. Problems associated with serial order change will be mentioned as they are relevant to the considerations and

proposals made below. However, the relevant factor to be extrapolated from the above is that language must essentially be seen as a communicative system, and as such it seems reasonable to assume that language change does not originate in terms of a change primarily to be associated with the speaker's underlying grammar. Rather, it seems that we should consider that language change comes about for communicative reasons, and only as such can then be integrated into a 'grammar of a language' which 'changes' over time. Thus, the following chapters will be essentially concerned with language as speakers' re-interpretation of their language system to meet disordered surface structures conditions which critically affect communication.

Footnotes to Chapter Five

¹ Similarly, OHG bintist, OE Bindest "you bind" may be taken, by extension of the argument, to derive from *bindest pu (Koch 1974).

² See Miller (1975), for other suggestions of traces of VSO order in PIE.

³ Hudson (1972), Sanders (1970), Peterson (1971).

⁴ Pullum has established, from evidence from Malagasey, and, more interestingly, from Zeneyze (or Genoese), that VOS is a possible fourth dominant order type. In the latter, the basic order (specifically when the entire content of the sentence is rhematic, or non-topical, is VOS. Contentions had been made that VOS was not a dominant order in that it does occur in some languages such as Malagasey and Coeur d'Alene to indicate topical material, as

"its-gwite-ams x^wätsi' x^wä'abän
 he-sees-it the deer the Ben
 'Ben sees the deer'.

But in Zeneyze, when the sentence as a whole is schematic, a dummy clitic (neuter) is attached to the initial verb, and only VOS order is allowed. Thus, it is the fact of being rhematic that determines VOS order as most basic in Zeneyze. Thus, contrast (a) (rhematic) with (b) thematic in Zeneyze

(a) NON-TOPICAL VOS

U-vende i pesi a Zena a Katayning
 PRO-sells the fish in Genoa the Katherine
 V O S

(b) TOPICAL

A Katayning a-vende i pesi a Zena
 Speaking of Catherine, she sells the fish in Genoa

⁵ See Warden (1924), McGeoch and Irion 1952), Miller and Friedman (1957) and Bruner and O'Dowd (1958).

⁶ Rischel (1970), however, holds that West Greenlandic Eskima is OSV, but Pullum contends that O here is rather an ergative, and not a true O, thus in any case may be more closely related to an SOV type, since 'S' in an ergative language is more closely related to 'O' in a non-ergative. For further details, see Pullum (1975: 8).

CHAPTER SIX

The performance factor in linguistic analysis

6.00 Linguistic change & language variety

In the last chapter we concluded that the determining factor in language type change was in fact speakers' interpretation of their linguistic systems, and that change comes about through change in surface structure being reflected in change in underlying processes, which may further generalize to make the change more significant.

In considering surface structure as a main factor in language, change, we obviously must turn to some grammatical model other than that of classical TGG. We have already noted in chapters above that the notion of a performance grammar became a serious proposition, certainly among psycholinguists, after the notable failure in testing the 'derivational theory of complexity'.

Within historical research the first, and most compelling blow to the competence-based theory came in 1968 from Weinrich, Herzog and Labov. The fundamental criticism levelled against classical TGG in this study is against the axiomatic homogeneous speech community. They contend that the following statement from Chomsky, (1965): 3-4) seems empirically empty:

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

The notion of the homogeneous speech community and the structuredness of language was of course borrowed from the Neogrammarian school. Consider what Weinrich, Herzog and Labov consider the outcome of such premisses:

... the more linguists became impressed with the existence of the structure of language, and the more they bolstered this observation with deductive arguments about the functional advantages of structure, the more mysterious became the transition of language from state to state. After all, if a language has to be structured in order to function efficiently, how do people continue to talk while the language changes, that is, while it passes through periods of lessened systematicity? ... This, it seems to us, is the fundamental question with which a theory of change must cope. The solution, we will argue, lies in the direction of breaking down the identification of structuredness with homogeneity. The key to a rational conception of language change--indeed of language itself--is the possibility of describing orderly differentiation in a language serving a community. We will argue that nativelike command of heterogeneous structures is not a matter of multi-dialectism, or 'mere' performance, but is a part of unilingual linguistic competence. One of the corrolaries of our approach is that in a language serving a complex (i.e. real) community, it is the absence of structured heterogeneity that would be dysfunctional.

(1968: 101)

In accordance with other models for language change which we have discussed, the authors define as relevant to a theory of linguistic change the following:

1. definition of the set of possible changes, and conditions for change
2. how change is transmitted.

In addition, the authors also claim that it is relevant to consider how observed changes are to be embedded in the linguistic and extra-linguistic systems of which the forms in question form a functional part. They also consider

how changes are to be evaluated in terms of their effect on linguistic structure, communicative efficiency, and other factors involved in linguistic communication. The last, and most important consideration is, for them, accounting for the actuation of changes within a system, or consideration of what factors cause languages to change in a certain area and at a certain time, but not in and at others.

From research carried out by one of the authors, Labov (1963, 1965, 1966a,b) on language variation, the authors conclude that continuous variation exists within each dialect (and, by implication, in each idiolect and language) as a structural element, and that movement of 'tokens' from one linguistic category class to another within a system seems to be part of general linguistic function. As an example of continuous variation, the authors give a case from Black American where the copula BE is normally deleted where white Americans normally retain it; they suggest that an utterance such as the following indicates a case where a negro speaker has access to both varieties, and chooses to use both for good measure; 1968: 167

Make believe this is a team, and this a team
Overwhelming evidence such as this suggests that continuous variation must be considered as part of human linguistic capacity.

The authors extend their hypothesis on language variation to the problem of the actuation of linguistic

change. Following Labov's (1966) proposition that social factors do have bearing upon linguistic features, they put forward the claim as follows. It is suggested that linguistic change begins when one of the many features of language variation, perhaps even a variation from one idiolect, spreads through the linguistic community in a subordinate fashion, for example, throughout one social group only affecting only a subpart of the community. This feature may then take on a certain social significance associated with this particular group. Because the variation/change is embedded in the linguistic structure, it may be generalized within the system to other elements. The change may well not be instantaneous, and other factors may contribute to halt the process. However, if new groups adopt the change/variation and reinterpret it as primary in the system, then it may well extend through the whole community by the process of adoption, and become dominant and primary in the whole community. They postulate that its complete adoption is most often accompanied by loss of social significance such as it had when perceived as a variable.

Specifically, then, the main argument contained in Weinrich, Herzog and Labov (1968) is that command of language necessarily entails command of heterogeneous structures. Since the followers of classical TGG would assign these variables either to separate dialects, or to the level of performance, the authors conclude that the

classical TGG model could not describe empirical fact, on the grounds that it indeed is true of language systems that 'not all variability and heterogeneity in language structure involves change, but all change involves variability and heterogeneity'.

6.01 Communicative competence - a brief comment

Social and linguistic perception of linguistic variation have therefore been outlined as necessary in understanding the actuation and extension of linguistic change. Bailey (1972:23) proposes, in an extension of the work done by Weinrich, Herzog and Labov, that 'the incorporation of regional and temporal variables, along with class and stylistic variables (in) our theory of competence is only a matter of course.' Weinrich, Herzog and Labov (1968) have proposed that variation and language change may best be studied in dialects which overlap, where it is possible to follow the spread of one element from one system to the other, and to note the strict co-occurrence relations which will initially precede the element being accepted into the receiving community.¹ Bailey's extension of this proposal lies in his formulation of the linguistic capacity to use and understand variations in appropriate settings. A corollary of this approach is Bailey's denial of the classical TGG axiom of the distinction between competence and performance, in that he wishes to include the capacity of 'polylectal' variation control in his 'version' of

linguistic competence. Consider his argument:

The fact that children can understand, and on occasion imitate a good deal more of their native language than they can normally produce suggests that investigating linguistic competence in terms of what a speaker usually produces wrongly limits the scope of competence investigations to a fraction of what is known about one's native language. Current generative theory should therefore be adapted to a new emphasis on communicating, by extending the scope of the data ^{admitted} to include everything that lies within the child's hearing competence. An adequate theory would have to go well beyond the current static models based on idiolects to provide a psychologically plausible way of organizing the complex data known to the child, who understands his grandparents (who may be from different locales), his schoolmates of different ethnic and economic classes, announcers on the communication media etc.--not to speak of the different styles he himself produces.

(1972: 22)

Bailey further proposes that regional and temporal variables must be organised along with stylistic and varietal variables in a (revised) version of the classical notion of competence. Bailey's new style competence includes notions which the classical model consigned to performance, and then ignored for the purposes of constructing a grammar of the language. Thus Bailey may be seen to essentially reject the classical dichotomy between use and system, and also, by implication, the TGG distinction between synchronic and diachronic analyses of language. The incorporation of temporal and regional variables into Bailey's synchronic analysis of language learning coordinated with his enforced rejection of the dichotomy between competence and performance, and between diachronic and the synchronic, means that he is free to use methods of investigation hitherto reserved for dialectal

and comparative reconstructive linguistics. His proposals for the incorporation of polylectal competence into a revised competence are as follows. He firstly considers the problem of how exactly to set up an account of the acquisition of polylectal competence within a revised TGG model. Thus he states that

a linguist must suppose that children and adults handle the lectal variety which they are observed to handle quite competently (1) by guesswork, in the face of evidence like that amassed by Labov (1966)..or (2) with a multiplicity of internalized grammars individually formulated for each variety of the native language known to the language-user. To state these hypotheses is to refute them. A more credible hypothesis ... is the claim that children constantly revise a single internal grammar of their native language until they arrive at one which will handle the observed variety, asymptotically approaching (a) panlectal grammar through the incorporation of a sufficient number of diverse non-levelled variants types.

(1972: 24)

Bailey's proposal of a poly-to-panlectal grammar, as outlined above, has of course much to offer as a hypothesis in establishing a model of the linguistic capacity necessary in a grammar which purports to explain language change within the framework of typology and word order change. Perception and command of the diverse variants of serial orders belonging to different language types, as would be necessary, for example, for a speaker of classical Greek, whose competence would have to extend to handling of the VO type within his language (prepositions, as opposed to postpositions) while the characteristic type was still dominantly OV. Even more interesting are Bailey's brief proposals for the organization of the

panlectal grammar (1972: 25). Most importantly, Bailey contends that rules must be formulated in their least general terms, since knowledge of the least general form entails knowledge also of the more abstract formulation. In terms of a theory of serial order change, the application of these principles to various stages of transition would give further corroboration to Bailey's outline.²

6.02 Linguistic perception & general cognition in language acquisition

Bailey's (1972) suggestion outlined above stresses the need for a revised version of the classical TGG notion of grammatical competence, integrating features of language use hitherto relegated to performance. Linguistic perception and language usage are basic in the outline of linguistic competence in Bailey's work. Bever (1970) proposes further that basic linguistic capacity is acquired through the interaction of certain behavioural-perceptual strategies and the linguistic-social environment. Consider Bever (1970: 281):

Since adult linguistic ability includes the ability to talk in sentences, to listen to sentences, and to produce intuitions about sentences, the child must simultaneously acquire 'concrete' behavioural systems for actually talking and listening as well as an 'abstract' appreciation of linguistic structure itself.

Bever outlines three aspects of cognition which he considers are the basis for linguistic capacity in human beings. Firstly, he isolates 'basic capacities'³ which seem to be present in young children without any environmental stimulation. Secondly, he isolates 'behavioural

strategies', structures utilized to 'shortcut the internal structure implied by the regularities' (in the behaviour of children and adults).⁴ Thirdly, Bever states that adults have what he terms 'epistemological structures', which are systematic generalizations of the intuitions present about regularities in behaviour.

The child's basic capacity to predicate action with a verb with reference to the actor of that action leads Bever to posit that language ability develops through the basic expansion principle (in English, and for SVO languages alone); (1970: 298):

Any Noun-Verb-NOUN sequence within a potential internal unit in the surface structure corresponds to actor-action-object.

Further, he argues that more complex semantic distinctions which might break this rule, such as the complexity of the verb 'promise' as opposed to the verb 'tell' (C. Chomsky, 1969), are eventually sorted out by the child as late as the age of 10. That is, Bever considers that perceptual strategies are basic in the language acquisition process (a general extension of cognitive ability) and that they operate on surface structures.

On the basis of his contentions about sentence perception, Bever argues that the strategies used in speech perception to discover internal structure from external sequences should be distinguished from basic linguistic capacity and from the system of grammatical intuitions which are described by the rules of an abstract grammar. However, he is not sure that these strategies should be

considered as derived by induction over experience of the linguistic environment or as autonomous internal developments. However, an argument in favour of the former proposition is that the development of these strategies is dependent on the development of linguistic capacity to use sentences according to their internal meaning, or 'lexical potentiality', which must be considered as behavioural induction over actual speech usage.

Bever's explanation of how behavioural systems affect linguistic structure gives an instance of how the grammatical structure of adult intuitions about sentences of their language is influenced by the mechanisms of language perception. The classical TGG hypothesis of the innate grammar consisting of formal and substantive universals as a specific and separate mechanism from other cognitive functions now seems unnecessary. In Bever's analysis the universal grammar is only an epistemological abstraction of the adult's intuitions about his language. The fact that behavioural and perceptual mechanisms can define certain aspects of language in terms of its use must align linguistic capacity with cognitive capacities in general. The basic premisses that the perceptual rule 'identify NVN as actor-action-object' is obtained through linguistic experience and then is applied deductively to identify (and produce) all new sentences. This type of rule may be defined as a rule of recognition. Consider Derwing (1973), who, as we have seen before, disagrees with the formal outline of the TGG

model. Thus the formal nature of rules in the classical TGG model as predetermined linguistic operations is considered to be non-empirical by Derwing.

Derwing's (1973) criticisms are based firstly on the fact that the formulation of rules in the abstract grammar in the TGG model are based solely on the native speaker's linguistic intuitions about his language. Derwing rejects this procedure on the grounds that since the 'linguistic intuition' can in no way itself be tested for its empirical content, the rules themselves must be considered as only mechanistic abstractions. Secondly, the fact that the operation of rules contained in the internal grammar is considered governed by innately determined processes allows no appeal to general cognitive mechanisms permitting the development of perceptual and behavioural structures controlling the development of language and further its use. Thus he proposes that rather the notion of rules in linguistic models should be correlated with cognitive, behavioural and perceptual mechanisms; (1973:311):

Suppose, therefore, we replace Chomsky's abstract notion of rule with a reconceptualization specifically designed to represent part of a model of linguistic behaviour (a performance model), that is, a model in which 'putting rules to use' means simply behaving according to rules. This immediately places a behavioural interpretation on our notion of rule ... the rules express behavioural regularities directly. This decision has the important immediate consequence of implying that one kind of evidence is necessary if we are to justify the formulation of any particular rule: we must demonstrate that the linguistic behaviour of the speaker, at least, is creative or 'regular' in the manner stated by the rule ... We may then

postulate that the rule in question is a general surface structure constraint on the form of utterances, and that the language user has learned he must conform to it if he is to communicate effectively and creatively.

The premiss that a rule is essentially a surface structure constraint is also upheld by Bever (1970). His intentions in the paper are to show how grammatical structure as understood and produced by adult speakers, and also how their linguistic intuitions about potential sentences, are indeed influenced by the mechanisms of language perception and learning. Consider:

The isolation of such cases (the influence of language perception and learning on 'grammatical structure') suggests that there are universal constraints on the form of grammar which are not inherent to the statement of universal grammar itself, but rather to the way in which grammar is learned and the use to which it is put.

(1970: 351-352)

Bever illustrates this hypothesis with a note to the effect that in natural language there seems to be some universal constraint on the amount of ambiguity of internal structural relations in sentences. He notes that some languages represent internal relations by word order and few function words, while others represent these relations almost wholly by means of functional endings or words, but with relatively little reliance on word order. However, he notes that no languages do neither, and very few have both. The relevant constraint would seem to be that languages will not tolerate vast amounts of ambiguity in the surface realization of internal relations. This would make the learning of language an impossible, or at least very difficult, task. The salient point is that this constraint is not a constraint on the form of the

internal grammar, but a statement about the universals of language learning. Further corroboration of the premiss of a cognitive base for linguistic structures lies in the fact that one of the major features of children in the acquisition process age group is their relatively poor short-term memory. Recent research by Brown and Hanlon (1970) shows that children find most difficulty in the production of sentences with a large number of transformations, though it is obvious that they can understand such sentences. That is, they 'choose' to produce spontaneously the more complex forms later in development. A less simple further piece of evidence is that while children seem to adequately keep track of adult utterances both as semi-models, and from the point of view of being able to decode them, they often back-track on their own development. That is, they cannot keep track of what they have said themselves, both on the spot and for future models in their linguistic development. (A.J. Macrae, personal communication) Thus, the relevant comment would seem to be not that the grammar which children internalize is telescopic with respect to the adult version, but that they have not got full control of their linguistic memory mechanisms. Thus there would not seem to be as much content in the innate linguistic specification as was supposed in the classical version of TGG, once the universal grammar is stripped of those aspects which can be seen to draw on other cognitive processes.

6.03 Ambiguity and speech perception in language acquisition and language change

Most relevant to our concerns here is Bever's contention that perceptual mechanisms are crucial in the language acquisition process, and that a predictive grammar of a type similar to the classical TGG model is only acquired through generalization by the adult speaker. In a paper extending Bever's (1970) claims, Bever and Langendoen (1972) propose that perceptual mechanisms play a crucial role in the process of language change. The authors positively reject the Halle (1962) model that the history of a language may be described as a 'series of rule additions, deletions and reorderings' on the basis that this offers no explanation of the phenomena, but describes what has happened. Following Bever (1970) they contend that the relative dependence of the child on perceptual strategies constrains the kind of predictive grammars which can be learned. They propose to restrict the kind of grammar that can be learned in such a way that the sentences which it predicts must be in general perceptually analyzable. This statement is made on the grounds that 'a grammar which predicted every sentence to be ambiguous as to its internal structure could not be learned, nor could one which predicted that every sentence violated universal perceptual principles'. They do however note that most natural language grammars do predict some ambiguity, and some violation of universal principles, and moreover that a

speaker can cope with limited problems of ambiguity.⁵

If a child relies heavily on perceptual principles to acquire his language, what makes a language perceptually simple, and makes this generalizable by the child? Bever and Langendoen point out that a language with a 'fixed' word order, where, for example, the first noun is always the subject, is perceptually simple. Similarly, a language with a rich set of inflections where semantic relations are marked by the differentiated case endings is also perceptually simple. But a language with a rich inflectional system is also difficult to learn. The authors point out that, even in such a language as modern English with a poor inflectional system, children still have great problems in the correct acquisition of inflections, generalizing strong verbs (he sitted 1) on the analogy of weak verbs (he cooked).⁶ On the basis of their hypothesis, however, the authors hold that a language with a rich inflectional system which is 'difficult to learn' will be a prime candidate over time for simplification of the inflectional system. Thus the language will change from a state of being 'difficult to learn' to being 'easy to learn' but ^{perhaps} difficult to use. This hypothesis seems to us to be the major defect in this paper, although other hypotheses on language change presented will be discussed below and will be seen to be most insightful for a theory of language change. However, Bever and Langendoen's proposal concerning inflections as 'difficult to learn' may indeed be valid

in that since inflections are particularly sensitive to phonological erosion, inflectional languages may well be more difficult to learn. That is, since phonological erosion is constantly in process, children may find it difficult to recover their individual distinctiveness, and therefore inflections may well cause acquisition problems. Thus, analytic as opposed to synthetic language systems may be optimal, in that children, and the adult 'creators' of pidgins and creoles do seem to prefer the analytic type. As we have seen, a possible explanation (see Traugott 1972 for a discussion) may be that speakers prefer to give unique segmented realization to each crucial abstract linguistic relation.

6.04 Constraints on language change in a speech perception model

Bever and Langendoen consider data from the history of the relative clause in English in their (1972) paper. Consider:

The history of the grammatical restrictions on relative clause markers in English has been our example of the effects on linguistic evolution of this interaction between the systems for understanding sentences and learning sentence structure. As the nominal inflections disappeared between the 11th and 15th centuries, certain constructions with relative clauses became perceptually complex. This complexity was counteracted by changes in the restrictions on the presence of relative clause markers, which removed most of the ^{perceptually} difficult cases from the language.

(1972: 77)

The authors propose that the change from a situation in OE and EME, where relative clause subject pronouns could

in many occasions be omitted, to a situation such as that in present day English, where they are almost always obligatorily present, is dependent on clause recognition or the isolation of N(oun) V(erb) N(oun) as a clause or sentence.

They note that from OE till about 1700 'it was possible, for a relative clause modifying a noun which followed the verb in its own clause to begin with a finite verb, so that derivations like (that shown below) could be obtained, (1972: 50):

Harry ate the baklava [_S it was disintegrating]_S

SHARED NOMINAL DELETION \Rightarrow

Harry ate the baklava [_S was disintegrating]_S

They further note that relative sentences with shared nominal deletion with subjects become rarer till in ModE they are ungrammatical except in existential and cleft sentences (1972: 51, examples 43, a,b) and to a great extent in interrogative cleft sentences also (1972: 51, example 43c). Thus, for example, in OE it is possible to have a relative clause as (1972: 55, ex. 47c)

Her on þys 3eare 3e for Alfred was at Baþum 3erefa

In this year died Alfred (who) was reeve at Bath.

Omission of the object relative pronoun has been common since around 1600, and was sporadic before that date. It is of course common in present day English, as
John saw the man she admires.

Bever and Langendoen propose to account for the loss of the 'shared nominal deleted' relative in terms of

perceptual ambiguity. They argue that speakers would when the language was inflected, have been able to distinguish between subject and object deleted relatives, in that object deletion leaves a nominal (or other constituent) as the first element of the clause, and in an inflected language this would be marked objective. They argue however that the major clause recognition strategy NVN was a basic pointer to learners and speakers, who would with difficulty interpret subject relative clauses which had undergone shared nominal deletion. That is, on a first reading, speakers might not be able to mark off main clause and relative, given that the relative clause began (after shared nominal deletion) with a verb. Further with no overt marker of objective in surface structure, the configurations of both the subject and object deleted relative clauses become critically 'difficult' to decipher.

They consider, however, that the subject deleted relative clauses caused the greatest problems. They state (1972: 66)

As the number of false NV = subject+verb segmentations determined by perceptual strategy...became too great the independent marking of the relative clause became obligatory.

The fact that the object-deleted relative type remains is explained in terms that 'one cannot require of a language that it never generate a sentence which violates a perceptual generalization, only that the actually uttered sentences be in general perceptually recoverable.' (1972: 66).

Further, it would appear that relative-object deletion is not, in fact, a critical case for reformulation.

This would appear to be the case in that even with object deletion, the resulting structure does not violate Bever and Langendoen's postulated clause recognition strategy NVN, while subject relative deletion does. With respect to object-relative deletion, a formulation NVNN still results and this holds good since even if the relative object is deleted, speakers still make the correct demarcation, i.e.

N	V	N	(\emptyset)	N ...
Subject	V	Object	(\emptyset)	Subject ...

(where (\emptyset) represents the deleted object relative).

Thus the authors consider that perceptual learning strategies vital to the language with recessive inflections caused speakers to block subject relative pronoun deletion, thus maintaining a demarcation between two clauses.

By extension of these arguments, the authors suggest that the constraints which a child and adult have on the utilization of language in speech behaviour limit the kind of sentences that are understood and therefore restrict the kinds of grammatical construction that are learnt. The interaction between language learnability and language usability, the authors suggest, is a major criterion in language change. For example, if the surface realization of internal semantic relations is simplified (e.g. reduction of inflections) the surface structure may

become perceptually complex, and compensation be needed to make the language perceptually simple again.

Bever and Langendoen have assumed that languages will change, and will be restructured. They do not raise the question why this should be the case in the first instance. Earlier in this work we have questioned the classical TGG position that (a) children alone maximally restructure their grammars and (b) that the grammars acquired by children are optimally simple representations of the forms they hear as data, and that as a corollary linguistic change occurs when the child's grammar does not 'conform' to the grammar of the adult. But it cannot be said that children restructure simply to create an optimal grammar. There must be some basis for this restructuring. Weinrich, Herzog and Labov (1968) proposed that linguistic change comes about when some neologism, initiated by some person or group within the linguistic community comes to be accepted firstly as an alternative to the norm, and then replaces the older norm within that community. Bever and Langendoen (1972) following the recent hypothesis that the child's linguistic ability develops by minimal changes, propose the following. If a child is in contact with a neologism, he will adopt it as part of his predictive grammar only if it is comprehensible to him, and if its grammatical description is not radically different from the grammar he has already under control. That is, he must be able to use his general perceptual ability in using

the new construction. They note that certain constructions will be novel to the child because he has never heard them, and that also sometimes they will be new to him and new to the language. But the point that must be stated is that the child will not adopt them into his grammar unless they conform firstly to the general perceptual mechanisms he applies to discover the meaning of a form and how it is to be used in the speech situation. In summary, the authors propose that

... linguistic evolution can be interpreted as an interaction of systematically constrained neologisms with the ontogenetically shifting filter in the child: these neologisms that are appropriate to the particular stage in the child 'survive'; they are picked up by the child and incorporated into the predictive grammar of his language ... Their form is somewhat constrained by existing synchronic structures, and if they create a structure which is too much at variance with existing structures they 'die out' and do not become part of the structural evolution. In brief, the linguistic future is highly constrained by the structural and behavioural systems implicit in the linguistic present.

(1972: 81-82)

Thus Bever and Langendoen argue that a child will not change or adopt into his predictive grammar neologisms that violate those constraints he imposes on his language through his adoption of certain appropriate perceptual strategies. They further propose that change cannot be seen in its entirety as part of the formal predictive internalized grammar, thus rejecting recent TGG claims about language. That is, they reject the notion that certain features of performance should be formally incorporated as part of the speaker's internal grammar,

i.e. as part of the speaker's competence, in order that certain processes concerned with language change may be explained.⁷

6.05 Communicative competence and a revised notion of simplification in historical linguistics

This section will be concerned with investigating recent work in TGG historical linguistics in the light of the hypotheses of Bever (1970) and Bever and Langendoen (1972).

Traugott (1972) suggests that the type of grammar needed for the adequate description and explanation of phenomena in diachronic language study is a competence based model of internalized ability to use language in context, and also to change language. Her contentions that this type of model should be constructed are based on reconsiderations of the notions of simplification and restructuring. She holds that restructuring is the reformulation of two or more rules (of the semantic base), or constraints, contrasted with the modification or addition of a rule or constraint which has no consequences anywhere else in the syntax of the language. Traugott, moreover, retains as axiomatic the classical TGG premiss that it is children alone who carry out major restructuring, but she questions the classical premiss that simplification equates with restructuring. As we have seen, in her (1969) paper she offers the hypothesis that simplification in one part of the grammar will result in elaboration in another.

She argues in the (1972) study that linguists should

remember that in the acquisition process children do not restructure anybody else's grammar. Rather, they construct grammars, and as they do so their own grammar gets restructured on the basis of their own system, of other people's output, and of universal principles (1972: 35). She further holds that viable methods of grammar construction may be derived from the work of Andersen (1973) concerning deductive, inductive and abductive modes of grammar-building, and that perceptual factors play a major constructive role also, basing her evidence on Bever and Langendoen (1971), Kiparsky (1971) and Slobin (1971).

Her major contention is that the processes of simplification and elaboration should be seen as descriptive apparatus only (thus answering R. T. Lakoff's quibble on her (1969) methodology). She holds that the child does not simplify or elaborate but merely constructs a grammar that will enable him to communicate as a speaker and member of his linguistic community. As such, she proposes that he formulates a set of rules and constraints which enable him to do so. More importantly, she considers that the child goes through language acquisition utilizing 'natural processes'.

Accepting the Halle premiss that language acquisition and diachronic change are intrinsically linked, Traugott proposes that diachronic change, as derivative of the process of language acquisition, must conform in some way to ontogeny, that is, be governed by the same linguistic

principles as govern language learning. Following Stampe (1969), she argues that simplification, elaboration, markedness (all the classical TGG historical linguistic terms) and all other processes which have within TGG historical research been postulated as explanations in both language acquisition and language change, are no more than metatheoretic constructs. Stampe has argued that children are born with a certain innate ability, or ability for certain specific linguistic processes that would allow them to simplify their grammars to what he terms a 'verbal pabulum', if it were the case that nothing intervened in this development. He postulates that a child's task in acquiring the language system is 'to revise all aspects of the system which separate his (language) from the standard' and that this revision involves 'suppression, limitation and ordering' (1969: 44). Traugott takes up Stampe's arguments stating that they are in fact a statement to the effect that in acquiring language the child generalizes, which is the opposite of the classical hypothesis of what the child does in the acquisition process. Stampe, further, holds that language change will occur where children fail to make the appropriate generalization to reach the adult standard system. This in one sense may be termed comparative simplification: but what has happened is not simplification in the child's grammar. Ontogenetically nothing has altered.

Thus Traugott argues that ontogeny must be considered as a factor in language change. Baron (1972) also holds

this belief, illustrating her proposals with the development of periphrastic causatives in the history of English in comparison with the development of the same in the speech of children. The parallel evolution, she argues, must confirm that ontogeny be considered as part of the future explanation of language change.

Both Traugott (1972, 1974) and Baron (1972) are concerned with the notion of natural processes as outlined by Stampe (1969). Traugott particularly is concerned with the syntactic process of segmentalization, or giving analytic or phrasal representation to underlying semantic relations. She notes that the process of segmentalization is common in the speech of children and that further it seems to be characteristic of pidgins and creoles. She moreover notes that the loss of segmentalized features from a language is often subscribable to phonological reduction (cf. Vennemann 1973a, 1974b, 1975 and discussion in chapter 4 above). She however does not subscribe to claims that there may in linguistic change be some analytic-to-synthetic cycle, as does, for example, Vennemann and Reighard (1971), but only to the claim that this apparent cycle is the result of processes which lead to analytic or synthetic structures.

Traugott (1974) also proposes that the processes resulting in the apparent linguistic phenomenon of the analytic-to-synthetic cycle may well be linked to the interaction of three sets of linguistic universals. These three sets are defined as universals of language (which are

constraints on language),⁸ natural processes (which are constraints on expressibility) and perceptual processes (which are constraints on learnability). We have noted, then, that Traugott has isolated segmentalization as the major process in syntax: she further claims that it has ontogenetic status.

She hypothesizes that the natural process of segmentalization operates in language acquisition subject to universally operational perceptual constraints. That is, when segmentalization leads to a string too long for memory retention, phonological reduction being in operation, the language will lose some of these segmented features, and thus become synthetic.

Similar proposals for an interaction between perceptual processes and the underlying grammar have also been made by Kiparsky (1970, 1972, 1974). There, such factors as 'functional roles', which presumably include perceptual mechanisms, must be included as part of linguistic competence. Kiparsky's thesis is that certain regularities in language can only be explicated if we include substantive functional conditions which 'pertain not to the form of grammars but to their output' (1972: 195).

Zwicky, however, in a question addressed to Traugott (1974) points out that if one subtracts the universals which are not specifically linguistic from Traugott's set of three universal constraints on language then the question must be as to what empirical status is accorded to the universals which constrain language. Traugott maintains

that these latter constraints on the linguistic code itself, the formal and substantive universals of Chomsky (1965) should be maintained as the basis of language, arguing that the universals of natural process and perceptual constraints do no more than condition the implementation of the linguistic code as constrained by general linguistic universals.

6.06 Concluding remarks on competence versus performance in language change

The basic problem in the papers discussed directly above would seem to be the maintenance of the notion that a model of language must be based on competence, that is, that all factors affecting linguistic ability and capability must be considered in relation to the strictly basic features of the substantive and formal linguistic universals, as defined in Chomsky (1965). That is, linguists in the TGG camp hold that the linguistic features of ordering, predication, category relations, and categories themselves are specifically linguistic, and as such distinct from other cognitive features. Bever and Langendoen (1972) maintain that such theoretical 'picking and choosing' is not permissible. They claim that it cannot be allowed that one part or other of the perceptual system (or for that matter, the cognitive system in general) be kept as part of competence at the same time excluding others if they do not seem to interact with formal linguistic structure. The goal of the linguist and the psychologist

is to find a device which can account for language and its structural and semantic functions^{and information content} in terms of general cognitive mechanisms. Bever and Langendoen's proposals that perceptual mechanisms are basic in language acquisition, and also in the production and decoding systems of speakers, and that the predictive grammar is acquired over time and experience by the learner, is the hypothesis which is adopted in this study.

Footnotes to Chapter Six

¹The study of dialect overlap was the major method in comparative and reconstructive diachronic linguistics of the late 18th and 19th centuries. It is interesting to view the Weinrich, Herzog and Labov theory in the light of this.

²which is:
 (i) Knowledge (in a language with transitional serial order type) of exactly which type of structure type is applicable where (ii) Speaker knowledge of the dominant serial order, and of the less basic variants and where to apply them (iii) Knowledge of how to borrow and use innovating variants from other texts and dialects.

³Bever notes that the 2 year old can judge numerical inequality and predicate actions with verbs in the speech situation.

⁴These are utilized in making, for example, relative judgements of large numbers. People may suspend knowledge of integers and counting, and use perception in judging the largest array, etc.

⁵For example, Chomsky (1965) points out (and now well known) ambiguity manifested in

Flying planes can be dangerous

Indeed, it would seem that many literary artifacts and stylistic devices are based on linguistic ambiguity. Given this, it would seem that speakers tolerate at least a certain amount of ambiguity with absolutely no communicative problem resulting. However, the non-native language learner may have some problem with the kinds of linguistic ambiguity mentioned above.

⁶However, this argument is vitiated since, in ModE, inflections are irregularities. Thus the authors' argument cannot be seen as a comment on the complexity of inflections, but merely as a comment on the complexity of irregularities.

⁷A discussion of 'performance as part of competence' and language change is found in Kiparsky (1974).

⁸See Chomsky (1965) Emonds (1970).

CHAPTER SEVEN

Speech perception and typological change

7.00 Preview

We have rejected the notion of a competence-based model of languages proposed in classical TGG, and discussed in the preceding chapters. We also reject revised TGG models whereby competence is extended to accommodate features of performance and also factors of general cognitive ability and capacity. This latter is rejected on the grounds that it is not permissible or competent to take into account only those factors of general cognitive capacity which are necessary in accounting for a language in terms of an internalized grammar alone. Rather, we have adopted a version of Bever and Langendoen's (1972) model of language, where perceptual strategies are dominant in the acquisition of language, and where the internal or predictive grammar is built on the basis of inductively learned perceptual recognition strategies.

7.01 Phonological reduction as a causal factor in type change

Let us return to the study of language typology, and look at research recently published in the light of the model of language proposed above in 7.00.

Venneman (1975), following Greenberg (1966), notes that in consistent XV (OV) languages, complement clauses precede their head nouns, and adverbial clauses precede their verb (among other characteristics). This, Venneman

claims, follows from the principle of natural serialization, discussed in chapter four and repeated here for convenience:

Languages tend to serialize operator-operand hierarchies unidirectionally

$$\left\{ \begin{array}{l} \text{Operator} \end{array} \left(\left\{ \text{Operand} \right\} \right) \Rightarrow \begin{array}{l} [\text{Operator}[\text{Operand}]] \text{ in XV languages} \\ [[\text{Operand}]\text{Operator}] \text{ in VX languages} \end{array}$$

Venneman notes that if case markings are lost from NPs in the sequences of complement and adverbial clauses in XV languages, the resulting patterns conflict with the basic clause recognition strategy of the XV language. Thus, following Bever and Langendoen (1972), every NP V (intrans) pattern and every NP NP V (trans) pattern will constitute a clause; but, with loss of inflection, up to four NPs can appear in sequence followed by two verbs where the relation of the NPs to their respective verbs can be tackled only after the complex sentence is complete. And even then it can be decoded only with some difficulty.

Venneman illustrates this situation from German:

weil Hans Maria Peter Paul vorsustellen bat
because John asked Mary to introduce Peter to Paul

Venneman notes further that the linguistic situation in German is vitiated even more. In relative clauses with transitive verbs, it becomes unclear whether the NP (not the relative) in the relative clause is the subject or the object of the verb. This may result in a restriction where such NPs are always interpreted as objects, which they deprives the language of that particular type of relative clause where the head noun is object to the relative clause verb. This analysis may be extended beyond German to any XV language with a worn inflectional/

morphological system.

More problems can exist for an XV language, however. Kuno (1974) has pointed out that because of perceptual difficulties inherent in centre-embedding, a consistent verb final language tends to place subordinate clauses, and NPs with subordinate clauses, at the beginning of the sentence. As we have seen earlier, in chapter four above, Venneman considers the critical development of sentences with the patterns

(Rel) NP_{Subj} NP_{Obj} V

and

(Rel) NP_{Obj} NP_{Subj} V

He argues that with a loss of the case markings distinguishing subject and object, the result is the collapse of the above two sequences, and the emergence of the uniform pattern

(Rel) NP NP V

Thus it is unclear whether this represents the order type SOV, in which case it follows that the recognition strategy of NP NP V as actor-object- V will operate, or that of a sequence with a preposed object.

Accepting that Kuno's hypothesis that SOV languages will avoid centre-embedding by preposing of relative, complement, adverbial clauses and the like is correct, Venneman proposes that another strategy must be brought to bear on these preposed and perceptually complex structures. Venneman of course considers that structures become complex

through loss of case markers which aided perceptual decoding. These kinds of ambiguity and perceptual difficulty are precisely what cause speakers of an SOV language with an eroded case system to rely on the devices which are available to the language type: the passive, demonstratives, articles etc. Moreover, Venneman allows that speakers will process the integration of postposed clarificational sentences into the main sentence to ease the perceptual problem of decoding.¹

Venneman postulates that the VX characteristic of the subordinate clause following its head noun originates from postposed clarificational sentences in a worn XV type. That is, that the phenomenon originates when an originally XV language begins to change towards the VX type, due in the first place to phonological reduction of the case marking system, which then leads to the above mentioned perceptual difficulties. The early stage of this development is when a language is in what Venneman calls the T(heme) V(erb) X stage.

Thus Venneman holds that this hypothesis accounts the fact that an SXV language with an eroded case system and a TVX language characteristically have

1. subordinators morphologically related to deictic or anaphoric pronouns and verbs and adverbs on the basis of reference to the main clause,
2. subordinators occur at the beginning of the subordinate clause because referential constituents are normally placed sentence initially.

(for other examples, see Venneman (1975))

The hypothesis that an SOV or TVX language should develop referential and deictic signals in this manner is very plausible, and in many cases is borne out by empirical evidence, especially within the Indo-European language group. Thus the arguments outlined above in part corroborate the Bever/Langendoen hypothesis that language and language learning is governed by perceptual recognition strategies. Primarily, the solutions evolved by the worn SOV language are essentially linguistic representations of gestural pointers, the very core of perceptual methods of disambiguation.

7.02 Segmentalization as the result of phonological reduction

Traugott (1972, 1974) considers, as we have seen, that the universal natural process in syntax is segmentalization. She further has argued that in language change the most natural development is toward greater segmentalization of surface structure forms. However, she considers that if a language becomes perceptually complex because over-segmentalization, an interaction between relevant perceptual mechanisms and the mechanism controlling natural processes takes place whereby phonological reduction (the polar opposite of segmentalization) results, and the language returns to an inflectional type. She concludes that the process of segmentalization is dominant, giving consideration to the large amount of segmentalization in the speech of children, and in pidgins and creoles.² Thus a case of segmentalization as the preferred mode in

the speech of children can be seen in the fact that children have a period where saying 'I already go' seems preferable to 'I went'.

We have seen that Venneman, on the other hand, maintains throughout his work on type change that the process of phonological reduction is dominant in the change from agglutinative to isolative structures.

Consider Venneman (1974a, 1975)

Phonological change is always operative, in all languages at all times. A few types of phonological change lead to a maximization of contrasts; e.g. diphthongization, Spanish (s ʃ ʝ) to (θ ɣ x); a few types make items longer, e.g. dissegmentalization, anaptyxis and epenthesis. The dominant types of phonological change are reductive: their result is levelling and loss, e.g. assimilation, consonant gradation, consonant loss, syncope, apocope, monophthongization, co-articulation of consonants, haplology. Some types of phonological change are compromises between reductive tendencies and the need for contrast: push chains, dissimiliations, metathesis. The net result of phonological change, given long periods of time, is phonological reduction. To put it bluntly, words become shorter by phonological change (cf. I-E languages, and Chinese); where they seem to become longer, the mechanism is non-phonological: borrowing, analogy, compounding, degeneration of full words into affixes.

Thus it can be seen that Traugott and Venneman argue, each the converse of the other, that either segmentalization or phonological reduction are the dominant factors in language change. However, perhaps the question as to which of these processes is dominant in the transition of language from one type to another, and which will be most naturally preferred by the speaker, or most naturally will occur within a language system, is not the most important question. In fact, we have seen (chapter four)

that Venneman's argument for the primacy of phonological reduction had been shown to be ^{not totally/universally the cause of serial change} by arguments in Li and Thompson (1974). Further, Traugott's argument for the primacy of segmentalization is vitiated by the fact that (see Bever and Langendoen 1972) a language with a fully defined inflectional/agglutinating system is as perceptually simple in the decoding process as a language with a fully defined isolative system.

Rather, the question would seem to be this. Given the fact that languages are continually in flux as to their surface structure realizations of the underlying semantic relations (continually moving between analytic and synthetic, or at least always changing with respect to the standard type of each), the question that is relevant should surely be how speakers in a transition period learn requisite perceptual strategies. That is, how can any speaker in a language which has characteristics of two or more types discover perceptual strategies which allow him to develop a grammar which predicts correctly how he should go about constructing sentences of his language?

7.03 Acquisition of serial order according to speech perception mechanisms

Greenberg's (1966) isolation of three basic dominant and basic word order types (SVO, VSO and SOV), plus ~~the~~ further fourth possibility of free word order may be considered as the first steps in defining perceptual recognition strategies in language acquisition and use.

These three, SVO, VSO and SOV, plus the fourth basic word order type isolated by Pullum, VOS (Pullum 1975) would seem empirically to constitute the (formal) constraint on the kind of ordering that is imposed in the surface structure sequencing of human language. Following Pullum, and indirectly Venneman (1975) and Bartsch and Venneman (1972) we argue that these four orders are optimal as sequencing constraints in that they of the six possible logical orders place the subject and verbs in primary positions with varying degrees of adequacy (see further Pullum 1975).

It is not, however, necessary to consider that these formal sequence constraints should be crucially linguistic. Abstractly, ordering relations are primary in any cognitive structure for the utilization and production of the appropriate cognitive schema. We have already considered Bever and Langendoen's proposals that linguistic processes, both acquisition and use, and also the additional process of change, should be described within a framework of perceptual strategies. However, more substantively, it cannot be argued, of course, that these particular four orders, or the notion that a set of four itself, should in themselves be considered as a definitive cognitive universal. Rather, it seems that, quite simply, these four order sequences are specifically linguistic in that they are optimal in allowing the 'best' placement of noun-subject and verb-predicate. Further, it is this latter,

the use of predication, that makes human language specific and distinct from all other forms of communication.

Adopting Bever's (1970) hypothesis concerning the role of perceptual recognition strategies in the acquisition process and in language use, we may define the four basic word order sequences in human language as

(i) SOV (ii) SVO (iii) VSO (iv) VOS

(i) NP NP V (ii) NP V NP (iii) V NP NP (iv) V NP NP

Firstly, it is interesting to note that the most, unexpectedly common found order in Greenberg's sample, SVO, has the non-optimal sequence where V is not found, following Pullum (1975, chapter five 5.04) in a position of prominence. Perhaps this may be due to the fact that SVO order does indeed seem to be a half-way house situation between the major characteristic structures of two more optimal types SOV and VSO (where the subject and the verb are given more optimal prominence according to their primacy within the sentence), and that it is true that most languages are in flux between ambiguity and optimality. However, this remains as only a flimsy passing thought, and will not be investigated further here. More plausibly, SVO may be seen to be 'optimal' in another way in providing a simple way of distinguishing S and O without recourse to function markers. That is, it utilizes only the necessary linearization factor common to all languages. This latter may tie in with Traugott's (1972, 1974) hypothesis that languages will most naturally be segmented, in that SVO is an analytic type and the most commonly found dominant

serial order type. Further, the SVO type would seem to accord best with Bever and Langendoen's (1972) clause recognition strategy, for the same reasons as above. To return to the point, the language learner will learn by induction over linguistic experience the recognition strategy which is relevant on the basis of the data. It is not proposed that each of the above recognition strategies are innately present in the child, but that rather he will use inductive, and thence deductive processes, a basic cognitive set, to explicate how his language seems to be structured. In the course of more advanced linguistic development, he will begin the construction of a predictive grammar of his language such that he is able to correctly use an indefinitely large set of structures of his language in his speech community.³

Bever and Langendoen (1972) state that, however, there are few languages where there will not be some potential ambiguous structural sequences, and thus potential difficulties for the language learner. For example, if we take it that OE is basically SVO in type, then the language learner will learn NP V NP as his basic perceptual recognition strategy. But he would also have to learn how to account for sequences, both clausal and intra-clausal, where the NP V NP strategy does not work, i.e. the sequences VSO and SOV, and their attendant typal characteristics. It would seem, then, that the

child learning OE, and indeed the child learning ModE, would have to construct further clause recognition strategies which would then underlie 'separate' grammars according to the types V NP NP and NP NP V. Further, (David Roberts, personal communication), the child would have to construct perceptual NP recognition strategies to account for typical characteristic sequences within this smaller syntactic unit, and again, in a language in transition from one type to another, would have to construct two or more strategies according to sequence.

For example the child learning ModE has to account for two possible serial order patterns at intra-clausal level. We may illustrate this with sequences denoting the 'genitive' as the King's son v. the son of the King. Following Greenberg's (1966) classification the former is typical of an SOV type, the latter of a VSO or SVO type, here SVO (from other evidence showing English to be SVO not VSO). Thus the child learning ModE has to have a mechanism which can mark the King's son and the son of the King according to type. That is, the child must be able to link the former to the serial order type where operators precede operands, and the latter to the type where operators follow operands. In the case of the child learning ModE, no extension from sequences such as the King's son to full clauses with NP NP V sequence is borne out by data the child encounters. That is, he will find no evidence to provide a basis for laying down

a strategy of clause recognition for an SOV serial order. However, he does find by testing that it is plausible to set up rules of linearization based on operator following operand sequences, In short, the NP V NP sequence.⁴ Thus language learners today do not establish two basic clause recognition strategies, but mark as basic NP V NP, with exceptions such as the King's son based on the operator/operand test, and marked as a result as exceptions to the basic pattern of the language.

In an earlier section we partly rejected Venneman's account of natural serialization on the grounds that we could not give it adequate ontological status. In the above context,⁵ however, it is possible to consider the operand/operator relationship purely in terms of patterns recognized and stored by the child as common or recessive in his language, In short as units in his search for the basic clause recognition strategy of his language.^{5a}

In these terms, therefore, it seems natural and very possible to incorporate it into the language acquisition process in general without recourse to the dubious notion that the operator/operand relationship is based primarily on the relationship of the object and the verb. Rather, the recognition of operator and operand and their relationship may be part of the child's logical/epistemological powers which are not specifically linguistic, but part of his innate mental programming.⁶ This would then allow us to say that when the child acquires the ability to speak, he does not use specific linguistic processes,

but processes which are part of his general cognitive inheritance.

7.04 Acquisition of serial order in a language displaying features of more than one linguistic type

Our task is now to assimilate the facts and hypothesis considered thus far in the above sections of this study. We propose that the child in the process of language acquisition firstly acquires a set of perceptually based clause recognition strategies based on the corpus of data he hears around him. On the basis of this, he can understand what is being communicated to him, though restricted by memory limitations in the production of more sophisticated, or complex utterances. On establishing clause recognition strategies (and intra-clausal strategies) the child can go on to internalize a grammar which he utilizes to produce correct serializations of syntactic combinations. This, as discussed in 7.03 above, will incorporate marked serial orders if the child has been provided with enough material to warrant his retention of a marked type, which clashes with the basic serialization he has encountered.

From this, we must allow that individual speaker's may have different 'quotas' of marked serializations registered in their grammars, dependant on reinforcement of these marked serializations in their range of socio-linguistic contacts throughout their lives. Thus the loss of a marked serialization will be accelerated if a speaker is in contact with others where the marked

construction is also heavily recessive.

Further, if a child internalizes a grammar based on two sets of perceptual strategies (i.e. one NP NP V and one NP V NP) and one set is dominant, then he may well generalize the dominant order over the recessive order, so that further recessive sequences are wiped out of his grammar. Similarly, an adult might acquire a propensity, social in nature, to use one sequence, most naturally the dominant one, to the detriment of the recessive one. Thus, following, Weinrich, Herzog and Labov (1968), the spread of a generalization may well be socially motivated with regard to the adult, or numerically motivated with regard to the child (although the child may acquire one particular sequence strategy socially from his peer group). Finally, the recessive strategy will disappear through generalization throughout the community of the more dominant pattern. Certainly, it is very probable that though the new perceptual strategy may appear for linguistic and/or perceptual reasons, it will be spread through social channels throughout the community.

Further, innovating serialization sequences will not suddenly 'appear' in the language, but will be derived processes affecting speakers' performance. The question then remains, however, as to how innovating serialization (at first recessive) come to be accepted as dominant. Again, this will depend on processes affecting language production. For example, an inflected language is

subject to phonological erosion, and in any case, if the semantic motivation for inflectional paradigms is lost, then speakers may establish another means of representing the function of the inflections themselves. Thus, for example, in the case of the OE dative inflection, which merged with the accusative, the function of goal was not lost, but ^{came to be} represented by the innovatory preposition TO. Therefore, although it seems that both the inflection and the preposition co-existed in marking goal, eventually the preposition TO emerged as the sole marker of goal. Thus at one point in the language speakers marked the TO marker as an innovatory sequence, in that TO preceded its nominal head, whereas the dative inflection followed. We can, thus argue that as inflections became eroded, the serialization of marker and head gradually changed in serialization sequence. Given the argument in 7.03 concerning natural serialization, we can argue that language users would pass through a period where they would be coping with perceptual strategies which were polar opposites, i.e. both operator preceding operand and operator following operand. It would appear, further, that this applied at clause level, also, in terms of the transition stage in OE noted by Venneman (1974a) where main clause strategy was NP V NP (operator follows operand) and subordinate clause strategy was NP NP V (operator precedes operand). Further, we must postulate once more that different speakers in different social and regional categories would have different 'mixed' grammars based on differing quotas of

mixed strategies, since from evidence available it was by no means fixed that all main clauses were NP V NP in OE, or all subordinate clauses NP NP V. The transition, due to the processes affecting surface structure, eventually led to a dominant NP V NP clause recognition strategy.

Thus we can account for language change, and language transition from type to type in terms of speaker's acquisition of new perceptual strategies arising from innovations in the language system, which have developed for some linguistic and/or perceptual reason, such as segmented structures arising to realize semantic relations not made distinct by a worn morphology, with the important proviso and empirical reality of the transition period when both old and new are present in a synchronic stage of the language system. Two sets of perceptual strategies will thus result in a speaker with two distinct grammars, each accounting for each set of strategies. Thus, given that one grammar will be dominant, i.e. account for more sequences of the language, the situation may arise where one grammar becomes marked as the 'grammar of subordination', as was the case in OE with SOV sequence as opposed to SVO, and is the case with Modern German where the same situation holds.

7.05 Serial order - developmental similarities in related languages

We can now allow a version of Koch's (1974) proposals

concerning related change in related languages. Since languages of one family are derived from a common source, then originally speakers of that common source would have had perceptual strategies and grammars based on the sequence orders operational then. Depending on which dialect of the parent the languages are derived from, then they will inherit tendencies to generalize according to which sequence order, and thus perceptual strategy, was dominant in that dialect. This then may in some way explain why related languages, although changing in the same direction may do so at different times and rates.

If it is questionable that a speaker may operate with more than one grammar, then the only answer would seem to be that empirically he does, in that there are many languages in the world which are combinations of more than one language type, and thus the speakers must be in command of perceptual strategies and grammars which generate the 'opposing structures' (in terms of the Greenberg characteristics of various types being opposed according to whether dominantly OV:VO).

Finally, it is proposed that the actuation of change will come about in terms of the child and the basic 'learnability' of his language, which, according to Bever and Langendoen (1972), is in constant interaction with perceptual strategies and language utilization. This, then, will concern us in the following chapters of this study.

Footnotes to Chapter Seven

- ¹ See Hyman (1975) who bases his theory of word order change on what he calls 'after-thought syntax'. See also Venneman (1974a, 1975).
- ² This argument is based on the premise that the language of children and of 'created' languages will manifest the preferred state of surface structure forms.
- ³ Morton (1971:84) 'the developing nervous system is structured in such a way that permits the internal representations of the basic properties of grammars to be constructed from more general principles at the appropriate time in development'.
- ⁴ Bartsch and Venneman (1972) SVO languages serialize on the principle that operators follow operands. See also Venneman (1974a, 1975).
- ⁵ The child's deductive operations in constructing the recognition strategies for the linearization rules of his language.
- ⁶ Bever (1970)
- ⁷ For example, Koch (1974) points out that VSO order patterns in the Indo-European group during its SOV and SOV-SVO days seems to have been stylistically marked.

5a. Definition of the terms operator and operand

- '... In a constituent structure AB the specified element is the operand and the specifying element the operator, and, syntactically, ... the element which determines the syntactic category of AB is the operand, the other the operator.'
- Venneman (1973a: 49 n.1)

CHAPTER EIGHT

Innovations in the verb system of some languages of the Indo-European group: some data provided, some theories proposed

8.00 Periphrastic verb innovations briefly detailed

A feature of the later Indo-European languages, such as Late Latin, French, English and other of the Germanic languages is that they share a common development of periphrastic verb forms, analytic in form. Classical Latin too utilizes the past participle in conjunction with the verb BE to represent the perfect passive, and even earlier attested languages such as Hittite, Vedic and Sanskrit show a possible form of this character, a combination of the present participle and the verb BE. Thus, the development of these periphrastic verb forms may be illustrated by comparing modern French and Latin verb forms, French being directly related to Latin:

Latin 'amavit' French 'il a aimé'

Latin 'amatur' French 'il est aimé'

The new development of the periphrastic verbs involves characteristically the use of the verbs HAVE and BE with a non-finite form of the verb, such as the present or past participle. Thus, in English we have a 'perfect' formed with HAVE and the past participle; Gothic formed a future with HAVE and the infinitive; and the 'future tense' in English is realized as WILL or SHALL and the infinitive.

R.T. Lakoff (1972), (~~&~~chapter ~~Three~~) proposes that the development of the periphrastic verb forms in the

Indo-European language family should be seen in terms of the general drift within the language group from synthetic to analytic surface representations of the underlying semantic relations within the sentence. As we have seen, synthetic surface structure representations seem typically to be related to SOV serial order in a language, while analytic representations seem to be connected with languages of the VO type (Greenberg 1966).

Koch (1974) has shown that within the Germanic subgroup of the I-E family, the verbal system is presently no longer the simple two-'tense', one voice, system of Proto-Germanic, nor indeed were the systems of OE, Old High German etc. as simple as that proposed for P.Gmc. She notes that the situation in OE is as follows; (1974:66) :

From the beginning of the period is attested the periphrasis with 'have' or 'be' in the present or preterite to express the perfective aspect. A progressive periphrasis is introduced with 'be' in the present or preterite with the present participle. Temporal as well as aspectual auxiliaries develop... The passive is expressed by 'beon', 'wesan' or 'weorðan' and the past participle. Inflections of the subjunctive mood are blurred in OE, and periphrastic subjunctives are common ... Modal uses of 'magan' and 'motan' are found in the earliest texts; Bede often uses 'sceolde' and the infinitive instead of the preterite subjunctive.

Again, Koch proposes to explain this development as part of the general trend within the Germanic group away from SOV order or its typical characteristics to the new order SVO, which has, characteristically, analytic structures.

It is traditionally assumed that if phonological reduction renders inflections non-distinct, then speakers

will develop an alternative mode of representing the semantic information. For example, the traditional account (Brunot and Bruneau (1969)) of the development of periphrastic verb forms in Romance languages is as follows. Illustrating from Latin, the loss of the distinct Latin tense forms 'amavit', 'amabit' and 'amabat' was caused by vowel reduction and by the operation of a phonological process which caused stop consonants to become continuant, and thus the three forms fell together, and became non-distinct. Since the forms no longer could be distinguished for communicative purposes, the language had to 'create' new distinct forms. The obvious gap in such an explanation is that it offers no reason for the development and the origin of the new forms other than that they were 'needed'.

If we accept that phonological reduction of the morphology of the Indo-European languages does indeed seem to play a major part in their later development from SOV to SVO order, then a possible solution is at hand. Consider the development of the Romance future tense: French 'il aimera', Spanish 'el amare'. These tenses constitute the verbal infinitive in conjunction with HAVE (Latin 'habere'). But, as opposed to the periphrastic forms of the perfect and the passive, these are synthetic and thus belong characteristically and perceptually to a language with the basic order of SOV, in that the AUX does not precede but follows the verb. Moreover, these

forms (before they became synthetic) were not 'new': classical Latin had a construction consisting of 'habere' and the INF indicating necessity, with a secondary future reference. Thus it is likely the Romance forms are closely linked to this Latin model structure, especially as they are typically SOV in sequence. Given that the language had utilized the device when SOV to produce a new 'future', then it was generalized when the language went further along the path to SVO.

8.01 Phonological reduction, segmentalization & the development of periphrastic verbs

In the development of the periphrastic forms, the question would seem to be why verbal meaning previously manifested by inflection, and in the older languages of the I-E family by functional ablaut of the verb root/stem, should then come to be represented by auxiliaries (AUX) once lexically 'full verbs' in conjunction with a non-finite part of the verb.¹ We have tentatively proposed earlier that language change will come about when the child (and by extension the native speaker), finds the language system hard to learn, and therefore ambiguous or difficult to use in the speech situation. Thus, we propose that if the operation of phonological reduction has rendered indistinct important morphological reflexes of underlying semantic information, then speakers will reinterpret existing pieces of surface structure to obviate this information loss and represent the underlying information.

But what of the case of language where segmentalization is the mode for realizing underlying semantic relations? We have noted (Chapter 7.02) that phonological reduction and segmentalization do indeed seem to be the major forces at work in language, and that phonological reduction is prevalent in all languages (Venneman 1975). Following Bever and Langendoen (1972) we accept that perceptual complexity arising from excessive manifestation of either of these processes will be compensated by gradual increase in the manifestation of the other. But in what way can we say that a language is cursed by excessive segmentalization? Rather the situation would seem to be as follows. Reighard (1971) notes that in the development of creoles, virtually all inflectional systems of the parent language are lost. Tense, mood, aspect and other crucial underlying features are realized in the creoles, by segmented terms derived in some instances from full verbs with appropriate lexical content found in the parent language, and in some case derived from other surface forms, again lexically appropriate for reutilization as various function markers. New AUX are usually uninflected, and stand adjacent to the verb, as verb phrase constituents. As illustrations of this process we may instance Haitian TE, which indicates past tense is derived from French ÉTE; FEK 'have just' indicating perfective is derived from French FAIRE and NE...QUE, and

AP derived from French APRES indicates imperfective. This, in conjunction with Traugott's (1972, 1974) evidence, would seem to suggest that language learners prefer segmented structures in representing underlying semantic relations and features, and thus that segmentalization is preferred to synthetic structures. However, given that phonological reduction seems universally to operate on all (especially unstressed) surface forms, then essentially we appear to be presenting a cycle from inflectional to segmentalized languages and back. Most naturally, segmentalization of surface realizations seems to be preferred, but a language with this representation will be affected by phonological reduction, reducing full words to the status of affixes. When the affixes themselves become so worn by phonological reduction, the speakers will use other available pieces of surface structure to fill the communicative gap. The process will begin again. Thus it is not surprising to find that within the Indo-European group, language systems affected by phonological reductive processes 'compensate' by utilizing other available pieces of 'full' surface structure, related in lexical content to the underlying semantic information once represented by the worn morphology. In fact, Meillet (1917) proposes that the synthetic form of the Latin future in -b-, and also the imperfect in -b- are derived from the Indo-European full verb BHEU 'be'. Similarly, Meillet (1917) holds that a

possible derivation of the Germanic weak verb past tense morpheme *-d-* is derived from the full verb *DO*. On the basis of such evidence, Reighard (1971) suggests that the Indo-European languages are on a new cycle from analytic to synthetic. Certainly, if as we have seen, the AUX of the Indo-European language family is derived from a full verb, then further grammaticalization and reduction may well reduce it to the status of affixes, or, more specifically case markers. However, it should be noted that this is an overstrong hypothesis, since, as we have noted, prediction in terms of how a language may change is not possible. Thus, though French DOES seem to be moving (in some respects) towards greater synthesisism, we may not say Spanish will also.

8.02 Tense and aspect in early Indo-European languages

The verb system of PIE is traditionally held to be based on a distinction between perfectivity and imperfectivity (Prokosch 1939), manifested in surface structure by ablaut of the verb root/stem. The original function of the present 'tense' was thus held to convey the notion of imperfectivity, and that of the perfect 'tense' to convey the notion of 'action completed' or 'state achieved'. Later developments extended the function of the personal endings of the verb with the secondary notion of tense, or temporal deixis.

Kurylowicz (1964:92) defines the distinction between tense and aspectual systems as follows:

The moment of speaking being perceived as a point joining the infinite linear extension of the past

with a similarly extending line of the future, the contrast of the verbal action with this point will make us consider the present action as overlapping it, as having a temporal extension (linear action). On the other hand, confronted with an infinite extension of the past and of the future, the same verbal action will appear reduced to a point. Therefore the action of the grammatical present is perceived as linear, or imperfective, the primary function of the grammatical past or future as punctual or perfective [my 'italics' - S.M.M.]

The category of tense allows the linguistic reference of an action to a certain moment, allowing the definition of tense as a kind of relative aspect. The development of the imperfective² tense in Latin and Greek, but especially Latin, allows that imperfectivity, the aspectual distinction, be temporally referentially also. This development is borne out morphologically, in that the imperfect tense is derived from the present stem, originally denoting imperfective aspect.

8.03 Change in nodes of representing aspectual distinctions. A hypothesis proposed to account for the semantic status of an innovating periphrastic verb form.

In the Indo-European language group, certain developments affected the imperfective aspectual category, as represented in surface structure by the 'present' stem. Besides the purely aspectual notion of imperfectivity (see Jessen 1975: 363) the utilization of the 'present stems' developed in such a way as to allow it to convey, through reinterpretation of the personal endings as markers of temporal deixis, the further notion of temporal location; and then further, the well-known grammar book 'present' and 'past' tenses acquired in Germanic the notion of punctuality.

This development seems to have come about firstly when these verb forms were utilized in Germanic with pre-verbs and other elements limiting the action to a single moment of time. Thus in terms of Jessen (1975)'s heuristic for defining aspectual types, the older I-E aspectual categories would seem to purely aspectual, defining imperfective as opposed to perfective. The later development would seem to have reinterpreted the utilization of the verb systems in terms of proposition-type. Thus she states:

We may consider a (temporally-structured) proposition as corresponding to the extra-linguistic situation being described. ... the aspects are simply concerned with whether the situation is in fact 'alive' or whether it is already 'dead' or not yet 'born'.

(1975: 364)

Kurylowicz (1964: ch. III) then suggests that the next development was that a new formation was evolved to convey imperfective, aspect as a result of functional load on the old 'present' or imperfective stem. In terms of Jessen (1975: 364), however, Kurylowicz's proposal is not adequate in narrowness of description. Jessen would rather class these new 'state-descriptive' verbs as aktionsarten. Examples of this new type in Germanic may be found in the formation of denominative verbs, such as OE fiscian from fisc and cearian from cearu. However, by the OE period it is doubtful if this derivation was synchronically recoverable, though at some point in the development of P.Gmc it must have been synchronic process.

The term which we will later be primarily concerned with, the periphrastic form BE and the present participle

will later be discussed in terms of ^{an extension of} Jessen's propositional-type category, i.e., as zeitcharakter. Following Deutschbein (1917), Jessen characterizes the proposition-type as a description of a linguistically relevant situation, i.e. the description of states, activities, accomplishments, achievements (1975: 363). She further suggests that in the case of a state, the extra-linguistic situation being described is simple in that it has no temporal structure, whereas in the case of an accomplishment, where temporal structure is involved, it may be described as complex.

With respect to the form BE and the present participle, it would appear that the propositional-form involved is a state, denoting that the extra-linguistic situation being described is unfinished, or continuous. Evidence for this assertion will be provided at a later point in this work. At present, it remains to define the proposition-type, or zeitcharakter as a guide to the later discussion on the development of the periphrastic form under consideration.

Jessen extending Allen's (1966: 192) proposals that nouns should be regarded as bounded ('pencil') or unbounded ('gas') considers that certain verbs should be also regarded as bounded ('drown') and certain others unbounded ('believe').

Given this inherent lexical composition manifested by certain ^{verbs and nouns} Jessen also notes that certain verbs are not merely non-bounded, but rather unspecified, such as jouer. She

states that 'only the higher-order construction constituted by the verb and its complement is non-bounded or bounded, which one depending on the interaction of the verb and the semantic properties of the complement.' That is, she argues that the function of zeitcharakter is to produce, though the interaction of an ~~semantic component~~ and its complement a particular kind of semantic proposition which neither could represent without the other. (1975: 311-312).

Jessen defines zeitcharakter further as a linguistically relevant situation type composed of elements which together gloss the extra-linguistic situation. However, she notes that if one looks at the internal structure of the proposition types, it is found that their constituent parts also involve notions such as inception, cessation, termination and simple existence. In this way, the proposition types may be linked to the verbs of aktionsart and to the imperfective/perfective aspectual distinctions, in that all involve some notion of existence, whether simple or complex.³

At present, the above is no more than an outline of a possible hypothesis concerning the development of the periphrastic BE + PRES PART in OE. However, the above theoretical analysis will be seen to adequately account for the template structures in OE for the development of BE + PRES PART form in OE.⁴ This will concern us in the remainder of the work. At this stage, however, we should note that Jessen's distinctions and correlations of

the imperfective/perfective system with the proposition type allow us to postulate a natural transition from one type of aspectual system to another. That is, the common link between the older Gmc and Indo-European imperfective aspect and the innovating OE continuative proposition type is seen in the shared existential character of the terms realizing the different aspectual types. Similarly, the innovating perfective proposition-type HAVE/BE and PAST PARTICIPLE is linked to the older perfective distinction through the shared existential character of the forms.

For part of the remainder of this work, we will be concerned with the development of the hypothesis that the innovating periphrastic verb form BE + PRES PART is in fact the proposition-type denoting continuous action.

Footnotes to Chapter Eight

- ¹ By AUX is meant that segment in the composition of a periphrastic verb which does not carry the lexical content, which carries tense, and, most importantly, which specifies the type of verbal proposition to be realized by virtue of its grammaticalized semantic content. In most instances AUX derives from full verb status, its function in a verbal periphrasis depending on the expansion or reduction of its original content when grammaticalized (i.e. robbed of full verb status).
- ² In Latin and Greek the imperfective tense essentially should be seen as a secondary derivation from the original Indo-European root denoting imperfective aspect. However in these languages the secondary notion of 'past time' is an additional function. Thus, 'imperfective tense' denotes unfinished action performed at a time preceding discourse production 'now' time.
- ³ That is, whether the existence of a proposition is denoted, whether its cessation, whether a state exists or is finished. For further details, see Jessen (1975: 364).
- ⁴ Our use of Jessen's term proposition type is an extension of normal usage in that properly zeitcharakter indicate lexical items signifying states, activities, achievements and accomplishments. We hold, however, that there was no overt aspect in O.E. leaving only distinctions of proposition type (within the frame of the 'simple tenses' and omitting mention of any aspectual adverbs). Given this, we argue that the periphrastic BE + PRES PART (-ENDE) was initially perceived as a state zeitcharakter. That it should develop as a surface complex unit, not lexical, is consonant with the developing analytic nature of the language system.

CHAPTER NINE

Terminological Interlude

9.00 Terminological Interlude

As a preface to this chapter and those that follow, we propose here to give a definition of terminology used to denote certain categories crucial to the argument we adopt concerning the development of the Mode form representing progressive aspect.

Blanket terms have been utilized to denote the following categories.

PRES PART =	present participle
INF =	infinitive
GERUND =	verbal noun
BE + PRES PART =	the verb BE in combination with the present participle, denoting either the continuative proposition type or progressive aspect
AUX =	auxiliary

Further, blanket terms have been adopted for the markers of certain categories, such as -ENDE for the marker of the BE present participle.

We do not propose to set up these cover terms as underlying universal semantic categories. Rather, with respect to the critical concern of this thesis, the non-finite forms of the verb, we propose that the blanket terms be regarded as English-specific reflexes of a universal 'non-finite verb spectrum'. In this way, we may talk of the English reflexes of the 'non-finite verb spectrum' in terms immediately accessible to the linguist

concerned solely with English, without stating that all languages must manifest in surface structure such categories as participles or gerunds etc.

Similarly, when we mention 'participial slot', or 'infinitival function' etc. we do not hold that these are universally present in all natural languages. Rather, we intend these as glosses for those parts of the non-finite verb which appear in certain positions or functions in English structure.

We have already stated that the non-finite parts of the verb must be ranked according to a hierarchy of verbness. Thus if a form may sometimes operate in a nominal context, and if it has overt nominal characteristics, then it is less 'verby' than a form which displays no nominal characteristics.

In terms of the non-finite terms analysed here, the infinitive seems to be the most 'verby' of the group INF, PART and GERUND. Here, we may define INF as a depleted full verb structure. That is, although it may govern an accusative object, it is depleted of verbal concord markers and of markers of temporal deixis. Further, it most frequently appears without a subject. However, although it has no overt verbal markers, it has not developed any nominal markers, nor does it ^{normally} appear in nominal function (but it does decline in O.E.)

In comparing the functions of INF with that of PART, we find a pointer to the status of PART in its traditional

gloss, VERBAL ADJECTIVE. Unlike the infinitive, participles have partly nominal and partly verbal features. As a quasi-adjective, it is a nominal qualifier and as such (if appropriate) it will agree with its head noun in number gender and case and maybe predicative after copular BE. Further, in conjunction with auxiliaries, and in predicative relation to its head noun, it may also be seen to operate as a finite verb, governing an accusative object. However, given that it may decline (in an inflexional system) and given its function as a nominal qualifier, it must be seen as more 'nouny' than INF, which may only function as a verb subordinator.

Definition of the gerund as a verbal noun may give some clue as to its relative position on the non-finite verb continuum. Essentially, the gerund is nominal, given that in inflected languages it may decline according to the appropriate nominal paradigm. Further, it may be governed by prepositions, and (at least in English) it carries the same marker as an abstract noun. It would appear, moreover, that in English the only means of distinguishing the abstract noun and the gerund is that the gerund may take an accusative object and may not take determiners, while the abstract noun takes a genitive object (e.g. The leaving of Liverpool) and may take determiners.

It is relevant at this point to define what is meant

by the 'non-finite verb spectrum'. It is held that the non-finite parts of the verb are not underlying distinct categories, but rather form a fuzzy continuum. It would appear that this continuum may be graded as to the 'nouniness' or 'verbness' of the elements of which it is composed. That is, the 'non-finite verb spectrum', is composed of elements ranked according to their relationship with full verbs, the more 'verby' the element, the more verbal characteristics it will display in surface structure. We owe a debt to Lakoff (1972) and Ross (1972, 1973) for the notions "fuzzy", nouniness, verbiness etc.

Given this fuzzy continuum, we can then account for the fact, for example, that in certain languages there will be no form analagous to the English 'participle'. More generally, we may state that the division of the continuum or 'spectrum' is arbitrary, and to a certain extent language specific. Thus, although we might term as 'participial' a form in one language, it may well represent a wider or narrower functional range than a form termed participial in another.

Basically, all non-finite forms of the verb may be termed subordinators. That is, their function is similar to a subordinate clause, but obviously more condensed in structure. To give a definition of such forms as PARTICIPLE, INFINITIVE and GERUND we must therefore firstly state as their primary function the role of subordination. From the overt characteristics of the gerund, then, we may conclude that it is the 'nouniest' category of the non-finite forms discussed above.

Up till this point we have gratuitously assumed that PART, INF and GERUND are indeed non-finite verb categories. We base this assumption on the fact that all three display some verbal characteristics. We hold here that the critical test for verbness is ability to govern an 'accusative' object (given that the verb form is transitive). That this is a critical demarcation test for a noun-verb distinction is borne out by the fact that true nouns govern objects in the 'genitive case'. Further, INF, PART and GERUND may be defined as non-finite verb categories, since they may not display distinctions of tense, voice or number concord.

Within this work, however, certain terminological discrepancies may be noted. For example, we retain the term 'inflected infinitive' for the OE form TO + X - ENNE when in terms of the above definitions it should rather be classed as a gerund, given its overt dative case marker, and its particular function in the language system. The term 'inflected infinitive' was retained because many textbooks still label it thus, and because the term verbal noun/gerund is utilized to mark the innovation of the -ING form as a gerund. We do, of course, hold that the functions of the TO- INF and the verbal noun in -ING ^{were closely related. Further we talk in terms} of a coalescence of the markers of the ME participle and gerund resulting in a confusion of the original functions of participle and gerund. This approach is adopted to make clear the fact that these once distinct forms coalesced under a single marker.

Essentially, in terms of the 'non-finite verb spectrum' all that has happened in the merger of the participle and gerund is that one marker, -ING, comes to realize a larger part of the continuum. That is, the -ING form marks both verbal adjective and gerundial function. The outcome of this situation is one of the central problems to be discussed in the following chapters.

It is appropriate also to define our use of the term functional load which will be employed in discussions below on the development of the form BE + PRES PART as a verb form. Essentially, our use of the term does not merely hold that when optimum distribution of features in a language system is distorted, language change will occur as a compensatory measure. (Jespersen (1941); Martinet (1962)). Rather, following Bever & Langendoen (1972: 83) we hold that this latter is a false assumption, and that functional load should rather be regarded as a measure of the optimum frequency of a feature with respect to its information load. We argue that this should be measured against the mechanisms of language acquisition and use. That is, if a construction is used for many different communicative purposes, it will be both difficult to learn and to use. This then will be a potential case for re-distribution of functional load. We shall adopt this use of the term below.

CHAPTER TEN

The expanded form 'BE and the present participle'
in Old English

10.00 The line of investigation

In this chapter we will be concerned with the development of the OE periphrastic form BE in conjunction with the present participle. We shall attempt to discover its origins, its semantics, and its status as a verb form.

10.01 The evolution of the Indo-European participial form

Kurylowicz (1964:58) states that the participle in Indo-European is, morphologically, a deverbative abstract which may represent a 'second verb' within a sentence. He further proposes that the participle should be considered a derivational category as opposed to the other major deverbative abstract, the infinitive, which he considers to be inflectional. This he corroborates from evidence which shows that the infinitive can be built from any verb root or stem, whereas the participle is a limited class.

He proposes that the evolution of the participle in I-E came about as follows. The derivational verbal abstract in I-E was realized originally as a verbal adjective, or substantively, as an agent noun. As an adjective, this deverbative could function

1. as an attributive to a noun ... Latin litteris scriptis

2. as a predictive relation ... Latin litterae scriptae sunt

At some definite moment in the history of the I-E languages (different for each language) if function 2 prevails and becomes dominant, then the verbal adjective may be incorporated into the verbal system, and may achieve the capacity of verbal government, or rection, i.e. being able to take an object, as well as continuing its ability to enter into agreement with a noun.

Thus, the participle, a deverbative nominal abstract incorporated into the verbal system has the capacity to mark a subordinate clause without any explicit subordinate marker:

(a) nautae dormientes a militibus necatae sunt

The sleeping sailors/the sailors who were sleeping while the sailors were sleeping, they were killed by the soldiers

(b) Dum nautae dormient milites illos necaverunt

While the sailors were sleeping they were killed by the soldiers.

This function of the participle is utilized as yet in English:

Coming down the road, I saw a really funny thing happen

10.02 Functions and derivation of the participle & its marker

The I-E present participle, with which we are concerned in this study, is derived from the present stem of the verb conjoined with the nominalization infix of NT. This NT nominalization device was also productive in

forming agent nouns, such as OE laerend, or the relic form we find in ModE friend. This NT infix was also productive in the formation of the gerunds and gerundives. Consider Latin participle and gerund: *ferens/ferentis: ferendum*. On the relationship between the participial and gerund/gerundive forms in Latin, Gildersleeve and Lodge (1968) state that:

The most plausible theory connects the forms in -NDU- with those in -NT- as being verbal nouns originally without any distinction of voice. The significance of necessity (in the gerund and gerundive) comes mainly from the use as a predicate. The gerundive is passive; the gerund like other verbal nouns is theoretically active or passive... The gerundive is a verbal adjective, which produces the effect of a progressive participle. Whenever a participle is used as a predicate it becomes characteristic and good for all time. As amans not only equals qui amat but also qui amet, so amandus equals qui ametur.

(1968:§251, note 1; § 426, note 1)

In Latin there is also a connection between the verbal noun INF and the gerund, in that the latter acts as the oblique form of the INF, apart from the objective.

In Latin and Greek, the major use of the participle seems to be as an appositive in predicative relation that is, behaving like an adjective but in agreement with the noun but forming a predication through conjunction with a verb. Further, in classical Latin the participle very seldom has verbal rection, i.e. can govern an object, although it also declines as a noun. Thus, the gerund may appear in such constructions as:

Homines ad deos nulla re propius accedunt, quam salutatem hominibus dando (Cicero Lig. 12.38)

'Men draw nearer to the gods by nothing so much as bringing deliverance to their fellow men.'

Thus it would appear that the gerund is more integrated into the verbal system than the participle, in that it has verbal rection.

10.03 The OE periphrastic form BE + PRES PART (ENDE) - a finite verb form or not?

The problem in dealing with the construction BE + PRESENT PARTICIPLE henceforth (PRES PART) is the establishment as to whether or not it should be treated as a syntactic unit or not. We have seen that in Latin participial constructions are usually appositive, and so it would seem they are in the earlier Germanic languages. However, some scholars, notably Mossé (1938) consider that BE + PRES PART is a syntactic unit, a periphrastic verb denoting "imperfective aspect."

Kisbye (1971) states that originally in Germanic the present participle was incapable of verbal rection, and that this was a secondary feature which emerged primarily in OE of the Germanic languages, supported by the influence of Late Latin, where the PRES PART has verbal rection. He notes further that this truly verbal quality was not a feature of the PRES PART in poetry and non-translational literature in the Germanic languages. He further instances gloss translations in OE where the glossator was reluctant to translate a Latin present participle with the OE. Thus Kisbye (1971, I 81-3) notes

rogans eum: gebaed hine

videns iesus fidem: gesaeh þe haelend geleafa

However, though there are not a great many structures with BE + PRES PART as seeming verbs in the early attested data

of the Germanic family, it does seem to operate as a fully verbal structure, and thus capable of verbal rection, adverbial government and other verbal functions. Thus:

GOTHIC

was Iohannes daupjands
John was baptizing

[Mark I:4]

wesun siponjos...fastandans
the disciples were fasting

[Mark II:18]

sijais waldufni habands ufar taihun baurgim
have you authority over ten cities

[Luke XIV:17]

OLD HIGH GERMAN

was thaz folc beitonti Zachariam
'erat plebs expectans Zachariam'
The people were looking at Zacharias

The traditional explanation of the form BE + PRES PART

with verbal rection is that it appears in the Germanic languages at a time of heavy influence from Latin, and Greek. We have already considered the possibility of contact as a source of language change (chapters ^{four,} six and seven) but rejected it as a primary motivation. However, we may say that certainly, influence may be considered as secondary, boosting, motivation, especially here. More interesting is the hypothesis that the Germanic language systems were changing from synthetic to analytic and that this particular development is part of the whole movement.

We have already held that the Germanic two-tense system could be considered consonant with Jessen's (1975) aspectual residuum, the 'temporally-structured proposition corresponding to the extralinguistic situation being described. In OE, the present tense could represent

either present, future or generic (imperfective) 'time', while the 'imperfect tense' could represent either imperfective action-in-past-time, or perfective action-in-past-time.

Thus a situation "not complete" or "continuative" (linked to imperfective aspect) was represented in OE by the "present" and "past" tenses. Thus:

þeos woruld .. nealaecþ þam ende
this world is approaching the end

and

was se cyng .. on fære mis þære scire þe mid him fierdedon
the king was on his way with the shire-men that were
campaigning with him

However, Quirk and Wrenn (1955: 77ff) note that when a verb which is lexically perfective is utilized in the kind of propositional-type aspect defined by Jessen (1975: 363) which is here continuative, a different construction is often used: the inherently perfective verb is accompanied by a participle or infinitive. Thus:

Ða com Grendel gongan

and

fleogende com

Further, there do seem to be many instances in OE where BE + PRES PART is utilized 'deliberately' to denote the continuation of the action in the situation represented, thus suggesting a direct connection between the two structures. Examples of this latter structure with the 'continuous' action are:

Ær þæm þe Romeburg getimbred wære 1111 hunde wintrum
 ond hundeahtatigum, Uesoges, Egypta cyning, wæs
winnende of suððæle Asiam, oð him se mæsta dæl
wearð underþieded. Ond he Uesoges, Egypta cyning,
was siþþan mid firde farende on Sciþþie on þa
 norððæles, ond his ærendracas beforan asende to
 þære ðeode

(Alfred: Orosius)

þa hie hamweard wendon he westan þære ie Euftrate,
 ealle Asiam hie genieddon þæt hie him gafol guldon,
 ond þær wæron fiftene gear þæt lond herigende ond
westende, oð heora wif him sendon ærendracan æfter,
 ond him sædon þæt hie oðer dyden, oðþe ham comen
 oððe hie him woldon oðerra wera ceosan

(Alfred: Orosius)

ond ymbutan þone weall is se mæsta dic, on þæm is
iernende se ingefoglecesta stream; ond wiðutan þæm
 dic is geworht twegea elna heah weall, ond bufan
 ðæm maran weall ofer þone ymbgong is mid stænenum
 wighusum beworht

(Alfred: Orosius)

Hio þa seo cwen Dameris mid micelre gnornunge ymb
 þæs cyninges slege hiere suna þencende wæs, hu heo
 hit gewreca mehte

(Alfred: Orosius)

þu þe þyrstende wære monnes blode xxxwintra,
 drync nu þine fylla

(Alfred's Orosius)

Examples 'translational' from
 Latin, but accompanied by state
 adverbs

Presumably, Quirk and Wrenn wish to imply that the
 conjunction of a lexically perfective verb and the
 'timeless' participle in combination make a predication
 where the participial function and the lexical content
 of the verb of motion make up an 'imperfective' periphrasis.
 However, complete acceptance of this argument is vitiated
 on realization that the participial forms have lexical
 content also. However, the potential connection between
 structures consisting of verbs of motion and participles
 and BE + PRES PART will be discussed below.

It is a traditional controversy among scholars as to whether these forms composed of BE + PRES PART are in fact a syntactic unit, or whether they are separate units, and the participle should be construed as substantive. Thus, it is argued, the forms noted above could derive from forms such as

he was on temple lærende

where it is possible that lærende may either be the 'equivalent' of a participial clause, or a substantive.

Scholars have disputed whether the text containing the above should be amended to lærend, the true substantive.

Thus it may well be the case that of decisive importance in the development of the form BE + PRES PART is the point of contact between it and the agent noun in ENDE.

Moreover, as Kisbye (1971, I:29n.3) points out, the high frequency of agent nouns in OE as opposed to other Germanic languages may account for the fact that BE + PRES PART develops more strongly in OE than in the other related languages of the Germanic family.

The acquisition of verbal rection of the form BE + PRES PART must in some way be due to 'functional load' on the simple 'present and past tenses', and also connected with the fact that the form is in accordance with the isolative characteristics developing in OE, as we have discussed earlier. In early OE the participle was incapable of governing an object in the accusative case, but governed a genitive object, as nouns, thus

manifesting its nominal origins. Bøgholm (1939:6) notes that this is the case, and gives the following as illustration:

was þæs þe þan ehtres fleonde

Moreover, the participle declined in early OE according to the JA/JO declension again betraying its nominal origins. By the end of the OE period, however, the participle did not decline and agent nouns in END(-E) had lost the final -E of the suffixinal ending, which aligned participles completely with the agent nouns, (now typically with the suffix -END. Such evidence could point to a possible confusion between the agent noun and the participle in construction with BE, thus accelerating the development of the verbal form BE + PRES PART.

10.04 A detailed study of the Old English present participle and its functions

In this section we will try to establish what functions the form BE + PRES PART has in OE. Within the OE period, speakers utilized the participle in -ENDE in the following functions, set out as in Kisbye (1971: I, 25-27)

1. Independent use:

deverbative agent nouns in ND, e.g. hælend the participle is also used substantively:

and cyste hyre fæder and þa ymbsittendan

(Appollonius of Tyre)

2. Dependent use:

(i) as an attributive adjunct:

to þam plegendam cyngre (Appollonius of Tyre)

(ii) predicative (a) in the subject relation,¹ the connecting verb, chiefly one of rest or motion, approaches AUX status:²

þa com se Hælend to hym..gangende

(St. Matthew)

- (b) in the object relation,⁸ forming a dependent participial nexus:

Ic geseah þone scuccan..feallende adun
(Aelfric's Homilies)

- (c) as a clause equivalent

(I) equivalent to an ADJ clause

and bæc geongra manna plegan on handa, to
þæm bæpsteðe belimpende (Appollonius of Tyre)

(II) as an ADV clause equivalent

þe hine æt frumsceaft forþ onsendon/ænne
ofer yðe umbor-wegende (temporal) (Beowulf)

ne ongyte ge þæt eall þæt utan cymþ on þone
man ganyende ne mæg hine besmitan
(conditional) (St. Mark)

(III) used coordinately, the participial equivalent to a clause

þacwæp he his fæder and swariende (St. Luke)

Kisbye (1971) also notes the use of the 'dangling' participle, so called because the participle has no relation to the subject of the principal clause, and thus coming to act as an independent or absolute adverbial adjunct, which has been in evidence from OE right till ModE:

and þus cweþende, fyren wolc astah (Blickling Homilies)

It would seem then, from the functions of the participle above-noted, that in fact the participle is partly nominal and partly verbal. The point that we have to define is exactly how verbal the participle is when it appears in constructions of the form BE + PRES PART.

Through the OE period, the periphrastic forms composed of the verb BE + PRES PART are employed frequently, with a marked increase in frequency towards the end of the OE period. Thus, though in EOE they are more commonly

found in texts derived from Latin originals, by LOE they appear commonly in original prose. Kisbye (1971¹²) notes that in the Blickling Homilies, the expanded form seems to occur more frequently than the simple present tense form, (though it should be noted that the Blickling Homilies owe a debt to a Latin original) but that in the earlier OROSIUS (Alfred) there is only one instance of the form in the non-translated passage containing the tale of the voyages of Othere and Wulfstan. Further, the whole of BEOWULF has only three examples, THE CHARMS one, and there are none in the RIDDLES. It is a traditional position that the occurrence of BE + PRES PART is not native, and that it was brought into the language as a vehicle for translating certain Latin syntactic constructions. For example, the form is often used in interlinear glosses to translate Latin deponent verbs, without any regard for anything but literal rendering, word-for-word. Thus:

muþ heara sprecende was in oferhygde

os eorum locutum est in superbia (Vespasian Psalter)

Further, the periphrasis sometimes (in the translational works) corresponds with the Latin present participle and a form of ESSE. Thus:

Stondende werun foet ure in cea⁸furtunum pinim

stantes erant pedes nostri in atriis tuis

and also the BE + PRES PART form is used in correspondence with clause equivalent constructions of the following type:

erat in templo docens

he was on temple laerende

Thus many scholars consider that the form is nothing but a reflex of the Latin idiom, just as it has been argued that similar developments in the other Germanic languages were due to the influence of works in Latin and Greek. Certainly, it cannot be denied that at this time, the Germanic cultures were being flooded by Christian material in the form of religious texts, most of which were in Latin and Greek. However, a crucial factor would seem to be that the form does exist quite extensively in the extant texts available, translational or not. We hold that because of its frequency, it cannot have been merely a calque, in that it must have been consonant with the language system of the time to be given use at all.

10.05 Some putative origins of the expanded form

Kisbye (1971, I:29) outlines three forms as crucial in the development of the verbal structure BE + PRES PART. Firstly, he considers the clause equivalent function of the participle, as he was on temple lærende. Secondly, he considers copula and predicate adjective types, as hit is scinende. Thirdly, and most crucially, he considers forms such as he cwom gangende.

This third type is of early Germanic origin (as are the other two) and indeed seems to be found in earlier languages of the I-E group.

EXAMPLES OF VERB OF MOTION + PARTICIPLE

ic afeorrade fleonde
elongavi fugiens
 Vesp Psalter 54, 8

iohannes com ne etende ne drincende.. Mannes sunu com
ætende & dryncende
 OE Gosp Mt 11, 18

heofonfugas, þa þe lacende geond lyft farap
 Azarias 143

þa earman bearn.. ferdon worigende
 Ælfric Hom 2, 30

Nalles æfter lyfte lacende hwearf middelnihtum
 Beowulf 2832

This particular construction seems to be a variant of the common I-E structure, ACCUSATIVE + INF. It is difficult to gloss such structures, cwom gangende being glossed (hopefully) as 'came coming'. In fact, it seems that the participle adds nothing to the lexical content of the 'main verb'. It seems that a possible explanation of such structures may be derived from a comment made earlier, that verbs which take such participles, as cuman in cwom gangende, are terminative verbs of motion, and, by extension, Rest, that is, are essentially perfective. It seems that these constructions essentially reflect the break-down of an earlier system of representation of aspectual categories.

10.06 Modes of representing aspectual distinctions in the Germanic languages

We have noted that it is traditionally held that, in I-E, aspectual distinctions of perfective; imperfective were made, but that this system later broke down. In Gothic, however, there seems to be a renewal of the category of aspectual differentiation of imperfective and

perfective. Instead of the verb stem or root as the indicator of verbal aspect, Gothic makes the distinction as perfect versus imperfect through the presence versus the absence of the affix GA. Kuryłowicz (1964) outlines the development as follows:

1st level - <u>ana-meljan</u>	<u>meljan</u>
'to write down'	'to write'
2nd level -	<u>gameljan</u>

That is, certain primary verbs, like meljan, formed derivatives with GA as a prefix. Kuryłowicz however, is of the opinion that compound verbs like anameljan did not, however, need to make a transformation of the type evidenced by meljan, in that already they were lexically perfective. Stage two of the process outlined above is that meljan and gameljan become two grammatical forms of the one lexical unit, indicating respectively imperfective and perfective. Anameljan, however, remains primarily non-terminative, with the secondary characteristic of terminative action lexically inherent. Thus, Kuryłowicz states:

As an inflectional form, 'meljan' takes over the durative (imperfective) tense forms of 'gameljan'. Thus 'gamelip' is displaced from its primary function as present by 'melip', and limited to the secondary function as the form of the future. In the forms of the past tense ('gamelida') the role of the prefix is to denote non-durativity (punctuality, perfectivity) .. The lexical identification of 'meljan' and 'gameljan' brings about a new distribution of the two forms henceforth belonging to the inflectional system of a single verb.

(1964: 102)

A point worth noting, however, is that this method of distinguishing between perfective and imperfective was only functional in the verbs of the weak paradigm. Strong verbs did not utilize the GA prefix, and as far as can be seen, the only method utilized by the strong verbs was the I-E ablaut system, which as we have seen, was no longer fully functional in the Germanic languages. Moreover, the GA marker did not spread and remain as a marker of aspect in the later reflexes of the Germanic languages. In OE, GA reduced to GE, and survived only as a marker of (mainly) past participles, though it could appear on other parts of the verb. At any rate, by L.O.E. GE- had no grammatically significant function.

However, it may be argued that in the Germanic languages, where verbs may be derivationally perfective, inceptive imperfective, we have a system of aktionsart (Jessen 1975: 363) in operation. Characteristically, verbs of aktionsarten will lexically represent the type of situation being given linguistic representation. Thus Jessen (1975: 364) argues that they will 'identify such milestones as the birth of the situation, its death, the realization of its 'telos', its simple persistence'. Thus, if a verb inherently perfective, i.e. such as cuman, which signifies the end of a spatial (or temporal) journey, is utilized in the description of a situation which is extralinguistically continuative, then some additional syntactic information will be needed to specify the semantics of the continuing situation.

The GA aspect marker, which marked perfective, could allow a distinction between +GA and -GA verbs as a distinction between perfective and imperfective aspect. However, it seems that it was never utilized with strong verbs, thus leaving part of the verb system without an adequate perfective v. imperfective marker. Moreover, since the verbs of motion are lexically perfective or (imperfective) then being strong verbs, the perfective verbs could never mark unfinished or continuing action. Thus it may be that such structures as cwom gangende arose firstly to allow description of continuing situations in the discourse proposition.⁴ Given this and given the lack of aspectual markers for perfective: imperfective oppositions, it may well be that speakers extended the cwom gangende structure to denote unfinished action with all types of verbs, thus giving rise to a verb form which satisfies Jessen's propositional category of aspectual distinction.

That this development is possible from the point of the kind of grammar we have proposed is evidenced from earlier functions of the participle. We have noted that a major function of the participle is that it may function as an adverbial clause equivalent. Thus, in the predictive grammar of speakers, participial clauses could be interpreted as ADVERB, and so also may the participle in the structure which we are discussing. However, it seems that this argument is not fully viable

in that participial clauses behave differently from the participle in the $V_{\text{motion}} + \text{PART}$ structures. That is, the participial clauses may prepose freely, but the other does not, always following the verb of motion. It is more likely that the construction illustrated by cwom gangende came about simply by extension of its function as a nominal attribute. In this function, the participle in conjunction with the verb is representative of a predicative action correlating the subject to a particular unfinished situation. The kind of structure denoted by the verb and the participle records linguistically that the actor has not finished performing the action, not, as would be denoted by, say, imperfective aspect, that the action alone is unfinished. This latter fits the category of propositional aspect, as discussed above (chapter eight 8.03).

10.07 The expanded form BE + PRES PART in OE - a new aspectual distinction?

From such structures, it is an easy development to structures such as BE + PRES PART. We argue that speakers would extend the possible range of verbs which could form such instances of propositional aspectual distinction from verbs of motion to verbs of rest. Following Anderson (1971, 1973b) and Jessen (1975), BE is the primary verb of rest, denoting existence, i.e. that a certain linguistic proposition exists, or more concretely, that a certain extralinguistic situation

exists. By this extension, speakers have access to a method of representing in discourse that an extra-linguistic situation exists, which, at the relevant point in the discourse, is unfinished.

However, as many scholars have noted, its often the case that the periphrastic form BE + PRES PART serves simply as an equivalent of the simple 'present or past tenses', denoting action occurring at a particular point in time. Moreover, adding a complicating factor, the simple tenses can also express generic predications,⁵ of which in some sense continuative action may be termed a sub-type. Other scholars such as Mossé (1938) have argued that always with the form BE + PRES PART there is present some sort of duration of action in the semantics of the structure. He isolates fifteen distinct semantic parameters of continuative action or rather, simply, action, which he argues are the prime features of the periphrasis, such as ingression, descriptive value, quality etc. However, in a critique of Mossé, Bodelson (1938:205-209) points out that if fifteen different semantic types can be isolated, can it really be said that any specific semantic function is distinguished? Consider the following types of 'duration' which Mossé wishes to isolate:

Actuality: and þæt leoht wæs weaxende mare and mare,
and hraþe to me wæs ofstende

Limited Duration: Perseus ... on ða ðeode winnende
wæs ' of hi him gehyrsume wæron.

It seems that the problem in this analysis is that Mossé

wishes to isolate such categories as above as underlying categories of aspect, in the sense of Jessen (1975).

It therefore seems that Mossé wishes to extend the underlying aspectual categories from Jessen's three types (1975: 362-365) to a larger number of types, which would therefore include an aspect of quality, an aspect of description etc. The relevant point to be made is that Mossé confuses the lexical content of the participle with the function of the periphrasis as a whole. Rather, the category of aspect realized by BE and the present participle is diffused only when the two combine as the skeleton verb form. That is, the proposition-type denoting continuative action is only realized through the underlying semantics and thus the derivation of the component verb. The lexical content of the participle links the linguistic description of the extra-linguistic situation to the real action in the real world. That is the lexical content of the BE + PRES PART forms describes what is happening, the form how it is happening.

The fact that the simple tenses and the participial periphrasis seem to be in some cases interchangeable does, however, pose a problem. In this study we consider the BE + PRES PART structure as realizing a certain kind of aspectual distinction, that is, Jessen (1975)'s propositional type, discussed above in 8.02. That the emergence of the periphrasis is an OE development may be evidenced from the fact that in EOE the construction of

BE and the PRES PART would seem no more than a combination of BE and the participle, where the participle is purely appositive, and in no way has acquired the function of governing an accusative object. The case also seems to be similar in the other Germanic languages. The path of the development would seem to be as follows.

Structures such as cwom gangende, (composed of verbs of motion/rest and the participle, where the "main verbs" are lexically perfective or imperfective) act as a linguistic catalyst. Thus the structure is generalized to include the primary verb of location or rest, BE.

The structure with BE + PRES PART thus denotes linguistically that a situation is in existence (continuously) for the time of the extra-linguistic situation being given linguistic representation. Consider the examples below in terms of this argument. Thus:

he stod murnende

which may be glossed as

he stood as he mourned

is close in situational type to

he is murnende

Further, the argument may be strengthened by noting that as a non-finite form of the verbal system, and deriving from the I-E imperfective stem the participle itself is inherently timeless, thus adding linguistically to the appropriateness of describing an action which continues throughout the extra-linguistic situation being described.

The fact that structures composed of $V_{\text{motion (Rest)}} + \text{PRES PART}$ are related linguistically to those composed of

BE + PRES PART, and that in both these constructions, as in the participle-as-attributive the participle is essentially timeless, or continuative, thus allows these forms to be perceived as a 'new' verbal type denoting propositional action type, in this case continuative.

10.08 Proposals for the path of entry of the expanded form into speakers' structural inventories

Following Weinrich, Herzog and Labov (1968) we would argue that these new constructions would co-occur within speakers' linguistic inventories along with the older simple 'tenses' as representative of continuative action. Then we face the question as to why speakers in the first place should re-interpret old combinations of the participle (as an appositive) as part of the verb aspect system. Firstly, the simple forms of the tenses in OE were complex in function, denoting both tense and aspect,⁶ and therefore combinations of BE and the present participle would be prime candidates for re-interpretation of continuous action, given what has been said above. That this may be allowed as a valid argument may in part be substantiated by an extension of Traugott's (1972) proposals concerning the process of segmentalization. It is argued that the simple 'two-tense' system of the verb in OE does not fully represent unambiguously all the semantic categories of aspect available and necessary in describing certain extra-linguistic situations. Given this state of affairs, and given speakers' tendency

to segment to obviate complexity arising out of reduction of categories, the emergence of periphrastic isolative realizations of the underlying linguistic feature of 'continuative action' is not surprising.

With respect to the confusion, in OE, between the simple forms and the new periphrasis as representing continuative action, it is reasonable to assume that if speakers perceived the periphrasis as representing continuative action, then it is possible that at some stages of its development they overgeneralized and allowed it to represent simple point-of-time action as well.

10.09 The gradual development of the expanded form as a finite verb construction

Therefore we do not subscribe to the view that the periphrastic form BE + PRES PART arose suddenly and unaccountably as a verbal form. Rather we allow that due to the reduction of the I-E verbal system to a two-tense system in the early stages of Germanic, these simple forms in OE had become complex in function. In view of the reduction of surface structure manifestations of verbal categories, we argue that speakers resolved the situation by re-interpreting available structure, BE + PRES PART (via primarily V_{motion} + PRES PART) as part of the verbal system, denoting the propositional type of continuous action. Thus, in the face of the complexity of the existing verbal system, three factors, semantics, syntax and perceptual (re-interpretation)

interplayed to allow the emergence of the new verbal construction.⁷

Further evidence that these latter three factors are involved in the emergence of new representations for features of the verbal system may be brought forth as follows. The development of WOLDE + INF to denote the propositional aspect type of iteration (as opposed to continuous action) was parallel with the development of the BE + PRES PART as an integrated member of the verb system. Further, the genesis of the modal auxiliaries is seen in the so-called present-perfect verbs, such as magan, utan, and the genesis of 'futurity' is found with other verbs of this type WILLAN and SCULAN, both types being found in conjunction with the infinitive. Concomitant also with the development of the form BE + PRES PART is the emergence of periphrastic passives with BE + PAST PART, and also the emergence of a new combination with HABBAN/WESAN + PAST PART, denoting a type of deictic aspect, where the occurrence of a situation in the past can be linked with time co-occurrent with the time of discourse: this is of course the so-called perfect tense.^{7a}

Thus it seems that a major characteristic of the emergence of the new periphrastic forms of the verb system in OE was the reduction, or semi-reduction of full verbs to the status of AUX. We have already noted (chapters four and seven) that this is typical of languages

where old surface representations of semantic categories have been obliterated or lost all surface distinction, or have become complex. This was the situation in the Romance languages where the new passives, perfects and futures were formed from combinations of the verbs BE and HAVE in cooccurrence with participles. There also we saw that these constructions did not suddenly appear, but in fact had been present in the language system with similar meaning to the form they replaced. Thus it seems that when a language system is depleted in surface structure of forms denoting certain important semantic categories, then one path of obviating the resulting complexity or depletion is the utilization of other 'pieces of surface structure' with similar semantic content as a replacement, in this case resulting in segmented structure replacing an older analytic form.

The acquisition of verbal rection by the form BE + PRES PART may thus be reasonably postulated to have occurred at a time in the language when speakers began re-interpreting such combinations as verbal, as opposed to merely a combination of BE and the present participle.⁸ The reduction of inflections in general in OE, and the fact that the participle 'lost' its nominal inflections may well have been caused in part by speakers perceiving the participle as more verbal than nominal, or the loss of inflection may have 'encouraged' speakers to perceive it as a verb. In any case, by LOE, the form BE + PRES PART

appears to be part of the verb system, its primary function being to denote the proposition-type of continuative action.

In this chapter, then, we established that the form BE + PRES PART (-ENDE) seems to have denoted in OE a type of propositional aspect, in this case continuous or unfinished action. We further argued that this type of propositional description is only possible because of the underlying character of the component parts. That is, both BE and the PRES PART inherently are atelic, and thus in combination produce a structure whose frame may describe unfinished action. Thus the description of the extra-linguistic situation is furnished by the lexical content of the participle, while the frame BE + PRES PART denotes that the situation being given linguistic expression is unfinished at that particular point in the discourse.

Footnotes to Chapter Ten

- ¹ that is, its 'subject' is coreferential with the subject of the 'connecting verb'.
- ² Its 'object' is coreferential with the object of the 'connecting verb'.
- ³ Here, we take 'approaching AUX status' to mean that the verb of rest or motion is lexically depleted, and may have been grammaticalized as the predicative verb. That is, the participle carries the lexical and thus discourse information, while the 'verb of motion/rest' indicates the predicative functions such as tense, person etc. In combination, the participle and verb denote a higher verb structure.
- ⁴ Interestingly, constructions with the participle and the verb of motion are found early in the Indo-European group, e.g. Hittite. This may mean that even at this early stage the pure aspectual system had its inherent drawbacks. For examples of such, see Mossé (1938, §23)
- ⁵ Generic predications here include 'true' generic statements such as salt dissolves in water, habitual predications as Bill visited us each Thursday/on Thursdays and iterative predications as Suzie eats popicles all the time etc. OE examples: wyrd bið ful aſeð; Heofena Rīc is ge lic
ƿæm hi redes eadſe
- ⁶ It would appear that the 'simple' forms of the verb even today can denote such aspectual distinctions, being preferred to periphrastic combinations. Thus Wakelin (1972) shows that Lincoln dialect speakers would say the kettle boils (rather than is boiling), it rains (rather than is raining). Also he finds dialectal occurrence of examples such as How's get on - deriving this from How dost thee get on? - utilized in preference to how are you getting on? (1972: 121)
- ⁷ Following Bailey (1973) we hypothesize that the spread of the innovating continuative proposition-type in BE + PRES PART (ENDE) would most probably have spread from one language group or class outwards, till it reached the point of usage exemplified and attested in the available data. We would argue that its path to a verbal form, then, would be through a spread through social classes and over generations by contact of isolects (certain areas/classes where certain forms are utilized as marked or unmarked variants). However, appealing though this theory may be, it seems that its use in this far-removed historical data could only be speculative: we do not possess adequate information on language usage according to social class.

⁸ To gloss the reinterpretation operation in this context is not difficult. We have shown above how the combination BE + PRES PART may well have arisen as an extension of the cwom gangende forms, which themselves seem to have been a complex aspectual innovation. Thus, in contexts where the situation described is unfinished, BE + PRES PART may well have been the linguistic device utilized in the representation, whether or not it could officially be classed as a 'verb' or not, i.e. whether it governed an object, or adverbials, could passivize, or not. However, there will have been situations where the simple tense forms and the periphrasis could both appear without altering the information value of the discourse. Given enough of this open-choice between the two forms, speakers would eventually begin to utilize the periphrasis with the above-noted verbal trappings, because of its availability in certain 'slots' as a variant of the simple tenses. Given its use in verb 'slots' and its analagous development of verbal characteristics, its usage would spread throughout the range of the simple tenses (as denoting continuous action) and throughout the language community. Thus, it would become available to all speakers in verbal function as a variant representative of continuative action.

7a. Examples of other innovating analytic verb forms

(i) HABBAN + PAST PART [transitive verbs]

Hæfde se cyning his fierd on tw tonumen

(ii) BEON/WESAN + PAST PART [intransitive verbs]

swa clæne hio lar was oðfeallenu on Angelcynne

(iii) BEON/WESAN/WEORFAN + PAST PART ⇒ Passive

Aefter fæm fe Romeburg getimbreod wæs

(iv) WILLAN + INF ⇒ FUTURITY (?)

Fa Darius geseah fæst he oferwinnan beon wolde

} "Perfects"

CHAPTER ELEVEN

The development of ING as the marker of
participial function in Middle English

11.00 Preview

In the previous chapter we discussed the evolution of the periphrastic verb form BE + PRES PART (-ENDE) in OE. In the following pages, we shall attempt to characterize the development of this form in ME, and to document some arguments for the innovation of what is termed the participle in -ING.

11.01 The ING controversy

The evolution of the form BE + PRES PART (in ING) has been the subject of much scholarly debate in the last few years of linguistic research. It is traditionally accepted that the participle in -ING may be defined syntactically as partly a gerund and partly pure participle. Thus (a) exemplifies the former, and (b) the latter:

(a) His coming upset me

(b) Laughing all the way to the bank, Fred cashed in the proceeds of his bank robbery

To define our terms, we hold that a participle is a verbal adjective which behaves syntactically as an adjective (i.e. as in attributive relation to a noun, but which can be replaced by finite parts of the verb to give almost identical meaning). Thus a participle may be said to be an adjective with verbal powers. A gerund,

however, is a verbal noun, and as such retains nominal status in that it governs a genitive (of..) object, as nouns, and has thus less verbal character than a participle. Further, the gerund takes a determiner, which participles do not, and thus may be considered as nominal in usage and syntax.

11.02 Outline of analysis

Most scholars would agree that three functional categories are involved in the evolution of the ModE forms of the participle/gerund in -ING, namely the older form of the participle, the form in -ENDE, the infinitive and the gerund (or verbal noun). The period when this hybrid form evolved may be taken roughly from the LOE to the LME period, that is, from mid 10th to the 15th century. Therefore at this point it is appropriate to outline the functions of the verbal noun and the infinitive in OE. We have already discussed the functions of the participle in -ENDE in the last chapter.

11.03 The infinitive - form and function in Old and Middle English

In OE there were two forms of the infinitive in use, the inflected and the uninflected. To consider the uninflected infinitive firstly, it is descended from a fully inflected action noun formed by means of various suffixes in the I-E languages. The I-E suffix *-ono- was to develop into the Germanic INF ending -AN as found in OE, OHG (Old High German) OS (Old Saxon) and Gothic.

Secondly, the inflected INF is formed from the basic infinitive found in P(imitive) G(ermanic); it was inflected according to the AJ/JO declension, the case endings appearing in OE as ENNES (gen.) and -ENNE (dat.). Later these inflected forms came to be prefaced by the preposition TO, which is an innovation common only to the West Germanic languages of the group. Thus as an example of the inflected infinitive in OE

for þæm we selfe magon seodan þa þing þe to seodenne
(Ælfric's Colloquy)

sint and brædan þa þing þe to brædenne sint
(Ælfric's Colloquy)

The participle TO is historically an old preposition (and adverb) meaning towards and the infinitive thus denoted the GOAL to which the activity of the main verb was directed. The directional force of TO is particularly noticeable after a verb of motion, itself directional in force:

Seo for þa mid me to onfonne minum cynerice

'ad regnum percipiendum' (Appollonius of Tyre)

In OE, however, the genitive ending which is attested in OHG and OS fell into disuse by the time of pre-literary OE, and (cf Mustanoja (1960:513)) even in OE, mainly in poetic texts, the dative INF is coalescing with the uninflected INF in function (see later for a fuller discussion) as

Mæl is me to feran

where the uninflected INF appears after TO, normally prefixing the inflected INF. The collapse of the markers was complete by ME for the most part, though Chaucer (Mustanoja, as above) uses to seyne.

The development of the goal directional INF in early

West Germanic, especially in the development of the INF marker TO, may be seen as a replacement for the older uninflected INF. Originally (Kurylowicz 1964: 162) the old INF was marked as being in the accusative case, one case which typically was a case of motion-toward (cf. Latin domam ire), and was functionally opposed to another INF form which displayed a petrified suffix derived from an old dative case. The two forms later coalesced, according to Kurylowicz because of the growing factor of isolative modal verbs governing INF in the accusative, or goal, case. Germanic speakers may have innovated the new form with inflections, (and latterly with TO) to strengthen the infinitival function of PURPOSE. The utilization of the prefix TO in conjunction with INF will be discussed later with respect to change in serial order in English from SOV to SVO.

The infinitive has verbal rection (i.e. governs an accusative object), is a non-finite form of the verb with the further distinction that it can mark subordination. Thus in predicative function, it presupposes the existence of two separate verbal actions, one primary represented by the 'main verb' and one secondary, represented by the INF plus an explicit or implicit subject.

The innovating form of the INF, in classical OE found with TO (i.e. the inflected), prevails over the older form in nominal functions, being explicitly more nominal in form. Kisbye(1971:12) notes that the form with TO appears in subject function, but only after impersonal

expressions, as

him is leofre to feohtanne¹

It also appears in object function, as a predicative complement after a copula and in the predicative type 'to be to', which is arguably based on the joint influence of the Latin gerundive and future participle as

hi þonne wæron fram him ece mede to onfonne
eterna illo præmia essent percepturi

It also prevails over the uninflected form as an adjunct to nouns, and also as an adjunct to adjectives, and as adverbial adjuncts denoting purpose:

he cymb eft to þam micclum dome, to demenne eallum
mancynne (Ælfric's Colloquy)

Further, it is used absolutely as

þider sculan þeofas and, hrædest to secganne, ealle
þa manfullan (Wulfstan's Homilies)

The uninflected infinitive is maintained almost fully in subject position as

lufian his nehstan swa hine sylfne is mare eallum
onsægdryssum (St. Mark)

and also is utilized primarily in object functions, and the uninflected INF prevails after auxiliary or quasi-auxiliary forms such as CUNNAN, WILLAN, SCULAN, MAGAN, MOTAN etc.

The uninflected form also appears in the infinitive nexus or ACC + INF with verbs denoting command, causation and perception. Further, the infinitive without inflexion appears adverbially with verbs of motion as

þa hie to sele furþum in hyra gryre-geatwum gangan cwomon
(Beowulf)

and

nu ge moton gangan ... Hrothgar geseon

However, though some functions remain in the OE period distinctively attributable to representation by either the uninflected or the inflected infinitive, the reduction of the old preposition TO to a meaningless infinitive sign is, as Kisbye (1971, I.7) points out, illustrated by a perceptible increase in the use of the TO-infinitives in functions hitherto reserved for the uninflected infinitive. Further, great confusion as to the use of the infinitives seems to arise. Consider:

gearowe wæron ehtnysse to þolōgenne and deaðe sweltan
gif hi þorfton

where the inflected and the uninflected infinitives both appear, apparently performing the same function.

Moreover, as we have seen, the loss of inflection after TO form, occurring mainly in OE poetic texts, while perhaps being originally due in these texts for stress purposes, must have had some basis in ordinary language. At any rate, the TO-INF does occur without the full dative ending, giving a marker in OE which is morphologically equivalent to the uninflectional form of the INF. Further sound changes in ME removed the inflectional ending completely.

11.04 The origins of the Middle English gerund in -ING

The derivation of the abstract action noun (of which the ME gerund is the reflex) is rather more complex. To derive these nouns from denominative verbs,² the suffixes -NKA (Gmc -UNGO) and -ENKA (Gmc -INGO) were used.

The distribution of these suffixes is very uneven, OHG showing mainly -UNGO, O(1d) N(orse) showing mainly -INGO, and OE showing both. It is remarkable that these suffixes did not appear in Gothic or anywhere outside the Germanic group. In OE -ING/UNG were the reflexes of the above suffixes utilized in the derivation of these abstract nouns. It appears that originally in OE -ING was suffixed to Class 1 verbs, as

gemetan gemeting

fedan feding

spillian spilling

while -UNG was suffixed to the larger class 2

bledsian ... bledsung

cweacian ... cweacung

cleopian ... cleopung

This regularity would account for the relative paucity of -ING forms in the earlier literature of OE. There seems however, to be an increase in the number of -ING forms to the detriment of any distribution according to verb class. Variant forms such as leornung: leorning and getacnung: getacning are relatively common especially in later texts.

The developing tendency for the occurrence of -ING seems due to the interaction of a number of morphological and phonological factors. Kisbye (1971, 152) following Langenhove (1925: 1ff) outlines these factors as follows:

1. in some texts, notably earlier ones, there is a pronounced tendency to prefer -ING before the

back vowel of the dative plural. For example, *Vespasian Psalter* has geamrung but geamringum.

2. Compounds seem to 'prefer' -ING from early OE on, for example, leornung but leorning-cniht.
3. While the -UNG suffix confines its bearer to the abstracts of the strong feminine declension, the -ING is more versatile, functioning also as the suffix of masculine and feminine concrete abstract nouns. Abstract nouns which come to be used concretely are apt to adopt an analogous -ING.
4. The general trend of LOE onward is toward unrounding of vowels in unstressed syllables, illustrated by spellings like -ENG and -ANG for earlier -UNG.
5. The analogy of Scandinavian -ING.

All these factors seem to have contributed to the emergence of -ING as dominantly representing the deverbative noun suffix.

Functionally, the UNG/ING forms display all the characteristics of a noun. As subject, object and predicative complement they can often be substituted for an infinitive. However, it is held that this interchangeability does not so much denote the verbal status of the deverbative nominal but rather the nominal status of the infinitive. This interchangeability between the gerund and the infinitive is found more frequently in LOE. The following nominal properties of the gerund should be noted, following Kisbye (1971, I:52f):

1. they follow the strong feminine declension
2. they may be governed by prepositions, e.g. ymbe nedinge
3. they may enter freely into compounds, e.g. leorning-cniht

4. They may function as subject, e.g.
ælc bletsung is of Gode, and wyrigung is of
deofle. (AElfric's Homilies)
5. they may function as object, e.g.
and gearca us gereordunge on þinum huse
(AElfric's Homilies)
6. they may function as a predicative complement
after a copula e.g.
þære sawle hawung is gesceadwisnes and smeaug
(Alfred's Soliloquies)
7. they admit of a preceding adjective, demon-
strative and possessive pronoun
læt nu þine micclan cwyrlmunge (AElfric's Lives of Saints)
seo reafung þæs Persiscan feos (Alfred's Orosius)
þas getacnunge sceal gehwile cristen man, healdan (AElfric's Homilies)
for ðam ahefen ys þin myclung ofer heofonas (Alfred's Psalms)
8. they take an object in the genitive, e.g.
and in leornunge haligra gewrita
(Alfred's Bede)
9. they take a subject in the genitive, e.g.
þapa he gefredde his deapnes nealæcunge
(AElfric's Homilies)

Thus it can be seen that the deverbative noun in ING was indeed treated syntactically as a noun in OE.

Given that the 'new' present participle and the gerund form in ModE seem to be derived from the -ING form (except for ModScots), we have to discover how this situation came about, and also how the -ING form of the participle acquired verbal rection, given the above statement about the function of the -ING/UNG form in OE. Firstly, however, Kisbye (1971) notes that there is some OE evidence that in certain circumstances the verbal noun would seem to have verbal rection, i.e. it would appear to govern an object in the accusative case. Thus:

in gemoetinge folc in annesse and ricu þæt hie
þiowien dryhtne

'in conveniendo populus in umun et regna ut serviant
Domino'

(Vespasian Psalter)

and

in þon gerecep ging weg his in haldinge word þin

'in quo corrigit juvenior ~~viam~~ suam in custodiendo
tuos'

(Vespasian Psalter)

The opinion that the verbal noun could have 'verbal force' is held by Curme (1914: 491ff) and Callaway (1929: 32ff). Also, it seems that another possible corroboration of verbal force in the verbal noun in OE may be found in Curme's (1912: 351ff) claim that it takes adverbial modifiers. Kisbye (1971) does not however allow that the evidence provided in Curme and Callaway is sufficient for stating that the -ING/UNG form in OE had verbal force; most of the examples are from Latin interlinear glosses and as such are suspect. We, however, do not admit that interlinear glosses should be dismissed, holding that to be used they must be fairly consonant with structures in the native system.

11.05 Some theories concerning the development of -ING as the marker of participial & gerundial function in Middle English

The -ING form of both the gerund and the participle of ModE seems to be derived from the OE verbal noun. We have seen that in OE the participle, the verbal noun and the infinitive are all by definition non-finite deverbative abstracts, but that the participle and the infinitive would seem to have verbal roles of syntactic subordination.

Here, we hold that at some point in the ME period, a change came about so that the old participle in -ENDE was replaced by the form in -ING. We therefore have to investigate how this change may have come about.

The period in English during which the evolution of

the new form in -ING came about was also a period when many inflectional endings were either collapsed with other endings, through phonological reduction, or, later, lost altogether. It is traditionally held that certain phonetic processes affected the realization of the participle suffix -ENDE, with the result that in form and function it collapsed with ING. The process will be outlined in this study.

If it is accepted that the derivation of the Mode gerund/participle must be in terms of an evolution from the verbal noun of OE, the form in -ING, then we have to inquire into the process of this development, and how the form in -ING came to be able to fulfil the syntactic role of the participle.

11.05 Curme & Armstrong's theories

We have seen, as outlined above in section 11.00, that there are sporadic occurrences of the verbal noun in -ING/UNG with an accusative object, but that practically all are from interlinear glosses from the 9th to 12th centuries. These occurrences have lead Curme (*E Studien* 1916 and *Anglia* 1916) to assume that the gerund, or verbal noun with verbal rection, was a native phenomenon, and not due to Latin influence. In his *Syntax* (p. 484) Curme states that, as a modification to his previous views, the development of the gerund was most probably facilitated on the analogy of the present participle in ENDE, due to certain phonetic and phonological processes

which had rendered their morphological markers non-distinct.

This view is similar to that held by J.L. Armstrong (1892: 200-211) who believes that what he terms the ME 'gerund' dates back to the OE form in ING/UNG. Curme, however, differs from Armstrong in holding the belief that the merger between the participle and the verbal noun was also connected with certain processes affecting the inflected INF. Thus Curme believes that the participial ending in -INDE reduces (loss of [d]) and thus the INDE spelling becomes available as a spelling for the inflected INF, that is -ENNE, with whose realization it is now homophonous. Armstrong, however, holds that the inflected INF, whose morphological marker in EME seems to have become homophonous, or similar to that of -ING, had no part whatsoever to play in the development of the verbal noun as part of the verb system. His argument is as follows: in the earliest recorded stage of the language, the dative of the INF, often accompanied by TO, is used to express GOAL or PURPOSE of action, as

geweald to gyrwanne
power to work/of working

Armstrong holds that this use of the inflected infinitive marks that it is not an infinitive, but rather a gerund. This distinction seems to be based, however, more on the fact that the form in question is inflected, and thus is equivalent to the Latin term 'gerund', rather than for

any syntactic reason, since he notes also that the uninflected infinitive with TO is often used in the same syntactic frame, realizing the same meaning. However, according to Armstrong, the next step in the argument shows ENDE or INDE as the marker for the infinitive ending ANNE or ENNE, thus showing that his 'gerund' marker could now be used as the marker for the participle, and thus pointing to a confusion of function arising out of a confusion of form. Thus:

comen Crist to wurpiende
they came to honour Christ
(D.E. Chronicle)

About the same time, that is, circa 12th century, an additional INF marker appears before the infinitive stem, i.e. FOR. This is simply developed: TO has long since lost any semantic significance of GOAL (TO was originally an adverb, 'towards'). Thus forms such as:

for to clensen
for to witiende

arise, showing again that the old inflected form, Armstrong's 'gerund', is seemingly confused in both form and function with the participle. The 14th century sees variant forms of -ING interchanging with -INDE as

to seethinge
to be sodden

and it is in this form that Armstrong states that the OE gerund dies, its fundamental use, the expression of purpose, being in the main handed over to the uninflected INF, i.e. as it is represented in ME. He considers, further, that the death of the old OE 'gerund' (i.e., the

inflected INF) may have been due to the rise of a new gerund. The OE verbal noun in ING/UNG had wholly the syntax of a noun, if we ignore for the minute the interlinear glosses where it has been argued the verbal noun displays verbal rection. Armstrong notes that in time the ING marker supplanted the UNG, and by the 14th century it appears that the OE 'gerund', the present participle and the verbal noun all had 'the same marker', i.e. a phonetic realization of ING. He holds that it is vital that it be borne in mind that the old 'gerund' expressed purpose, and that it was prefixed by TO. It is crucial to his argument that this new gerund from the OE form in -ING also derives from an amalgamation of the endings of the present participle and the old inflected 'infinitive', though he argues that that this 'infinitive' must be rather considered a gerund in OE. Thus he argues that due to the confusion of the OE verbal noun in -ING, the present participle and the old 'gerund' (inflected infinitive), the original form in ING (or the combination form that has arisen) begins to take adverbial modifiers and even to cease to govern genitival objects. Thus, he illustrates this development by the following:

in youre here dwelling
 (Piers Plowman)
 for knowing of comeres
 (Piers Plowman)
 by fyndyng of that issue
 (Maundeville)
 This shewing shrifte .. shall be merite to the
 (Piers Plowman)
 In shaving oure borders
 (Maundeville)

This, Armstrong argues, is the origin of the modern Gerund.

11.05(ii) Callaway's theory

Morgan Callaway (1929:32ff) proposes yet another derivation for the modern gerund/participial form in ING. As stated above, the few OE instances where a deverbal noun in ING takes an accusative object are practically all from interlinear glosses, which must be held suspect. Thus Callaway argues that the verbal noun in ING acquired verbal rection through the influence of Latin, quoting as examples:

in gemoeting folc in annesse
in conveniendo populus in unum
(Vespasian Psalter)

in haldinge word þin
in custodiendo sermones tuos
(Vespasian Psalter)

on gecyrringe mine fiend
in convertendo inimicum meum
(Eadwine's Canterbury Psalter)

These and other samples of data, then, lead Callaway to hold that the form of deverbative noun in ING/UNG acquired its verbal characteristics by analogy with Latin, as indeed he argues did the OE present participle earlier (1901). He further holds that the influence of the present participle is crucial when the forms of the OE noun in ING and the present participle have coalesced phonetically, thus allowing that the form in -ING strengthens its verbal characteristics through contact with the participle. He also considers that the French

gerund/participial constructions contribute to influencing the ING form, and strengthening its functioning with verbal rection.

Mustanoja(1960:567) points out, as has Kisbye (1971, I:53f) that the fact that all the cases where the OE noun in ING has verbal rection are in interlinear glosses thus weakens the argument that this deverbative nominal intrinsically was part of the verbal system. Rather, it's evolution as a gerund would seem to be a ME phenomenon, and its further development with participial status would seem to be in the ME period also.

11.05(iii) Mustanoja's theory

Mustanoja holds that in understanding and describing the evolution of the ModE form in ING in both its participial and gerundive functions, not only syntactic functions but also phonological and morphological factors have to be taken into account. The phonological factors which would seem to be relevant brought about the confusion between the deverbative noun in ING, the present participle and the inflected (and later uninflected infinitive). At the end of the 12th century and in the course of the 13th the ending of the participle (in LOE one of the variants of INDE, ENDE, ANDE, in this case INDE) becomes confused with the ING form in the southern and central parts of England, and spellings of each appear on either the deverbative noun or on the participle seemingly indiscriminately. The confusion between the

markers ING and INDE is reflected in many texts, particularly those written by Anglo-Norman scribes. Thus, we find such examples as

ne goinde ne ridinnge
(Lazamon B 1582)

where the earlier A text of Lazamon had had

ne ganninde ne ridinde

which manifests no 'scribal confusion' between the correct ending for the participle, and the verbal noun. Also found is

guo into helle inne libbende þet þou ne guo in þine
stervinge
(Ayenbite 73)

Further, Mustanoja (1960) notes that in some parts of the South and S.Midlands the inflected INF in ENNE appears in texts as INGE, as in

he hadde neuere to doinge wiþ his wive
(Richard of Gloucester 6843)

In addition, the present participle occasionally ends in EN instead of ENDE as in

He saȝ þe roke And þe brinfires stinken smoke
(Genesis and Exodus 1164)

and the inflected infinitive may appear with END, as

to flende
(Lazamon B)

whereas in the earlier A text we find to fleonne.

Moreover, in the North and N. Midlands, and in the 15th century in the South, NG may appear as N, as in

drynkyng

for

drynkyng

and compare also the appearance of unknowen for unknowyng,

and a converse example, I am moche beholdyng (for 'beholden') unto him.

Mustanoja further contends that while the data he adduces may be 'uneven' with regard to their dialect provenance and chronology, it is difficult not to believe that this confusion of forms brought the noun in -ING into closer connection with the present participle and the infinitive with respect to function, thus promoting its use as a gerund.

11.05(iv) Langenhove's theory

Langenhove (1925) contends that the ME gerund, derived from the OE deverbative noun in ING, is a direct descendant of the uninflected infinitive on the grounds of certain phonological arguments, similar to those outlined above. In contrast to Langenhove's proposal is that of Logeman (1892: 200-211) who argues that the gerund should be identified with the inflected infinitive. Logeman's contention is based on evidence which suggests that the suffix of the inflected infinitive ENNE/ANNE became confused with that of the present participle, and that the inflected infinitive assumed these latter suffixes in LOE and ME. He contends also that a similar development has taken place in other Germanic languages. In ME, he maintains, this ENDE suffix became confused, and then collapsed with the ING suffix of the OE verbal noun, but, he argues this latter process did not take place in other Germanic languages, where it remained ENDE/ANDE, and so in

Scandinavian we find:

alle norske ord er brukande her er knapt livande
ætende tid

and in Dutch we find

zittend leven staande receptie

and in German

fallende sucht

which Logeman argues are gerunds, reflexes of the older inflected infinitives.

Langenhove, on the other hand, notes that since the 13th century the form of the inflected infinitive suffix is ING(E), as in to wetynge, to doinge. This form develops from the inflected infinitive and the same development took place with uninflected infinitive; thus Langenhove and Logeman crucially differ here. Thus the -N ending of the uninflected INF also is replaced with -ING although this development remains unnoticed, according to Langenhove, because the uninflected infinitive becomes identical in form with the deverbative noun in ING and is 'mistaken' for it'. The only difference between the uninflected infinitive and the noun in -ING is in syntactic function, the infinitive having verbal properties, the noun nominal. Consider his argument for the non-distinctiveness of the verbal noun, the present participle and the non-prepositional, non-inflected infinitive, given the phonetic changes he posits, noting that he also argues that the uninflected infinitive had previously been confounded with the present participle with

the suffix ENDE; (1925:129)

In sentences such as the following the infinitive is morphologically no longer distinguished from the participle or from the verbal noun: 'godes wisdom, ~~ðurh~~ hwam bieð alle wittes and ælle wisdomes and alle tungen spekinde'; 'þe þridde (wise of meninge) is menende his synnes bifor godde'; gifeð his almesse eider for luue and for havende hereword and for to ben wurðed'; þer was sobbing, siking and sor, handeswringing and drawing bi hor'; si Mirre signifiæt wastinge, for þo luue of god wakie, go ine pelrimage, visiti þe poure and to sike'; 'sume men laðed here lif on etinge and on drinkinge and on uuele speche'; þe teares, þe man weped ~~for~~ longenge to hevene ben cleped reinwater'; 'we haven..don us into helle wite for ure muðes mete on þre wise: on etinge to michel'; Fir haveð on him þre mihtes on to givende hete, oðer to givende liht, þridde to weldende elet to none pingē'; þe filosofe sayþ, þet yefþe is yeuyngē wiþoute ayen-yefþe...

Langenhove also notes that occasionally the non-prepositional infinitive in ING and the 'infinitive without ending' are found together as in

Vor tuo þinges is þe man yborþe: be þe be-ulyngē of kueade and do þet guode.
(Ayenbite 121)

Langenhove's argument runs as follows. He contends that, since the 12th to 13th centuries, the infinitive in -N (without inflection, without preposition) is confounded with the verbal noun in -ING, which he considers to have been occasionally marked with the suffix -N before the 12th century. Thus he argues that occasional converse or reverse spelling occurred where a verbal noun might end in -N, as indeed is the case in texts of both English and Scots provenance, thus:

scedin (Cursor Mundi MS E): scheding (Cursor Mundi MSS C,F,G,T)

and he notes evidence from rhymes as thus found in

Barbour's Brus, the rhyme between murnyng: syne. This Langenhove takes to suggest that the phonetic realization of ING suffixes might have been as -N, in the light of the data presented.

Langenhove argues that the acquisition of verbal rection by the form in ING derived from the OE deverbative noun may well be accounted for by the fact that, due to the decay in realization of inflections, the (dative) was no longer a distinct case, distinct from the accusative. This certainly was the case, especially in northern dialects. Thus it became impossible to differentiate between the operation of the verbal noun and the non-prepositional, uninflected infinitive, in that both were realized phonetically as [ɔŋ] represented by -ING. This claim is illustrated by the following:

Bot son quen he had seised þe land/þat in þan fel
a hunger strang/Thoru corn wanting or thoru were
(Cursor Mundi Cotton MS 2395-2397)

Langenhove further claims that such constructions were already manifested in OE as ~~below~~; but glosses may be suspect:

on gecyrringe mine fiend
in convertando inimicum meum

and

on edlænunga him
in retribiendo illis

Langenhove argues in addition that when the prepositional infinitive in -ING gained ground in the 12th and 13th century, it not only set the prepositional INF free to assume greater verbal power and to become of greater communicative use, but being confounded with the

verbal noun it also assumed some of the characteristics peculiar to the latter, such as its uses with possessive adjectives as

pai..servyn here god in here levyng
 þen seide þe Angels in heore sizing 'ledeþ'
 alþa; he by be his ȝigginge cristen
 bot in hir fleing þar sco yode/an angel hir befor stode

Thus, the above examples would seem to illustrate the birth of a new form, the gerund. But Langenhove claims that this 'gerund' merely continues the ME non-prepositional infinitive which was originally marked by the suffix -N, in that it never in the new form loses its dual nature of being both a noun and a verb, nor its ability to interchange in various constructions with the prepositional infinitive. Thus, he argues, we find that in ModE the gerund and the infinitive are equally 'good' in certain constructions, as is affirmed in Curme (1931: 378), and also that although they may interchange, there may be a change in the type of proposition or "meaning" offered if one or the other is chosen. (Langenhove 1925: 131).

In conclusion, Langenhove argues that since the 12th and 13th centuries, the infinitive in English has appeared in three different forms, as

1. The bare infinitive, originally the uninflected form in OE, the use of which in the ME period was more and more restricted, so that in ModE it is chiefly 'used in dependence with the verbs SHALL, WILL, MAY, MUST, DO, LET, and on simple tenses of DARE and NEED. So too in dependence on the active voice of the verbs BID, MAKE, HEAR, FEEL (Onions 1905: 122, paragraph 157).
2. The prepositional infinitive, which ever since OE has continually been developing at the expense of the bare infinitive.

3. The infinitive in -ING, commonly called the gerund, which owes its existence to a double confusion: (a) of the inflected and uninflected infinitives, since its form is that of the inflected without TO (b) of this infinitive in -N and the verbal noun in -ING both words having in the spoken language homophonous realization sometimes the same syntax and semantics.

Langenhove's argument that the gerund develops from a double confusion, firstly the confusion of the inflected and uninflected infinitives, and secondly between the infinitive in -N and the verbal noun in -ING is confusing terminologically. We suggest that in fact his conclusion is based on the fact that the infinitival usages of the modern form in -ING, as

seeing is believing
to see is to believe

derive from older 'nominative' and 'objective' usages,³ as given in the outline from Kisbye (1971, I: 2-3) given above, which were originally performed by the OE uninflected infinitive. Langenhove proposes that an extension of the confusion over these forms is still operative, and suggests that an infinitive without TO, confused with the verbal noun in -ING in the 12th and 13th centuries becomes an alternative to the nominative and objective usage of an infinitive with TO.

11.05(v) Mossé's theory

F. Mossé (1938) suggests that the evolution of the gerund is primarily due to a confusion between the verbal noun in -ING and the present participle in -ENDE the latter giving it its verbal properties. Mossé contends

that the gerund accompanied by an accusative object makes its first appearance at the end of the 12th century, in the form of the present participle, i.e. marked with the suffix ENDE:

þe þridde is menende his synnes bifore Gode
(Trinity Homilies 65)

and

ech man gifeþ his almesse eifer for Godes luue and for hauende hereword and for to ben wurþed fer and ner
(Trinity Homilies 157)

Consider also the further example from Mustanoja (1960: 571) which also seems to corroborate the hypothesis:

biginneþ anon Veni Creator Spiritus mid up ahevinde
eien and honden toward hevene
(Ancrene Wisse MS Nero)

as compared with the MS CCCC of the Ancrene Wisse, 'wiþ up ahevene ehnen'. Mustanoja also points out the parallel use of forms in -INDE and -INGE in the same sentence, as in

ac þer is anoþer lenere corteys þet lenep wyþoute
chapfare makiinde alneway inneþinge oþer þans oþer
ine hors
'mais il i a uns autres presteors cortois qui
present sanz marchie faisant toutes voies en
attendant ou en derniers ou en cheval'
(Ayenbite 35)

Also, Mustanoja notes an example of the form in ENDE accompanied by an prepositional qualifier, which would suggest its gerundial status

to provy hor bachelerye, some wiþ launce and some
wiþ suerd wiþoute vileynye, wiþ pleynde atte tables
oþer atte chekere
(Richard of Gloucester 3965)

Notable is the fact that other MSS of the above latter text have pleynge or pleisinge.

Mossé's argument as it stands is slightly dubious in that he contends that the form in ENDE was decoded because of the confusion as a gerund, and later was replaced by the verbal noun, which took over its functions. A better exposition might be that a functional correspondence existed between the form in ENDE and the form in -ING, and that due to certain interrelated factors, the form in -ENDE was superseded by that in -ING. This will be taken up at a later point in this study.

11.05(vi) Einkenkel's theory

Einkenkel (1916) argues that the gerund goes back to native elements, that is the verbal noun in ING and the infinitive in OE, the former giving the gerund its form, the latter its function. He further contends, however, that the native development lacked force, and would not have resulted in the formation of the gerund had it not been reinforced by the influence of Latin and French. He considers that the few OE instances of a gerundial usage of the verbal noun in -ING are imitations of Latin usage. Further, he considers that French influence is strongest at the beginning of the ME period and brings with it the peculiar use of the French 'gerondif', as in

par la paiz faisant
deffendi vous sor les membres perdant
sanz marchie faisant
en menant grant noise

which he claims prove of crucial significance in the establishment of the gerund in ME. However, as Mustanoja (1960) points out in his discussion of Einkenkel's views,

Van der Gaaf had noted (1928: 39) that Anglo-Norman and ME constructions of the type

par deus cens mille mars paiant

and

þurh ibodenes biddunge

appear at roughly the same time in their respective languages, i.e. circa late 12th century. He considers that this makes it dubious that Anglo-Norman had any decisive influence on the formation of the English structure. Einenkel, however, believes that definite French influence on ME is instanced in the absence of the determiner before the verbal noun, and in the use of the uninflected infinitive in new functions, e.g. with prepositions. This latter is first attested around 1200 AD. He further argues that at this time, the verbal noun begins to appear with adverbial modifiers and an accusative object, signifying its acceptance as a verbal form. The structure with the form in -ING prefaced by IN appears around the end of the 13th century, along with a steady increase in French influence. Consider:

in making

with

(OF) en venant

and

in his defendaunt

where the ME form has utilized the OF participial/gerund suffix, indicating some influence between the two languages at least.

11.05(vii) Rooth's theory

Erik Rooth (1941: 71-85) contends that the gerund derives from the OE verbal noun in ING/UNG, that in OE this verbal noun has similar functions to the inflected infinitive, and that through the course of time it fell together with the inflected infinitive to form a syntactic hybrid. He also posits a syntactic and morphological syncretism between the OE infinitive and the participle, with the net result that the verbal noun, the present participle and the infinitive all came to be used gerundially. He posits that the phonetic realization of the suffixes of the verbal noun, the participle and the infinitive were by LOE non-distinct, resulting from a phonetic coalescence of the realizations of NG, ND and NN, noting as corroboration that in southern dialects the ending of the verbal noun before this situation was ING, and that of the participle INDE, which may have contributed to the early collapse of the distinct realizations. He argues that a process came into operation such that /nd/ and /n/ became /n/ which then came to be merged with /ŋ/, resulting in the domination of the forms in ING in all cases of the participle, infinitive and verbal noun. He argues that such a process is not found only in English, but also in O(ld) Frankish, O(ld) F(rench), OS, MHG, NHG, and also, of course, in ME.

11.05(viii) Dal's theory

Dal (1952: 5-116) denies that the evolution of the

gerund in ME was in any way influenced by French, arguing that the verbal noun in ING/UNG has gerundial qualities in the 10th century, before the formal merger of the participle and gerund in French. She further argues that the gerund took over some of the formal properties of the participle, for example, its function as an appositive, and its predicative usage with verbs of action and rest, and with verbs of causation and perception before fully integrating all the participial functions. She considers that the step in the evolution of the ModE gerund/participle may be due to Celtic influence, in that all participial functions in Celtic are performed by a gerund and a locative particle. Further, she argues that the formal merger between the verbal noun and the participle-in-ENDE came about not only through shared syntactic function, but also because -ENDE was phonetically weak, and through various phonetic processes fell together with ING. The first step in the formal merger was thus when the participle and the verbal noun shared some formal properties of function and the same suffix-marker. The second stage was when the marker ING came to be recognized as one form realizing both the old functional properties of the OE participle and the verbal noun.

11.06 Conclusions concerning the theories in 11.05

It is very, indeed abundantly, obvious that so far in the history of research into the development of the ModE form in -ING there is not one conclusive argument

as to how the form in ING comes to function as a gerund, i.e. with verbal rection, and also as to how it 'replaces' the OE participial form in ENDE. From the above catalogue of scholars' thoughts on the subject, it is clear that at least there seems to have existed from the OE period a certain ambiguity of function between all three forms, the infinitive, the verbal noun and the participle. Moreover, and crucially, the periods within which the evolution is attested, there is a general levelling of inflectional endings, rendering many case forms indistinct. This may be important in that it is clear that phonological reduction has operated on the forms under discussion, to produce the above-noted 'confusion'.

11.07 Details of functional correspondence between the verbal noun, the inflected infinitive and the present participle

It is agreed that there are striking functional correspondences between the verbal noun, the infinitive and the present participle. For example, although the ING/UNG verbal nouns function systematically as nouns in all respects, as subject, object and predicative complement after a copula they may be utilized where in OE an infinitive is more commonly found. In ME we find that the form in ING occurs rather more frequently in this position, where more naturally in ME we would expect a TO infinitive:

fondunge is slidunge
(Ancrene Wisse)

and

understandynge is to knawe what es to doo
(Richard Rolle: The Seven Gifts)

Also, as we have seen, an alternation between the participle and the infinitive is possible, after a verb of motion of rest, to indicate the manner of action of the main verb, as in the variant structures

com fleogan: com fleogande

Callaway (1913) suggests that the slow development of the participle in this construction may be attributed to the native use of appositive participles to denote manner with verbs other than verbs of motion, as

Ba ic ða ðis leod, cweð Boethius, geomriende
asungen hæfde
(Boethius 8.15)

He ascribes the same development to similar and comparative constructions in other Germanic languages; (no translation given by Callaway)

(O.Scand) þa komu þar flugjandi hrafnar treir
(OHG) Ther kuninc Marsilie kom fliehende
(OS) Huarbondi geng forth

Mustanoja, however, considers that the substitution of the participle for the infinitive in such constructions is due to Latin influence, as in

ymbe þa endleoſtan tid he ut eode and funde oðre
standende 'invenit alios stantes'
(Matthew xx.6)

The participle after a verb of motion also is continued into ME, as in

eadi is he..þet ure Loverd hwon he cumeþ ivint
wakiinde
(Ancrene Riwe 63)
beatus quem invenerit vigilantem

Mustanja (1960) further notes that 'the choice between the participle and the infinitive is often a matter of

personal preference'. He illustrates this by showing the variants of the following

left þaime slepand (northern)
 lete þame slepene (northern with Midland features)
 lete hem slepyn (Norfolk or Suffolk)
 left hem slepynge (Midland)

A third functional interchange occurs in OE between the present participle and the inflected infinitive.

Armstrong (1892: 200-211) notes that in LOE and EME the inflected infinitive as a 'gerund of purpose' could, and often was, replaced by the present participle accompanied by TO. Thus he states; ^{(quoted from Langenhove (1925),}
^{Introductio (i)):}

In the earliest recorded stage of the language, the dative of the infinitive accompanied by TO is used as a gerund expressing purpose, as 'geweald to gyrwanne'. The (uninflected) infinitive with to was occasionally used in the same way. The next step shows ENDE (or INDE) for ANNE, as the ending making the gerund (the dative infinitive) the same in form as the participle, as, 'coman Crist to wurpiENDE'. About the same time, that is, in the 12th century, FOR occurs before the TO, as 'for to clensen', 'for to witiende', indicating a weakening in the purpose-giving power of TO. The 14th century has INGE for INDE, as 'to seethinge', and it is in this form that the OE gerund dies, its fundamental use--the expression of purpose--being in the main handed over to the modern infinitive.. In 14th century English the old gerund, the present participle and the verbal noun all have the same ending.

(Further examples of the confusion on separate sheet, but to be incorporated directly below statement to this effect.) Thus, there follows some data which exemplify the interchangeability of endings, regardless of older syntactic function:

þa com þer in are tiden an oht man riden
 (Lazamon)

þa hit wes ðæi a marsen and duȝeðe gon sturien
(Lazamon)

þa com Moddred faren þere mid unimete uolke
(Lazamon)

ant com þe feond fleonninde bi þe lufte
(Ancrene Wisse)

as it com glydande adoun on glode hym to schende
(Gawayn & The Grene Knight)

The functions of the gerund composed of TO and the present participle have been analysed by Irvine (1930:472) where she concludes that this structure seems to be used most often to denote purpose, in an adverbial frame, as

ic aras to ondetende þe
surgebam ad confitendum tibi

to stigende
ascendendos

Other functions of this construction, argues Irvine, are denoting necessity, as 'tid to miltsiende--tempus miserendi eius', as a substantive, 'ac me þincþ þat to lang æall to rimade', denoting specification 'earfoþe to understandende' and futurity', to gefyllende wees--completurus erat'.

Irvine notes that in the case of the functions of purpose and necessity, the participle with TO is in many cases used to translate a Latin gerund or gerundive with AD. She considers that its widespread usage and its usurping of the position of the inflected infinitive with TO in these functions may well be due to Latin influence.

11.08 Conclusion

The above discussion concerning the functional

correspondence and development of the non-finite forms of the verb appears at first glance, to be totally inconclusive. However, one major conclusion is evident. That is, that these forms were to a certain degree in overlap by at least L.OE. The next Chapter will deal with the question of communication problems arising from the 'free' interchange of the non-finite forms.

Footnotes to Chapter Eleven

¹We should note here, however, that the subjecthood of to fechtanne is doubtful. It may be argued that this sentence has no subject, the topic of the sentence being him (dative). We may gloss this sentence by It is pleasing to him to fight, where to fight is the complement of the glossed It. Essentially, this is an impersonal construction with no overt subject (cf. Latin pluit 'it rains'). In fact, this is a typical TVX structure (Vennemann 1974a, 1975), where the initial slot need not be filled with a grammatical subject, but must be filled with topical material. When the serial order of the language became fixed in ME as SVO, impersonal constructions such as the above became unacceptable. That is, a grammaticalized subject in initial slot because a requirement, not an option.

It may well be that the inflected infinitive appears as the complement of these (dative) impersonal constructions just because it itself is marked as dative. Thus rather than being a subject complement, it is a true dative complement. It remains as the complement infinitive, however, after impersonal constructions in the dative are no longer available to speakers because of its overt infinitival marker.

²That is, verbs themselves derived from nouns.

³Where the form in -ING as a variant of the infinitive in OE could appear in subject and object slot. See above 11.01.

CHAPTER TWELVE

Functional overlap and marker confusion
in the non-finite verbs, forms of L.OE
and E.ME.

12.00 The great non-finite verb controversy--is
elucidation possible?

Given that the inflected infinitive, present participle and TO-INFINITIVE seem to be in some contexts functionally interchangeable, we must discover some plausible explanation for this phenomenon. Elucidation of this overlap is not difficult to outline in terms of speakers' internal grammars, in that all are part of the 'non-finite verb spectrum' to a greater or lesser degree of verbiness (see Chapter nine for a fuller explication of this) . Synchronically, and in terms of the language in use we must answer the question as to why the speakers came to have these terms as free variants. That is, we must discover the linguistic catalyst which brought about this overlap/free variant situation which is not found in classical OE.

12.01 Phonetic merger & spelling interchange

It is well-established that great confusion seems to have obtained in the southern and south-western dialects of L.OE. and E.ME between the endings of our three forms, the present participle, the infinitive and the verbal noun. Visser II (1022ff) deals with spelling shifts from IND to IN, from NNE to NGE, from NG to ND, from ND to NG, and from ING to IN. Let us firstly consider some examples of these shifts, as exemplified by Visser, giving examples from O.E:

NNE---NGE

to secgange
(Boeth. MS B 39.10)

NG---ND

mid mynstres fadunge landsumere
(Ben. Rule 9.19)

ND---NG

þære synne to wibbunge minre unhyrsumnesse
(Alfred Bede 619.22)

ING---IN

cynin min
(Vespasian Psalter 5.3)

This latter example is Northumbrian,
but included to show how
widespread spelling interchanges
of these sequences were.

From this evidence, more extensively presented in Visser II, we may conclude that there cannot have been much distinction in phonetic realization of these endings, given how change has affected them. Visser notes that this becomes much more evident after consideration of ME in the suffixes in poetic rhyme ^{and assonance} sequences. He gives the following as an example:

clopyng: behynd
sekynd: tyding
for-sakyng: takyne

For further illustration, see Visser II, §1027.

Kisbye (1971, I: 55) also argues that there can have been little phonetic distinction between the endings of the present participle, infinitive and verbal noun in L.OE. He notes that three variants of the inflected infinitive have been recorded, by E. ME, as in the following:

to comende to commenne to comynge

and notes further that this claim of little phonetic distinction in the individual markers is further borne out by variant spellings in other words not related to these three categories, such as the interchange between pousen, pousend and pousyng (thousand). Such variant spellings may be found freely in one text. In ME then, this interchange of spelling was very common in the categories we have been discussing. Kisbye gives the following as illustrations of the confusion which might occur where 'the correct' ending does not appear on the 'right' category: thus (1971, I: 55)

who was it of hem that was to doynge this thing
(Wiclif: ST Luke)

manie manisshe folgeden ure drihte to herende his
wise word
(Trinity Homilies)

guo into helle ^{inne} libbende þet þou ne guo inne
stervinge
(Michael: Ayenbite)

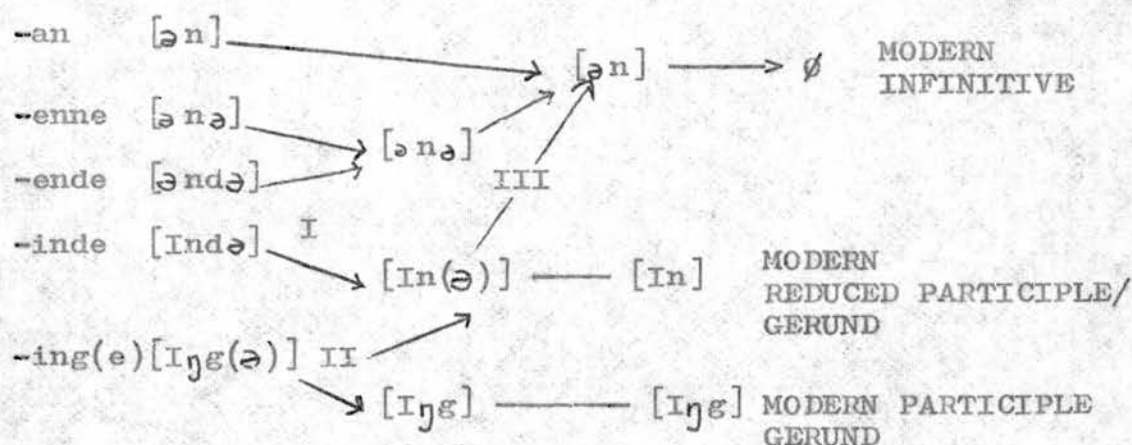
in wakyns, fastings, and in prayers
(Richard Rolle: Form of Living)

þa com an guldene leo liðen ouer dune
and forð hire gun geingen and to þere sæ wende
(Lazamon)

Ich wolde..
no Wenhaver mi quene wakien in þonke
(Lazamon)

Briefly, we might outline the phonetic processes which merged the endings of the present participle, infinitive and verbal noun as follows, thus synthesizing and adapting all the suggestions put forward by those scholars who have studied the problem, and who have been

discussed above. Thus, the situation came about, which may be diagrammed (in terms of phonetic change) as follows:



I = loss of [d]

II = loss of [g] (later than ME period)

III = [In] → [ən] (cf. Mustanoja's examples above)

12.02 Functional origins of the marker merger--a matter of speech perception?

In the immediately preceding sections we have seen how the verbal noun, present participle, and infinitive in LOE/EME have some degree of functional overlap, and we have seen how this may have come about in terms of phonological reduction leading to phonetic merger. This situation would seem to be complex, where speakers will have problems in decoding the variant structures if their particular dialect does not have a system where one marker does not equal one category. To understand the kind of linguistically complex situation which seems to have arisen, we must investigate from the points of view of the language learner and the language user.

In EME three forms are available for use after the infinitive marker TO, the old infinitive, as to wunien(ne); the old participle as to wuniende and the old verbal noun as to doynng. As we have stated previously, the old infinitive and participial forms with TO are clearly derived from those forms in OE denoting necessity and purpose, i.e. the OE gerunds, the inflected infinitive (see especially Irvine 1930). The origin of the old verbal noun with TO is obscure, however. Visser states that it is possible that its proto-type was forms of the verbal noun used with þæt and hwæt clauses, as

wundra..gefreode..mannum to swutelunge þæt hi
sylfe magon godes rice geearnian mid godum
weorcum

(Alfred. Saints Lives 468, 426)

Visser considers that the most remarkable feature about the form with TO and the verbal noun is its widespread diffusion in a short space of time within the ME period. Its most frequent occurrence is found in the texts of Wiclif and Trevisa; by about 1300 it has succeeded in ousting the form with the present participle. (For further illustration, see Visser II.§§ 1031).

Further, Visser notes that in ME as in OE there was only one semi-verbal structure that could be combined with any preposition other than TO, that is, the verbal noun. Moreover, the present participle in ENDE could not appear with any other preposition except TO. Given these facts, and the fact that TO in conjunction with the present participle was a structure arising out of a phonetic

merger of the marker of the participial with that of the inflected infinitive, it is possible to understand how these two forms could be confused and become interchangeable in both form and function.

In OE the nominal origins of the inflected infinitive were perceptually transparent and therefore its use as a gerund, a verbal-nominal with the power of governing an object in the accusative, was not complex from the point of view of the language learner establishing its function and position within his predictive grammar. For language learners in the later OE period, the situation became more complex when phonetic processes reduced the inflectional marker on the 'inflected' infinitive, levelling it with that of the older 'uninflected' infinitive and, later levelling it (through the operation of other phonetic processes outlined above) with the marker of the present participle. This latter then began to appear in gerundial function also, though of course it is not clear whether we must postulate that the speaker interprets the now common marker as belonging to either the infinitive or the participle. What we could term a grammatically fuzzy situation can be seen to have arisen.

At the same time, the language learner would be aware that the norm for categories appearing with prepositions was that they were nominal. Further, he would have to note that the form which occasionally appeared with verbal function and with prepositions was the deverbative noun in -ING. Thus, we must reconstruct

a situation where the old function of the OE inflected infinitive was obscured by the levelling of its inflectional marker with that of the uninflected infinitive, and we may posit, from the above information, that in replacing the surface manifestation of the old inflected infinitive, speakers would most naturally turn to the verbal noun, which in certain circumstances could appear with verbal characteristics, and which did appear with TO. Further, the phonetic realization of ING and those of the levelled infinitives and participle would add strength to this argument, given that they must at least have been similar.

The problem therefore for the historical linguist seems to be in determining whether the speaker could in fact make any distinction between the functions of the old present participle, infinitive and verbal noun, given that by a certain stage in the history of English, they are marked by freely interchangeable markers, which are realized as (fairly) non-distinct.

Visser holds that the transition from the participle ending in ENDE to the participle ending in ING came about due to the functional interchange between forms in ENNE, ENDE/INDE and ING after TO functioning as 'gerunds' of purpose. As we have noted, the form TO..ING was most common in ME, especially in the works of Wiclif and Trevisa. Thus Visser argues, that as the ING form in this function gradually emerged as dominant over all the

other markers, this led to its eventual spread into the other functions of the participle as a general principle.

The question then arises as to why the form in ING did not generalize into all the functions of the infinitive with TO, if, as seems the case, speakers at certain stages in the language could not have recovered any distinction for INF as opposed to PART or GERUND on the basis of markers alone. We propose that by the beginning of the ME period, the marker TO had begun to lose much of its original lexical meaning which syntactically marked GOAL or PURPOSE. It became merely the marker of the infinitive. This may be seen in the following examples:

þe liggeþ inne swile sunne and ne þencheþ noht for
to arisen
(Lambeth Homilies)

Here FOR¹ precedes the infinitive and marks the purposive nature of the infinitive, buffering the semantics of GOAL/PURPOSE hitherto marked by TO. Other dialect variations of the new marker FOR are found such as WIPP, as in

wipp to letenn swingenn himm þe bodigg
(Ormulum)

Also are found the Scandinavian particle TILL, alone or preceded by FOR, as

Engynys alsua for till cast/thai ordanit and maid
redy fast
(Barbour's Brus)

The Scandinavian AT, which like TILL, is also found in northern texts; and FOR, accompanied or not accompanied

with TO, is most common in southern texts. Thus the form of the infinitive with TO came not to be perceived as denoting purpose, and concomitantly the gerund form with TO died, while the form with FOR TO continued during the ME period to denote purpose.

The reduction in function of the uninflected infinitive to a stage where it only operates with a small class of verbs, the newly established modal verbs such as WILLAN, MAGAN, AGAN etc. allowed, and made necessary, a situation where speakers reinterpreted the infinitive with TO as that form carrying out all the previous functions of the uninflected infinitive, and more generally as that form which is utilized for marking the close subordination of one action to another. This development is closely connected with the loss of lexical status of TO in an infinitival environment, such that for communicating close purposive subordination, speakers adopted the infinitive = FOR (TO). Thus, speakers regenerated the infinitive with TO as a distinct form, it being necessary to have an infinitive clearly marked as such in the language. Reasons for this will be discussed at a later point in this study.

Thus we are left with a situation where the form and function of the old participle and the old verbal noun are united under the one morphological marker in ING. Already in ME the form in OE deriving directly from the OE deverbative noun had begun to acquire verbal rection.

Thus in its nominal function such forms as the following are attested:

and in bryngyng hire servyse thei syngen a song
(Maundeville's Travels)

This usage is novel in that the nominal origins are transparent in that the form is governed by a preposition, but it also is governing an accusative object. In the transitional stage of the language where such forms first appeared, we must posit a situation where speakers connected the verbal noun in ING and the older gerundial forms with TO and variant markers EN(NE), ENDE/INDE or, crucially ING. We must allow that speakers would have some of these variants, especially the gerundial (old inflected infinitive) function being marked by a form in ING, and thus could motivate no distinction between this and the verbal noun, and thus assigned them either function. In this situation we must envisage a certain confusion of function between the inflected infinitive, the participle and also the verbal noun. In this situation, given that the marker ING emerged as dominant, the form in ING usurped both form and function of the participle, and began firstly to appear with verbal rection in its nominal functions by analogy with the participial functions.

The relevant point to be made here is that although the distinct participial marker -ENDE was lost, this in no way entails that participial function is lost. Rather we must regard the form in -ING (with verbal characteristics) as representing a wider band on the 'non-finite verb spectrum', (see above, :9.00). That is, verbal

-ING is taken to represent both 'participial' and 'gerundial' functions. We may therefore label the verbal marker -ING as representative of a hybrid, the participle/gerund.

A more complex situation is evidenced in connection with the verbal -ING form and the nominal -ING form. As we have seen, the form in -ING was in OE an abstract deverbative nominal, but that in certain syntactic contexts it developed verbal characteristics. This latter development is intrinsically linked with the phonetic collapse of the markers of the inflected infinitive, the present participle and the OE nominal in -ING. As we noted above in 10.00, the gerund is in fact characteristically the 'nouniest' of the non-finite forms of the verb. Further, ^{the} only distinction between nominal and verbal -ING in ME seems to be that the nominal form may take determiners and governs its object in the 'genitive case', while the gerund may not take determiners and governs its object in the 'accusative case'. Given that gerundial -ING seems to be a ME innovation, then it is not unreasonable to hypothesize that speakers might confuse the functions of gerundial -ING and nominal -ING, or at least allow them as variant forms when governed by prepositions. Such a situation is exemplified by

in kepyng Goddis hestis and trewe prechyng of
the Gospel

(Wiclif: of Clerks Possessioners)

In summary, we consider that it is not unnatural

to find speaker confusion over the various functions of -ING in a transitional period during which -ING was marked in some functions as part of the non-finite verb system.

12.03 More on the marker merger

It has been argued above that the form in ING came in ME to represent both nominal, gerundial and participial functions due to the phonetic and functional confusions and overlap we have documented above. In OE the participle stood ⁱⁿ both apposition, and in predicative relation to the noun it qualified, both in its nominal and verbal uses (by this latter, we mean the BE + PRES PART periphrasis and other verbal usages). We have already noted that the nominal form in ING governs a genitival object; it may also take a subjective genitive, as

til the day come of her faders dying
when he sawe the tyme of his departyng
 (both examples: Oocleve: De Regimine Principum)

Visser also notes that gradually during the ME period the marking of the object by the form in ING in participial function gradually came to be more frequently realized by OF, as in forms of the periphrasis (cognate with the form in OE BE + PRES PART (ENDE)). Thus from Visser III (§§ 1860 and 1869) we find

ofte sythis by siche myraclis pleyinge men and
wymmen..ben moved to compassion..thanne thei ben
not scorninge of God but worschipyng
 (Wiclif: Sermon c. 1380)

Eny..offre that were moderynge of your hoole title
or of eny of your clakmes beyond the see
 (Proceedings of the Privy Council, 1414)

besecreit, ~~trew~~, inccessing of your name
(William Dunbar, Poems, 1500-20)

Moreover, it seems that the form in ING takes an OF object when it appears in slots in OE filled by the infinitive, as

Consaille is doyng of worldes riches
wysedome es forgetyng of erthly thynges and
thenkyng of heuen

Firstly, let us consider the mode of expressing subject relation found with the form in ING, that is, the OF or genitive government mentioned directly above. This seems to have been the most common mode of expressing the subject relation, even in participial function. The form in ING with its subject in unmarked subject position, or 'the common case' as traditional grammarians refer to it, arose within the 14th century, but unambiguous cases are scarce till about 1400. Kisbye (1971, I: C 2-20, note 1) gives as examples

from the sonne arisyng
eftir his fadir departyng
by the mone shynyng
at þe chyl dren goinge

but concludes that these cannot be taken as unambiguously clause equivalent structures, since they may well be relics of OE genitives without S. One of the earliest unambiguous clause equivalent structures would seem to be

Bot son quen he had seised þe land/þat in þan fel
a hunger strong/þoru corn wanting or þoru were
(Cursor Mundi)

The establishment of the subject in subject position, and unmarked for case, must therefore be a late development,

and may indicate that speakers were aware that they used a form in participial function which was in fact a nominal. This may have been anomalous, but we may posit that it was accepted in the transitional period due to the fact that speakers may have had as part of their passive structural inventory (in the sense of Weinrich, Herzog and Labov 1968) knowledge of the confusion obtaining between the different functions performed by the form in ING.

Additional evidence which suggests that speakers did in fact accept the form in ING with participial function as part of the verbal system, despite the marking of subject and object in the genitive case, may be derived from the following evidence. There is substantial data available which shows that the form in ING may be accompanied by adverbial modifiers, and taking passives, as shown here:

but now your sayd leiges .. may suffer their goods
and cattels to remayne in the feilds day and
night without being stolen
(Ellis Letters 15th century)

It has been suggested, in fact, that the form in ING did acquire full participial function rather earlier than some linguists would allow. The forms that Kisbye (1971) adduced above as ambiguous examples of the participial form on ING with subject in the common case, may in fact be examples of full participial function. Mustanoja (1960: 563) holds that the form in ING acquired participial status at an early stage, noting that such a form as

pat was showet apertly by temples and images
falling down

(Stanzaic Life of Crist 910)

may be ambiguous, being either gerundial or participial, but by comparing function such as this with the function of the past participle, they would indeed seem to be participial. The evidence from the use and function of the past participle which he brings to bear may be illustrated by forms such as

alle ich habbe tobroken ham ou, min leoue sustren,
aseme dep to children, þet muhten wiþuten brokene
breade deien of hungre.

(Ancrene Wisse 155)

ther hath be no defalte, I gesse, of time lost
(Gower)

and he may polyce hym at þe prest by penaunce taken
(Purity 1129)

It does seem, however, that the most favourable analysis that can be offered is one where the two approaches are combined. That is, loss of genitival inflectional may well have resulted in a form of 'subject' equivalent to one already in the common case. Thus, the gradual loss of the preposition OF may well be due to the influence of structures such as those with the past participle illustrated above, and due to the influence of structures where the form in ING was not held to be nominal, but simply the marker replacing the old ENDE, and which therefore did not admit of a genitival 'subject'. It should be noted that in many areas the loss of the INDE/ANDE/ENDE marker did not take place till late in the ME period,¹ and indeed in modern dialect Scots, it is

still present, a distinction being made phonetically between the marker of the gerund and the marker of the present participle. This then, again, may have been part of the passive inventory of those speakers in areas which did have ING as the marker for the present participle, thus not realizing the subject by means of a genitival marker, since the ING marker represented participial function.

12.04 ING - the dominant non-finite form marker

The form in ING did not merely replace the form in ENDE/INDE/ANDE in its participial functions, it also came to act as a variant of the old infinitive in its nominative functions. Its use here stems back to the L.OE/EME merger in phonetic terms of the marker of the infinitive and the marker of the verbal noun, and thus we find examples as

long bigging is here nogt god
(Genesis and Exodus 718) c.1250

Hure her wunenge is swiðe reulich
(OE Homilies 185)

and there are numerous ME examples also, which show a 'nominal' ING in infinitive function, as

shedding of blode..al ys for noghte
(Lydgate: Complaint of the Black Knight 60,417)

and indeed this usage continues to the present day. This particular usage of the form in ING was never manifested by the participle.

The form in ING also assumes infinitival function in

accusative position, as in

þat he me giue dubbing
(King Horn 438)

sundring and samening tagte he
(Genesis and Exodus 458)

and this has a reflex in ModE also.

Unlike the form of ING in nominative infinitival position, the form in ING as infinitive in object position has as a variant such forms as

on æfter seofon dægum heo eft hweorfende
and cumende me gehehton
(Alfred. Bede 266,31)

This latter appearance of the participial ENDE form where either ENNE or ING would be rather more expected has given scholars much trouble in assigning it its grammatical function, that is, whether it is a participle or an infinitive. Again, we must in this situation return to the argument that the phonetic realization of ENDE, ENNE and ING had become phonetically similar, and even homophonous, with the result that spelling interchanges could occur. However, the appearance of this interchange so early in the OE would belie this as a conclusive argument; rather it seems that we must look for some grammatical interchangeability between the participle and the infinitive in OE to fully explain this phenomenon. We have noted that in OE the participle and the infinitive seem to be interchangeable in structures such as com fleogan and com fleogende, where both assume the function of modifying the verbal action. It may well be that the structures noted directly above are a generalization of

such earlier attested forms as com fleogan: com fleogende. In the light of this argument, it may well be the case that the form in ING in this function came about due to the phonetic merger of the infinitive and the participle, and later those realizations with the realization of ING. The form in ING would be strengthened in this function, since in a transition period, speakers would have as part of their structural inventory the knowledge that forms in ING could appear in objective positions as nouns, and so in a situation where ING forms appear in infinitival function, speakers would not reject the new form as not in accordance with the rest of their language system.

12.05 Functional confusion and the ING marker

The essence of this chapter has been crucially to show that the phonetic merging of the realizations of the participial, infinitival and verbal noun markers in LOE and EME brought about a situation where these markers could freely interchange, thus marking any one of the functions of the above three categories. We have also outlined several syntactic functions where these forms overlapped in OE before the phonetic merger began.

The fact that such a spelling interchange arose, making it unclear which form is present has lead linguists to believe that the emergence of the ModE participle/gerund is due totally or at least partially to the systematic complexity which arose. It is worth stressing,

however, that at no time were the functions of the participle, the infinitive and the verbal noun lost; rather, the surface structure lost distinct representational markers of these functions.

We can reconstruct a situation where if the forms in ING and the reflex of the ENDE participial remained distinct in manifestation, then speakers would classify them separately in terms of their function and underlying semantics in the predictive grammar which each speaker of the language constructs. This was the case in northern dialects and Scotland where the two forms remained distinct phonetically for some time, and, it is held, remain distinct in modern form. However, in a dialect area where ING marked both functions, we have a problem. Do we argue that the speaker would separate the distinct gerundial and participial functions, or would he have no motivation from surface structure data to do so? Certainly, we have argued that the ING form denoting participial function acquired verbal rection on analogy with (in a transitional area) the old participle and infinitive. From the mass of data which suggests a gradual and 'fuzzy' transition from ING as the marker only of the verbal noun to ING as marker of the latter and participial function we may well have to accept that, for a period anyway, speakers were confused at least as to how to realize structures. In ModE, this situation may well still be in existence. Most people

can only distinguish between participial function and gerundial, by making the quasi-statement that the gerund takes OF while the participle does not.

Thus the situation which seems to have arisen is as follows. In LME, the form in ING, while retaining all its nominal features, acquired a new and distinct verbal characteristic, governing an object in the accusative, allowing a passive, and also adverbial modification; in brief, carrying out the function of a participle in all ways, i.e. as a non-finite marker of subordination. This ING form, then continued to be interchangeable with the distinct form of the TO INF in subjective, objective positions, and also a predicative complement after a copular verb. Thus in Modern English we have the variants 'he taught me reading' and 'he taught me to read'. Synchronically, then, the use of a nominal form as part of the verbal system would not be an upset to the language system as a whole, since the marker of the nominal ING had already phonetically merged as with that of the present participle and the infinitive, and all could be marked with ING. Within the language, this departure is not novel: the development of the inflected infinitive in Germanic is another instance of a nominal being brought into verbal service, while still transparently bearing nominal features. It seems that this form was brought into verbal service to express a specific semantic function, in that it is the form with the dative/TO marking that survives as the bearer of specific semantic

PURPOSE/GOAL, given that this could no longer in the earlier Germanic languages be derived from the uninflected infinitive. So too the gerundial use of the infinitive in ING with TO in OE, and later the use of the verbal noun in ING with TO. This latter was reinterpreted by speakers to denote purpose, when firstly the TO infinitive came to be perceived as the plain infinitive, with no specific inherent PURPOSE, and secondly when the marker of the inflected infinitive merged with (a) the marker of the uninflected infinitive and (b) the verbal noun in ING. Moreover, it could be that speakers more naturally would replace the now complex inflected infinitive with the verbal noun in ING, given that both were explicitly nominal, and had in certain areas merged as to their markers.

The formal merger of the present participle and the verbal noun in ING, in later ME perceived as a gerund, must therefore be in part due to the point of contact between them, that is, the infinitive. In no other form is there a specific point of contact between the use of the OE verbal noun and the present participle. Thus it may be that the development of the verbal noun into a gerund is through its contact with the infinitive; this may well have been strengthened later through contact with the participle in that it had had its marker merge phonetically with that of the infinitive.

We argued earlier that a point of dispute in such a

study as this must be whether the speaker in a transitional area could make the functional distinction between participle and gerund, both represented by ING. We noted that in Modern English native speakers can distinguish them, if only by saying that one form appears with OF and one doesn't. It does seem, however, that at certain points in transitional areas in ME speakers could recover no distinction between the two categories when used in certain surface slots, as in examples such as

in kepynge Goddis hestis and trewe prechyng of
the Gospel

There it seems that the writer could recover no difference between the participle and the gerund in function, and that the two forms here appear as variant structures. Interestingly, however, the phrase 'in kepynge Goddis hestis' is of course not fully participial since it is governed by a preposition, a characteristic of the gerundial form; note also that the OF with prechyng, a significant nominal feature, may be due to the presence of ADJ trewe. So in fact the situation in this example would appear to be very complex, showing a linguistic situation where the characteristics of the gerund and the participle have been very well confused in the structural inventory of this writer at least. It would therefore seem that we have a situation where neither the nominal nor the verbal characteristic of the ING as pertaining specifically to the gerund and the participle forms have been kept distinct at this stage in the development of the Modern form, giving speakers the possibility of choosing either the more nominal or the more verbal variant without

changing any of the communicative value of the utterance.²

We can assign the confusion of form and function to the fact that at earlier stages in the languages speakers had access only to one marker for the functions of the gerund, and the participle (taking 'gerund' to equal the function in OE carried out by the inflectional infinitive) which stemmed from the phonetic merger of the infinitive and the participle with the OE verbal noun. Forms such as after my taking leefe, which display a mix of verbal and nominal characteristics due to this merger of form and function, seem however to be common only to English among the Germanic languages. On this factor, i.e. the acquisition by the marker ING of the capacity to operate as a participle and gerund, Visser II (§ 1035) states that

It is, and always has been, impossible to say in Dutch 'de bestraffing de misdadiger' (the punishing (of) the criminal), 'de herroeping het bevel' (the cancelling (of) the order); or in German 'die Reinigung das Zimmer' (the cleaning (of) the room), 'die Verbrennung das Buch' (the burning (of) the book).

Again, in no other Germanic language is it the case that the modern reflex of the verbal noun with the marker ING/UNG can take adverbial modifiers as it manifests in ME, as in

bi puttyng forth of whom so it were
(Mercers Petition to Parliament)

nor can it be employed as an attributive or predicative adjunct, nor can it take an adverbial suffix to form new adverbials.

12.06 Fuzzy functions and fuzzy markers in the non-finite verb system--comparative evidence and foreign influence

Although the development of the verbal noun into a participle/gerund in English has no comparative structure in any of the Germanic languages, there are however, certain developments within the Indo-European language family which may be similar in terms of semantic, syntactic and perceptual development.

We have already mentioned briefly the formal merger which occurred in French between the participial form and the gerund. In Italian and Spanish the categories of gerund and participial are now both represented by the same marker, a reflex of the Latin gerund in ANDO/INDO/ENDO, which is itself, of course, cognate with the OE participial marker ENDE. One explanation of the situation in the Romance languages is that certain phonetic processes caused the originally distinct markers of the participle and gerund to merge, and thus the homophonous forms were reinterpreted as one lexical unit, with a dual but related function. The major point of difference between the situation in Romance and the situation which developed in ME is that in Latin the gerund had verbal rection, although morphologically it was nominal. The common denominator between English and the Romance situation would seem to be the operation of phonetic processes causing a merger between the markers of participle and gerund; and given their status as non-finite forms of the verb, speakers retained this surface ambiguity,

it being within whatever limits a speaker sets on the nature and degree of toleration of that ambiguity.

Having now established the similarity of processes affecting the language systems of Romance and English which effected a situation which caused a merger between the markers of the participle and gerund, we must look briefly at the possibility of external influence on the development of the ING participle.

Firstly, the merge between the participle and the gerund in the Romance languages was more predictable in terms of the surface realizations manifested, in that the participle and the gerund "looked alike", and would have been realized alike, and in fact are derived originally as abstract deverbatives by the same affix, NT. This particular linguistic situation is fairly predictable in terms of the linguist looking at the historical developments. But as we have seen, the situation in English is rather more complex, and most probably the linguist would not have been in a position to predict that the ING form in English would emerge as dominant.

It has also been suggested earlier in this study that French influence (the situation outlined directly above) may well have buffered the development of the ING form as representing both participle and gerund. Kisbye (1971: I C2-8) notes that

while the French participle could normally be rendered without difficulty by a corresponding form in ENDE, the gerondif puzzled scribes being now translated ~~now~~ by a present participle...and now by a verbal noun in -ING.

The following example from Michael of Northgate's translation of the French 'Some de Vices et des Vertues' is symptomatic: 'Ac þer is anoþer lenere corteys þet lenep wyþ-oute chap-fare makiinde alneway in heginge oþer ine pans oþer ine hors' 'mais il i a uns autres presteors cortois qui prestant sanz marchie faisant toutes voies en attendant ou en derniers ou en cheuals'.

Similarly, it has been suggested (Dal 1952) that Celtic, with its abundant use of verbal nouns in verbal function, has been contributory in the development of the ING form in English. It is traditionally assumed that contact may well have existed and that Celtic speakers may well have diffused their structure among dialect regions which were either bi-lingual, or contiguous. However, though we can allow that some interlanguage contact was possibly influential in the development of the English form, it would seem that it is more reasonable to assume that the ING form as gerund and participle came about through language internal processes.

12.07 The picture of resolution presented - tentatively

We have thus argued that in the ME period there was a phonetic merger of the once distinct markers of the infinitive, the participle and the verbal noun, and that the utilization of the form in ING assumed gerundial and participial function through some sort of confusion of form and function of the latter three categories. We have also shown how even in OE before the operation of the phonetic processes which brought about the merger of the markers there were certain points of overlap in function between the participle, inflected infinitive and verbal noun.

The situation arose, then, that in a transitional area spelling interchanges between these three distinct markers came about, with certain areas favouring one particular marker for, it seems, all functional categories. It seems then that a situation of functional ambiguity arose whereby speakers could have no real motivation in distinguishing certain functions, and that features of each of the categories were superimposed on others within the set. This appears to have resulted in a situation where the form in ING, the OE deverbative noun, acquires certain verbal characteristics in conjunction with appearing in functional slots appropriate for participles and infinitives.

However, the picture presented above is of course a simplified one. It is not the case that because one dialect area represents all three distinct categories of PART, INF and VERBAL NOUN by one marker, they do not in fact make some slight phonetic differentiation. This may be substantiated in the northern dialects where the advent of standard written language may have brought about a situation where ING represents participle and gerund orthographically, but where some phonetic distinction is made between [ɛnd] and [ɪŋ]. However, from the textual confusion which does obtain, it would seem that in many dialects of ME, ENDE/INDE and possibly ANDE did disappear both orthographically and phonetically, and that the infinitive re-established itself as a distinct functional category marked by TO and the verb stem, the form in ING

as a gerund being a variant paraphrase in certain functional slots discussed above.

The confusion between form and function which has been discussed above seems to have begun in the south and southwestern dialects with the merger of the markers of the three categories we are concerned with. In OE, forms of the verbal noun in ING appear in the function of gerund of purpose, such as to comynge, and also forms of the participle appear as to comende, where more normally a form as to comenne might be expected. In the ME period confusion as to what the realization of the PRES PART marker is would seem to have spread to more northerly dialect areas, as is illustrated in Havelok, where we find
 gangande, driuende, fastinde
 (c. 1280)

It is suggested that this general instability, combined with circulation of texts from the south in more northerly regions, would affect, and effect, a more general interchange of the markers in all three categories we have been concerned with. This may have been effected before the phonetic processes which produced the merger in the south took place also in the north. This situation may well have meant that scribes and writers in the north would have been more confused about which markers should be used for which functions, because they would follow the southern pattern of interchange of markers in writing while in speech would actually make a distinction between -ING and -ANDE. At any rate, for northern writers to interchange in markers would be an artificial written convention, and in speech no phonetic interchange would be manifest.

Finally, we must ask why the infinitive which has survived into ModE is not also marked by the morphological suffix ING. Firstly, we may adduce the evidence that by early ME the OE distinction between the inflected and uninflected infinitives had been lost, phonological reduction having wiped out the dative marker on the

inflectional infinitive. Secondly, in LOE and EME, due to this latter process, and the merger of the phonetic realizations of the markers of the INF, and verbal noun resulting in homophonous markers, we do find that the function of the OE inflected infinitive has partly been usurped by the form in ING in conjunction with TO, partly by the addition of another lexically purposive preposition such as FOR or TILL in conjunction with TO and the (now) verb stem. However, it seems that the re-establishment of a distinct INF marker is partly due to the altered word order sequence in ME. By the ME period, the serial order is largely of the type SVX, and accordingly subordinate clauses characteristically follow their heads (Greenberg 1966). The fact that TO precedes the verb stem thus performs a useful communicative/perceptual decoding function, in that by its presence speakers can signal and note when a subordinate clause begins. Thus in a linguistic situation where communicative difficulty might obtain with respect to the form in ING, it seems that the infinitive was resurrected to make definition of subordinate clause types initially more perceptually simplex. For instance, in a phrase such as 'I like reading books', the ME speaker, 'confused' in his structural inventory as to exactly what the form in ING could or could not denote, may have preferred to utilize the available and less perceptually complex form with TO and the verb stem. With respect to 'infinitival' ING, it

would be possible on initial and not complete decoding of the phrase 'I like reading books' to assign the meaning of ADJ to 'reading'.³ Thus we argue that the TO INF in ME was 'resurrected' to make 'linguistic life' less complex. In fact, however, in ModE we do have variant structures of 'I like reading books' and 'I like to read books', where they have one reading in common (ie, books, not comics, etc.)⁴ but we argue that for the former to be a paraphrase of the latter there must be no stress on 'reading'. With overt stress, 'reading' would most naturally be interpreted as an adjective. We must accept that we will never know whether ME speakers could in fact mark such distinctions (as we have illustrated) by stress.

Footnotes to Chapter Twelve

- ¹Disappearance of ENDE/LNDE/ANDE forms
 Dates are approximate in all instances: 1290 in southern dialects, 1350 in S-E, 1450 in S-W, 1480 in London, 1460 in E Midlands, 1400 in C Midlands, 1430 in W Midlands, 1450 in northern dialects, still in operation in dialect Scots. This disappearance can only be stated firmly as orthographic^{not} phonetically. They still may have been realized at later dates. (Mossé 1938 §134-139). We shall discuss at a later point why (with reference to this footnote) the expanded form should survive in N. regions, when seemingly lost in more southerly. See footnote 3a, chapter 14.
- ²By more nominal, we mean ability to be governed by prepositions, to take determiners, to govern objects in the genitive etc.; by more verbal we mean having verbal rection, taking adverbials etc.
- ³See Kimball (1973b) especially for further details of syntax as a guide to sentence decoding.
4. It is accepted that I like reading books can give the reading "I enjoy Reading", whereas most people do not have this Reading for I like to Read books. This author (unfortunately!) does.

CHAPTER THIRTEEN

The evolution of the BE + ING form in
Middle English

PART I

13.00 Survey and prospect

In the preceding three chapters we have discussed the possible path through which the form in ING passed to achieve its modern participial/gerundial status. We have presented the argument in terms of a phonetic merger resulting in the reinterpretation of the form in ING as having both a newly acquired gerundial function and a participial. We argued that the new status of the form in ING results from the loss of distinct markers for the verbal noun, participle and infinitive, with speaker reinterpretation such that the form in ING be dominantly participial/gerundial with functional overlap into the infinitive slot in certain situations we have outlined above. Thus in terms of speakers learning the language, we have argued that the complex and confused situation arising from the phonetic merger was resolved through communicative need to distinguish markers for the infinitive as opposed to the participle/gerund.

In this chapter we will attempt to examine the development of the modern English construction, commonly called the progressive or continuous tense, denoted here by the schema BE + ING. At an earlier stage we discussed the origins and functions of the form BE + PRES PART in OE, which is of course in some way related to the present day

form. Here we will be concerned to delineate a possible path of evolution for the present day form of the structure BE + PRES PART composed of the new hybrid ING form and BE.

13.01 How 'verby' is the BE + PRES PART (ENDE) form?

The earliest usage of the form in ENDE (in Germanic (or, correctly, its cognate) is as a deverbative adjective or as a substantive adjective. This usage is attested widely in Gothic, the oldest extant Germanic language. Thus:

sijais waila hugjands andastauin þeinamma
be kindly disposed to your adversary
(Matthew 5. 25)

It may, however, have predicative force in Gothic, and as such may govern a direct object, as in

sijais waldufni habands ufar taihun baurgim
have you power over ten cities!
(Luke 19. 17)

It would appear from the above, and from similar data that the ENDE form in Gothic (there attested as ANDS) had verbal rection, and as such may be considered as part of the verbal system.

It has often been argued that the verbal nature of the participle in the Germanic languages is not in fact a native phenomenon, but a calque based on structures the scribes met with in translating Latin and Greek texts. Certainly, the nominal origins of the participle seem evident in the following examples, where the participle is seen to govern a genitive object, as is the case with all nominal structures. Thus:

þeh hie him þæs gebafiende næren
(Alfred: Orosius 86. 21)

his wæron swiðe ehtende
(Alfred: Orosius 134.14)

However, before accepting that the participle is more nominal in form than verbal, we must consider further evidence.

13.02 Verbs of motion/rest and the present participle

While it is disputed that the form consisting of verbs of motion or rest with the present participle are of an early Indo-European origin. Certainly there are numerous examples of this construction in Germanic languages other than English. Visser III (§§ 1793-1796) collocates these structures under the heading 'Verb plus form in ING: Slight Subordination', where by ING he means a gloss for the present participle throughout its history. He argues that in such structures the participle is the dominant element, while the verb of motion or rest serves to modify its meaning. He gives as examples of this form the following

friedjands izwara þanaseiþs ni gam in Kaurinþon
'I came not sparing Corinth'
(Gothic: Ulfilas 2 Corinthians 1.23)

thie anthere zi lante quamun feriente
the others to the land came sailing
(OHG: Otfrid 5.13.27)

hwarabondi geng forð undar themu folke
he went walking forth among the people
(OS: Heliand 4967)

and it is found even in 17th century Dutch, as in

sy coemt hier gaende: wi moetent sonder falen so
 beschicken ~~she~~
 she comes here approaching: we must without fail
 thus arrange it
 (Cornelius van Ghistele: Terence Comedies 722)

As regards those forms which appear with verbs of rest, Visser again notes that the main verb seems rather to be functioning as a quasi-auxiliary, giving the combination the nature of an expanded or periphrastic verbal form. Again the construction seems to be of a fairly early date of emergence, Visser quoting the following as examples:

Jah þan standaþ bidjandans
 and then stood praying
 (Gothic: Ulfila Mark 11.25)

quad, er io..lagi dauualonti
 he said that he lay dying
 (OHG: Otfrid 3.27)

Griotandi satun idisi armskapana, thia that al
 forsaun
 weeping sat the sorrowful women that had seen it all
 (OS: Heliand 5743)

ef þer yrðið drukknir lægið sofandi
 if you should get drunk and lie dazed
 (O.Sc: Egils Sga)

hiu sit wepanda en ropande
 she sits weeping and crying
 (O.Fris. Laws 32.26)

A point of difference in our understanding and analysis of these constructions from that of Visser is that we do not hold that originally the verbs of motion and rest should in any way be considered as AUX, with the participial form acting as the main verb. Perceptually, speakers would interpret these structures as combinations of verbs and verbal adjectives, since at this point in time the

participle acted in all ways to betray its nominal origins, being inflected as a noun, not being able to take adverbial modification, agreeing with the subject which it qualified, and for the most part governing a genitival object.

That these verbs of rest and motion should not be considered as auxiliaries in OE is borne out by the following evidence. Visser notes, following van der Gaaf (1934), that the expanded form with verbs of motion and rest have as seeming equivalents the simple forms of the verb, so that the Latin version of the Acts of the Apostles 2,11 'quid statis aspicientes in coelum' is rendered in Ælfric Homily 1.296 by

Hwi stande ge ðus starigende wið heofonas weard?
but in the Blickling Homilies 123 by

Hwæt standaþ ge her and wundriaþ & up on þysne
heofon lociaþ?

Visser thus argues that this should be proof that the participle may be interpreted as a full verb form, as in ModE, with the verb of motion or rest interpretable as an AUX. However, in no other place in English do verbs of motion or rest appear as auxiliaries, at least at this stage in the history, and thus it is not plausible to state that these verbs have been reduced in lexical status. Rather, it would seem that the participle is interpreted as an adverbial/participial adjunct to the verb. In this way we can allow that the form we are discussing was spread into the language system by speakers decoding and

entering the participle into their predictive grammar as a clause equivalent subordinating adjunct.

However, we have argued earlier in this work that the construction of the participle with verbs of motion and rest may well have opened a path for the development of the verbal periphrasis with BE and the present participle. Intermediary between this construction and those with verbs of motion would seem to be the following.

13.03 Is WEORÐAN the missing link between verbs of motion/rest and BE?

Visser holds that WEORÐAN appears in construction with the present participle, and may be defined as a periphrastic verb form denoting continuous action, intermediary between verbs of motion/rest with the present participle and the later form BE + PRES PART. However, before analysing the WEORÐAN form, let us firstly reconsider our earlier discussion of the Germanic verbal system. Specifically, we shall consider the methods of representing aspectual distinctions.

The P.Gmc 'two-tense, one voice' verb system is essentially a syncretism of tense and aspect markers derived from P.Indo-European. Essentially, because the simple tenses (which in Indo-European primarily marked aspect) mark the secondary distinction of tense, the old distinction of imperfective/perfective (realized by the verb stems) was obscured. Further, although P.Gmc had

a type of aktionsart, orderivational aspect, this did not survive as a synchronic process in OE.¹ Given that these two methods of aspectual realization were not fully available in OE, it must be the case that speakers did not have the means to represent certain aspectual distinctions via the verb system.

We have argued that although there are abundant instances in the Germanic languages of collocations of verbs of motion/rest and the present participle, essentially these are not periphrastic verb forms. Evidence for this assumption is found on analysing the status of the verbs of rest/motion. It would appear that they have not been grammaticalized as auxiliaries. Thus, in conjunction with these verbs, the present participle must be analysed as an adjunct to the main verb, extending the description of the situation denoted by the main verb. However, given that the present participle is essentially timeless, then in conjunction with the verbs of rest/motion it must be seen as describing an action or event which is ongoing throughout the main situation described by the verb of motion/rest.

If we accept the above as a definition of the present participle in conjunction with verbs of motion/rest, then we begin to see a path of development from these structures to that of BE + PRES PART. That is, if the lexical content of the verbs of motion/rest were depleted, then the lexical content of the participle would describe the

whole situation, and the frame would represent that the action was unfinished. In fact such a development does seem to have taken place with the reduction of WEORÐAN from a lexical verb of motion to a grammaticalized auxiliary status.

WEORÐAN appears to be grammaticalized as an auxiliary (see Givon 1971 for a discussion of this process) in the very early stages of the Germanic languages.² In fact, it originally was a verb of motion cognate to the Latin vertere, and, in certain contexts in early Germanic it assumes full verbal status, with the meaning BECOME. Given its original status, we may then posit that its ability to collocate with the present participle is in fact derived from collocations of verbs of motion/rest and the present participle.

Examples of WEORÐAN and the present participle may be given from all the Germanic languages, where it was a common variant of the form with BE; Visser III (§§1798ff:), where WEORÐAN is not glossed in English because of the problems in translation.

jah wairþand mannans sik friondans

(Gothic: Ulfila 2 Timothy 3.2)

and the people "worth" loving to themselves

tho ward im..mod mornondi

(OS: Heliand 720)

Then "wearp" his heart sorrowing

uuntrentiu uurtun eliu dhiu folc

(OHG: The Monsee Fragments 5.17)

"wearp" wondering all the people

and hi sinne mete nowet bihalda ni muge ande

rutande werthe

(O Fris: Laws 335,21)

that he his food may not keep and "worth" Rattling

han laghe sina hander offwir miin aghon ac genast

wardh iac seande

(O Swedish: Nichodemi Evangelium 382)

he put his hands on my eyes and immediately I saw ("worth" sec)

Mithridates wort jagende in foreste

(Mod. Du.)

Mithridates "worth" wandering in the forest

wurden burgware bliðe on mode, ferhōfeonde
(OE: Andreas 1583)

In ModE it is difficult to gloss WEORÐAN. It was by derivation a verb of motion, but as an auxiliary it remained as having directional features, normally and traditionally glossed as ingressive or inchoative. In many instances, however, there seems little semantic distinction between it and BE, especially when used with the present participle.³

Given that the forms of PRES PART with verbs of motion and rest and then with WEORÐAN are common early in the linguistic history of the Germanic languages, the outline which we have just presented allows a path of development for the form BE + PRES PART. We have argued that in conjunction with verbs of motion and rest, the PRES PART marked ongoing action co-occurrent with the situation described by the main verb. That is, the participle in these instances is a kind of adverbial adjunct. However, with the reduction or grammaticalization of WEORÐAN, the participle denotes the main situation, while the semantics of WEORÐAN (as BE/BECOME) and of the participial frame denotes that the situation is ongoing or unfinished. That is, the combination of WEORÐAN and PRES PART represents how a particular situation is progressing at a particular point in the discourse. This essentially appears to be a proposition type, in the sense of Jessen (1975) denoting continuous action.

While we have argued that in no sense can the majority

of verbs of motion and rest be considered auxiliary we hold that WEORPAN did in fact reduce to auxiliary status. No particular explanation as to why WEORPAN alone was reduced can be offered here. However, there are some instances of other collocations of verbs of motion/rest and PRESTPART where the main verb adds little to the description of the situation. For example, if we consider the collocation stod murnende, the main verb stod appears essentially to be close in status to an auxiliary of state, such as BE or BECOME (WEORPAN). It may well be that such collocations were a causal factor in the development of WEORPAN in conjunction with PRES PART.

We have proposed that WEORPAN, grammaticalized as an AUX could appear in combination with PRES PART to realize a complex verb form denoting the propositional type of continuous action. Further, as an auxiliary, WEORPAN marks the temporal reference to the proposition according to its relation with the extralinguistic or communicative temporal axis. We have noted, moreover, that the lexical content of WEORPAN may in certain contexts be equated with the lexical content of BE. Given this correspondence, it is reasonable to propose that speakers began to utilize WEORPAN and BE as variant forms. When this situation arises in conjunction with communicative problems manifested by the overloaded simple tense forms, the collocation of BE + PRES PART would

most naturally be utilized as a variant of the simple tenses (when denoting unfinished action). Evidence for the naturalness of the use of the BE + PRES PART may be evinced from the semantics of BE and the PRES PART. We have already noted that the present participle is, being a non-finite verb form, essentially timeless. Moreover, its derivation from the Indo-European 'present stem' denoting imperfective aspect is manifest in its semantic frame, that is, that it denotes an ongoing or unfinished situation. Further, BE is, semantically the primary verb of location, both abstract and concrete (Anderson (1971, 1973b); Jessen (1975)). In conjunction with the timeless participle, BE must be seen to denote continued existence of a situation. Thus the combination of BE and the PRES PART forms a frame which, by virtue of the semantics of the component parts describes linguistically that a situation is unfinished.⁴

Given the above arguments for the evolution of the periphrastic form BE + PRES PART, we may tabulate its development as follows:

I	VERB OF MOTION/REST (lexically perfective: imperfective)	+	CLAUSE EQUIVALENT PARTICIPLE (describing an ongoing situation co-occurring with the situation described in the main verb)
II	VERB OF MOTION/REST (WEORPAN) (reduced to AUX status, either directional or locational)	+	PARTICIPLE (describing that the <u>main situation</u> is unfinished, with time reference denoted by the AUX)

III	VERB OF LOCATION (BEON, WEORÐAN)	+	PARTICIPLE
	(in this combination, AUX is strictly locational)		(as above in II - that is, denoting proposition- al aspect, in this instance continuous action)

From this table, we can see that a major factor⁵ in the development of BE + PRES PART was extension of the kind of verb with which the participle collocated. That is, in Stage II, we find the participle describing the main situation, thus becoming the major element in the collocation, with BE and WEORÐAN perceived as AUX only.

13.04 From WEORÐAN to BE and the present participle - an exercise in speech perception

Speakers would thus have 'found' the BE + PRES PART form in their language, firstly as a variant of the WEORÐAN structure, which in turn may be seen (in terms of the language system) to be closely related to the structures composed of the verbs of motion/rest and the present participle. In fact, all three forms are in existence in OE, and given the functions outlined above, it is reasonable to propose that speakers marked them as related structures.

The development of the BE + PRES PART form as a fully verbal equivalent of the simple 'tenses' (when denoting continuous action) results from two major factors. Firstly, the structure with BE is strictly non-directional (as opposed to that with WEORÐAN, which may be directional), and thus in combination with the

present participle the frame is doubly representative of unfinished action. In contrast to the simple tenses, this form marks semantically that the proposition is continuous, while the tense marker carried by the auxiliary links the aspect of continuation to the time axis of the discourse. The simple tenses, however, mark temporal deixis and aspectual distinction by the same morpheme. This latter situation would appear to be problematic in communication especially when we consider the other functions of the simple tenses. Thus, we may argue that the second causal factor in the development of the BE + PRES PART periphrasis is that its use in the context of continuous action eases the functional overload of the simple tenses, and obviates possible communicative ambiguity. Further that the 'replacement form' for the simple tenses (as markers of continuous action) should be periphrastic and not synthetic may be explicated by Traugott's (1972, 1974) claim (if otherwise supported) that a language will 'prefer' to give segmented realization in surface structure to distinct underlying semantic categories. This may receive confirmation, at least from the OE language system. That is, OE had no resources to re-create inflexional markers of underlying categories, but did have available isolative surface forms which appear to have been semantically suitable as replacements for inflectional markers which had been lost, or had become communicatively complex. For further details of

this general process, see Venneman (1974a, 1975) and the above chapters on language change and word order change.

13.05 The development of BE + PRES PART (-ENDE) - a native phenomenon

By outlining a development as above, we have lent credibility to the hypothesis that the periphrastic form of BE + PRES PART was a native development in the Germanic languages. However, there still remain some linguists and scholars who claim that the structure is no more than a calque on Latin, which we have discussed elsewhere. There is however evidence available which suggests that glossators did not always translate the glosses literally, in that in some cases a participial is used where in Latin there was another form, as

ond þus cwæþ: þu þe þyrstende wære monnes blode xxx
wintra, drync nu þine fylle
(Alfred: Orosius 76.33)

as compared with the Latin original

*Satia, te, inquit, sanguine quem sitisti, cujus
per annos triginta insatiabilis perseverasti*

For further examples, see Visser III (§ 1853).

Further evidence that the periphrastic form was indeed a native formation may be derived from the very fact that from an early stage it was a variant of the simple tense forms, as we noted in chapter 10.02ff.

There we argued that the seeming interchangeability of the two forms was due to the fact that the periphrastic form was an innovating structure denoting ^{the 'state'} proposition-type, and

that speakers would firstly have both forms available as structures in their communicative inventories. Thus, in certain areas and perhaps with certain groups of speakers, each form could become representative of either function, either aspect or pure temporal location of action, due to a confusion of exactly what the new form denoted. This would certainly seem to be the case, given the evidence available, such as

secuti sunt eum
fylgedon/fylgende weron
(Mark 1.20 - Lindisfarne Gospels)

profectus sum
gefoerde/færende wæs
(Mark 12.1 - Lindisfarne Gospels)

ðā menigo fylegende wæron/gefylgedon hine
(Matthew 14.19 - Lindisfarne Gospels)

13.06 Function of the expanded form in English

We have thus argued that the periphrasis with BE + PRES PART comes to represent the propositional type of continuative action. In this structure BE is recognised as an auxiliary, and as such marks the time location of the situation being represented on the axis of discourse time.

We have further argued that such a development came through speaker reinterpretation of constructions formed with participles and verbs of rest and motion. That is, we argued that since verbs of motion and rest are lexically imperfective or perfective, and thus limited in the kind of aspectual situation they may denote adjunction of the

present participle allowed linguistic representation of an unfinished situation as opposed to a representation of perfective/imperfective action. The functional extension of the structures with verbs of motion/rest and the present participle to the periphrasis with BE + PRES PART has been dealt with above. It remains to state here that the extension took place at that time in the OE language when all other realisations of verbal aspect had become communicatively ambiguous, or, indeed, lost to the language⁶. The loss of other aspectual markers, and the innovation of the new periphrastic verb forms meant, essentially, that OE developed a propositional aspectual system.

With respect to the proposition type denoting continuative action in OE, we may confirm that it was an OE innovation from evidence quoted in Visser III § 1857. There he notes that the expanded form was rarely found with lexically perfective verbs such as reach, fulfil, recognize etc. That is, these verbs were not often found realized in the 'timeless' present participial function, because of their intrinsically perfective meaning. The character of the proposition type denoting continuative action is derived from the grammatical function of BE and the present participle, both denoting abstractly that what they represent is unfinished. In early OE, when it may be argued, the system of zeitcharakter was the primary 'aspectual' function, a lexically terminative action {an achievement} for accomplishment }

could not be part of a structure denoting an unfinished action. The imperfective correlative of the perfective form would be utilized instead. However, by the time of classical OE, this type of aspectual opposition was, by and large lost to speakers as a ^{primary} mode of representing aspectual distinctions. Thus, in classical OE, we do find examples of lexically terminative verbs represented in the BE + PRES PART periphrasis. Similarly, Visser finds that the BE + PRES PART periphrasis is rarely used in early OE with verbs carrying perfective affixes such as GE- (Gmc GA), A-, BE-, OFER- and TO-. In classical OE, these verbs are found framed in the expanded form. Again, this suggests that speakers had no alternative means of representing continuative action. That is, these suffixes no longer denoted perfective action.

This, this would suggest that by the classical OE period, speakers no longer had available to them the purely aspectual distinctions of perfectivity or imperfectivity, but did have the means of representing linguistically the kind of proposition involved. That is, speakers could represent, e.g. whether a situation was finished (the new 'perfect' tense) or whether it was not finished (the BE + PRES PART construction). The intrinsic character of the linguistic frame (for example, BE and the present participle/'existence', 'unfinished') realizes the state of the situation, while the lexical content of the participle realizes what is happening.

Thus in classical OE we find lexically perfective verbs within the new continuative propositional frame, as in

ne ongetton hwaet...gespraecend weas him

This would seem to support the hypothesis that OE was a major transitional period in linguistic methods of representing aspectual distinctions. In effect, the collapse of the Indo-European verb system to the 'functionally overloaded' OE 'two-tense' system seems to be the causal factor in innovating a new aspectual category in English.

To develop this latter argument further, the periphrastic form BE + PRES PART has a natural role in the verbal system as it developed in OE. As we have noted, the verbal system of P.GmC had become a two-tense system, where the simple tenses bore, for the main part, all those semantic features of the verbs system which are represented in ModE by distinct surface forms. Such a system had complications for speakers using the verbal system in communication, since ambiguity could arise from one form having many possible interpretations. We have argued that Traugott's universal of segmentalization has a role to play in understanding how language change may come about. Most naturally, speakers will prefer to have distinct surface forms for all distinct semantic categories (cf. the case with the speech of children, and also with the formation of pidgins and creoles, mentioned in chapter 6.04.) Thus the verbal system in the early

Germanic languages may be seen to violate this communicative 'preference' which obviates communicative ambiguity. In OE there was a concomitant development of other periphrastic forms of the verb, such as the passive form (BE + PAST PART), the so-called perfect tense (HAVE/BE + PAST PART) and various modal constructions with verbs such as *MAGAN*, *AGAN*, *UTAN* etc., and the development of 'future' AUX, in OE derived from the verbs *WILLAN* and *SCULAN*. It is not the place here to discuss the developments of these latter forms, but from evidence available (Visser II & III) it appears that their derivation is similar to that of the BE + PRES PART construction. That is, they replaced various functions hitherto represented by the simple tenses, again, because of communicative ambiguity caused by functional overload of the simple forms. Further just as happened with BE in the expanded form, the new modal auxiliaries are derived from full lexical verbs grammaticalized as function markers denoting various types of propositional modality.

Leaving aside, then, for the minute the theoretically messy situation in OE where speakers 'confused' themselves between which of the simple forms of the verb and the periphrasis with BE + PRES PART represented what function, let us construct a simplex situation. We argue that synchronically speakers of OE perceive the simple tenses as denoting pure action unmarked for any aspectual distinction (leaving aside also the fact that the simple

tenses denoted generic action) as opposed to the form with BE + PRES PART which denoted propositional continuative aspect. We may speculate that speakers could mark both the simple forms of the verb, and the uninflected infinitive (in LOE), as denoting unmarked proposition types with the result that the markers of the simple forms could only operate as deictics of temporal location, and the bare infinitive without TO as only denoting action qualifying the modality of the class of verbs to which it was limited (the emerging modal verbs discussed directly above). It might well have been the case that the simple tense forms would have been lost from the language, if they were not retained for distinguishing such other semantic features as habitual and generic action: it may be that speakers utilized them for this because of their almost totally unmarked status. Thus in OE, a language which adopted propositional-type aspect, they came to refer either to marked or unmarked time⁷ in the extra-linguistic situation.

Footnotes to Chapter Thirteen

- ¹For example, GA prefixed to a verb converted it to perfective, thus allowing distinctions of GA/not GA corresponding respectively to perfective/imperfective. Other suffixes were also utilized to denote iteration, inception etc.
- ²In fact, we may partially account for its grammaticalization as an auxiliary over all other verbs of rest and motion as follows. Essentially, the 'level' of lexical content expressed by WEORÐAN even as a full verb is low compared with other verbs of motion and rest. It would appear to be the case that the lower the content value, the more prone a lexical item to the process of grammaticalization.
- ³It is interesting to note that WEORÐAN does in some instances in OE translate a Latin future, thus manifesting semantic utilization of its directional features. See also in German structures such as Er wird singen, which may be glossed as "He is going to sing" or "he will sing".
- ⁴Similarly, the combination of HAVE/BE and the PART PART forms a frame which, by virtue of the semantics of the combined elements, may denote that a situation is finished. This proposition type also seems to have been evolved to relieve functional load on the simple tense forms in marking past action/present state.
- ⁵Of course, to define BE + PRES PART as a fully verbal form may also be determined by the fact that it began governing an accusative object, which is characteristic of verbs. In early OE the participle is found governing its object in the genitive, which is the characteristic nominal mode of government.
- ⁶For example, the Gmc GA v. not-GA aspectual distinction was non-functional in OE, except as a marker of the past participle of certain verbs.
- ⁷That is, a single tense form may be said to refer to marked time if it represents habitual iterative, inceptive propositions, since these may be linked to specific temporal locations. If the simple tense represents a generic predication, we may state that it is unmarked for time, except in so far as the proposition holds good for all time.

CHAPTER FOURTEEN

The evolution of the BE + ING form in
Middle English

PART II

14.00 Prospect

We have noted that in OE the linguistic methods of realising aspectual distinctions seem to have been in transition from the older imperfective/perfective oppositions to the innovating propositional types. However, in LOE and EME this situation is complicated even further by the phonetic merger of the markers of the present participle, the inflected infinitive and the verbal noun, which we discussed above in Chapter 9.00ff.

14.01 Was the OE expanded form lost between LOE and EME?

In EME, it has been traditionally assumed that the periphrasis with BE + PRES PART either disappeared or 'went underground', with relatively few forms appearing in the literature of the time. Kisbye (1971, I:36) notes that of the few forms which do occur, they seem to be of a more or less adjectival nature, as

is schinende
is livende

or what he calls stereotypical cases, with very common verbs, such as is fehtende; is cweþende. He further notes that verbs of motion and rest still appear with the periphrasis. He gives a general statement to the effect that the form is more or less absent from the S-W dialectal areas, is rare in the EMidlands and Kentish,

but appears to hold ground in the Northern dialects, and also to a fair extent in the N Midlands. Further, he states that it is not till the 14th century that the form again seems to be on the increase, though even then it is rare in the works of Chaucer, Gower, and Lydgate, all writing in the London area. A century later the form BE + PRES PART (ING) is found universally.

It is traditionally assumed that the non-appearance of the periphrasis in some dialects in the first half of the ME period makes it difficult to establish any direct line of contact between the OE form with BE + PRES PART (ENDE) and the form as in the ModE he is coming. In the following sections we will be concerned to establish a possible developmental path.

14.02 Possible paths of development in ME

Direct descent of the form BE + PRES PART (ING) from the OE verbal noun in ING is not probable in terms of the data available to the historical linguist. Visser III (§ 1859) notes that evidence which might possibly be considered consists of only five OE examples, we note here

saule synna intiga gif beoþ lettinge...he geswutelige
 pecati causit fuerit latens..patefaciet
 (Interlinear Gloss: Rule of St Benet 80.10)

wee..gehyhton ðette he were eftlesing israelis
 (Lindisfarne Gospels: Luke 24.21)¹

and wees menigo..drowungo†drowenda
 (Lindisfarne Gospels: Mark 5.26)

wedlinge ic eam
 egens sum ego
 (Junius Psalter 87.16)

Hwæt is elde behouinge
(Lambeth Homily: 119)

Thus, given the paucity of early examples which resemble the construction which was established in LME and which has survived in that form into ModE, some linguists have argued that the construction must have developed from the verbal noun preceded by the preposition AN.²

(§1859)

Visser III\claims that the most viable path of derivation of the modern form BE + ING is from OE prototype forms composed of BE, AN(ON) and the gerund ING. He claims that such structures do in fact appear in some profusion in L.O.E., EME and instances the following as an example

heo iuunden þene king þær he wes an slæting
(Lazamon 12305, circa 1205)

Given these forms, Visser argues that a further step in the development to the modern form is the loss of the locative marker AN.³

This certainly seems a plausible hypothesis, since, as we have noted, the expanded form BE + PRES PART (-ENDE) is hardly attested at all in the southern and south Midlands dialect areas. This lack of data has led some linguistics into considering that there can be no link at all between the OE and the ModE forms, and that the ModE form is derived from structures such as exemplified directly above. However in the same manuscript of Lazamon from which the above example is quoted we find examples of the expanded form without AN, as instanced by

al þa winne þe ich æm waldringe ouer
(Lazamon)

This would suggest that both forms were operational at this period.

In fact, an earlier example of the expanded form with AN is found, but AN is not in collocation with an ING form, but with the marker of the OE present participle ENDE. Consider

we sind an sprecende
(Lindisfarne Gospels)

which we may compare with the more common OE form with AN, as

creca burg on ... cwælcunge was
(Alfred: Orosius 100.8)

Attestation of AN with the ENDE marker would suggest that (at least) the phonetic confusion between the markers of the inflected infinitive, the noun in -ING and the present participle had begun. Further, this early confusion of the markers of the present participle and the noun essentially prefigures the complex situation which arises in ME when ING is realized as the marker of participial, gerundial and nominal function.

However, to return to the situation evidenced in Lazamon's Brut. We noted that this text shows expanded forms with and without the locative particle, AN. Further, we have proposed that the form without AN is the reflex of the OE type with BE + PRES PART (ENDE), while it would appear that the form with the locative particle derives from OE constructions such as that illustrated

in the example from the Orosius given above, i.e. where the form in ING (or UNG) is essentially nominal.

However, given that fact that both the expanded forms of the verb with ING emerge at roughly the same period, it seems relevant to discuss their development in ME concurrently rather than individually.

14.03 Foreign influence or change in marker perception?

The increasing proliferation of these forms in ME has been ascribed by some linguists as a result of contact with other languages which manifest expanded verb forms.^{3a} For example, Kisbye (1971, I:38) suggests that the Celtic languages in Britain (in which there occurs a high frequency of expanded verb forms) may have impinged on certain dialect areas of ME, spreading the 'shape' of the expanded form which was then realized in ME as BE + ING, with or without the locative preposition AN. Other linguists have suggested that French influence, in the shape of forms such as il était parlant, was considerable in firstly strengthening the gerundial ING as the marker of participial function⁴ and further in strengthening the shape of the expanded forms. However, we do not accept that interlanguage contact can be held to be the major motivation for expanded forms in ME. As regards the influence of the Celtic languages, the most that can be said is that speakers in bi-lingual or contact areas may well have had the innovating BE + ING or BE + AN + ING buffered by the structural properties of the Celtic verbs.

However, as most of the Celtic speaking areas are in the north and north-west, where the form ENDE/ANDE persisted longest, this hypothesis would seem rather weak. With regard to French influence, it should be noted that the French ANT marker represented both participial and gerundial functions, and so there is no real reason why speakers should not have retained -ENDE as the dominant marker for both these functions, rather than ING, particularly since -ENDE and -ANT sound similar, (if we take the French influence as strong in literary texts).

Thus, rather than accept that the development of the expanded forms BE + ING and BE + A(N) + ING is due to language contact, let us rather investigate briefly the origins of these two constructions, which may hold the key to their emergence in the ME period.

We maintain that the form BE + ING is the direct descendant of the OE expanded form denoting continuous action, that is, BE + PRES PART (ENDE). In chapter eleven, we have shown how the -ENDE marker of the present participle was lost, with the ING marker emerging as the marker of both participial and gerundial function. Essentially, then, BE + ING remains the surface structure realization of that proposition type we have called continuous or unfinished action.

However, the form BE + AN + ING would seem to derive directly from OE constructions where BE is collocated with a nominal in ING which is governed by a locative

preposition. Given that ING in OE primarily denotes an abstract noun or state we may gloss the BE + AN + ING as the linguistic representation of a situation being in a state of X-ness. That is, BE + A + ING represents that at a certain point (or between two points) on the axis of discourse time a certain situation is in existence. We will return to arguments concerning the semantics of these two forms below.

It is relevant at this point, however, to consider whether ING as the marker of participial, gerundial and nominal abstract functions may have caused any speaker confusion over function and form. One possible hypothesis is that due to the high preponderance of ING forms with transparent nominal characteristics, the ING form as representative of the OE BE + PRES PART (ENDE) construction was not recoverable beyond the transition period when ENDE and ING were variant markers of participial function. Again, we shall discuss this hypothesis below.

14.04 BE + ING and BE + AN + ING - innovations marking a new aspectual distinction - or markers of the OE propositional type?

We have argued that the form BE + PRES PART in OE represents a propositional aspectual distinction in the sense of Jessen (1975), denoting in this case the continuation of the situation being linguistically represented. However, Anderson (1973b) states that the progressive aspect, characterized by Jessen as purely

aspectual (characterizing the life of the situation, its birth, existence or death) is typically composed of an auxiliary in combination with a verb form which is abstractly a nominal in construction with a locative.⁵

He further argues that in fact all aspectual distinctions may be characterised abstractly as an underlying nominal in a certain case relation with the 'auxiliary' form of the verb. Thus, in fact, we may speculate that the original I-E aspectual distinctions were in fact evidence of this, in that the verb stems of PIE were in fact originally nominals.⁶

Anderson's hypothesis leads to an interesting proposal concerning the development of the new periphrasis BE + PRES PART in the ME period. We have argued that the form BE + ING is derived directly from the OE form, through the various phonetic processes which lead to ING emerging as the marker for both the gerund and the participle in ME. But we have also committed ourselves to making a tentative proposal concerning the evolution of the form BE + AN + ING. This form in fact appears at roughly the same time as the form BE + ING. We accept that Anderson's proposals concerning the derivation of progressive aspect are essentially correct; thus we argue that in the BE + AN + ING form we have a superficial manifestation of what Anderson claims is underlying progressive aspect in all languages. At this point, we tentatively claim the emergence of this form signifies a return

to an aspectually based verb system, in the sense of Jessen (1975); see further our comments in chapter eight, paragraph two.

If this is the case, however, how do we explain this phenomenon, and the fact that the form in ING without AN became the dominant structure long before the form with the locative participle became in any way as widespread? Also, we must explicate why the specifically locative form is now 'dead' in ModE, except as a poetic device.

We have argued, essentially, that the form in ING emerges as the marker of abstract nominal, gerundial and participial function because of a three-way merger, in OE between the markers of the non-finite parts of the verb.⁷ However, it would appear that the ING form in the BE + ING expanded structure was not initially perceived of as being explicitly nominal, but rather was seen as the direct reflex of the OE participial marker. We may safely form this conclusion because in this context ING does not display overtly nominal features. That is, since the BE + ING form is not governed by a preposition, as in the BE + AN + ING form to analyze it as nominal is tantamount to glossing, for example he was singing as he was song.

If we accept that in EME the form BE + ING was a direct continuation of the OE BE + ENDE, that is, that ING in this context is 'participial' rather than nominal, then we may state that BE + ING did directly carry into ME the proposition type denoting an unfinished situation.

However, it is in the EME period that the ING form emerges as a gerund, and as such may appear governed by prepositions (a transparently nominal characteristic) though it may govern an accusative object. Thus at this early stage of ME, the ING form represents abstract nominal, participial and gerundial function. Thus it may be the case that the emergence of the BE + AN + ING form is governed by speaker confusion as to whether or not ING as marker of participial function should be governed by prepositions.

14.05 BE + ING and BE + AN + ING - markers of propositional modality and progressive aspect respectively

This latter argument lacks support, in that we must account for the fact that the preposition contained in BE + AN + ING is specifically locative, and, further, that no other preposition may replace AN. A more cogent argument is found in the following. Firstly, we may allow that ING emerges as the marker of both participial and gerundial function. Secondly, speakers perceive the form BE + PRES PART(ING) as marking a proposition type, in this instance continuous action ongoing over a specified period of discourse time. Thirdly, the BE + AN + ING form is perceived of as describing the existence of a particular situation within the discourse, and within specified discourse time. This latter is a natural, but more restricted, development from other prepositionally governed gerund types, and is in no way

a direct reflex of the OE periphrasis BE + PRES PART (ENDE).

What construction, then, do we have in the ModE form BE + ING? It seems that the form with the explicit locative marker AN survives until (at the latest) the early 20th century, with, of course, AN being reduced to A. However, just as in ME, the 'simple' form BE + ING survives alongside the BE + A(N) + ING construction. Given our putative analysis of the ME situation, it seems that from the ME period onwards, the English aspectual system may have been partially dichotomous. That is, BE + ING represents the propositional distinction of continuous action. We may also include the so-called ('perfect tense',⁸ and perhaps the passive as components of this propositional aspectual system. On the other hand, the innovating BE + A(N) + ING form may represent a truly aspectual [or existential] system, in that it appears to mark the existence of a situation as opposed to a situation not yet terminated.

14.06 Complications - the non-finite verb confusion over ING extends into the finite verb forms

The disappearance of the locative particle AN from what we have termed the BE + AN + ING periphrases complicates the analysis of the surviving form in ModE. That is, is the modern form the reflex of ME BE + ING or of the BE + AN + ING form?

It would appear that ING as the marker of gerundial and participial function causes problems in demarcating

which function it represents. For example, in a sentence such as

After leaving him, I got back my independence we may categorize leaving as a participle if we take after as an adverb, but as a gerund if we take after as a preposition. It seems that we have reached an impasse in our analysis.

However, rather than expending energy on a method of categorizing participial and gerundial functions, the following argument seems to obviate the above problematic situation. Given the fact that ING marks that part of the 'non-finite verb spectrum', which in other languages is, and at other times in English was represented by two distinct markers, we may allow that ING represents a syntactic hybrid. That is, ING may appear in syntactic frames which are more or less verbal, or, more specifically which range from participial through gerundial to nominal functions.

This situation would appear to be unparalleled in the Germanic language family, and must be ascribed to the first EME phonetic merger which resulted in ING emerging as the marker of participial and gerundial functions. Given that -ING then marked uniquely that band of the non-finite verb continuum denoting participial and gerundial function, it may well be that speakers began to allow features of the one function to appear in the frame of the other in surface structure. In short, we must admit of a fuzzy

demarcation of the two once distinctly marked functions.

14.07 BE + ING and BE + AN + ING - variants denoting progressive aspect?

If it is the case that from ME onwards speakers have been unable to make definite decisions concerning the demarcation of participles and gerunds, then we may well find that they have had a similar problem in distinguishing the forms BE + ING and BE + AN + ING. In fact, given that the ING form is weighted heavily towards more nominal characterizations (the abstract nominal and gerundial functions), it may well be the case that speakers perceived the ING marker in the BE + ING as (at least) equivalent to the gerundial BE + AN + ING before the loss of the AN marker. Evidence is, in fact, available to support this claim. Anderson (1973b) has shown that the Mode BE + ING⁹ form should be analysed as denoting the existence of a situation, which characterization we assigned only to the ME BE + AN + ING form. Anderson argues that the Mode BE + ING form must involve an underlying locative particle, in that forms such as

She was buying apples when I saw her last
may be paraphrased as

She was IN THE PROCESS OF buying apples when I saw her last

This analysis thus underlines the fact that ING in this sentence is nominal (it may be glossed by PROCESS) and that it is governed underlyingly by a locative marker, denoting that the process is in operation. See Anderson

(1973b) for further details of this proposal. For our purposes, however, this analysis corroborates our hypothesis that speakers came to perceive the two expanded forms as variant structures. In fact there is data available which would seem to show a stage in the transition of ING in BE + ING from marking purely participial function to its marking gerundial (and thus more nominal) function. Consider therefore

he is ~~man~~marshalling of his bull, bear and horse
(Ben Jonson: The Silent Woman)

This is very obviously a hybrid form, in that while there is no explicit locative marker, the ING governs a genitive object, linking it to the nominal frames within which ING may also occur.

14.08 The outcome in modern English explained

Thus, to account for the ModE form BE + ING as representative of progressive aspect which was represented in ME by BE + AN + ING we must hold that at some point these forms became surface structure variants, both marking progressive aspect. We argue that this situation came about through speaker perception of ING as preponderantly nominal (including, of course, gerundial function). Thus, given the similarity of shape between BE + ING and BE + AN + ING, speakers began to perceive BE + ING as a variant of BE + AN + ING without an explicit locative marker. The question then remains, of course, as to why the BE + ING survived as representing progressive aspect,

when the language had a surface structure form which explicitly marked this function. A possible explanation may be evinced. The BE + ING form had always, from the ME to ModE periods, a higher frequency rating of use. Further, it may well be that the elision of the AN marker in fact happened much earlier than has been previously thought. If this is the case, then the two forms may have merged in form and function perhaps as early as the Ben Jonson quotation given above. This is not to say that this putative merger happened so early in all dialects; in fact, it patently did not. However, it may be the case that the BE + AN + ING form, always the lesser in frequency of use, became marked adversely as representative of lower class or rural dialect speech, and thus was never established as the standard form for representing progressive aspect.

14.09 The OE connection - a brief review in summary

It remains now to account for the fact that during the first part of the ME period the form BE + PRES PART was not attested in many texts from the southern dialect areas. It should be noted that these were the areas where the merger between the markers of inflected infinitive, the participle and the noun in -ING was first operational. Therefore we may posit a situation in these areas as follows. Where there is no trace of INDE (the dialect variant of our cover term ENDE) does not entail a loss of participial function. Rather, the participle appears

'disguised' as comyng, comyn etc, for example.

Those linguists, then, who conclude that the OE form BE + PRES PART (ENDE) is lost in these southern dialects, have to admit amazement at the emergence of ING as the marker of participial, gerundial and state-nominal function. Essentially, if it is held that the new form BE + ING has no connection with the OE expanded form, then it must be the case that it developed 'out of thin air'. Our account, however, shows these two forms are directly related, the product of the merger between the original OE markers of the present participle, the inflected infinitive and the state-nominal in ING. Such an account obviates many of the problems concerned with the 'no direct link' approach to the forms BE + PRES PART (ENDE) and BE + ING. Further, our account draws a connection between the development of BE + ING, BE + AN + ING, and the surface structure realizations of the non-finite forms of the verb.

Footnotes to Chapter Fourteen

¹ Compare with OE Gospel: we hopedon ðæt he to alysenne were israhel

² Jespersen (1905: 205)
Poutsma (1921: 95)

³ This process is quite plausible in that AN is unstressed and as such is prone to phonological erosion. Evidence of this erosion is found in later reflexes where AN is reduced to A-, e.g. Let's go a-maying

⁴ In French, both participial and gerundial function are denoted by the -ANT marker

⁵ Thus, in conjunction with BE, the marker of location, the locative nominal characterizes that a situation is in existence, i.e. is progressive. In this instance, Anderson argues that BE is the marker of existence, and that construction as a whole is therefore a locative existential. To put it more simply, BE + LOC + NOMINAL denotes that at the time of the utterance or some deictic point of time, a certain action is in progression, or that it is in existence.

⁶ For further details of this proposal, see Garnett (1859), Key (1874)

⁷ That is, a phonetic coalescence took place between the markers of the TO- INF, the PRES PART and the abstract nominal governed by the preposition TO.

⁸ See Chapter Ten, section 3 for a brief outline of the possible development of the 'perfect tense'.

⁹ Anderson (1973b) characterizes the modern BE + ING as representing progressive aspect. In fact the BE + AN + ING form directly represents in surface structure the underlying semantics of this aspect.

3a An interesting speculation about the survival of the expanded form BE+PRES PART (-ANDE) in northern and north-eastern regions when the form appeared lost more southerly (and where BE+ING had arrived as marker of PRES PART) is this. These were the areas of greatest Scandinavian settlement. It is often argued that Scandinavian of this period, or that point fairly analytically (of the introduction of more MODALS such as G.A.R.) was instrumental in reducing both nominal and, importantly, verb ('simple tenses') inflections. Given this, it is reasonable to assume that the survival of the expanded form was needed, in the light of the even greater depletion of the simple tenses. That is, in this case, Scandinavian may have boosted the frequency of the expanded form, and thus have been of secondary aid to its development (Richard Hogg, personal communication). See also Ch. 12, footnote 1. Massé (1938: 45-60 indicates the frequency of the expanded form, noticeably greater in the north from the 15th century.

CHAPTER FIFTEEN

The Germanic Connection

15.00 Outline of analysis

In developing our outline of the evolution of the form BE + PRES PART (ING) in English, we have noted that no other Germanic language appears to manifest an overtly nominal marker in a finite verb form. Further, given Anderson's (1973b) characterization of progressive aspect, it would seem that no other Germanic language gives specific representation to this aspectual distinction. However, as we have seen these languages do manifest a verb form cognate to the OE BE + PRES PART (ENDE) structure. In the following section we will discuss the 'Germanic connection' with respect to analyses we have provided for English.¹

15.01 Does English alone have a marker of progressive aspect?

We have argued that in English the forms BE + ING + A(N) + ING have existed as variants of the progressive aspectual structure since the late ME when a merger occurred between the participle and the gerund, to such an extent that a "grammatical hybrid" emerged. The possibility of the form BE + A(N) + ING occurring as a variant of the simpler form continued till the early 20th century. In 1905, J. Wright stated that indeed the form with the preposition is most common in some dialects (1905: 297). However, we argue that the dominance of the simpler form

lead to its emergence as the only marker of progressive aspect, perhaps through wider mass-media communication in standard language. At any rate, in present day English, the form with the locative particle is obsolete.

Visser notes (III § 1862) that in German there is no form which might be construed as isomorphous with the expanded form BE + (A(N)) + ING in English. In standard German, the simple tense form derived from PGmc still functions denoting both continuous and punctual action:

Er geht in die Kirche
'he goes/is going (in)to (the) Church'

However, there is in fact a structure which is composed of the locative preposition AM and the form usually recognized as the infinitive. Consider the following:

Wir waren gerade am (beim) Essen
'We were just (a)-eating'

das Wasser ist am Kochen
'the water is (a)-boiling'

These constructions are not usually found in standard German, but are attested in some dialect areas. Interestingly, the infinitive form found in this construction is derived, not from an original infinitive, but from the OHG participle in ENDE. Similarly, we find in Modern Dutch structures which are cognate to the above German forms, as

wij waren aan het eten
'we were (a)-eating'

het water is aan het koken
'the water is (a)-boiling'

Moreover, in Afrikaans, which was originally a creole based on Dutch, we find a similar construction with a locative

particle and the verb stem, which is a reduction of the Dutch infinitive, originally a participle in ENDE. Thus:

Ek is aan die Skruf
'I am writing'

These examples would seem to allow of the hypothesis that there is in fact an ^{semi-isomorphic} progressive structure in other of the Germanic languages. Given Anderson's (1973b) characterization of the abstract form of the progressive, then the above examples, just as much as the English BE + AN +ING form would seem to give explicit surface structure form to the underlying configuration. In brief, the above are composed of a locative particle and a verbal nominalization. The major difference between, say, English and modern German is that ~~w~~^{the} progressive aspect in modern English must be represented by the expanded form, while in German the simple form is still available, and indeed is the standard.

However, in derivation the above expanded forms would seem distinct from the English form. In LOE and EME we have argued that a phonetic merger occurred which had the effect of collapsing the phonetic realizations of the markers of the present participle, the inflected infinitive and the verbal noun. From this situation, only two forms arose, the participial/gerundial in ING and the TO infinitive. In the other Germanic languages, such as Dutch and German, it appears that a similar phonetic merger took place between the marker of the infinitive and the participle, with the INF form emerging as dominant in certain functions.

It would further appear that this infinitive form in certain dialects assumed participial function, i.e. after BE. Moreover, since the older deverbative noun did not merge with the markers of the infinitive and participle, it would appear that the infinitive form continued to extend into the domain of gerundial usage, and acquired the ability to be governed by prepositions. In this situation, it would seem that some development similar to that of ING with A(N) occurred, allowing a situation where the participial function could be further modified by a preposition. In the case of the locative preposition in modifying position, this allowed the reinterpretation of the combination BE + LOC + INF/PART as denoting progressive aspect, i.e. representing the existence of a proposition at or for a time specified within the discourse. (Jessen 1975: 363).

15.02 The Germanic expanded form and its modern reflexes

Further, the outline of the development of the above form in the Germanic languages in some part explains the traditional dilemma in historical Germanic studies that the form BE + PRES PART, as a finite verb although present in the early stages of the languages in this group, otherwise seems to be absent from all except English. To explicate this dilemma in terms of a phonetic merger between the marker of the infinitive and that of the participle, with the infinitive form emerging as the unique marker of both functions would seem in part to offer an answer. It also

appears to explain the gap in the structural inventories of the Germanic languages (except English), where periphrastic perfects, passives and futures are attested, formed from combinations of participles and BE, HAVE and 'WEORÐAN', but no periphrasis is found denoting progressive aspect - if we expect that combination to be BE + PRES PART. It would appear then, that progressive aspect in all Germanic languages is derived originally from combinations of BE + PRES PART, but that through phonetic mergers this form in ENDE is lost. In the modern reflexes of the older Germanic languages, it would seem that the form in combination with BE as the surface representation of progressive aspect is a verbal nominalization, whatever its original function. This, then, is in accordance with Anderson (1973b) where it is held that the abstract representation of the progressive must be a verb of existence in relationship with a locative nominalization, evidence for this nominal status being found in paraphrases of the progressive with explicit nominals, as we noted above.

Thus, we may argue that since the Germanic languages derive their systems from a common PGmc ancestor, it is not implausible to expect that similar processes will also affect the surface structures of these languages. As we have briefly indicated, this does indeed seem to be the case with the non-finite verb form markers of certain of the Germanic languages. Further, it would appear that other of the Germanic languages (as well as English)

recharged their depleted verb system by incorporating certain non-finite forms in conjunction with auxiliaries into this system. In this way, the Germanic languages may be seen to have innovated a new means of representing certain proposition modality/aspectual distinctions when older aspectual markers were lost or had become critically ambiguous.

15.03 Related languages and related change

The above arguments and explication of data confirm our earlier hypothesis that related languages will undergo related systemic changes. Thus although, for example, the situation in modern German as regards the representation of progressive aspect is not equal to that in modern English similar processes brought about comparable systemic change. In this brief excursus then, we have linked our main data analysis to earlier comments on speech perception and typologically related languages.

Footnotes to Chapter Fifteen

- ¹It is not the place here to discuss the status of the Germanic constructions which are cognate to the OE periphrastic forms denoting continuous and perfective action (and possibly the passive form). For the purposes of this work, we hold that they too are indicative of certain propositional types as in OE, innovated because of the communicative complexity of the 'simple' verb forms.

CHAPTER SIXTEEN

Concluding Remarks

16.00 Overview of theoretical standpoint

In this work we have attempted to establish that a viable framework for the accounting for and explicating of historical data must essentially be based on the factor of speech perception. We have argued that constraints on what is learnable, and the utilization of language in the speech situation restricts both the kind of changes and the kind of system which a language can have in its evolution. We argue that linguistic change will come about when the interaction of speech perception and grammatical structure produce a linguistically and communicatively complex situation. The change will arise from a reinterpretation of existing structures and forms with the language system which will obviate complexity within both the communicative and learning processes.

Concomitant with our argument that speakers' perceptions of the grammatical system will determine what changes will come about in a language is our assumption that related languages will change in related ways. The basis for this hypothesis is that cognate languages have a common ancestor, one of the dialects of which served as the 'starting-point' for the descendant language. Given that radical change does not occur within a language system in a short space of time, then the language systems of descendant languages will be related in that they will not

be so far divorced from the common system of the parent (given that we are talking in terms of certain changes being predictable for a certain language system, given its synchronic state at any given point in its history). As exemplification we may take the Indo-European language family: if we accept that PIE was basically SOV in serial order, and given that the natural process of phonological reduction effected loss in inflectional elements over time in all the descendant languages, we may assume that all languages of this group will, *ceteris paribus*, relinquish worn morphological systems through segmentalization. This indeed would seem to be the case.

16.01 Perceptual factors, the non-finite verb forms and aspectual distinctions in English - Review

We have also argued that perceptual factors have been primary in determining the evolution of the form BE + PRES PART as denoting progressive aspect in English. We have established that the form in ING came to be standardized as the marker of gerundial/participial function in English through firstly a phonetic merger of the markers of the inflected infinitive, the verbal noun and the present participle. Subsequently, we argued that speakers reinterpreted ING in the function noted directly above, and reestablished the TO-INF as a separate category marker.

We proposed earlier that the reestablishment of a distinct form of the infinitive with TO in the ME period might well be due to perceptual features, making it

necessary to mark off the main clause from the subordinate clause. Following Venneman (1974a, 1975) we hold that English in the OE/ME period was in transition from SOV order to SVO. We have argued that in a language system with the serial order SVO, which is accounted for by the perceptual strategy 'recognize NVN as a clause', there must be some device in the language to mark the end of the main clause from the beginning of the subordinate.¹ We argued that if the infinitival form had not been resurrected, the form in ING would have caused communicative complexity as the marker of the beginning of the subordinate clause, since in the period of confusion obtaining as to whether it was a nominal or a part of the verbal system, speakers could have decoded firstly as a nominal, and part of the main clause. Thus, when an infinitive appears without an explicit subject, there must be some surface element marking the beginning of the subordinate clause; and we find the TO infinitive filling the communicative need.

We have briefly shown how similar phonetic processes affected the non-finite verb forms of other languages of the Germanic group, and how the resolution reached there entailed the emergence of the old infinitival form as the marker of gerundial function in certain syntactic frames.

Further, we hope to have demonstrated how existing structures in the language system may be utilized by

speakers when potentially critical ambiguity arises in parts of the language system. We argue that the PGmc verbal system which survived into OE and into all other Germanic language systems, was potentially ambiguous in the speech situation. We noted that in Gothic, while aspectual distinctions were represented primarily by the inflectional markers of the reduced Indo-European verb system, other secondary modes of representing aspectual distinctions had arisen. Thus, in Gothic we find that the Old Indo-European distinction of imperfective versus perfective aspect had been to a certain extent resurrected by the innovation of the prefix GA. That is, verbs prefixed by GA came to be perceived as aspectually perfective; and imperfective if GA was not affixed. However, this system did not cover all verbal categories, strong verbs not being available for GA-prefixing. We also find that verbs of aktionsarten were utilized to describe linguistically certain modifications of the action described by the lexical content of the root verb, a development found in I-E in general, and probably found in the early stages of P.Gmc. Thus in Gothic we find suffixes such as ATJAN, a reflex of the P.Gmc. suffix forming intensitive verbs and INON, the reflex of the form which conveyed the additional description of 'to become, to have X'. As analogical examples we may quote lauhatjan 'to lighten', swogatjan 'to sigh', ga-aiginon 'to take possession of' and gudjinon 'to be a priest'. However, such modes of representing modifications of verb action are recessive even in Gothic; and suffixal derivation does not operate in OE. The reduced

simple verb system alone drew aspectual distinctions by being accompanied by adverbs modifying the lexical meaning of the verb. In this way only could speakers represent what stage of the situation was predicated by the verb in particular discourse contexts.

We have further argued that the complexity of representation exhibited by the functionally-overloaded simple tense system was reduced by the development of new periphrastic forms. Specifically, it would appear that these new forms, by virtue of the semantics composition of their component parts, could mark different proposition types pertaining to different 'views' of the discourse situation. We illustrated this proposal with the development of the BE + PRES PART (-ENDE) form in OE as a marker of an unfinished situation. We held also that the other innovating periphrastic forms evolved along a similar developmental path.

Rather more briefly, we discussed the development of the innovating periphrastic verb forms in terms of the general principle that if a language has a recessive inflectional system, it will 'repair' damage to communicative efficiency by innovating segmented forms as replacement surface structure markers of the particular functions in question.

- 16.02 From Old English to Modern English - the expanded form and its development in relation to speech perception

We have also outlined a potential path of development

from the propositional continuative type represented in OE as BE + PRES PART (ENDE) to the modern form denoting progressive aspect. This development seems to rest primarily on the ME 'confusion' in demarcating the 'line' between participial and gerundial function, given that both are marked by ING. Given that speakers seem to have come to perceive these two functions as one, we have postulated that it is plausible and natural that speakers perceived BE + ING and BE + AN + ING as variant forms. That is, speakers carried over into the finite verb sphere the confusion as to what ING represented in the 'non-finite verb spectrum'. We further argued that the high frequency of ING in nominal or quasi-nominal frames brought about a situation where ING in the reflex of the OE form BE + PRES PART (ENDE) in ME was also perceived of as nominal. In this way we argued that speakers held this BE + ING form to be a variant of the BE + AN + ING form without a specific locative marker. Thus, the BE + ING form came also to denote progressive aspect, that is, marking that a certain situation is in process at a certain point, or between two points, on the axis of discourse time. We offer this as an explanation for the loss of the propositional type denoting an unfinished situation.

We have further argued that language change is the direct outcome of speaker confusion of elements in surface structure which have been critically affected by the operation, in our case, of phonological erosion. However,

in talking of 'confusion' of surface forms we held that this in no way entailed communicative breakdown. With respect to the innovation of the BE + PRES PART form in OE for example we held that this form would be perceived firstly as a secondary recessive variant of the simple tenses in denoting unfinished action. It is plausible to suggest that its rise in frequency was determined by its acceptance throughout various social classes and regional groups.

16.03 Finale

In this work, however, we have not had available to us (because of the limited data available to us which in any way comments on social and regional groupings) enough information to include social factors as determinant of the spread of the innovations discussed above. We are aware that this in part may be a serious omission in terms of justifying the methodology utilized here. However, we hope to have shown that an approach to historical language change through a framework based on speech perception and its interaction with grammatical structure is viable, and offers an adequate account of data here presented. We further hope that the first theoretical and critical chapters will offer some new considerations and hypotheses for the interrelated study of word order and general language change. It is enough if the contents of this brief work enable other linguists to produce more fruitful hypotheses for the analysis of linguistic change in earlier stages of English and other languages.

Footnote to Chapter Sixteen

¹Kimball (1973b), Venneman (1974a, 1975)

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All abbreviations quoted for journals are as in the
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