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AN ORIENTATION
OF THE THEORETICAL ASPECTS
OF VERBS IN ENGLISH

BY

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Preface

Traditional grammar originated in Greece in the fifth century B.C. and has been closely connected with philosophy and literary criticism ever since. Through the course of centuries, numerous grammars have been presented, with new ideas and definitions each "varying greatly in purpose, quality, basic assumption, and method of analysis." Each system of grammar has been productive in its own way as well as erroneous and has been succeeded by other systems still faulty. Consequently, in spite of the tremendous amount of theoretical data processed by investigators and experts, neither an explicit nor a complete grammar of a language has ever been approached. The reason simply is that grammar cannot be both explicit and at the same time complete. More specifically, by approaching an explicit grammar, we retreat to an incomplete one owing to the insertion of many numbers of exceptions which test and destroy the rules.

It is only during the past forty to fifty years that modern linguistics as a discipline has been introduced to investigate language as it is. Modern linguistics is mainly concerned with the description and explanation of the language as it is communicated, transmitted, and changed.

It has never offered a prescription to the use of language. One of the scientific approaches to the investigation of language, Fillmore's case grammar, provides the basic orientation of this thesis.

Modern linguistics is the product of its past. It evolved from the traditional approach to structural grammar, and then the transformational. The range of linguistics is vast and linguistics is still in its infancy.

Transformational grammar is concerned, as Chomsky has postulated, with the competence of the speaker-listener of the language. The principal aim of the new discipline has been the construction of a general theory of language which would not differentiate between the so-called "civilized" and "primitive" languages. Such generalization of a grammatical theory and scientific investigation of language leads modern linguistics towards a new approach which had not been accomplished by traditional grammar. Chomsky's views and theoretical analyzations are open-ended and still waiting for newer, fresher, and deeper analyses.

Verbs, along with other parts of speech, have lost their assigned traditional definitions on their way towards modern linguistics. Semantically, however, verbs have been interpreted to express some form of concrete or abstract motion in deep structure. It has also been postulated that each sentence in its deep structure consists of a verb and one or more noun phrases, each associated with the verb syntactically in a particular case relationship. The purpose of this

paper is to survey the theoretical aspects of verbs in deep structure and explore the relationships of other formatives in the sentence as they are interpreted, semantically and syntactically, on the basis of the formative verb which functions as the nucleus of the sentence.

I am indebted to Dr. James E. Duckworth for his direction on this thesis and the instruction from his classes, to Dr. Irby B. Brown and Dr. Harry L. Farmer for useful recommendations on the manuscript, and most of all to Dr. Edward C. Peple for his help throughout my studies at this university.

CHAPTER ONE

AN HISTORICAL PERSPECTIVE OF VERBS

One of the obvious things about grammar is that it is distasteful. Even grammar students, teachers, and scholars may not be delighted with the subject. Experts in grammar would like to call themselves philologists, linguists, structuralists, morphophonemicists, or various other things, rather than grammarians. The aversion occurs because the connotation of the word grammar to ordinary citizens may be "good or bad" English, and they are not concerned with the denotation, an analytical and terminological study of sentences. To the professional students of language--linguists or linguistic scientists--the word grammar still may mean something different. Since they are concerned with the scientific investigation of language(s), their denotation should be something like "the total set of signals by which a given language expresses its meanings" or "the total structure of a language." Such denotations would include all the grammatical aspects of the language, from sound system to distinctive patterns.

Grammar is what we learn when we learn a language. Presumably, any native speaker of a language, however uneducated, knows the grammar of his language. This is one of the

psychological aspects of modern linguistics hypothesized by Noam Chomsky, the founder of the transformational-generative grammar, which we shall return to in the next chapter.

Traditional grammar as we know it was first introduced in the fifth century B. C. by Plato who systematized the Greek tenses and distinguished three basic time references: present, past, and future. Three centuries later, this tense systematization was not fully recognized by Dionysius Thrax, who contributed many fundamental insights of his own to Greek grammar, for which he was recognized as the greatest authority on that grammar. It is beyond the scope of this thesis to detect the omissions and misrepresentations of the Greek grammar summarized by Thrax, and the later contributions of Appollonius Dyscolus and his successors. However, the successive generations achieved great successes in

> divising and systematizing a formal terminology for the description of the classical Greek language as it was written and read aloud, . . . a terminology which, through the medium of translation and adaption to Latin, became the foundation for nearly two thousand years of grammatical theory and the teaching and study of the Greek and Latin languages. . . .[1]

In the year 1586, William Bullokar published a grammar book. It was perhaps the first attempt at such a task in English. Following him there were other grammarians who presented their grammars with new ideas and definitions, each "varying greatly in purpose, quality, basic assumptions, and method of analysis."[2] One of them was Michael Maittaire.

Maittaire published his grammar book in 1712. It is the oldest one from which citations are used in this paper. He says that, "grammar is an art, which teaches the way of writing and speaking truly and properly."[3] Half a century later, Garnnett defines grammar as: "the art of expressing the relations of words in construction, with due quality in speaking, and orthography in writing."[4] He believes that his definition of grammar was the best at his time because it was presented with a slight difference from that of his predecessors.

It is understood then that, whatever a particular language may be, its grammar shows the art of using that language in speaking and writing. Garnnett's division of grammar into four parts—Ortheopy (definition of letters), or Orthography (correct spelling), Prosody (study of pronunciation, meter, and rhyme), and Syntax (sentence-making)—is much the same as the grammar of Maittaire, Harris, Cobbett, and Bullions.[5]

Nouns and verbs are the two chief parts of speech, according to Maittaire. His belief is supported by the ideas handed down from the great philosophers, namely Aristotle and Theodectes. Other parts of speech, he says, have been increased gradually by later philosophers, chiefly the Stoics.[6] Maittaire defines a verb as such: "Verbs signify Motion, and every motion necessarily supposes some Being or existence.[7]

"Whatever a word denotes, either being, doing, or suffering, is a verb"; says Garnnett. When action passes over some person or thing, the subject of that action, it is called

"Active Transitive Verb"; and in case the action is terminated in the person or thing that acts, and does not pass over to any other person or thing, it is called "An Active Intransitive Verb."[8]

A verb is then "a word which expresses what is affirmed or said of things; and denotes Being, Doing, or Suffering"; Garnnett further explains concluding that "the very root of a sentence" can be a verb.[9]

James Harris published his grammar book in 1751, almost forty years after Maittaire's. A separate heading, Attributes, is dedicated to adjectives, verbs, and particles with a detailed explanation for each. He also says that, "all verbs denote energy" (by energy he means Motion and its Privation).[10]

W. Snyder writes:

> Grammar is a science, which unfolds the principles of language. It teaches us, according to established usage, the correct and appropriate disposition of words, to express our ideas in writing or speaking.[11]

His division of grammar adds up to six parts (Orthography, Orthoepy, Etymology, Prosody, Syntax, and Orthometry), mentioned above. Orthoepy (the correct pronunciation of words), with a new definition, and Orthometry (explanation of rules of versification or poetry measured by syllables called poetic feet) are the two additional parts of grammar which his predecessors perhaps either did not believe in at all or just interpreted in some other way.[12] A verb, he defines,

> is a word expressing action, passion, being, state, or condition. It is emphatically called <u>verb</u> because no sentence is complete or expressive without it.[13]

None of those early grammars mentioned so far were appealing and practical even for their time. Compared to the contemporary scholarly works in language, the eighteenth-century grammars were mostly amateurish and inadequate. Some grammars were published which were not popular at the time but influential later. These poor grammars were imitated and became the pattern for the study of English in the next two centuries.

These grammars had two major defects: first, they were not English grammars but disguised Latin grammars; second, they had no intention to describe English grammar, as is done in modern linguistics. They were designed, instead, "to regulate and control it, to prune it and make it more neat and elegant."

Early grammarians transposed the Latin structure and terminology and called it English grammar. They apparently did not understand that languages are not convertible into one another the way dollars are convertible into francs and pounds. On the other hand, they did not much care about the fact that these two languages—Latin and English—are quite different on the basis of expressing their meaning and structural features.

Modern English grammar recognizes, firstly, only two tenses—present and past—looked at one way; and secondly,

several dozens, looked at another way. Since Latin happens to have six tenses, the first English grammars described six tenses too, It is quite obvious that the English tense system has been translated from the six tenses of the Latin system.

> Thus the first English grammars were made. They were Latin grammars masquerading as English, and they were filled with pontifical pronouncements having very little root in reason. But good or bad they were destined to have an enormous influence and to mold the attitudes of many generations to the English language.[14]

With the early eighteenth century, there came out numerous English grammars with considerable disagreements about categories and terminology. William Cobbett, for example, in his first introductory letter to his son goes into some detail in defining grammar. He believed that, to gain knowledge, one should take certain steps before entering upon the innumerable paths of knowledge. Grammar is the gate of entrance to any knowledge.[15]

There are certain "rules and instructions" with which to become acquainted in order to make use of words in a proper manner. Grammar teaches "how to make use of words." "These principles and rules constitute what is called grammar."[16]

Cobbett's division of grammar into four parts is much the same as his predecessors; namely, Maittaire and Harris. Under the title of etymology, however, he mentions the names of six parts of speech. Two of the major ones are given here because of their importance to my later discussion and the way Cobbett has investigated them:

> Nouns: the names of persons and things.
> Verbs: words which signify, _to do_, _to be_, or _to suffer_. They also express all the different actions and movements of all creatures and all things, whether alive or dead.[17]

By the end of the eighteenth century, when grammarians imitated one another, "the grammars began to shake down and the differences to be smoothed out." The only English grammar which became very popular was Lindley Murray's, in 1795. It was a kind of synthesis of the labors of many other grammarians preceding him; and it set the style for the next century or so.

William Fowler's English grammar was published in 1852 to meet the language and grammar requirements of the students at schools and colleges as well as their ordinary uses for the common purposes of life. He believed that

> language is not made but grows. As new ideas germinate in a fertile mind, they often come forth in new forms of expression, which sometimes become permanent portions of the language. Foreign terms are imported. New terms are applied to new inventions in art or new discoveries in science. An old term applied to a single object is transitively applied to other objects. A language thus grows by grafts from without and by germs from within.[18]

Throughout his book, Fowler tries to acquaint the reader with the origin and history, the structure and laws of the English language. He says, "the verb essentially expresses assertion," and explains that the Chinese call verbs _live words_, and nouns _dead words_.[19] He further explores that

> the dead word or the Noun is from the Latin nomen, a name, through the Norman or Old English. It is the name of an Object or Thought, whether perceived by the senses or the understanding.[20]

He has divided the English grammar into Science and Art and explains them as put here in his own words:

> English grammar, as a Science, is a system of principles and a collection of facts peculiar to the English language, together with those which are common also to other languages. English grammar, as an Art, is a system of rules for the practical application of these principles to the English language.[21]

A verb is a part of speech, says Sir John Stoddart, which is derived from the Latin verbum. He discusses the fact that Aristotle has given a similar word for a verb in Greek, and concludes that, a "verb is a complete word, significant, with time, of which no part is significant by itself."

Aristotle's definition of the nouns differs from the verbs only in the words "with time" but it is significantly referable to the Greek language and not to the "Universal Grammar", in reference to Stoddart's book.[22]

The great power of the Noun which is to be "attributed solely to that faculty of the mind by which it is formed", is called Conception, according to Stoddart. Things are given names such as "red", "John", etc. as a result of conception of a certain impression. With reference to the kinds of conceptions, he first distributes the Nouns into Proper and Appellative, and then into Substantive and Adjective.[23]

He confesses that even in his time, the verb has been differently defined by different grammarians and then argues that conception (with its varieties), "throws considerable difficulties in the way of any person who attempts to analyze the verb, and ascertain its nature."[24]

Peter Bullions' grammar book was revised and published several times because of its clarity, accurateness, and the great skill with which the author had presented it. He wrote that

> grammar is both a Science and an Art. As a Science it investigates the principles of language in general. As an Art, it teaches the right method of applying these principles to a particular language, so as thereby to express our thoughts in a correct and proper manner, according to established usage.[25]

He places the Verbs in a separate class and defines them thus: "finding that many words tell us what things do, or assert that they are or exist, we call them Verbs."[26]

From the nineteenth century on, generations of students became informed of the parts of speech, sentence diagramming system, and parsing sentences. They considered six to ten parts of speech among which, the verb was a word that expressed "action, being, or state of being." However, no fundamental insights concerning the grammatical theories were expressed until the publications of Henry Sweet.

In the year 1892, Sweet's New English Grammar was published. In this book, he treats the parts of speech in detail apart from their inflections and formal characteristics.

He has taken pains to make the Old English Foundation as sound as possible. "especially by eliminating the numerous errors that have been handed down from grammar to grammar or have resulted from taking words from the dictionaries without verification."[27] He calls his grammar scientific and historical, not purely descriptive. His objects are the main grammatical phenomena and main lines of development based on the language of his time. He, therefore, avoids historical details which do not bear upon the time in which he lives. He refuses some of the definitions of the parts of speech given by his predecessors as they are "literally nothing more than quibbling etymologies." Also he objects to some of the grammatical terminology of his time and declares that it is our duty to improve the existing terminology in case it will be confusing, ambiguous, or defective.[28]

We understand that ideas about grammar were developed in the centuries from the first English grammar to the eighteenth, nineteenth, and twentieth centuries; but none of them has ever reached the point which would serve as a standard—a true way with no errors, accurate and clear. In fact, no true road to this topic has ever been found. The reason is simply because of the Latinization of the English grammar, believed Myers, concluding thus:

> the result is that even people who have mastered the rules are often oppressed by a sense of mystery about the whole thing.[29]

The descriptions of language found in English grammars may deal with real phenomena actually existing in the language.

They name word classes as nouns, verbs, etc., and categories as subjects, particles, etc., which occur in English and are currently observable. Although English grammars discuss real things in general, they talk about some categories such as, the dative case of nouns, or the optative of verbs which do not occur in English but in Latin and Greek.

> They do not, however, discuss them truly. The reasoning on which the descriptions rest is a nightmare of confusion, contradiction, circular argument, jumbling of principles, and plain foolishness. The definitions seldom define anything; categories are set up now on one principle, now on another; like things are frequently separated and unlike things thrown together. When we try to find logic in the proceedings, we are forced to conclude that English grammar doesn't have any. Intellectually, it can only be described as a mess.[30]

These shortcomings can easily be illustrated. A noun has been defined as the name of a person, place, or thing. In the sentence (The car is red), car, according to the definition, names a thing, which is acceptable as a noun. Red also names a color. It is certainly not acceptable to call red a noun. A color is not really a thing but a quality, and red is an adjective here because it names a quality. A verb, as stated in grammars, is a word that expresses "action, being, or state of being." Departure expresses action of departing but it cannot certainly be a verb. That and a great many nouns similar to it are derived from verbs but can not be verbs. Here one identifies the word class on the basis of features not stated in the definition.

The phonemic transcription /²ðə sənz rěyz + ³míyt¹ ↘/ has two different meanings which may not easily be distinguished here. In standard spelling, however, it could possibly be "The sun's rays meet," or "The sons raise meat." These misunderstandings rest on the fact that the word classes are not signalled and that they carry a wide range of ambiguities.

Attempts to base a grammar on the sentence, therefore, have proved to be unsuccessful. The reason simply is that sentences are variable and unlimited. No pattern can be specified for the utterances of individuals. They are uncountable, unknown, and therefore incomputable. Utterances differ in regard to patterns, pronunciation, and intonation. There arise misunderstandings and misinterpretations out of the above-mentioned ambiguous sentences and the one like "That is John's picture," unless they are put in a situation or context. In the grammars presented, similar shortcomings are currently observable. In truth, "the definition has little connection with the quality it purports to define."[31]

In traditional grammar, adjectives are defined as "words that modify nouns." By this definition, there is no way to distinguish between such expressions as "a mess sergeant" and "a messy sergeant." In accord with the assigned definition, these two modifiers—mess and messy—are adjectives which both modify nouns. It is quite obvious that here, apart from the semantic differences, there is a difference demonstrated by word order. It should not be far from the

truth to believe that "the whole description of the English parts of speech rests on little more than guess, intuition, and accident."[32]

Similar ideas have been expressed by the generations of the nineteenth and twentieth-century linguists. As we have seen, the domain of the traditional grammar has already been under severe criticism by Sweet who led the way towards modern linguistic approaches. Also we shall see how the rationalism and empiricism of the eighteenth-century grammatical system gave way to the nineteenth and twentieth-century structuralism, followed by the concepts of the transformational-generative grammar. Edward Sapir, one of the linguistic figures whom I shall return to in the following chapter, believes that

> Our conventional classification of words into parts of speech is only a vague, wavering approximation to a consistently worked out inventory of experience. We imagine . . . that all 'verbs' are inherently concerned with action as such, that a 'noun' is the name of some definite object or personality that can be pictured by the mind, that all qualities are necessarily expressed by a definite group of words to which we may appropriately apply the term adjective. As soon as we test our vocabulary, we discover that the parts of speech are far from corresponding to so simple an analysis of reality.[33]

Before turning to the highlights of the transformational-generative grammar, I would like to make a brief survey of the characteristics or the functions of the "slot filler" grammar, which deals with the finite verb and is a concern of this paper.

Earlier, I stated that linguistics is a new discipline with an approach to grammatical theories quite different from that of the traditional grammar. To establish a word class, or in the traditional term, a part of speech, structuralism abandons meaning as a possible common characteristic of such words as depart, pretend, and assist. These words have been postulated by linguists to have something in common; that is they occur in a large number of similar or identical positions in English sentences. As an example, these words can fill the slot in "Let's _______:" (Let's depart, Let's pretend, Let's assist), or in "They'll _______:" (They'll depart, They'll pretend, They'll assist), or in "He _______ed:" (He departed, He pretended, He assisted).

What these words — depart, pretend, assist — have in common, therefore, is that they share a possible number of positions in the English sentence patterns. Such positions may not be filled by the words departure, pretence, or assistance. As I have mentioned above, in traditional grammar, both depart and its derivative departure express some form or degree of concrete or abstract motion, as all verbs do, but they belong to different categories. This is where the circular definition and illogical reasoning of the traditional grammar rest.

In modern linguistics, the traditional meaning as "action, being, or state of being," or "motion" involved in sentence patterns cannot be used as tools to define the verb class with. The reason is that it is not the meanings that produce the patterns, it is the patterns that produce the meanings. Although,

apparently, it is accepted that depart and departure share in some way the same meaning, neither one can fill the slot of the other. This seems a realistic and reasonable hypothesis developed by the linguists to distinguish a great many words in the English vocabulary like depart, pretend, and assist as a separate word class called "verb;" and departure, pretence, and assistance as a different word class called "noun."

According to this linguistic hypothesis, any words that can fill the blanks in "Let's _____" and "Let's _____ it" may traditionally be called intransitive and transitive verbs, respectively. There are some words, however, that occur in different classes; that is, that they have one to four possibilities. The word face, for example, can occur in the positions like "Let's face it" and "That's a nice face." These are among other exceptions which occur in the English grammar as a result of an approach to describe and explain the language in terms of explicitness. It is possible, therefore, to conclude that words are verbs only when they occur in verb patterns. As Paul Roberts puts it:

> It[verb] is any word occurring in any of a certain set of positions in English sentences. These positions are describable or listable, but they are numerous and complicated. The native speaker of English knows them all by virtue of being a native speaker. To give him a conscious understanding of the concept of 'English verb' it is usually necessary only to give a few examples: An English verb is a word like depart, go, eat, face occurring in such patterns as 'Let's ___,' 'They want to ___ it,' 'I'll ___ later.' A foreign speaker would have to learn all the words and all the patterns

> in order to get a full understanding of the English verb. In other words, he would have to learn English.[34]

In 1933, Leonard Bloomfield, whose vast scientific research in English grammar helped the followers of the new discipline a great deal, presented his structural grammar. I shall return to that in the next chapter. Later on, many others, including C. C. Fries, Trager, and Smith, presented their works, depending partly on that of others, but they proposed quite a new approach which had already opened the door towards modern linguistics. Almost all of them believe that the traditional definitions of the parts of speech are subjective and speculative, and that they prefer them no longer to be termed as such. Instead, they proceed to classify words "simply by their form changes or inflections."[35]

Fries, in American English Grammar (1940), had tried to get the standard English from something between the three levels of language — the "vulgar English," the "popular English," and a "college graduate." This book neither appealed to the people nor to himself.[36]

In his second book, The Structure of English (1952), Fries disagrees with the subject and predicate of a sentence and the usual division of question, negative, etc.. He says that English contains four "open" classes of words which are roughly equivalent to the four major parts of speech (noun, verb, adjective, and adverb) and fifteen groups (designated by the letters A to O) corresponding to the other parts of speech and miscel-

laneous words. His diagramming of sentences by the principle of "Immediate Constituents" is also important and interesting though it did not solve any of the grammatical problems. After a long discussion and analysis of grammatical ideas, Fries concludes that, for an effective "language program," a pupil should first observe the facts of the English usage intelligently and then become familiar with the three types of grammatical ideas - "word-forms or inflections," "function words," and "word-order."[37]

The proposed three methods of classification do, however, have advantages, and disadvantages, and overlap considerably; but they are by no means either explicit or complete. The question why none of the experts in grammar can come to a close agreement is answered by Louis Myers:

> English grammar is concerned with the variable reactions of millions of people, and investigators who seek the exclusive truth about it can't agree, any more than can those who study theology or politics or aesthetics.[38]

Linguists, however, totally believe that a grammar would be worthwhile studying when it is "rational and soundly based". Such grammar "should also be logically defensible in the same way that a chemical analysis is logically defensible. It should be built on the known principles to proceed by rational methods to reasonable conclusions."[39]

Modern linguistics, as a new discipline, is entirely devoted to the scientific study and investigation of language(s). A carefully controlled collection and inspection of data has superceded the old speculations, philosophizing, and impressionistic argumentations. Modern linguistics has neither been interested pri-

marily in the field occupied by traditional English grammar, nor in English alone. Instead, it is concerned with the speaker-listener's competence and the underlying correspondences of all languages. The assumption that speech rather than writing would be the fundamental reality of language is one of the concepts of the new discipline initiated by the nineteenth-century empiricism, and developed by the twentieth-century structural and transformational-generative linguists.

Furthermore, the principal aim of modern linguistics has been the construction of a general theory of grammar which would not differentiate between the so called "civilized" and"primitive" languages. Tremendous efforts have been rendered to disentangling problems posed by such remote and exotic languages as Algonkian, Hopi, Swahili, or Mazateca, which belong to the exploration of Language Universals, and have no direct relevance to our discussion here. However, it is sufficient to say that the generalization of a grammatical theory, and the scientific investigation of language have led modern linguistics towards a new approach which had not been accomplished by the traditional grammar.

In chapter two, we shall see how the new discipline differs from the traditional grammar in its concept of structure. This approach bases the structure of grammar of any language on the use of the rules by a speaker of the language. Those rules or recursive devices, under the transformational-generative grammar should not only specify just the types of sentences of the language but also tell its speaker in a determinate way the struc-

ture of the specified sentences. Also, the rules should generate any sentences which have never been uttered or heard by a native speaker of the language before.

CHAPTER TWO

THEORETICAL ASPECTS OF MODERN LINGUISTICS

Like many other sciences, linguistics originated quite recently. Before the nineteenth century, the investigation of language as practiced by American and European linguists was considered "subjective," "speculative," and "unsystematic." Traditional approaches to linguistics then were vehemently opposed by the "Bloomfieldian" school of linguistics dominant in the United States right after World War II. We shall see that this school was later opposed by the "Chomskyan" school.

Modern linguistics is primarily concerned with the spoken language, and its derivative, the written language, seems to have been investigated to a lesser degree. The construction of a general theory of grammar has been postulated by linguists to be the principal aim of modern linguistics. It has been established as an underlying structure of all languages. Generalization of theoretical description and scientific investigation of language has led modern linguistics towards a new approach never attempted by traditional grammar.

Modern generative linguistics recognizes three interrelated parts: syntax, semantics, and phonology, in the grammar of any language. Further, the grammar should reflect the ability of the native speaker in his production and understanding

of new sentences. The parts of this theory are central to the theory of Noam Chomsky's transformational-generative grammar. I shall only be concerned with syntax, as it is the major component in the structure of a language in which the verb functions as the nucleus.

Transformational-generative grammar is indebted to its earlier counter-part, the structural approach of linguistics, which has provided the base component of S $\longrightarrow$ NP+VP. I shall return to this while describing the highlights of generative grammar.

Franz Boas, the writer of the introduction to the Handbook of American Indian Languages (1911), has hypothesized that

> every language has its own unique grammatical structure and that the task of linguist is to discover for each language the categories of description appropriate to it. This view may be called 'Structuralist.'[40]

It should be stressed that the structuralist's approach was not confined to Boas. Wilhelm Von Humboldt, a contemporary of Boas, and others from Europe, also expressed similar views. In fact, structuralism has been "the rallying cry of many different twentieth-century schools of linguistics."

Edward Sapir (1884-1939) and Leonard Bloomfield (1887-1949), who followed Boas, were the two greatest and most influential figures in American linguistics. Sapir believed that language was "purely human" and "non-instinctive," and it was worth studying because of its uniqueness to man and its indispensability for thought. His work has continued to hold the attention of linguists down to the present time. In fact, the attitudes toward language which Chomsky has held and expressed in

most of his recent publications were originated by Sapir.

Bloomfield's approach was to make linguistics autonomous and scientific. These terms implied that any data which were not directly observable or physically measurable should deliberately be rejected. Chomsky, therefore, has developed his ideas in the "Bloomfieldian" tradition of autonomous and scientific linguistics. It is believed that there is no such "aura of vagueness" in Bloomfield's Language (1933), which is observed in that of Sapir's (1921).

In his book, Language, Bloomfield adopted behaviorism (stimulus-and-response) as the frame-work for linguistic description. According to this systematic hypothesis, the study of semantics had apparently no direct relevance to the description of syntax and phonology of language. There is no indication, then, that either Bloomfield or his followers have made positive contributions to the study of semantics.

"The attempt to formulate the principles of phonological and syntactic analysis without reference to meaning" reached its culmination in the book of Methods in Structural Linguistics (1951) by Zellig Harris, a "Bloomfieldian" follower. This book contains many procedures of grammatical analyses of the description of language, a major portion of which has now been formulated with mathematical precision by Chomsky. He (Chomsky) later, however, described this book, including the work of other structuralists, as a set of "discovery procedures" for grammatical description.

The "Bloomfieldian" school, of which Harris was a member, prepared the way for Chomsky's general views on linguistic theory as presented in his first book, Syntactic Structures (1957). By this publication, Chomsky had already moved away from the position, which we shall see later, led by the structuralists on the "discovery procedures." Nevertheless, he

> continued to maintain that the phonology and syntax of a language could and should be described as a purely formal system without reference to semantic considerations. Language was an instrument for the expression of meaning: it was both possible and desirable to describe this instrument, in the first instance at least, without drawing upon one's knowledge of the use to which it was put. Semantics was part of the description of the use of language; it was secondary to and dependent upon syntax, and outside linguistics proper.[41]

There may be one major point which sharply distinguishes Chomsky's views from that of the Bloomfieldians. It is the creativity (or "open-endedness") of human languages upon which Chomsky has laid great stress, and has claimed that the theory of grammar should reflect the ability that all fluent speakers of a language possess to produce and understand sentences they have never heard before. It is this creativity of language from which Chomsky draws his theory of the transformational-generative grammar.

The aim of theoretical linguistics is then to give a scientific answer to what language is. That is, that language is not simply a set of "habits," but it is radically different from animal communication. It is man's capacity

for language, along with other reasons, which distinguishes him from animal species. The fact that language plays a major role in all aspects of human activity is quite obvious. That is, no communication, even the most rudimentary kind, would be possible without language. John Lyons interprets Chomsky as such:

> The structure of language is determined by the structure of human mind and that the universality of certain properties characteristic of language is evidence that at least this part of human nature is common to all members of the species, regardless of their race or class and their undoubted differences in intellect, personality, and physical attributes.[42]

In Syntactic Structures, Chomsky revolutionized, so to speak, the scientific study of language. Later, in _Aspects of Theory of Syntax_ (1965), he has put forward the theory of transformational-generative grammar which has been rated as undoubtedly the most dynamic and influential system in recent times. As Ronald Langacker puts it:

> Generative grammar is very much in keeping with contemporary views on the philosophy of science and also with the ideas of traditional grammarians. It represents both a revolution in grammatical thinking and a reaffirmation of the validity of structural insights about language that have been accumulating for many centuries.[43]

Chomsky's propositions in his recent publications reveal that all languages have some general principles in common. The form of grammatical rules are natural, being transmitted from parents to children. Every six-year-old child or younger knows the grammar of his language. This involves Chomsky's term of the notion "Competence," from which the theory of

transformational-generative grammar developed to systematically describe and explain the structure of human language.

As I mentioned earlier, Chomsky's views are based on the scientific investigation of language rooted in historical linguistics. Such a view that "the structure of language is determined by the structure of the human mind" is quite traditional; and it is, along with other views, generally related explicitly to those of the previous grammarians and the rationalist philosophers of the seventeenth and eighteenth centuries.

Chomsky did not reject the concept of Fries' Immediate Constituents; but he assumed that it should be applied to the methods of transformational-generative grammar. These methods or devices were first expanded in <u>Syntactic Structures</u>, and have been revised and somewhat changed in <u>Aspects of Theory of Syntax</u> (1965). In that book, Chomsky has postulated that the grammar of a language is able to generate all the sentences of that language and does not distinguish between those that have been attested and those that have not. He draws a distinction between the sentences generated in terms of the notions "competence" (the speaker-listener's knowledge of his language), and "performance" (the actual use of language in concrete situation).

> A grammar of a language then purports to be a description of the ideal speaker-hearer's intrinsic competence. If the grammar is . . . perfectly explicit . . . we may (somewhat redundantly) call it generative grammar.[44]

Generative grammar purports to describe the speaker's competence by a system of rules which are able to generate an indefinite and large number of sentences. Chomsky has analyzed this system of rules, as we have seen, into the three major components—the syntactic, phonologic, and semantic—of a generative grammar.[45]

The syntactic component has two aspects: a "deep structure" and a "surface structure" which are the concern of this paper. The deep structure, the abstract and internal structure of sentences, determines semantic interpretation; while the surface structure, the external structure of utterances, determines the phonetic form of the sentences. All conceptions and perceptions of human beings are based on the surface structure, which is rooted in the deep structure of utterances. The rules that express the relation of deep and surface structure in sentences are called grammatical transformations; hence Chomsky's term of transformational-generative grammar.

I shall now turn to the characteristics of transformational-generative grammar—the efficiency of the generative rules, the function of the verb phrase (VP) in the deep structure of utterances with the noun phrase (NP) on the basis of syntactic specification, and finally the position of the formative verb as being the nucleus of the base component of the generative rules.

The base component consists of a simple sentence (S) which combines a subject or noun phrase (NP) with a predicate or

verb phrase (VP). The formula $S \rightarrow NP+VP$ constitutes the deep structure or the first kernel-pattern (the simple active declarative sentence) upon which, the system of English sentence is constructed. This rule assumes that we should begin with the formative S, and tells us to substitute the formatives NP+VP for it.

The kernel-patterns are underlying a system of sentences produced by the recursiveness of the transformational rules, out of which an indefinite number of surface structures, the terminal strings or the external utterances are produced. The base and transformational components constitute "the machinery for generating the sentences of English and assigning a structure to them." The notion of such grammar is that it should produce an indefinite number of sentences automatically, most of which the speaker of a language has never heard before.

Transformational-generative rules do not apply to the surface structures, but rather they apply to abstract underlying structures. Broadly speaking, surface structures are the products of the perceptions and conceptions of the speaker of a language which are symbolized as the spoken utterances.

Transformational devices convert one sentence structure to another by performing various operations on the constituents making up these structures. The verb, of all the constituents in the sentence, functions as the nucleus in the deep structure, from which various surface utterances are processed. It has some kind or degree of concrete or abstract motion as a grammatical unit conceptualized by the traditional

grammarians. Such definition was based on the surface structure of utterances which is rooted both in syntax and semantics. However, the verb in modern linguistics has somewhat the same old definition of the prescriptive approach, as having some form or degree of concrete or abstract motion, but it functions as the core of the sentence in the concrete base of deep structure of utterances, from which the function is transmitted to the generation of an utterance until its final form, the production of the surface structure. In the next chapter, we shall see how the verb is followed by as many as three or more noun phrases in the deep structure which constitute the specific "case" relationships of verbs with other formatives of the sentence. I believe, then, that the sentence in English has no significance for any speaker or listener unless it is uttered with a verb which functions as the nucleus of that sentence (or clause).

Any language makes use of three elementary transformational processes: adjunction, substitution, and deletion. In English, the sentence "He cannot leave us" can be converted to "He can't leave us"; the sentence "It is difficult for me to concentrate on calculus" can be replaced by "Calculus is difficult for me to concentrate on"; and finally the construction of "The papers refused to report the trial because they were afraid to report the trial" becomes "The papers refused to report the trial because they were afraid to" as a result of an _identical verb phrase deletion_. All verb phrases in

the deep structures of utterances are deleted when they appear in the surface structures with identical verb phrases.

Any deep structure in English contains constituents which function as lexical items, each having features particular to itself. These features are semantic representations of every lexical entry in the lexicon as such:

Turtle:	Turtle (+N) (+Common) (+Concrete) (+Animate) (-Human) (+Count)	Kick:	Kick (+VP) (+V) (+Action)

Those features may function in the surface structures but they are subject to adjunction, substitute operations, and deletion transformation.

The knowledge of the grammar of the English language may be used properly and efficiently by employing the following four skills proposed by linguists. The knowledge of these skills in turn provides the speaker with the grammatical information he needs to understand and produce (or generate) the sentences of English.

1- The ability to distinguish between the grammatical and ungrammatical strings of a potentially infinite set of utterances.

2- The ability to interpret certain grammatical strings even though elements of the interpretation may not be physically present in the string.

3- The ability to perceive ambiguity in a grammatical string.

4- The ability to perceive when two or more strings are synonymous.[46]

Since language is basically composed of an infinte set of sentences, the speaker's use of particular skills in speaking and understanding his own language is quite remarkable. Although the proposed linguistic skills seem self-explanatory, they have never been explained to anyone's entire satisfaction. However, they reflect "aspects of the intellectual abilities we possess by virtue of being human." Attempts at explaining these skills play a major and important role of what makes us human. Here, Chomsky has postulated that human beings may be able to use, produce (or generate), and understand a human language by the grammar which they already possess. David Reibel, a linguist, believes that

> transformational grammar is unquestionably one of the most vigorous and exciting movements in linguistics. The fruitfulness of the transformational approach is evidenced by the important contributions it has made to our understanding of language and the insights it has provided about individual languages.
>
> Transformational grammar raises theoretical and descriptive questions fundamentally different from those asked previously by traditional or by structural grammarians. In particular, transformational grammar deals with the specification of a general linguistic theory from which the grammars of individual languages follow.[47]

From the progression of the transformational-generative grammar, it appears that that grammar is radically different from the traditional grammar in its concept of <u>structure</u>, and from the structural approach in its concept of <u>generative</u>. Also, Transformations often provide

> the most general as well as the most intuitive way of accounting for many sentence constructions. Through transformations, a grammar achieves greater generality—one rule may account for many constructions.[48]

Finally it is understood that the English language has both a deep and a surface structure. The deep structure of a sentence is an abstract object, which conveys the meaning of a sentence with the verb as its center and contains all the information relevant for its correct semantic interpretation. The surface structure gives the form of the sentence as it is used in communication—spoken or written. Transformations relate the constituents of both the deep and surface structures to one another without affecting their meaning. Through the process of transformations, different kinds of sentence structures—declarative, negative, interrogative, etc.—are generated.

CHAPTER THREE

VERBS AND THEIR "CASE" RELATIONSHIPS IN ENGLISH

In the previous two chapters I stated that the verb is the most important element to the speaker of a language in his construction of new utterances. We saw that the verb in the traditional grammar was "defined" as expressing "action, being or state of being." Such definitions assigned to the verbs and other parts of speech have recently been considered obsolete because they are subjective, speculative, and impressionistic. We also saw how grammar evolved from its traditional approach to structural and transformational-generative grammar.

I said that the verb in modern linguistics has somewhat the same old "definition" of the prescriptive approach of traditional grammar, as having some form or degree of concrete or abstract motion. However, the verb, according to the new grammars, functions as the nucleus of the sentence in the deep structure of utterances, from which the function is extended to the generation of the utterance until its terminal string, the surface structure.

In the following chapter, we shall see the verbs in their different inflections and derivations in the morphology

of English, according to the different points-of-view; the relationships of verbs in the base component with other constituents in the different stages, through their progression from the deep to surface structures which constitute the verb's specific "case" relationships.

W. F. Twaddell believes that

> the term "lexical verb" is used for what is sometimes called "full verb," "true verb," i.e. one of the thousands of verbs in the English lexicon with an inherent semantic meaning ("referential meaning") and without specifically grammatical function.[49]

I shall discuss his "Four-Element System of Constructions of Verbs" in a later stage.

Brown and his colleagues, under the heading of "Grammatical Distinction," explain that in spite of what people may think, there is no definite meaning that limits a word to one part of speech. Words that have been "defined" as "nouns" often turn out to be verbs, and vice versa. Since words shift about from one part of speech to another, no specific "definition" can be devised. In this respect, the "definition" of a verb—that which expresses action—would not apply to the word walk in the sentence "We went for a walk," as its grammatical function shows that this word is a noun, whereas one can use the same word as a verb in some other sentence pattern.[50]

Under the title of "Ambiguity Problems and Vocabulary Sources of Ambiguity," R. Tabory and P. Peters state that the verbs fall in the category of the Open-Class words which are

of some ambiguity. If a certain verb with all meanings belongs to the same class, the ambiguity is quite semantic. On the contrary, if a verb has various meanings and it belongs to different classes because of these meanings, the ambiguity can be partially of a syntactic nature. They give the words fly and like as two examples which both are verbs as well as nouns. These two words, therefore, have a noun/verb ambiguity.[51] As early as 1933, grammarians, linguists, and other experts were trying to solve this ambiguity, but their results show that such ambiguity is rather unsolvable.

Because of the distinctive features of verbs (being the nucleus of the sentence, having some form or degree of concrete or abstract motion in the deep structure of utterances, etc.) it is necessary to call them a separate class of words, according to Otto Jesperson. A sentence usually contains a verb but sometimes there are combinations without a verb which are occasionally called complete sentences. He (Jesperson) assumes the existence of "The Nine-Tense System" in Latin and "Seven Tenses" in English, and explains that these tenses take their root from the three chief tenses: present, past, and future.[52]

Twaddell's "Four-Element System of Constructions of Verbs" contains "past"-inflection, plus two of the primary auxiliaries (to be discussed later), have and be. He calls each of these four elements a Modification. He also identifies a zero Modification which bears the subject-agreement

marker (-S). All of the Modifications have the lexical verb with a semantic meaning; but only Modifications II and III are a formal system of constructions with a grammatical meaning (derivational and inflectional morphemes provide the meaning). The four Modifications plus the zero Modification co-occur in sixteen possible combinations of verb constructions.[53]

Paul Roberts has divided the verbs into Transitive (those that take an object) and Intransitive (those that do not). Transitive verbs are further divided into those that have human subjects (hope, see, dine, love) and those that have animate subjects (live, eat, die, breathe). He classifies verbs as one of the four major classes in English (the other three are noun, adjective, and adverb), and gives traditional names for five possible forms of an English verb: Simple or Imperative (simple form), Third Person Singular (-S form), Present Participle (-ing form), Past Tense (-ed form), and Past Participle (-en form). Those verbs formed according to the general system of English verb formation are called Regular Verbs. Those formed in special ways are Irregular Verbs. He considers a total of one hundred Irregular Verbs, and adds that one should learn them as individual items whereas Regular Verb formation should be learned as a system.[54]

There are only five different inflectional forms of verbs in English. These forms have been brought into discussion in

detail in morphology by Norman Stageberg. His classification of the five forms of verbs is much the same as Roberts' five possible shapes of verbs. He also suggests that the verb is one of the ten parts of speech and adds that a verb is always a single word. A verb may then consist of a paradigm of three or more of these inflectional forms or shapes. As an example, the verb set has only three inflectional shapes (set, sets, setting) and buy has one more inflectional shape than set. That is, both Past Tense and Past Participle of this verb are the same as bought. Consequently, buy consists of four inflectional forms or shapes.[55]

There are a few words identified as verbs by adding derivational affixes to them. The source parts of speech from which the verbs are derived are sometimes nouns, or adjectives. For example, the derived verbs enjoy and enlarge have for a Source a Noun and an Adjective, respectively.[56] Stageberg's further discussion shows that most of the verbs are free morphemes and that some of those free morphemes which are not already verbs can be transformed to verbs by adding bound morphemes either as suffixes or prefixes. For example: the verb supervise is consisted of the free morpheme super and the bound morpheme vise annexed to it as a suffix. In the verb restore, the bound morpheme re is annexed to the free morpheme store as the prefix. A verb can also be made from an adjective. As an example, the verb, activate is derived from the adjective active and the derivational suffix {-ate}.

Inflectional suffixes have also played a great role by joining the verbs. In fact, the {-S}, {-ing}, {-ed}, and {-en} forms of the verbs are made by annexing these inflectional suffixes to the Regular Verbs (some of the Irregular Verbs and all Modals are excluded). Also by adding inflectional suffixes -ize and -en to the nouns and adjectives, they can be changed into verbs such as standard to standardize, weak to weaken, etc. These inflectional suffixes are also called "permanent" forms as they are not removable. Once added, they become a permanent part of the vocabulary meaning of the word whereas the regular inflections, {-S} and {-ed} are removable elements (the {-S} may be put on or taken off or it may be changed to {-ed}).[57]

A kind of verb which is not considered to be lexically empty is recognized as a Linking Verb. There are only a dozen or so in general use. These serve grammatically to indicate the relationship between the subject and the complement. A linking verb occurs before an adjective such as: "Birds seem beautiful."[58]

A group of twelve verbs are recognized as Auxiliaries by Twaddell. They are like verbs and nouns the most frequently used in natural conversation. As grammatical sentence elements, they are sometimes misused by foreign and native speakers of the English language. Of the two types of auxiliaries, the Primary ones (have, be, do) function with the subject agreement {-S} and full "past" syntax, but Modals (to

be discussed below) operate without {-S} and without full "past" syntax. Modals precede primary auxiliaries in case members of both sets co-occur in a verb construction.[59]

In a long discussion about the morphemes of English, Joe Pierce states that various forms of be, do, and have are considered irregular verbs, auxiliaries, and suggests that they should be called three morphemic paradigms. Other irregular verbs are also morphemes but do not function as auxiliaries.[60]

The auxiliary verbs do and be have five and eight inflectional shapes, respectively, and the verb have has only four, but none of these three verbs is in Stageberg's category of verbs except as quasi auxiliaries.[61] The quasi auxiliary do is an empty one with a grammatical function but without any semantic meaning. It has five possible shapes (do, doing, did, does, done) and precedes the lexical verb stem. It may not normally co-occur with be and have, but does occur in questions, tag questions, negative sentences, and emphatic affirmations. "Do you think so?; It works now, doesn't it?; She does not believe it; I do mention it."

Be is a copula without lexical meaning but with a grammatical function of eight shapes (be, being, am, is, was, are, were, been). It is an empty auxiliary, precedes the lexical verb and also performs the function of "verb-qua-verb" in the absence of the lexical verb.

Modal auxiliaries are classified into two groups: four paired sets (can-could, may-might, shall-should, will-would)

and four unpaired sets (dare, must, need, ought(to)). Twaddell calls the four paired modals, major class; and the four unpaired ones, minor class. Only major modals provide for "conditionality and sequence-of-tenses." Modals neither co-occur, because of some elements of disagreement in their meanings, nor occur as the first imperative. "They function in a system of partial similarities and partial differences but their analysis is a semantic one."[62]

> Modals precede verb stems and give them special shades of meaning like futurity, volition, possibility. They are sometimes called verb markers because they signal that a verb is about to follow.[63]

Stageberg does not include dare and need in the group of modals but investigates their uses in question and negative sentences. The four paired modals, discussed above, serve in present and past tenses and are apparent in indirect discourses. The modals must and ought(to) do not have pairs (past form). For the past tense of must, had to is usually applied. Ought(to)/should, plus have, plus a past participle are usually used to serve as the past form of ought(to).[64]

Modals as a whole have general characteristics numbered below:

1. Coming before -n't (not) for sentence negation (He shouldn't work late)
2. Functioning before the subject (So can Joe, So will I).
3. Occurring as the location for grammatical stress and pitch signals (He can look silly, can't he?; I

will stop at the intersection).

4. "Occurring as the "echo" or substitute for the entire verb construction and its complements in repetitions" (You'll arrive before we will; Will it rain?—No, it won't).[65]

Grammars of English specify and describe all kinds of verbs--lexical, inflectional, derivational, auxiliary, etc.--in the vocabulary of the English language. With the exception of some auxiliaries, all other verbs carry some form or degree of concrete or abstract motion in the deep structure, the starting point of surface structures. The motion is then carried over to the final form of terminal strings, the spoken utterances. All verbs function in the center of the deep structure, the kernel-patterns of generative grammar, from which the entire surface structures, or the spoken utterances are processed. Recent studies in English grammar have suggested that the notion that

> any overall semantic analysis can be given of the inflections of all the verbs in a language is a naive and unwarrantable assumption. . . . Different lexical classes of verbs have different semantic functions statable of their inflected forms.[66]

Not all the views in modern grammar, as we have seen, have been supported by linguists. As an example, Stageberg, in his theory of syntax disagrees with the completion of the various recommended methods of the syntactic architecture of the English sentence as it is extraordinarily complex. He

explains that a verb cluster is one of the two parts of many English sentences and describes it thus:

> A verb cluster consists of a verb and all the words and word groups around it. The verb itself is called the headword or head, and the other words and word groups are the auxiliaries, modifiers, and complements of the verb.[67]

Verbs may be modified in a variety of ways, one of which is by auxiliaries. An auxiliary introduces the verb stem and determines its mood. The form of the verb depends on the particular auxiliary that occurs: (may go, should go, was going, and had gone). Verbs may be modified by other verbs: (kept going, got going, wanted to go, intended to go, and began to go).

Verb headwords are also modified by adverbs. In case the three groups of adverbs— "where," "how," and "when"—occur after the same verb headword, the normal order is "where," "how," and "when" (went away unhappily later); though other sentence orders (went unhappily away later, went later unhappily away,etc.) may also be used in natural conversation.

"When" and "how" occur before the verb headword, the "when" adverbs frequently, the "how" adverbs sometimes. "Where" adverbs do not usually occur before the headword (sometimes came in noisily; angrily went away).

Verbs may also be modified by nouns. In this case, the noun objects of the basic patterns are modifiers of the verbs in the patterns (went that way).

Wilhelm Humboldt, a linguist, believed that "the idea abandons through the verb, its dwelling place and steps forth into the realm of reality." He proceeds to say that

> the verb is distinguished from the noun and from the other parts of speech possibly occurring in the simple sentence by the fact that to it alone is imparted the act of synthetic establishment as a grammatical function. It originated . . . in the fusion of its elements with the root word by such an act. It has, however, also obtained the incumbency or obligation of performing this act itself in the intent of the sentence. Therefore, there is a difference between it and the remaining words of the simple sentence which forbids enumerating them with it in the same category. All remaining words of the sentence are, so to speak, dead material to be associated; the verb alone is the midpoint which contains and propagates life to the remainder. By one and the same synthetic act, the verb joins the predicate with the subject through its being.[68]

In the remainder of this chapter, I shall specifically deal with the relationships of the deep structure constituents—verb phrase and noun phrase—of sentences, a process which is considered to be the most productive way of all theoretical systems in "defining" the verbs. They are termed as the verb specific "case" relationships.

In chapter two of <u>Aspects of Theory of Syntax</u>, Chomsky has postulated that there is an important distinction between categorical symbols (NP and VP) and grammatical concepts (subject and object). He believes that

> sentence, noun phrase and verb phrase, for example, are provided as category symbols by the base, while the notion subject is defined as a relation between a noun phrase and an immediately dominating sentence, the

> term object as relation between a noun phrase and an immediately dominating verb phrase.[69]

Charles J. Fillmore's articles, "Toward a Modern Theory of Case" in Modern Studies in English (1969) and "The Case for Case" in Universals in Linguistic Theory (1968), may be the two best sources available dealing with the Case relationships. In these articles, Fillmore questions "the deep structure validity of the notion subject and object," and disagrees with the distinction between grammatical categories and grammatical functions (or relations) in English. His inquiry leads to a proposal in which no distinction between noun phrase and prepositional phrase (in English) is recognized. Instead, he suggests some grammatical cases which, he believes, play a major role in the groundwork of English grammars.

Chomsky's assumption is that "the deep structure relevance of syntactic functions is with respect to the projection rules of the semantic theory." Fillmore argues that "the structural subject and object are not to be found among the syntactic functions to which semantic rules must be sensitive."[70] In the sentences "The door will open" and "The janitor will open the door," open functions as intransitive and transitive verb, respectively. It has also a semantically relevant relation with the door which functions in both sentences as the subject of the former and the object of the latter.

In the sentences "The janitor will open the door with this key" and "This key will open the door," there is a common semantically relevant relation between this key and the verb

open. Here this key functions in the surface structure of both sentences as the object and the subject, respectively.

To name the functions of the nominals in these sentences, Fillmore calls that of the janitor, Agentive; and that of this key, Instrumental. He also uses the term Objective for the function of the subject of an intransitive verb and the object of a transitive verb (The term Objective here is not to be confused with the surface syntactic relation object nor with the surface case accusative). We already know that none of the functions can be identified with either subject or object. Fillmore concludes thus:

> If we allow ourselves to use these terms Objective, Instrumental, and Agentive, we might describe the syntax of the verb open as follows: it requires an Objective, and tolerates an Instrumental and/or an Agentive. If only the Objective occurs, the Objective noun is automatically the subject. If an Instrumental also occurs, either the Objective or the Instrumental noun may be the subject, as seen in the sentences (This key will open the door) and (The door will open with this key). If an Agentive occurs, an Instrumental noun can not be the subject, but, if it occurs, it must appear in a preposition phrase after the Objective, as in (The janitor will open the door with this key).[71]

Fillmore further implies that in the passive of the verb open, in case the sentence contains Agentive and Instrumental elements, the subject would be an Objective noun as in "The door will be opened with this key" and "The door will be opened by the janitor." In these particular instances, the Instrumental and Agentive expressions are specified (or modified) by their appropriate prepositions. We see that an analysis of syntactic functions in English requires a general account of

the role of prepositions in this language.

There are quite a number of verbs in English vocabulary similar to _open_ with syntactic relations, which are not identifiable with subjects and objects. Fillmore's list contains over fifty verbs, such as _continue_, _improve_, _sink_, _start_, etc., each of them behaves similarly to _open_. He interprets these words as such:

> They have a certain amount of freedom with respect to the syntactic environments into which they can be inserted—a freedom which can be stated very simply. The alternative is to regard these verbs as having each two or three meanings corresponding to their intransitive use or their capacity of taking subjects whose relation to the verb can be construed instrumentally in one meaning, agentively in another.[72]

Fillmore assumes that every noun phrase in English begins with a preposition. In the construction of a sentence then, the "preposition + noun phrase" is dominated by some category labels, such as agentive, objective, locative, etc.. More specifically, each sentence in its deep structure may consist of a verb and one or more noun phrases, each associated with the verb syntactically in a particular case relationship. That view also concerns the "Universal Grammars" which have no direct relevance to our discussion here, as this paper deals with English only. However, Fillmore developes his scheme by means of a series of specific assumptions in that he uses the first phrase-structure rule of the structuralists and of Chomsky's transformational-generative grammar, as his starting point.

The first phrase-structure rule (S⟶Mod + Aux + Prop) contains the major constituents of a sentence (S) as Modality (Mod), Auxiliary (Aux), and Proposition (Prop). He uses proposition rather than predicate because it includes the verb and all those elements which are relevant to the subclassification of verbs. The auxiliary is in immediate constituent relationship with the entire proposition. The constituent modality which contains optional elements such as negation, interrogation, etc. can be omitted from the rule. The first rule, therefore, can be rewritten as "S⟶Aux + Prop."

As I stated before, Fillmore assumes that every noun phrase begins with a preposition. He specifies a particular rule such as: "NP⟶P (Det) (S) N." Should this hypothesis be considered correct, due to the similarities between the formatives on each side of the arrow in respect to their grammatical structure and function, I believe the distinction between noun phrase and prepositional phrase would no longer be necessary.

All verbs govern a majority of prepositions and determine their function in the structures by their inherent semantic features. Thus <u>blame</u> requires <u>for</u> and <u>on</u> as its objective and dative prepositions, respectively. Verbs can determine their choice of subjects in case objective-dative structures occur. In the sentence "The typewriter belongs to Terry," the verb <u>belong</u> is required to choose the objective to be its subject; while in the sentence "Terry has the typewriter," the verb <u>has</u> requires the dative as its subject.

The two-part verb wake up can be used with objective (I woke up); with agentive (My daughter woke me up); with instrumental (An explosion woke me up); and with both agentive, and instrumental, in addition to objective (My mother woke me up with an explosion). The verb kill, on the other hand, must take either instrumental, or agentive, and may take both. In the case of the instrumental and in the absence of the agentive, by is the preposition which functions in the passive form, as in "The rats were killed by fire"; otherwise the preposition is with, as in "Mother killed the rats with fire." In this construction, the agentive appears only in the deep structure and gets deleted in the passive form because it is a "dummy," as in "The rats were killed with fire." According to such analysis, this sentence contains an "understood agent."

Regarding the previous discussion, the aspects of Fillmore's proposals pertaining to the verbs' specific case relationships in English are productive and interesting. They are also related to the "Universal Grammars." As far as this paper is concerned, his views are analogous with the concepts of Chomsky's transformational-generative grammar. I, therefore, concur with Fillmore when he summarizes his views as such:

> I regard each simple sentence in language as made up of a verb and a collection of nouns in various "cases" in the deep structure sense. In the surface structure, case distinctions are sometimes preserved, sometimes not—depending on the language, depending on the noun, or depending on idiosyncratic properties of certain governing words.[73]

In the following chapter, we shall see a demonstration of the expansion of Fillmore's proposition, its flaws and its merits; an illustration of the whole concept of the transformational-generative rules, their workability and productivity through processing; and finally, the advantages which would be gained by learning the language through regenerating new and unheard utterances.

CHAPTER FOUR

The Productivity and Workability of the Generative Rules

In chapter two of this paper, I remarked that theoretical linguistics is aimed toward scientific explanation to define and describe the language. It is believed that language is not instinctive and that it is from man's capacity of language that he is distinguished from animal species. Also, the major role that language plays in human activity is due to such capacity without which communication is almost impossible.

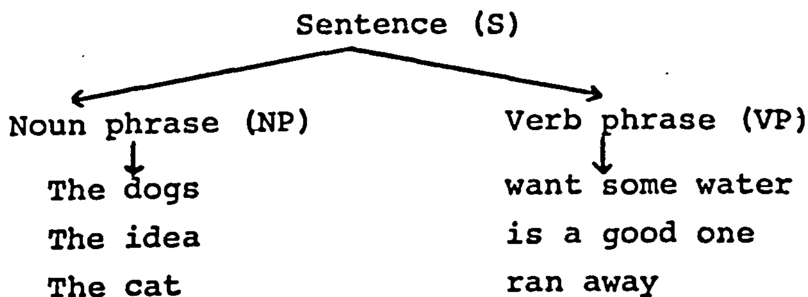
To define the language, therefore, we may begin with the description of a particular grammar "as the set of all the sentences it generates"; to put it in Lyons's words. More specifically, a language should have a grammar capable to generate an indefinite number of sentences out of the determinate, invariable, and finite vocabulary of the language by means of recursive rules and generating structures. Such grammar should also assign to every word in the vocabulary the syntactic class, or classes, to which it belongs.

That constitutes, as we have seen, a new approach, the transformational-generative method, which is quite different from the discarded traditional approach.

The formula 'S→NP+VP' is an illustration of the concept of transformationalists as the starting point of their approach toward syntax, and as the major component in symbolizing the unspoken and unwritten structures of the language. It would not then be unrealistic to believe that such an approach has been attempted to eagerly and anxiously move the language investigation from the psuedo-scientific science to a science.

In this chapter, I shall explore the categorical symbols, noun phrase (NP) and verb phrase (VP), somewhat in detail, as they are basic to the structure of the simple sentence (S). Also, they are to provide most of the "branches" on the tree diagrams. This formula (S→NP+VP) constitutes the deep structure or the first kernel-pattern (the simple active declarative sentence) upon which the system of English sentence is constructed. Such a rule assumes that we should begin with the formative S, and tells us to substitute it with the formatives NP + VP. The formula can be illustrated in the branching diagram below:

Figure (1)

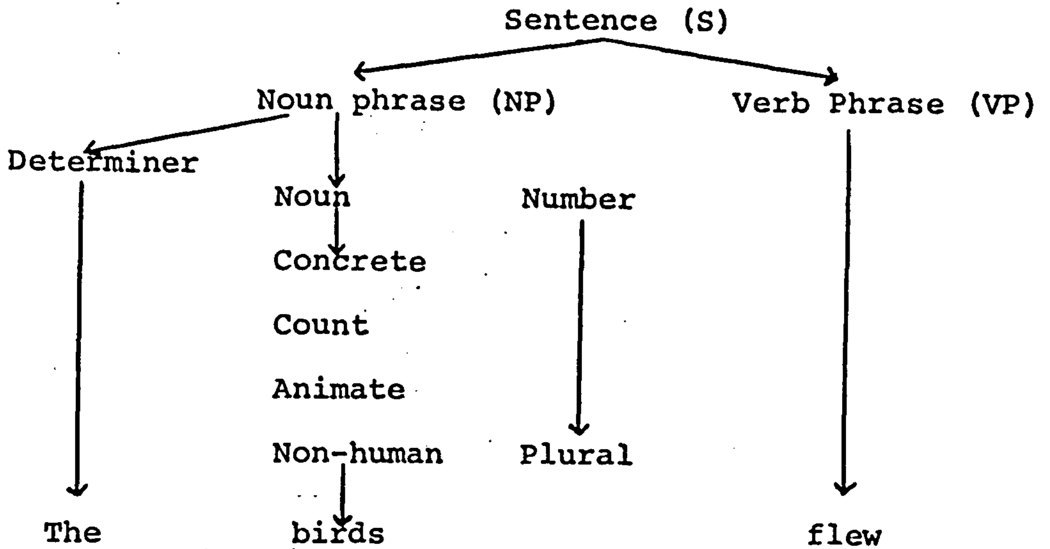


The noun phrase (NP) is then one of the major constituents of the sentence formula which consists of, in each example diagrammed above, a determiner and a noun (The + dogs, e.g.), known as the ultimate constituents among transformationalists. Since the purpose and the analysis of transformations are based on the grammaticalness of structures, elimination of the determiner from the noun phrase makes the resulting sentence ungrammatical. Number (singular and plural) —dogs, cat-also plays a principal role in the constructionor organization of a noun phrase. The proposed definition for a noun phrase then would be:

Noun phrase ⟶ Determiner + Noun + Number

The noun itself is a large and inclusive word class, consisting of "Concrete" nouns (those which tell how much or how many) and "Abstract" nouns (those which represent a fact, an idea, or a problem). They are considered to be the two major divisions of the noun. Concrete nouns are further subdivided into "mass" nouns (those that cannot be counted serially and have no plurals) and "count" nouns (those that can be counted serially and usually accept the plural -S). There is another classification for nouns as "animate" (boy, man, dog, etc.) and "inanimate" (bread, gold, etc.). Animate nouns are once again subclassified as "human" (boy, man) and "non-human" (cat, dog). The following diagram fully illustrates the concept of the noun phrase in its divisions, classifications, and as the first major constituent on the right-hand side of the arrow of the basic sentence formula:

Figure (2) Sentence: The birds flew



As I indicated in chapter two, any deep structure in English contains constituents which function as lexical items, each having particular features to itself. Such features (concrete, count, animate, etc.) are semantic representations of every lexical entry in the lexicon. They establish their functions in the surface structures but they are subject to adjunctive, substitute, and deletion transformations.

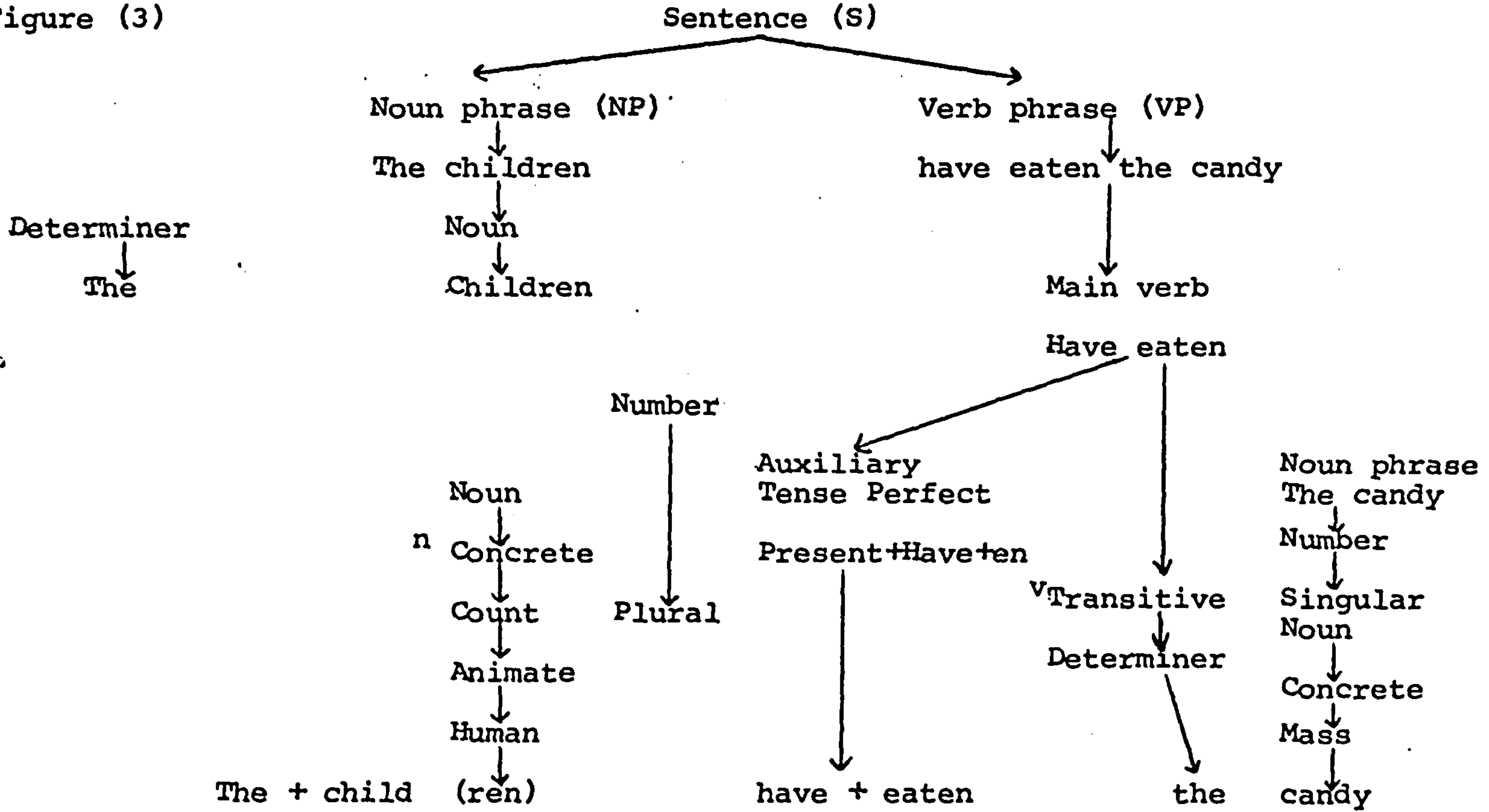
The function of noun phrase and other elements in a structure may not be decided without being affected by the verb, the nucleus of the sentence. In the basic sentence formula, therefore, verb phrase is the second principal constituent on the right-hand side of the arrow, which is established to somehow decide, affect or complete the function of the noun phrase. Elimination of either components—noun phrase and verb phrase—in the sentence structures results in the ungrammaticality, unproductivity, and unworkability of the generative rules.

The verb phrase within the sentence structure contains a great deal of material, variable and flexible, described and explained somewhat in detail in the previous chapter. Here the "main verb" is given some consideration in regard to its formation through the processing of generative rules. It may function individually in the sentence structure or combine with other components as shown below:

Be + Predicate
Linking verb + Predicate
Mid-verb and noun phrase
Transitive verb and noun phrase
Intransitive verb

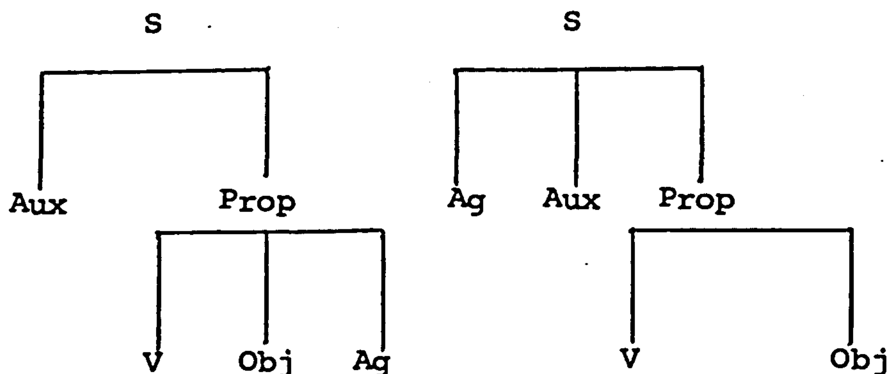
The term predicate here is used to include the predicate noun, the predicate adjective, and the predicate adverb, which follow "be", and the linking verb—remain, stay, become, etc.. Any sentence structure with a "mid" verb—lack, cost, etc.—and transitive verb—see, kick, etc.—at its center requires an object noun phrase, but only the one with the transitive verb can be transformed or regenerated into the passive voice (The children have eaten the candy; The candy has been eaten by the children). The sentence "The children have eaten the candy," tree diagrammed below, is a demonstration of the verb phrase with two noun phrases in which the transitive verb eat (plus the primary auxiliary have) functions as the main verb and affects the meaning of the noun phrases, "the children" and "the candy," the first as the Agentive, and the latter as the Objective.

Figure (3)



In pursuit of Fillmore's assumptions in the previous chapter, I posit that in Objective-Agentive sentences, and in absence of the auxiliary plus the passive marker, the Agentive becomes the subject, as in Figure (3). Accordingly, the Proposition in the first phrase structure rule (S ⟶ Aux + Prop), which contains all sorts of nominal elements relevant to the subclassification of verbs, releases one of its "actants" (any constituent in the sentence) to take the position of the subject. We can generalize then that the subject of a sentence is selected, in accordance with certain rules, from among the propositional actants. The noun phrase selected is placed by a transformational rule to the left-hand side of the auxiliary to serve as the subject. The rule can be diagrammed below:

Figure (4)



In the passive form of the Figure (3), according to the generative rules, the pattern reverses in that the nominal constituents--subject and object--exchange positions (The candy has been eaten by the children). All active and passive sentences are synonymous in their surface structure but identical in deep structure. In the process of passive transformational rules, not only the two nominal components interchange places, but also a form of be is introduced and the preposition by is added. Just as a negative sentence is identical with a positive sentence except in its negation and with a different deep structure, an interrogative sentence differs from a declarative sentence in its word order; that is, the deep structure is transformed to the surface structure.

Earlier in the concept of Fillmore's Proposition, we saw that every sentence might consist of a verb and one to three noun phrases in the deep structure, each associated with the verb syntactically and semantically in a particular case relationship. The noun phrases might operate in respect to the abstract presentation or in a concrete situation. In an intransitive clause or sentence, there might not be more than a noun phrase (the subject) needed to complete the structure (Girls giggle). However, in a sentence construction with a central transitive verb constituent, not only the speaker or listener may anticipate, in a concrete situation, two noun phrases (subject as the

first, and direct object as the second), but without them, the entire construction is considered incomplete, undecided, ungrammatical, and literally impractical. Moreover, in absence of any of the NP's, the motion or the linguistic affectation of the verb has not been applied to interpret or dictate the situation of the noun phrases in their particular case relationships.

The third noun phrase that might participate in the construction and presentation of a sentence is the indirect object, which immediately follows the direct object (He gave John a car). With respect to the Proposition analysis, the sentence "He gave John a car" consists of an Agentive ("the instigator of the action identified by the verb"), a Dative ("the case of the animate being affected by the state or action identified by the verb"), and an Objective (the function of the subject of an intransitive verb and the object of a transitive verb being affected and identified by the verb).

In the concept of Fillmore's Proposition, a close concurrence with Chomskyan innate grammatical rules, the verb is established as somewhat an obligatory sentence component which leads to other independently optional elements: Objective (Obj), Dative (Dat), Locative (Loc), Comitative (Com), Instrumental (Ins), and Agentive (Ag), described earlier. The Comitative case has been characterized as the case having denotation with or accompanied by affected and identified by the verb. The Instrumental

case is "the case of the inanimate force or object causally involved in the action or state identified by the verb". By the expansion of the proposition, all adverbial elements capable of becoming subjects or objects make their way into the rules; all others such as Time, Benefactive ("a verbal aspect, expressing that the action or state denoted by the verb is performed or exists for or in the interest of another person"), and Frequentative ("a verbal aspect expressing the repetition of the action") introduced are considered modality elements.

Aspects of Fillmore's concepts, as stated earlier, are also concerned with the universals specified by the grammatical theory. However, below is a demonstration of some of the examples in the expansion of the proposition which displays the range of kernel sentence types in the English language:

Terminal string	Category labels
John has a car.	V + Obj + Dat
I bought a car.	V + Obj + Ag
A coat is in the closet.	V + Obj + Loc
John has a coat in the closet.	V + Obj + Loc + Dat
John put a coat in the closet.	V + Obj + Loc + Ag
The door opened.	V + Obj
The key opened the door.	V + Obj + Ins
The janitor opened the door.	V + Obj + Ag
The janitor opened the door with the key.	V + Obj + Ins + Ag

John is with his brother.	V + Obj + Com
John turned out to be a liar.	V + S
John thinks that he is too old.	V + S + Dat
I persuaded John that he was too old.	V + S + Dat + Ag
I forced John to go.	V + S + Obj + Ag

There will surely be other cases needed in addition to the above category labels to further determine the grammatical functions of all the formatives of the sentence in their case relationships with the verb, the nucleus, as Fillmore further explores. This is highly an indication of the flexibility and explicitness of the generative rules by which the grammar of language is described and explained. That immediately removes Fillmore's case system from being complete by the abstract presentations hovering around the whole theory, which surely throws doubts toward its ultimate practicality. It is a fascinating experience to deal with the elusiveness of language through the exploration of which each discipline is discarded by a new one, more flexible and more explicit. The new discipline in turn loses its usefulness due to the presentation of numerous rules and uncontrollable exceptions. Furthermore, the concept of Fillmore's Proposition, in my opinion, is a matter of introduction of a relatively new linguistic terminology, which is still implicit. Above all, the split of the proposition and the removal of the agentive to the

right side of the auxiliary proves nothing more than the assumptions of the older theories. However, Fillmore's proposals are corresponding to Chomsky's theory of the transformational-generative rules.

Since grammar is supposed to formulate the structures of language in a proper way for every speaker or listener of that language to comprehend it in the same way, to communicate with each other with no significantly notable difficulty, and finally, to make it gradually unified, the concepts of the transformational-generative grammar seem to be uncomplicated, easy to follow, and persistent.

The generative rules may make those who have grown up with the English language fluent by playing with words, regenerating new structures, and uncomplicating the existing problems in construction of different grammatical and logical structures. For those whose native tongue is not English, the generative rules would help to identify the formatives in a terminal string, to recognize the function of the constituents, and finally, for the ultimate purpose of learning a language, to generate and understand unspoken and unheard utterances.

CONCLUSIONS

No sentence (or clause) has any significance for the speaker of a language without the verb as its central functioning constituent. The verbs along with other associated syntactic elements have lost their assigned prescriptive and traditional definitions towards the exploration, development, and description of language.

In the progression of grammatical theories, the concepts of the transformational-generative grammar, developed by Noam Chomsky and his followers, have finally superseded the prescriptive traditionalism, empiricism, and structuralism. The transformational-generative grammar differs from the traditional methods in its concept of structure, and from the structural approach in its concept of generative.

The concepts of generative rules into the analyzation of the three major interrelated components—syntactic, phonologic, and semantic are central to the theories of Chomsky's transformational-generative grammar. The syntactic component has two aspects: a deep structure, the internal construction of sentences; and a surface structure, the external structure of utterances. The deep structure is an abstract object which conveys the meaning of the sentences with the verb as its

center and contains all the information relevant for its correct semantic interpretation. It may consist of a verb and one or more noun phrases, each associated with the verb syntactically in a particular case relationship. The surface structure gives the form of the sentence as it is used in communication—spoken or written. All conceptions and perceptions of the speaker of a language are based on the surface structure of utterances originated in the deep structure.

Each of the various kinds of verbs—lexical, inflectional, derivational, etc.—specified and described in the vocabulary of the English language embodies some form or degree of concrete or abstract motion in the deep structure. The motion is then carried over to all the elements of the sentence and maintained through its generation to final utterances, the surface structures.

All verbs function in the center of the deep structure, the kernel-patterns of the generative grammar, from which the entire surface structures or the spoken utterances are processed. Not only does the deep structure contain syntactic elements, but also the semantic components and contextual circumstances are considered to play their parts.

The overall system of generative rules are provided to produce an indefinite number of sentences automatically, most of which the speaker or listener of a language have never heard before. Compared to the older theories, the concepts of the transformational-generative rules are

conceived of as operating with respect to 'abstract' (not phonologically specified) representations in general, which would not present any fresh problems.

The emergence of the new discipline, the linguistic approach of the transformational-generative grammer, as the most productive discipline, is indebted to the labors of the past as it is the product and will be the matrix of the future.

This discipline is in its experimental stages and left ad hoc to further, newer, fresher, and unpredicted explorations.

FOOTNOTES

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[2]Louis M. Myers. The Roots of Modern English. (Boston: Little, Brown and Co., 1966), p. 221.

[3]Michael Maittaire. The English Grammar. (London: W. B. for H. Clements, 1712), p. 1.

[4]M. Garnnett. The British Grammar. (London: A. Millar, in the Strand. 1768), p. 5.

[5]Ibid., p. 2.

[6]Maittaire, p. 35.

[7]Ibid., p. 60.

[8]Garnnett, pp. 7-8.

[9]Ibid., 104.

[10]James Harris. A Philosophical Enquiry Concerning Universal Grammar. (London: John Nourse and Paul Vaillant, 1751), p. 173.

[11]W. Snyder. Grammatical Pioneer, Analytical Grammar, Containing the Principles of the English Language. (Winchester: E. W. Robinson, 1834), p. 1.

[12]Ibid., p. 1.

[13]Ibid., p. 22.

[14]Paul A. Roberts. Understanding English. (New York: Harper and Row Publishers, 1958), p. 136.

[15]William Cobbett. A Grammar of the English Language (in a series of letters). (London: Mills and Co., Bolt-Court, Fleet-Street, 1835), letter 1.

[16]*Ibid.*, letter II.

[17]*Ibid.*, letter II.

[18]William C. Fowler. *English Grammar: The English Language in its Elements and Forms, with a History of its Origin and Development.* (New York: Harper and Brothers, 1852), p. 4.

[19]*Ibid.*, p. 244.

[20]*Ibid.*, p. 182.

[21]*Ibid.*, p. 177.

[22]Sir John Stoddart, Knt., LL.D. *Philosophy of Language or Historical Relations of Language.* (London: Richard Griffin and Company, 1854), p. 119.

[23]*Ibid.*, p. 49.

[24]*Ibid.*, p. 121.

[25]Peter Bullions. *An Analytical and Practical Grammar of the English Language.* (Raleigh, N. C.: Christian Advocates Publishing Company, 1864), p. 5.

[26]Alfred Welsh. *Essentials of English.* (Chicago: S.C. Griggs and Company, 1884), p. 5.

[27]Henry Sweet. *A New English Grammar, Logical and Historical.* (London: Oxford University Press, 1892), p. 10.

[28]*Ibid.*, pp. 5-14.

[29]*Ibid.*, p. 261.

[30]Roberts, *Understanding English*, p. 139.

[31]*Ibid.*, p. 140.

[32]*Ibid.*, p. 141.

[33]Edward Sapir. _Language: An Introduction to the Study of Speech_. (New York: Harcourt, Brace & World, Inc., 1949), p. 144.

[34]Roberts, _Understanding English_, p. 147.

[35]Sweet, p. 292.

[36]Charles Carpenter Fries. _American English Grammar_. (New York: Appleton-Century-Crofts, Inc., 1940), p. 32.

[37]_Ibid_., pp. 291-92.

[38]Myers, p. 293.

[39]Roberts, _Understanding English_, p. 143.

[40]John Lyons. _Noam Chomsky: A Lucid and Complete Account of Chomsky's Central Theses_. (New York: The Viking Press, 1970), p. 27.

[41]_Ibid_., p. 34.

[42]_Ibid_., p. 8.

[43]Ronald W. Langacker. _Language and its Structure: Some Fundamental Linguistic Concepts_. (New York: Harcourt, Brace and World, Inc., 1968), p. 10.

[44]Noam Chomsky. _Aspects of Theory of Syntax_. (Cambridge, Mass.: The M.I.T., 1965), p. 4.

[45]_Ibid_., p. 16.

[46]Roderick A. Jacobs and Peter S. Rosenbaum. _English Transformational Grammar_. (Waltham, Mass.: Blaisdell Publishing Co., 1968), p. 7.

[47]David A. Reibel and Sandford A. Schane. _Modern Studies in English_. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969), p. vii.

[48]Jacobs, p. 233.

[49]W. F. Twaddell. The English Verb Auxiliaries. (Rhode Island: Brown University Press, 1963), p. 1.

[50]Leonard F. Dean and Kenneth G. Wilson. Essays on Language and Usage. (New York: Oxford University Press, Inc., 1963), p. 220.

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[52]Otto Jesperson. The Philosophy of Grammar. (New York: W. W. Norton and Co., Inc., 1965), pp. 86 and 254-56.

[53]Twaddell, pp. 2-12.

[54]Paul Roberts. English Sentences. (New York: Harcourt, Brace and World, Inc., 1962), pp. 13-14 and 25-26.

[55]Norman C. Stageberg. An Introductory English Grammar. (New York: Holt, Rinehart and Winston, Inc., 1965), pp. 201-02.

[56]Ibid., pp. 202-04.

[57]Dean, p. 221.

[58]Roberts, English Sentences, p. 121.

[59]Twaddell, p. 2.

[60]Joe E. Pierce. "The Morphemes of English: Unbound Minor Morphemes," Linguistics: An International Review, 47 (April, 1969), pp. 47-48.

[61]Stageberg, p. 202.

[62]Twaddell, p. 13.

[63]Stageberg, p. 136.

[64]Ibid., p. 136.

[65]Twaddell, p. 17.

[66]Robins, p. 30.

[67]Stageberg, pp. 163-65.

[68]Wilhelm Von Humboldt. _Linguistic Variability and Intellectual Development_. (Coral Gables, Florida: University of Miami Press, 1971), p. 164.

[69]Reibel, p. 361.

[70]_Ibid_., p. 363.

[71]_Ibid_., p. 364.

[72]_Ibid_., p. 365.

[73]_Ibid_., p. 375.

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