MODULE 1 SYNTAX WITHIN THE STRUCTURE OF LANGUAGE

UNIT 1 AN OVERVIEW OF THE STRUCTURE OF LANGUAGE

CONTENTS

This unit will give an overview of the structure of language. To understand the complex structure of language, we shall treat it under four components: lexicon, phonology, syntax and semantics.

The unit is arranged as follows:

1.0 INTRODUCTION

Language is extremely complex. As with geological formations, the visible mass of linguistic structure forms itself into layers. The four-part division we are going to follow is in current use; almost every textbook for teaching a foreign language is organized around it, and where parts of language are treated in separate books, they usually divide the field in the same way: phonetics manuals for sound, dictionaries for words, grammars for syntax and semantics for meaning. It is obvious that words are 'made up of' sounds (or at least that they contain sounds) and that sentences are 'made of' words, and sentences must be meaningful. Most linguistic business is that of defining the levels and determining their inter-relationships, getting a more precise understanding of what 'made up of' signifies. See fig.1 below:

Semantics Reference to the outside world
Syntax Words and sentences
Phonology Sounds
Lexicon Vocabulary

While linguists disagree radically about precisely what form a grammar of a human language may take, there is considerable agreement that the correct theory of grammar must allow for grammars that have the four-part division we shall discuss. One can choose among several descriptions of what the levels are and how they are related. Some linguists start with the syntactic level and work down; others start with the bottom or phonetic (sound) level and work up. Since the levels are tied together and can only be understood as a whole, either approach is possible and picking one rather than the other is a more or less arbitrary decision.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the four levels of language structure: lexicon, phonology, syntax and semantics
- describe what each level stands for
- explain the relationships between these levels.

3.0 MAIN CONTENT

3.1 The Lexicon

The lexicon (or the lexical level), in its most general sense, is synonymous with the 'vocabulary'. It should be noted, however, that the word 'lexicon' is used in different senses by different linguistic theorists. For example, in Generative Grammar, it is used to refer to the 'component' containing all the information about the structural properties of the lexical items in a language. In some other grammatical models, these properties are formalized as 'features' and put in square brackets. We shall restrict our discussion here to its most general sense.

Every language contains a vocabulary or lexicon which is complementary to the grammar. The lexicon lists the lexemes of the language and provides along with each lexeme all the information that is required by the rules of the grammar. We cannot claim to know a language without knowing its vocabulary. The lexicon, therefore, must contain some information that will enable the speaker to reproduce correctly the

utterances in a language.

Two kinds of information the lexicon should contain are syntactic information and morphological information (ignoring pronunciation which is equally necessary in mastering the vocabulary of a language). In relation to syntax, knowing a word is not itself enough to ensure that it will always be used correctly in sentences. Take, for example, the word man which is a vocabulary of English. Apart from the fact that it is a 'noun', we also need to know that it may be preceded by a definite or an indefinite article 'the/a' (as in the man, a man); that it may be preceded by numerals (as in one man, four men); that it may be preceded by adjectives (as in serious man, dangerous man); and that it can be replaced by a pronoun like he, him, who or whom. Let us look at another word in English which is go. To specify this word, we shall need the information that it belongs to one or more subclasses of intransitive verbs and all the information needed for the selection and construction of its forms (e.g. goes, going, went, gone). Thus, the mastery of such information is part of linguistic knowledge, and a grammar designed to give a full account of linguistic knowledge will simply have to list in the lexicon for each word of the language the sum total of its syntactic properties. Such information appear to parallel that found in any dictionary.

The morphological information required from the lexicon will include the permissible combinations of prefixes, roots, and suffices which go to make up a word. Most English speakers, for example, would agree that the following words consist of a single root or stem, that is, they contain no prefixes or suffixes:

a, the, man, kind, hate, school, house

while the following words are morphologically complex in the sense that they contain prefixes and suffixes:

- houses (house-s)
- manly (man-ly)
- kindness (kind-ness)
- hateful (hate-ful)
- schooling (school-ing)
- unkindly (un-kind-ly)
- unmanly (un-man-ly)
- dislike (dis-like)

We thus see that the lexicon is an important component of the grammar of a language. When we know a language we also know the vocabulary of the language as well as all the information associated with each of the lexemes of the language that is required by the rules of the grammar of the language.

SELF ASSESSMENT EXERCISE 1

1. How many levels of language structure do you know?

2. What is lexicon?
3. Explain the two kinds of information that the lexicon should provide.

3.2 Phonology

Languages consist of several interrelated systems called components. These include the semantic component which determines the meanings of words and sentences, the syntactic component which specifies how sentences may be created or changed, and the phonological component which contains the rules by which syntactic units are converted into sound units. Since sound is the primary vehicle for expressing language, the phonological system is of major importance in understanding the nature of language and the nature of our knowledge of language.

At the level of phonology, the linguist is first of all concerned with the speech sounds of the language. This is within the realm of phonetics – the study of speech sounds. Whereas phonetics is the study of sounds that occur in language, phonology is the study of how these sounds are organized and how they function in language. In other words, phonology is the scientific study of speech sounds and speech patterns in a language. The phonological systems of languages vary in the number of sounds they contain. The English system contains twenty-four consonants and twenty vowels and diphthongs. The study of the number of sounds contained in a language, their permissible combinations to form words and their semantic functioning is the task of phonology.

Every language of the world has its own sound system and sound patterns. By a sound pattern we mean:

(i) the set of sounds that occur in a given language,
(ii) the permissible arrangements of these sounds in forming words, and
(iii) the process of adding, deleting or changing sounds in a language.

Phonology is also concerned with the 'grammar' of speech sounds: the patterns they enter into and the changes they undergo when juxtaposed with other sounds in the course of normal speech. For example, the grammar of English phonology allows a maximum of three consonants to cluster at the beginning of a word – but only a very few consonants are permitted in this position, and then only in a certain order. The first must be [s], the second must be one of [p], [t] or [k], and the third either [l] or [r] (splint, string, spring, screen, etc). All other arrangements, such as *trs-, and *rst- are prohibited by the rules of English phonology.

Phonological rules also specify how sounds regularly change when spoken in a variety of contexts. Notice how the final [t] of words such as *moist and script changes to [ʧ] when the* suffix *–ure* is added (moisture, scripture), and how the final [k] of public and elastic changes to [s] before the suffix –ity (publicity, elasticity).

The object of phonology, and of other areas of language study as well, is to describe and ultimately to explain the knowledge speakers have which allows them to produce and to understand their language. This knowledge is called linguistic competence. In phonology, competence includes knowledge of the specific sounds that occur in a language and how these sounds may be strung together to form syllables, words, and longer utterances. Part of competence is knowing what is permissible in a language and what is not. Speakers of English 'know', since it is part of their competence, that the initial sequence str- is possible, but that other combinations such as *tnr-* and *stm-* are not. By far the greatest part of linguistic competence is unconscious; that is, it is difficult if not impossible to state overtly what the principles of language are. Phonology is an attempt to make explicit one aspect of this linguistic knowledge.

Another important thing to note about speech sounds is that when you speak, you do not produce one sound, and then another. For instance, if you want to say pen, you don't utter each sound separately, instead, you move your organs of speech continuously and you produce a continuous sound. Despite the fact that the sounds we produce and the sounds that we hear and comprehend are continuous signals, everyone who has ever attempted to analyse language has accepted the notion that speech utterances can be segmented into individual pieces or segments. Therefore, although our speech utterances are continuous, in analyzing a language we can segment speech utterances.

It is important to note that every speaker of a language, even without any linguistic training, is capable of segmenting the speech segments of that language. This is because when we learn a language, we also learn to segment utterances in the language into their basic discrete elements of sound. Thus, though no two speakers speak alike, we are still able to segment the discrete elements with our knowledge of the language.

Speakers understand each other because they know the same language and how to segment the discrete elements of the continuous utterance.

We have said earlier that when you know a language, you know the sounds in that language; and knowing the sounds implies knowing the sounds that distinguish words which comprise the vocabulary or lexicon of that language. These distinguishing sounds are responsible for the different meanings of words. Therefore, when you know a word, you know both its form (the sounds that make it up) and its meaning. Each word must differ from another either in form and meaning, or in meaning only. The difference in meaning may be signaled by one sound (i.e. the two words are identical in all respects except by the difference in one sound) as in: pill/kill; or the difference may be signaled by two sounds as in: pet/got. These discrete differentiating sounds are said to be distinctive sounds because they are responsible for the contrastive meanings of words. They are called phonemes. In English, words like *pill, kill, till, fill, mill,*

nil and bill are distinguished only by their initial sounds. Therefore /*p,k,t,f,m,n* and *b*/are phonemes in English. Thus, when people speak the same language, they know the distinctive sounds (phonemes) that cause differences in the meanings of words and also know the sounds that don't cause any differences in meanings.

Therefore, a grammar of any language must include the knowledge of the phonology of the language.

SELF ASSESSMENT EXERCISE 2

1. What is phonology?
2. What are the things you know when you know a language?
3. What is the importance of distinctive sounds in a language?

3.3 Syntax

It is evident that a language is not simply an inventory of words. Words combine to form larger units called phrases, which, in turn, combine to form sentences. It is the task of syntax to describe the various ways by which words of the language may be combined to form phrases and sentences. The word syntax is derived from a Greek word that means "arrangement'. Syntax, therefore, concerns itself with the meaningful organization of words into larger units such as phrases, clauses or sentences and the analysis of such units. The sentence is usually taken as the largest unit amenable to meaningful linguistic analysis. This is why most linguistic analyses are limited to the sentence and its constituents.

Before going into the discussion of word groups, let us first consider individual words. You will notice that words are structured too. Most words can be divided into meaningful units. For example, the word *unconditionally can be divided into several meaningful units: un-condition-al-ly. Thus, un-, -al and –ly are meaningful in English (though* they are not words) because they signal some grammatical meanings. These meaningful units are called morphemes, which may be defined as the smallest meaningful units of grammatical description. The description and analysis of the smallest meaningful units of grammar is called morphology. Thus, morphology studies the internal structure of words, that is, the ways in which morphemes function as constituents of word structure. You will notice that from our example above, un-, -al and–ly, although they are grammatically meaningful in English, they cannot occur alone in phrases or sentences. In other words, they must be hooked onto other units or words. However, condition can occur alone because it can be combined with other words and phrases without the support of other meaningful units. We call the morphemes like *condition free morphemes because they can occur alone, but morphemes* like un-, -al and -ly that cannot occur alone we call bound morphemes since they always occur with free morphemes. The bound morphemes like un- that are attached at the beginning of free morphemes are referred to as prefixes while those that

are attached at the end of free morphemes are referred to as suffixes.

Having established the structure of words, we can now go on to examine how words can be strung together to form larger grammatical units. The syntax of a language describes the various ways in which words of a language may be strung together to form sentences. It has to be mentioned at the outset that native speakers of a language can produce not only sentences they have heard before but also those they haven't heard uttered before. In other words, they can make up and understand new sentences in the language. For an illustration, consider these examples:

1. (a) My teacher slept in the moon last night
   (b) Slept my teacher in the moon last night

It is possible that 1(a) may not have been uttered by anybody since it is not usual for people to go to the moon to sleep. In spite of this, speakers of English will certainly recognize 1(a) as an English sentence. However, although 1(b) contains English words, native speakers of English will reject it as an English sentence. The ability to take these decisions must be explained on the basis of the properties of the words in these examples and the order in which they are strung together. In the case of 1(b), for example, the verb slept must be positioned in the right place between my teacher and in the moon. This shows that speakers have knowledge of the structure of sentences, and it is this knowledge that the linguist seeks to describe in formulating an account of the syntactic component.

The notion that we are attempting to characterize precisely in the case of English is that of grammatical sentence of English. Intuitively, the grammatical sentences are the sentences that sound good to the native speaker; formally, they are the string of words that can be formed by the rules of syntactic component. The syntactic component, therefore, produces all and only the sentences that native speakers judge to be grammatical. Note that the grammaticality of a string of words is quite independent of whether it makes sense or not. For example, 1(a) is odd to the extent that it asserts something that is not easy to imagine. The reason for this has nothing to do with English grammar since it is not a property of English that it is not usual to walk over to the moon and sleep for the night. On the other hand, 1(b) is ungrammatical, and this is independent of whatever we might understand by this string of words. If we substitute hotel for moon in sentence 1(a) it will be less odd but the same substitution will not improve 1(b).

So far we have established that the syntax of a language makes use of: (i) meaningful elements or morphemes, and (ii) their arrangement. When we create an expression such as light blue, we select the descriptive morpheme from a possible set: light, dark, bright, etc., on the one hand, and red, yellow, green, etc., on the other. Besides their inherent meaning, such morphemes have additional meaning from their order in a sequence: blue

light has a different meaning from light blue. One may, therefore, think of language as a horizontal string with each position filled from a vertical store.

A large number of sentences may be made from a few elements, as you can see by using a few possibilities such as the following:

He drove the car slowly
This boy went well
That girl stopped frequently
Their driver performed yesterday

From these few words you can make many sentences. Try that out and be overwhelmed by the number of sentences you can come up with. Because of the large number of morphemes and words in any language and because of the many possibilities for arranging them, speakers can convey an infinite variety of meanings. The syntactic component of a language, then, is the set of rules by which words and groups of words may be strung together to form grammatical sentences of a language. The question of whether a string of words is a grammatical sentence of a particular language is completely independent of whether or not that string of words makes a true statement, logically consistent, or makes much sense at all.

The existence of this distinction does not preclude the existence of a relationship between the syntactic structure of a linguistic expression and its semantic content. It is obvious from what we said above that when the order of words in a sentence is changed the result may be a non-synonymous sentence:

2 (a) Samuel killed Jane
(b) Jane killed Samuel

Thus, apart from their phonological make up, morphological units and their syntactic structure, sentences have a meaning aspect: they convey messages. A linguistic description which ignores meaning is obviously incomplete.

SELF ASSESSMENT EXERCISE 3

1. What is the main function of the syntactic component of a language?
2. How is a word structured?
3. Why are native speakers able to differentiate acceptable sentences from the non-acceptable ones in a language?

3.4 Semantics

Some decades ago, linguists considered semantics outside their field of interest. Now, however, most linguists believe that an adequate theory of grammar must deal with semantics, as well as with phonology, morphology, and syntax. In spite of this, semantics still remains an area of major controversies as well as active research among linguists and philosophers. A linguistic description which ignores meaning is obviously incomplete.

The study of meaning is the concern of the semantic level of analysis. For practical purposes, meaning is described on the one hand in dictionaries, on the other hand, in grammars. By classifying light as an adjective as well as a noun, and by discussing differences of meaning in sequences, such as that between blue light and light blue, grammars deal with some of the meanings of language. The more specific meanings of words, such as blue, light, boy, and so on, are given in dictionaries. (It should be noted, however, that dictionaries do not give the meaning of words; they simply indicate the ways in which words are used).

In their treatment of meaning, dictionaries describe relationships between linguistic elements and the outside language. The simplest relationships to treat are those of words referring to concrete entities, for example, dog, cat, horse. But even these raise problems. We do also run into expressions where dog means, 'person' as in: 'You can't teach an old dog new tricks'. And if we hear someone refer to a car as a dog, the relationship has shifted to an inanimate object. As these last two expressions suggest, dog has both a favourable and unfavourble connotation. If someone 'puts on the dog' the chances are great that that person is not 'living a dog's life'. The meaning of even a straightforward word like dog is accordingly by no means simple, nor is it simple to describe.

In order to deal with meaning, we distinguish between the referent of a word or morpheme and its reference. Referent is its literal meaning, for example, dog is the four-legged animal. Reference is the user's concept. For some, a dog is highly favoured, for others it is strongly disfavoured. Such attitudes may be culturally determined; in the Middle East, the dog is despised, and when used for a person the term is highly pejorative. In Europe and North America the dog is generally valued highly, but the normal term for a female dog, bitch, has an unfavourable connotation, like the word for (male) dog in the Middle East.

Numerous examples could be given in support of the need to distinguish between referents and references, such as snake. The referent of snake is unambiguous, but the reference of a snake handler differs greatly from the reference for someone who has barely escaped being bitten by a poisonous snake or someone brought up in fear of snakes. The reference of words and morphemes thus varies from individual to

individual as a result of their experiences in life, in reading, and in other associations.

In dealing with meaning we would like to determine how the meaning of an item is acquired and how it is stored and managed in the brain. We acquire the meanings of common words in accordance with their referent. A child comes to know what dog means by having the animal pointed out when the word is uttered. Such a learning process applies to the general vocabulary; it is supplemented by illustrations, pictures on TV, etc. In the learning process children are often given contrasts with other animals, such as cats, and horses. In this way a child learns the hierarchies; dogs, cats, and horses belong to the class of animals.

Moreover, parallel words are taught in this way. Dog is associated with *puppy, cat with kitten, horse with pony. Such associations furnish* patterns of synonymy. A child learns that certain words are equivalent to others in most respects. Synonyms are words of the same or nearly the same meaning. In much the same way, a child learns contrasting words.

Left is opposed to right, no to yes, good to bad. Antonyms, or words opposite in meaning, are learned and associated with one another.

We apparently store words in such groups in some part of our brain. It has long been assumed on the basis of psychological experimentation that synonyms are stored in parallel, as are antonyms. If in playing word games we are asked to supply a list of words, they generally are from the same area of meaning: aunt calls up uncle rather than words like *chair, pant or until. When asked to furnish ten or so words, we respond* with items like father, mother, sister, brother, and so on, rather than *lion, Christmas, school and the like. The items we draw on accord with* semantic relationships, whether that of synonyms, antonyms, or hyponyms, that is inclusion under a term of more general meaning. The determination of such relationships indicates that meanings are associated by sets; in semantic study these are known as fields.

We have mentioned under the syntactic component that other word relationships involve units that are smaller or larger than single words. For example, many words take prefixes like pre-, un-, re-, and suffixes like -able, -ness and -ize to augment their meanings; thus, energy does not mean the same as energize. Also, some words can enter into relationships with other words to form compounds or idioms; for example, sidewalk and kick the bucket. Some of the most common idioms involve the particles on, off, in, and out in construction with a variety of verbs, particularly in slang expressions like tie one on, knock *it off, sit in, and freak out. Tie one on has a specialized meaning that* goes beyond the meanings of its components.

From the above discussion we thus see that any description of language must include the semantic component that will specify the meanings and relationships of words and

sentences as well as the relationships within and between sentences.

SELF ASSESSMENT EXERCISE 4

1. What is semantics?
2. How will word-order affect the meaning of an expression?
3. Distinguish between referent and reference
4. Explain the terms synonym and antonym

4.0 CONCLUSION

In this unit, we have tried to give an overview of the structure of language. The four levels of structure that we discussed are interrelated in spite of the fact that they are treated separately in language textbooks.

5.0 SUMMARY

You have learnt in this unit that:

- there are four levels of linguistic structure: lexicon, phonology, syntax and semantics;
- the lexicon is synonymous with vocabulary and provides all the information required in the use of a lexeme in the language;
- phonology describes the sounds and their permissible sequences in the language;
- syntax describes the ways words of the language are combined to form phrases and sentences;
- semantics deals with meanings (literary or figurative) of words, phrases and sentences; and
- these four levels must be treated in any good description of a language.

ANSWER TO SELF ASSESSMENT EXERCISE 1

1. Four levels: Lexicon, phonology, syntax and semantics
2. A lexicon (or vocabulary) is that 'component' that contains all the information about the structural properties of the lexical items in a language.
3. The two kinds of information a lexicon should contain are syntactic information and morphological information. Syntactic information includes the syntactic category of the lexical item, where the item occurs in sentences, etc. Morphological information refers to permissible combination of prefixes, suffixes and roots (stems) which combine to make up a word.

ANSWER TO SELF ASSESSMENT EXERCISE 2

1. Phonology is the scientific study of speech sounds and speech patterns in a language.
2. Knowing a language implies knowing the sounds of the language, how these sounds are organized to form words, and what the different sound sequences mean.
3. Distinctive sounds in a language are responsible for the contrastive meanings of words.

6.0 TUTOR MARKED ASSIGNMENT

1. In what ways are all the levels of linguistic description discussed above related?
2. (a) What are the levels of grammatical description? (b) Describe the function of each level.

7.0 REFERENCES/FURTHER READINGS

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UNIT 2 MAJOR CONCERNS OF THE SYNTAX OF ENGLISH

CONTENTS

In this unit, we shall discuss the major concerns of the syntax of English – a complete and précis description of the structural Properties of English language as it is spoken by native speakers. We will examine a variety of phenomena in English in order to determine in part the form of the syntactic component of English.

The unit is arranged as follows:

1.0 INTRODUCTION

All of us have a grammar. The fact that we use and understand English in daily affairs means that we use and understand, for the most part consciously, the major grammatical patterns of English language. Many linguists claim that the goal of a linguistic description is to make explicit what the native speaker – listener knows about his language. This knowledge (his 'linguistic competence') may be defined as the set of rules that enable him to produce and to understand grammatically correct sentences. Others insist that linguistics should also account for 'communicative competence', that is for the fact that speakers also know how to use sentences that are socially appropriate. These goals help us to gain a better understanding of the nature and complexity of language.

When linguistics examines a language they are presented with a complex mass of material which they try to reduce to some kind of order. It is obvious that there are many ways of proceeding in this task of making what appears to be chaos into a comprehensible arrangement, and that some people will prefer one way and some another.

The grammatical description of any language is made scientifically possible by isolating certain recurrent units of expression and examining their distribution in contexts as we shall see in subsequent units.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what syntax is
- explain what is meant by speaker-hearer's knowledge
- explain what is meant by grammaticality, acceptability and ambiguity.

3.0 MAIN CONTENT

3.1 Grammar and Syntax

The word 'grammar' in present-day linguistic studies has at least two important meanings. On the one hand, we say that a speaker knows the grammar of his language. He usually does not know it consciously – unless he has special training in linguistics, he cannot talk confidently about the nature of his grammar. A grammar in this first sense comprises the linguistic knowledge speakers possess which enables them to communicate in their language. 'Grammar' here is a psychological, mentalistic concept. The second sense relates to the linguist, not to the speaker: the linguist is said to write a grammar of the language. This grammar is a formal, explicit, description of the language.

Now these two usages must be kept apart. One look at a grammar is enough to convince grammar is enough to convince us that it is extremely unlikely that the speaker knows his grammar as an object of the shape the linguist provides when he writes his grammar. The speaker does not store his linguistic knowledge in the format which the linguist adopts for explanatory purposes; nor, when he produces sentences, does he follow step-by-step the processes which the linguist spells out as he constructs derivations for sentences. This latter point is most important: a linguist's grammar generates sentences; a speaker produces (and understands) sentences – the two processes are quite independent.

The study of syntax is concerned with the structural representation of sentences in human languages. It constitutes a part of the study of grammar, which also includes the study of sound (phonology) and meaning (semantics). The syntactic component of a grammar consists of mechanisms and principles that govern the construction of sentences and that provide a set of syntactic structures that are subject to interpretation by the semantic and phonological components. (We shall explain this more in Unit 13).

SELF ASSESSMENT EXERCISE 1

1. What do you understand by the word grammar?
2. What does the syntactic component of a language consist of?

3.2 Speaker-Hearer's Knowledge

Although the two senses of 'grammar' discussed above must be kept apart, we can learn a lot about how to do English syntax, and what to put in it, by speculating on the nature of the grammatical knowledge of a speaker. We can profitably ask: what must a speaker-hearer of English profitably ask: what must a speaker-hearer of English *know in order to communicate in his language? If we observe linguistic* behaviour from a number of angles, we can begin to make observations which encourage us to predict certain necessary components of syntactic knowledge. An example should serve to make more concrete the notion of the syntactic component.
English speakers know that they are not restricted to uttering sentences that they have heard before, but can make up and understand new sentences of the Language First, they know that, of the following four sentences, (1) is not a sentence of English, (2) is ungrammatical English, (3) is a grammatical sentence of English. Although (4) is a grammatical sentence of English, it is highly unlikely that any native speaker of English has even heard it since there are no speakers of classical Latin alive today:
1. I je akwukwo mara mma (i.e. 'To go to School is good.') - Igbo
2. Three tons are weighed by truck this.
3. This truck weighs three tons.
4. My brother married a native speaker of classical Latin

The ability of English speakers to make these interpretations must be explained on the basis of the properties of the words in these examples and the order in which they are strung together. This is evidence that the speaker has knowledge of the structure of sentences, and it is this knowledge that the linguist seeks to describe in formulating an account of the syntactic component of a language.

To go into more detail, they know more about ungrammatical sentences; for example, that (5), (6) (7), and (8) are progressively more deviant:

5. This circle is square
6. John alarmed an apple
7. John alarmed a the
8. Alarmed a the John

More relevantly, perhaps, they know an enormous amount about grammatical sentences of English. For example, they know that (9) and (10) are similar in meaning, as are (11), (12) and (13) and, in a different way, (14) and (15):

9. Her frankness astonished him.
10. He was astonished by her frankness.
11. The carpet is brown.
12. The brown carpet…
13. The carpet which is brown…
14. He mounted his proud horse.
15. He mounted his proud steed.

It goes without saying, that speakers know which sentences are different, as well as which ones are alike. That is, they can tell sentences apart.

Another area of linguistic knowledge concerns ambiguous sentences. Consider the following two examples:

16. The chicken is ready to eat.
17. I saw her in the street.

We can associate (16) with either 'X eats the chicken' or 'the chicken eats X'; (17) means either 'I saw her when I was in the street' or 'I saw her when she was in the street'. A native speaker of English knows enough about the structure of (16) and (17) to retrieve either (or, as alternatives, both) of the meanings for each of these sentences.

The linguist attempts to find a way of explaining these facts about speaker-hearer's linguistic capacities. He has to account for the structure of English sentences in a way which takes cognizance of speakers' intuitions of deviance, similarity, distinctness and ambiguity in their experience of English sentences. For instance, no analysis of (16) is adequate unless it assigns two alternative structural descriptions to that sentence, in recognition of the fact that speakers attach two different meanings to it. In his case, the grammarian will probably say that the *chicken is the object of the verb in one interpretation ('X eats the* chicken') and the subject of the sentence in the other ('The chicken eats X'). 'Subjects' and 'objects' are descriptive concepts which the linguist proposes as a way of explaining certain structural facts about English.

SELF ASSESSMENT EXERCISE 2

(a) Explain briefly what a speaker-hearer must know in order to communicate effectively in his language.
(b) Is this knowledge conscious or unconscious?

3.3 The Syntactic Component

The notion that attempt to characterize precisely in the case of English is that of grammatical sentences of English. Intuitively, the grammatical sentences are the sentences that sound good to the native speaker; formally, they are the strings of words that can be formed by the rules of the syntactic component. Ideally, the two sets should be identical, so that the syntactic component produces all and only the sentences that the native speaker judges to be grammatical.

Notice that the grammaticality of a string of words is quite independent of whether it makes sense or not. For example:

18. My brother married a native speaker of classical Latin.
19. Married my brother a native speaker of classical Latin.

(18) is odd to the extent that it asserts something that cannot be true at the present time. The reason for this has nothing to do with English, of course, since it is not a property of English that there are no living native speakers of classical Latin. On the other hand, (19) is ungrammatical, and this is independent of whatever we might understand by this string of words. Sentence (18) is made somewhat less odd if we substitute *Spanish for Classical Latin, while (19) is not improved at all by the* same substitution.

The syntactic component of a language, then, is the set of rules by which words and groups of words may be strung together to form grammatical sentences of the language. The question of whether a string of words is a grammatical sentence of a particular language is completely independent of whether or not that string of words makes a true logical statement which is consistent, or makes much sense at all. The distinction between the form of a linguistic expression and its content is a fundamental one and will be maintained quite strictly in this course.

The existence of this distinction does not preclude the existence of a relationship between the syntactic structure of a linguistic expression and its semantic content. It is obvious, for example, that when the order of words in a sentence is changed the result may be a non-synonymous sentence:

2. (a) John hit Mary
   (b) Mary hit John

As we proceed to construct precise syntactic descriptions, the question of which aspects of the syntactic structure contribute to the semantic content of an expression

will become clearer than it will appear to be at this point.

SELF ASSESSMENT EXERCISE 3

1. What do you understand by 'grammatical sentences'?
2. Must grammatical sentences of the language be meaningful? Give reasons.

3.4 Syntactic Rules

The learning of a first language is for the most part an unconscious process. While it is necessary for the native speaker to acquire rules of the language in order to speak it correctly, the rules are not explicitly made available to the learner, but are simply exemplified for him by other native speakers. The end result of this is that while it is clear that the native speaker employs rules for forming sentences, it is impossible to ask the native speaker what the rules are. Rather, it is necessary for the linguist to figure out what the rules must be on the basis of what the native speaker judges as grammatical and ungrammatical sentences of the language. The linguist seeks patterns of grammaticality and ungrammaticality and infers from these what the organizing principles behind these patterns must be. For example, a simple organizing principle that distinguishes between (18) and (19) is that the verb must follow the subject in English. Such a principle is incorporated into a tentative grammatical description of the language, and is subsequently tested against an increasingly wider range of relevant examples. It is important to note that the grammar that the linguist proposes is a hypothesis. That is, it is a guess as to what is really the case. The hypothesis must be formulated on the basis of good evidence; it must be tested whenever possible.

SELF ASSESSMENT EXERCISE 4

How do native speakers learn the rules of their language?

3.5 What the Linguist does: Writing a Grammar of English

A linguist writes a grammar in an attempt to expose the structure of the sentences of a language. His structural analysis is well motivated to the extent that he bears in mind that this set of sentences relates to a shared linguistic competence among the speakers of the language under description. The problem: what do speakers know? has an immense bearing on our more directly relevant question: How shall I present the *structure of the sentences by which speakers communicate?*

Briefly, a language, L, is a set of sentences. The linguist must account for all and only the grammatical sentences of L ('L' is a universal abbreviation for 'any natural

language'). This obligation follows from our comments on sentences (1)-(4) above: the mature speaker-hearer can distinguish between grammatical sentences of L, ungrammatical sentences of L, and sentences which are not of L. If the set described did not have limits, the grammar produced would be utterly unprincipled: it would fail to divide off English from, say, French sentences, and, since it would omit to separate off ungrammatical and grammatical sentences of L, it would be structurally anarchic. I will assume that we have procedures for discounting sentences which are not of L and sentences which are not grammatical, and grammatical sentences of L. If we can thus recognize grammatical sentences of L, we must go on to ask: How *many of them are there? The answer to this question is known: the set L* contains an infinite number of grammatical sentences. Almost every sentence we hear, or produce, is new to us. One might object that this observation is either unprovable, or, if provable, irrelevant since, because of human mortality, we cannot actually experience an infinite set of sentences. However, we need this assumption, because we must account for the creativity of language – we are interested in the newness of sentences, even if we cannot be concerned with their infiniteness. What we can show is that there is no longest sentences in a particular language, and therefore, by implication, there are an infinite number of sentences in languages. (This is not to say that there can be a sentence of infinite length, as has sometimes been claimed, quite erroneously). For every sentence of the type (21), a longer sentence (22) is possible:

20. Sam eats meat and vegetables.
21. Sam eats meat, vegetables and fruit

And for every sentence (22), a longer sentence can be constructed by adding one more item. I will give two more examples of constructions with this property; there are in fact several syntactic devices available for extending sentences indefinitely:

23. John believed that Mary claimed that Peter maintained that Felix said that…
24. This hot, sunny, lazy, predictable… climate suits me very well.

As the sentences of a language are infinite in number, the set which the linguist must describe cannot be co-extensive with any finite corpus of sentences which, by observation and recording, he might collect. There is a second reason why the task of writing a grammar cannot be accomplished by merely cataloguing the structure found in an observed corpus of sentences. The fact is that the actual utterances of speakers do not adequately reflect speakers' real competence in L. Actual speech, as any unprejudiced observation will confirm, is riddled with grammatical mistakes of all kinds: incomplete sentences, false concords, arbitrary changes of structure in mid-sentence, illicit co-joining of constituents which ought not to be linked together – or at least not in the manner that they are – and so on. (I am not appealing to 'prescriptive' standards. By 'ungrammatical here I don't mean structures which, in the manner of the

18th century purifiers or the edicts of the French Academy, have been decreed to be unacceptable; but structures which native speakers, if they could be reliably consulted, would agree are ill-formed from the standpoint of their grammatical knowledge). These errors stem from various kinds of psychological and situational 'interference': distraction, lapses of memory, shifts of attention, hesitation, etc. To describe such deviant sentences as these which occur in a corpus would be to describe linguistically irrelevant psychological factors as well as the linguistically relevant structural knowledge of speakers.

Thus a corpus of utterances is not the true subject-matter of linguistic description: it is only data – a set of observation from which, with caution, the linguist must draw his grammatical statements. In view of what has just been said, it is clear that the linguist's use of his primary data must involve two adaptations. First, some idealization' is necessary so that the grammar does not take account of the deviant sentences which occur in the corpus. Second, the linguist must devise rules which project from his finite, observed materials to an infinite set of sentences. That is to say, the grammar must have predictive power.

All this adds up to the fact that a grammar is not a simple reflection of linguistic of usage. In fact, linguists until quite recently believed that any sentence which was produced ought to be described by a grammar. But now a major reorientation has taken place: it has been realized that speakers' actual linguistic performance is not a very accurate indication of their underlying linguistic competence. Many features of linguistic performance, many aspects of texts and utterances, have to be discounted when writing a grammar.

From the above discussion, we see that a lot of things will be taken into account in any treatment of English syntax. As we progress in our study, we shall be taking up these issues.

SELF ASSESSMENT EXERCISE 5

Briefly describe what the linguist does in trying to write the grammar of a language.

4.0 CONCLUSION

In this unit, we discussed the major concerns of the syntax of English – things that are necessary in the knowledge of English syntax. Native speakers know these things unconsciously and the linguist utilizes this knowledge and describes it in form of rules in writing a grammar of the language.

5.0 SUMMARY

You have learnt in this unit:

- What grammar and syntax are;
- What a speaker – hearer knows when he knows a language;
- What grammatical and ungrammatical sentences are; and
- What the linguist does when he writes a grammar of a language.

ANSWER TO SELF ASSESSMENT EXERCISE 1

1. A grammar could refer to the linguistic knowledge speakers possess which enable them to communicate in their language; or to a formal, explicit description of a language.
2. The syntactic component of a grammar consists of mechanisms and principles that govern the construction of sentences and that provide a set of syntactic structures that are subject to interpretation by the semantic and phonological components.

ANSWER TO SELF ASSESSMENT EXERCISE 2

(a) The speaker – hearer knows:
   (i) the grammatical and ungrammatical sentences in his language;
   (ii) sentences that are not sentences of his language;
   (iii) how words are arranged to form sentences in his language;
   (iv) that there are infinite number of sentences in his language – he is not restricted to uttering only sentences he has heard before; he can make up and utter new sentences in his language; and
   (v) understands all grammatical sentences of his language.

(b) The knowledge is unconscious.

6.0 TUTOR MARKED ASSIGNMENT

1. What are the components of a grammar, and what is the descriptive function of each?
2. Provide reasons for the ungrammaticality of the following sentences:
   (a) The boy danced in the sun.
   (b) Colourless green ideas sleep furiously.
   (c) The famgy dompty crumbled upishly.
   (d) Angels the saints intercession with priests.
   (e) My brother is an only child.

3. The following sentences are ambiguous. Give the two meanings.
   (a) Old men and women witnessed the ceremony
   (b) He visited the criminal lawyer.
   (c) They are moving sidewalks.
   (d) Call me a cab.
   (e) He decided on the boat.

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UNIT 3 PERSPECTIVES ON THE ANALYSIS OF SYNTAX

CONTENTS

In this unit, we will discuss the various perspectives on the analysis of syntax.

The unit is arranged as follows:

1.0 INTRODUCTION

Having delimited the domain of syntactic investigation in the previous unit, we may now proceed to discuss the ways in which strings of words are organized within the sentence. Within the linguistic tradition it is possible, with a certain amount of abstraction, to discern two distinct trends, which may loosely be called the 'bottom-up' or word relation approach, and the 'top-down' or constituent approach. The two approaches do not meet in the middle, but both have things of value to contribute to our understanding of syntactic structure. We shall discuss the bottom-up approach first, and then contrast it with the *top-down approach, which supplanted it as the dominant trend in syntax* around the middle of the last century.

2.0 OBJECTIVES

At the end of the unit, you will be expected to:

- explain what bottom-up and top-down approaches mean and how they work
- discuss the contributions of these approaches in our knowledge of syntactic structure
- highlight their limitations in syntactic analysis.

3.0 MAIN CONTENT

3.1 'Bottom-Up' or 'Morpheme-to-Utterance' Approach (Word Relation Approach)

There are several methods of syntactic analysis. Two of the methods we shall discuss here involve searching for immediate constituents within utterances by comparing samples. One is by identifying the immediate constituents moving from the morpheme to the utterance (popularly called 'bottom-up' approach). In proceeding from morpheme to utterance, constituents cuts are progressively erased, forming larger and larger constituents back to the utterance itself.

The bottom-up approach starts from the lower end of the domain of syntax – i.e. with words – and attempts to specify ways in which they may be combined and in which they relate to each other. The bottom-up approach was largely developed by the American linguist, Zelling Harris.

The first thing to be done in this approach is to establish classes of units at certain level so that their occurrence with respect to each other may be specified. An example of such classification is the traditional 'parts of speech' into which most of the words of English are grouped. (A detailed discussion of 'parts of speech' will be undertaken in unit 5). The following eight parts of speech were established by the traditional grammarians: Noun (the name of a person, place or thing), Verb (a word that expresses an action or state of being), Adjective (a word used to modify a noun), Pronoun (a word that substitutes for a noun), Adverb (a word used to modify a verb, adjective or other adverbs), Preposition (a word that links a noun or pronoun to some other parts of the sentenced), *Conjunction (a word used for joining one sentence to another, or one* word to another of the same or similar parts of speech) and Interjections (exclamatory sounds that express some feeling of the mind). To find out the 'part of speech' to which a word belongs, ask yourself: 'What kind of work does the word do in the sentence?'; 'what part does it play in helping to make the sentence?' If the word gives a name to some individual, person or thing, or to some kind of person or thing, the word is a Noun. If the word refers to some person or thing without giving a name to the person or thing referred to, the word is a pronoun. This was how traditional grammarians classified words.

In spite of the inadequacies of traditional parts of speech, it is a remarkable effective tool for the analysis of English syntactic structure. It performs two essential tasks. On the one hand it provides a framework into which the vast majority of English words may be fitted. On the other, it is an essential prerequisite for the statement of possible word combinations in English. These may be formulated in quite a traditional way,

along the following lines:

i. Adverbs precede the adjectives in English (e.g. horribly inadequate);
ii. Adjectives precede the noun and follow the article in English (e.g. the big picture);
iii. English sentences have the order noun-verb-noun (e.g. John likes *yam).*

Such generalizations seem obvious to us, but they presuppose a surprisingly large amount of linguistic analysis, and it is only when such straight forward principles of grammar are established that it is possible to move on to consider the more elaborate deviations from these patterns which many consider to be the more interesting part of the linguistic system. Having established the units, the linguist using 'bottom-up' approach begins to combine morphemes into phrases and then phrases into sentences or utterances. For example, the sentence:

1. Those three boys ate the food.

will be analysed as follows:
{ate} (actually {eat} + {past})
{three} + {boys} (actually {boy} + {plural}){food}
{those} + {three} + {boys}
{ate} + {the} + {food}
{those} + {three} {boys} + {ate} + {the} + {food}

This can be represented in another way:

1. Those /three/boys/ate/the/food
2. Those/three boys/ate/the food
3. Those three boys/ate/the food
4. Those three boys/ate the food
5. Those three boys ate the food

The end result after combining the morphemes progressively as they 'go together' is a distinct unit, an utterance, or a sentence.

In the discussion above, we have tried to show how 'bottom-up' or morpheme-to-utterance' approach works. First, we establish the word class of each element. Next, we establish the ways in which these elements combine and relate to each other until we get to the sentence level. We find that this approach is capable of providing structural characterizations of a large number of English sentences and, at the same time, of specifying as un-English a large number of possible combinations of English utterances.

SELF ASSESSMENT EXERCISE 1

1. What is 'bottom-up' approach in syntactic analysis?
2. State the step-by-step procedures of 'bottom-up' approach in syntactic analysis.

3.2 'Top-Down' or Constituent Structure Approach

We have tried to present the general outlines of the 'bottom-up' approach to syntactic analysis – one which is firmly rooted in centuries of use in the European grammatical tradition. But there are good reasons to be unhappy about some aspects of such an approach. The definition of the parts of speech is one problematic area: it is very easy to find fault (in principle, rather than merely in detail) with the semantic parts of the definitions. Nouns, for instance, are defined in terms of what are essentially physical objects, but it is far from difficult to find nouns which denote other than physical objects; indeed, it is virtually impossible to find concepts expressed by verbs, adjectives, or adverbs which cannot also be expressed by nouns, whether directly derived from other words (e.g. be, - being; red-redness) or not (e.g. hit – blow, big – *size). If nouns and verbs were semantically quite distinct, then it would* be contradictory for there to be such things as 'verbal nouns' (i.e. gerunds – liking, wanting, etc.). The same sort of objection may be made to all the other semantic definition as well. Although there is some sense in these notional definitions, but as criteria for determining the membership of a category they are undoubtedly inadequate.

Misgivings also arise as regards the grammatical relations which form an essential part of bottom-up grammatical analysis. The semantic parts of such definitions suffer from the same faults as do those of the parts of speech. For example, the definition of the subject of a verb as actor, *experiencer or possessor of a property is not obviously satisfied by this cupboard in (1) below:*

1. This cupboard contains dangerous medicines.

   Even the usual definitions of subject and object don't seem quite appropriate for (2) and (3)

2. Samson suffered a stroke
3. This problem taxed many of the greatest minds of the time.

But even assuming the adequacy in general of these definitions (and there is no doubt that they cover the vast majority of the cases), there are further problems. Some word relations do not so obviously fit into the *head – governed term pattern. For example, the phrase many men give* grounds for claiming either word to be the head. Either of the words may occur independently as the subject of a verb:

4. Men were killed
5. Many were killed

Whenever either word occurs, a word of the other class could occur alongside it; men suggest a quantity, which may be specified, and many *suggests a set of objects, which also may be specified. Nor does* the relations seem to be in any different from that which obtains in combinations such as 'many of the men', which consists of two phrases, *many and of the men; of these many is obligatory, but of the men is not.* It is traditional to treat quantity words (quantifiers) such as many on a par with adjectives, and to analyse the noun as the head of the construction, but there seems to be no sound argument other than the force of tradition which requires us to analyse it in this way.

Finally, there are constructions which fit rather badly into an approach which describes syntactic structure in terms of relations between individual words. Take the following examples:

6. Tom and Jane walked up the street
7. Mary has been eating apples

In (6) it seems obvious that Tom and Jane as a whole is the subject of the verb walked: but establishing what could be the head and the corresponding relations within that three-word phrase seems hardly possible.

Such problems, and especially the difficulty of applying the traditional approach to languages of widely differing structure, led naturally to the development of what we have called 'top-down' approach. A simple and appealing version of such an approach was developed in the American structuralist tradition under the name of 'immediate constituent analysis'. Essentially this approach relies on the possibility of inter-substitution of strings of words or morphemes across different sentences, a procedure which is taken as establishing their equivalence as syntactic units.

The idea here is that sentences are constructed from groups of words, often paired rather than from single words added one onto these groups of words in turn cluster with other groups, layer upon layer of word pairs and pair groups, which eventually build a sentence. When presented with a sentence such as (8) below, a native speaker will find little difficulty in segmenting it into significant 'chunks'.

8. The man that I saw was wearing a blue jacket.

It is intuitively rather obvious that strings of words from (8) such as the *man that I saw, a blue jacket, the man, that I saw, etc are rather different* in status from strings such as I saw was, man that, wearing a blue, etc.

A three-word sentence such as (9) admits of three possible segmentations (assuming continuity of resulting segments).

9. Peter ran away

We may treat it as involving three isolated words as in (10) or we may decide that an adjacent pair of words is more closely related than either are to the third word as in (11) and (12)

10. [Peter] [ran] [away]
11. [Peter ran] [away]
12. [Peter] [ran away]

The criterion that we will accept as choosing between these segmentations is that of regularity of substitutability. So another three-word sentence, such as (13), which allows the same segmentation, allows free substitution of segments only with (12).

13. Mary likes custard

In other words, substituting away for custard (or vice versa) yields an unacceptable sentence:

14. *Mary likes away
15. *Peter ran custard

But Peter and Mary on the one hand, and ran away and likes custard on the other, are freely inter-substitutable:

16. Peter likes custard
17. Mary ran away

This type of segmentation is applicable to other sentences. Let us consider the sentence:
IC analysis also demonstrates two important points about English syntax. The first reinforces what we already knew from using test frames: English syntax is highly positional in structure – English is a word-order language – and words placed next to each other are usually semantically connected. The second point is that groups of words in English do indeed function as single units of syntax.

We have seen that the optimal result of immediate constituent analysis for typical sentences of English reveals a consistent pattern in all of them; the normal constituent break in a full sentence of two constituents which corresponds fairly closely to the

traditional notions of subject and predicate. Another observation which was central to the development of this type of analysis was that the constituents which result from such a procedure tend to behave syntactically in ways which are similar to the behaviour of individual words. A constituent of whatever length is then said to be an expansion of the word class with similar behaviour. This notion of expansion is directly related to that of distribution. If two strings of words are actually replaceable in all contexts, they are said to have equal distribution.

4.0 CONCLUSION

In this unit, we discussed two perspectives of the analysis of syntax: the 'bottom-up' and the 'top-down' approaches. As we have seen, one approach treats a sentence as a sequence of words, each word bearing a relation of some sort to at least one other word of the sequence. The other approach involves breaking a sentence down into chunks, and continuing this process of analysis until all the chunks into which it is analysed are words.

5.0 SUMMARY

You have learnt in this unit,

- what 'bottom-up' approach is and how it works;
- what 'top-down' approach is and how it works.

6.0 TUTOR-MARKED ASSIGNMENT

Use any of the approaches discussed above in analyzing the following sentences. Explain your step-by-step procedure.

1. The heavy rains in Benin City have rendered many streets impassable.
2. The militants have been making life intolerable for city residents.
3. They played a wonderful game.

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MODULE 2 ELEMENTS OF TRADITIONAL GRAMMAR

UNIT 1 THE ORIGIN AND DEVELOPMENT OF TRADITIONAL GRAMMAR

CONTENTS

In this unit, you will know what Traditional Grammar is, know its origin and how it developed over time.

The unit is arranged as follows:

1.0 INTRODUCTION

The study of language dates back to the ancient times though it had a rather chequered history. Although the earlier traditions of its study cannot, for the most part, provide us the kind of information we now need to fully appreciate the nature and workings of language, they nevertheless provide us insights into the achievements of the present. In the ancient times, the study of language was not as systematic and organised as it is now, because it was primarily speculative and attitudinal. In this unit we shall try to

explain what Traditional Grammar means, how it originated and how it developed.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what the ancients regard as grammar
- explain what Traditional Grammar is
- discuss how it originated
- trace its development over time.

3.0 MAIN CONTENT

3.1 An Overview of What Grammar is

The meaning of grammar covers a wide range of phenomena and it assumed different meanings from generation to generation. As we know it now, grammar refers to generalized statements we make about the regularities and irregularities that are found in a language. At present, the way we study language is to observe how native speakers use the language, and from our observations, we make general statements concerning the regularities and irregularities found therein. These observations are stated in form of sets of rules guiding usage of the language, thus becoming the principles on which the study of the grammar of the language is based. Theories of language are formulated based on such rules that are universal across languages, and many theories have been propounded by many scholars for the study of language.

In the ancient times, grammar meant something different from what it means now. In coming to their decisions about grammar, those early writers were guided by two influences: logic and Latin grammar. The Greeks considered grammar as a branch of philosophy that was concerned with 'art of writing'. The study of grammar was based on the way the language is written and used by the best authors. Thus, by the Middle Ages, grammar had come to be regarded as a textbook containing rules of correct usage of a language. In other words, a grammar book provided universal rules that teach how a language ought to be written or spoken. These prescriptions often led to inconsistencies and discrepancies.

Today, grammarians generally agree that any grammar of a language should describe and record actual usage from which rules that generate acceptable sentences in the language are formulated. In this way grammar thus becomes a valuable instrument in improving a learner's performance in the language rather than a textbook of do's and dont's.

SELFASSESSMENT EXERCISE 1

1. What did the ancients consider to be grammar?
2. How will modern scholars define grammar?

3.2 What is Traditional Grammar?

The phrase 'Traditional Grammar' represents an attempt to summarise the range of attitudes and methods that characterized the study of grammar in the ancient and medieval periods, especially of the European school grammars of the 18th and 19th centuries. It can mean several things: the way grammar was studied in the pre-linguistic era; the grammatical descriptions as contained in the school grammars written by renowned grammarians of the 18th and 19th centuries (e.g. Otto Jespersen's Modern English Grammar on Historical Principles, 1909-40); and a level of structural organization which can be studied independently of phonology and semantics, and generally divided into the branches of syntax and morphology. In this unit, we shall take traditional grammar' to mean the set of attitudes, procedures and descriptions found in the pre-linguistic era of grammatical study.

The distinctive features of traditional grammar were insistence on correctness, linguistic purism, literary excellence, the use of Latin models, and the priority of the written language over the spoken language. As we shall see in later modules, these features contrast with what obtains in modern grammatical studies that emphasize descriptive accuracy, appropriateness, comprehensiveness explicitness, and priority of the spoken language over the written form.

It is pertinent to note that there is no such thing as a single, homogenous, traditional approach either to grammar or to anything else in language study in the ancient and medieval periods. Therefore, the phase 'traditional grammar' is an attempt to summarize a state of mind, a spectrum of methods and principles over the 18th and 19th centuries that are associated with many schools of thought. For example, in traditional grammar, there are ideas about sentence structure deriving from Aristotle and Plato; there are ideas about parts of speech deriving from the Stoic grammarians; there are ideas about the nature of meaning from the scholastic debates of the Middle Ages, and so on. Therefore, there is no one homogenous approach called traditional grammar as we have of 'Transformational-Generative Grammar' (Noam Chomsky), or of 'Systemic Grammar' (M.A.K. Halliday).

When linguistics began to develop in the early decades of the last century, there was a natural and reasonable reaction against much of traditional study. This reaction, however, led to many of the valuable insights of traditional grammar being ignored or

their importance being minimized. However, many of the valuable insights of the traditional grammar are now being recognized and appreciated.

SELF ASSESSMENT EXERCISE 2

1. What things can the phrase 'traditional grammar' mean?
2. Define 'traditional grammar'.

3.3 Origin and Development of Traditional Grammar

As we noted in the previous section, the development of traditional grammar cannot be traced to one source. The fundamental attitudes and methods of traditional grammar came from different backgrounds. For example, the basic terminology for discussing language was first developed by the Greeks, adopted by the Romans, and passed on to us through translation in various languages. We find also that traditional grammar drew on the semantic theories of the ancients and the medieval. It should however be noted that there is no single semantic theory that has been agreed upon in ancient, medieval or modern times, but implicit in the method of distinguishing among the parts of language is Aristotelian idea.

Traditional grammar has its origins in the 5th century B.C. with Plato and Aristotle in Greece and a Sanskrit scholar named Panini (who knew nothing of the Greeks' work, nor they of his) in India. Plato, Aristotle and the Stoics devoted a great deal of time to the development of specific ideas about language. Plato was regarded by later Greek writers as the first to discover the potentialities of grammar, and his conception of speech (logos) as being basically composed of the logically determined categories of noun and verb (the thing predicated and its predicator) produced a dichotomous sentence analysis which has fathered most grammatical analyses ever since. The classification into the traditional 'parts of speech' was first articulated by the grammarians of Classical Antiquity – most authoritatively by Dionysius Thrax in the third century A.D.

Aristotle, and later the Stoics, examined the structure of Greek very carefully and produced definitions of what people felt grammatical analysis should be concerned with – definitions of parts of speech in particular, but also of many of the so-called categories of grammar such as case, number, gender and tense. This fairly detailed study of the language was the major influence on subsequent grammatical thinking. It was taken over by the Romans with very little change in general principle, and through the influence of Latin on Europe, was introduced in various degrees into every grammatical handbook written before the 20th century. Many of the features of modern linguistic theory too (for example, the idea of levels of grammatical structure) can be traced back to this early period.

Panini constructed a grammar of Sanskrit a half millennium before our era, concentrating especially on its forms. His grammar analyses simple words, determining roots and inflectional elements. It also analyses compound words, distinguishing formations such as those of bluebird 'a blue bird', bluebeard 'a man having a blue beard', fourteen 'four plus ten', etc. With Panini grammar we can determine precisely the forms of Sanskrit. It greatly influenced western grammatical theory when it came to be known in the 19th century.

Latin, largely under the aegis of the church, became the medium of educated discourse and communication throughout Europe by the end of the first millennium. Largely as a result of this, the emphasis in language study was for a while exclusively concerned with the description of the Latin language in the context of language teaching. The massive codification of Latin grammar by Varro, and the subsequent grammars of Aelius Donatus (fourth century) and Priscian (sixth century) are the outstanding examples of this approach. Donatus' grammar was used right into the Middle Ages – and a popular grammar it was too, being the first to be printed using wooden type, and providing shorter editions for children. Throughout this period, a high standard of correctness in learning was maintained, especially in pronunciation.

By the Middle Ages, when it had come to be recognized that Latin was no longer a native language for the majority of the prospective users, the grammar books became less sets of facts and more sets of rules, and the concept of correctness became even more dominant. One popular definition of grammar was "the art of speaking and writing well'. Later, it was common to hear people identify the aim of learning grammar with the ideal of being able to write Latin like Cicero. A similar attitude had characterized much Greek language teaching also: especially after the Alexandrian school (third century B.C.) the language of the best literature was held up as a guide to the desired standard of speech and writing for all. The Greek language had to be preserved as far as possible from decadence.

The effect of these attitudes to language on later thought was considerable. The teaching of Latin grammar and the study of Latin literature were perhaps the two most important aspects in the history of language study for promoting the development of misleading principles of analysis in traditional grammars. The pride of place given to Latin was clear in the classical orientation given to grammar and rhetorical studies. Grammar to many was the basis of all arts and all education (as the phrase 'grammar school' reflects). The sixteenth century provided the peak period of prestige for Latin, and other languages suffered accordingly. Languages, it was felt, were corrupted by commoners and preserved by the educated. Dictionaries, moreover, were only to define the words used by the best authors. It is not difficult to see the long-term effects of attitudes such as these. Grammars came to be considered as preserving a language's purity. Their role was to tell people authoritatively how to speak and write. The Latin

grammars were to be used as models for the descriptions of all new languages. Only the best authors, the literary giants, were to be studied as examples of what a language was like. And when English grammars came to be written, especially in the 18th century, the authors, steeped in these Latinate and literary traditions, regularly produced rules of 'correct' usage ('normative' rules, as they are sometimes called) which bore little relation to the facts of everyday speech, and rules derived from Latin into which the features of English structure were forced (such as the use of case system for nouns). Dryden, for example, seems to have introduced into English the 'rule' about not putting prepositions at the end of a sentence, taking his idea from the grammatical situation that existed in Latin; and his influence was so great that it has appeared in most grammar books since – though it is doubtful whether there has ever been a time in English when prepositions were so restricted in their placement in a sentence. Writers like Daniel Defoe, Jonathan Swift, Samuel Johnson and John Wallis argued vehemently that English needed to be 'regularised' and 'improved', its principles spelt out, its discrepancies smoothed out, and its distortions ruled out. Naturally enough (because there was no grammar of English before this time, but centuries' worth of clear analysis did exist for Latin), the first grammarians modeled their analysis of English on Latin. Also naturally, they found that English did not match the rules of Latin. So they shaped English to fit. That is why we are sometimes warned, for example, never to split an infinite in English: Latin infinitives, being part of the verb's base, cannot be split apart as the two-word infinitive of English can. Many such prescriptive rules linger in English traditional grammar today, as carryovers from Latin grammar.

Similar standards of correctness were imposed upon other languages too, sometimes being formalized in a more extreme way, as in the establishment by Cardinal Richelieu of an Academy in 1635 to preserve the purity of French. The attempt failed, as it was bound to do: the language continued to change with the years; and in France, as in England, the prescriptions of the grammarians simply became more and more removed from the majority usage (i.e. the reality) of the time.

Even in the earliest days, there were writers who protested that the grammarian's job was to record how the language was used, not to manipulate it and hand down prescriptions, but voices of men like George Campbell and Joseph Priestley were not loud enough. As a result, nearly every English-speaking person today is self-conscious about 'grammar', uncertain about what is 'good grammar' and what is not, and anxious about his or her ability to analyse the workings of the native language. As a sadder result, few adults are even interested in their own language, once they learn the basic skills of using it. Perhaps these unhappy consequences can be laid as much to bad teaching as to the inadequacies of the traditional system, but there is still no denying how awkwardly traditional grammar has served us as an analytical tool and how much it has confused most of us.

SELF ASSESSMENT EXERCISE 3

1. Is Traditional Grammar traceable to one origin?
2. What contributions did Plato and Aristotle make it the development of Traditional Grammar?
3. What influence did Latin have on Traditional Grammar?

3.4 Summary of Influence of Traditional Grammar on English Language

The Normans conquered England in 1066 AD, and this singular event affected English language a great deal. For some centuries thereafter, the role of English as the language of the ruling class was lot as Latin, and subsequently, French, became the prestige language. For example, Latin was the language of scholarship, the language of the church, the language of international communication, and also the language of administration. Only the commoners used English language while the ruling class used the prestige languages, Latin, and later French. This, therefore, restricted the use of English as a medium of communication and scholarship, and so, there was no standard grammar accepted by all.

Initially, English grammar was written for the purpose of teaching foreigners the Latin language (i.e. providing the basis for the study of the grammar, the prestige language) since many people aspired to know Latin. Teachers knew Latin and so they transferred the Latin concepts into the description of English. The idea of studying English through the grammatical rules of Latin led to prescriptivism – prescribing that English should be instead of describing what English was. The forms of English that conformed to Latin grammar were accepted, and those that did not were assigned to one structure or the other. Some of the prescriptions include the following:

(i) use shall for the first person and will for others in normal utterances, for example:

(a) $\left\{\begin{matrix} \text{I} \\ \text{We} \end{matrix}\right\}$ shall go

(b) $\left\{\begin{matrix} \text{He} \\ \text{You} \\ \text{They} \end{matrix}\right\}$ will go

This rule was formulated by the classical grammarians but it has no justification in the grammar of English.

(ii) don't end a sentence with a preposition. This rule was inherited from Latin where prepositions do not end sentences. However, it does not apply to English because sentences could end with prepositions as in the following:

(c) She was the girl I danced with.
(d) I saw the boy I spoke to.

In addition to these, the case system developed for English was modeled after that of Latin. Latin has six cases – *Nominative, Accusative, Ablative, Vocative, Genitive and Dative.* English is only assumed *to* have Nominative, Accusative and Dative, but all the six Latin cases were imposed on English. Thus, we see that traditional grammar had a great influence on English language, and it is the recognition of this baneful influence that contributed to the advent of structural grammar.

4.0 CONCLUSION

In this unit, we have tried to show what traditional grammar is, its origin and how it developed. In subsequent units, you will learn how this grammatical model handled specific aspects of language.

5.0 SUMMARY

You have learnt in this unit that:

- grammar refers to generalized statements we make about the regularities and irregularities that are found in a language;
- these statements are stated in form of sets of rules guiding usage of the language;
- what grammar meant in ancient times differs from its meanings now;
- Traditional Grammar is simply a summary of the range of attitudes and methods that the ancients and the medieval employed in studying language;
- Traditional Grammar differs from modern grammars basically on its insistence on correctness, linguistic purism, literary excellence, the use of Latin models, and its reliance on written language;
- Traditional Grammar is not traceable to a single origin – many philosophers contributed to its development; and
- the teaching of Latin grammar and the study of Latin literature helped to promote misleading principles of analysis associated with Traditional Grammar.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define Traditional Grammar.
2. "Traditional Grammar has little or no influence in the development of modern grammars". Discuss.

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UNIT 2 LINGUISTIC PRACTICES IN TRADITIONAL GRAMMAR – PARTS OF SPEECH, PARSING AND CONCATENATION

CONTENTS

In this unit, you will learn the ways traditional grammarians handled some syntactic aspects of language.

This unit is arranged as follows:

1.0 INTRODUCTION

For many centuries grammarians have tried to discern a basic grammatical system that would hold good for all languages at all times. This search for a universal grammar has proved fruitless. The types of expression that are necessary and fundamental in English may not occur at all in other languages. We cannot, therefore, assume that the categories we set up and describe have any validity apart from the language whose analysis required them.

In this unit, we shall discuss some of the linguistic practices of the traditional grammarians – classification of words into 'parts of speech', parsing and concatenation.

2.0 OBJECTIVES

At the end of this unit, you should:

- identify the traditional 'parts of speech' and the criteria used in arriving at them;
- explain what parsing means and how to parse; and
- state what concatenation means in traditional grammar.

3.0 MAIN CONTENT

3.1 The Definition of Grammatical Terms

There is a feeling that persists in most of us and that impedes our study of grammar – the feeling that there is something final and absolute in grammatical categories. This habit of mind persuades us, for example, that a given word is either a noun or not a noun. It is hard for us to suppose that it can be part noun and part adjective; and it is really impossible for us to conceive that it can be a noun to some people and an adjective to others. So when we ask our teacher about the part of speech of good in the good die young and when our teacher answers that it may be considered either a noun or an adjective depending on our definition, we are dissatisfied. We persist: "But what is it really? What is the right definition?" And if the teacher answers, "There isn't any right definition; it isn't anything really", then we are completely confused.

Let us try an analogy. We may conceive that a four-wheeled mobile vehicle is necessarily a car, a truck or a bus. But if we were to stand at an intersection and tally the cars, trucks and buses that pass, we would encounter problems. Most of the passing vehicles would be easily recognized as one of the three. But a small proportion would puzzle us. Is the 'pick-up' van a car or a truck? Is the vehicle with the back seat torn out and a truck bed installed a car or a truck? What is the jeep? Answers will depend on definitions. We can define car so that all of these will count as cars; or we can define car so that some or all of them will count as trucks or buses. And the question "Is it really a car?" is meaningless in any case, because any definition will be dictated to by our purpose in making the classification and valuable only if it enables us to classify according to our purpose with a minimum of uncertainty.

So with grammatical definitions, they are not so much right or wrong as good or bad, careful or sloppy, useful or impractical. We define nouns not to establish the nature or essence of nounness, but to be able to talk more conveniently about a large group of words in which we perceive some similarity. Our definition is good if it is readily understandable and applicable, and if it eliminates or reduces as far as possible the border ground of doubtful cases. Some grammatical terms, however, cannot be so defined as to eliminate all border ground.

Some confusion and argument can be avoided if we understand the bases of our definition. There are at least three possible bases, which will be called here the formal, the syntactic and the notional. By formal definition we mean definition based on form– sounds in the spoken language, spelling in the written. By syntactic definition we mean definition based on syntax – the relation of words to other words in the sentence. By notional definition we mean definition based on our understanding of the relationship

of words to the actual, real-world phenomena represented by the words.

For illustration, let us make three brief and incomplete definitions of a noun:

Formal: A noun is a word that forms a plural in –s
Syntactic: A noun is a word that may serve as subject of a verb
Notional: A noun is the name of a person, place or thing

Obviously none of these adequately defines noun, but each of them might be expanded and qualified so as to approach adequacy. Grammarians sometimes use one kind of definition and sometimes another, and sometimes a combination, as circumstances require or as their temperament leads them.

The first task of the grammarian is to group the words that occur in sentences so that he can talk about them. When he discovers which words naturally go together in groups, he gives the groups names, for convenience of discussion. For example, if he examines the sentences:

> The apple was ripe
> The moon was bright
> The car was old

he notes that apple, moon and car are words that can occur in similar positions and preceded by the determiner 'the'. In other English sentences, he finds other words which in form and behaviour are similar to apple, *moon and car, and presently it is clear that apple, moon and car are part* of a large group of words. The grammarian then tries to define the group – that is, to state in general terms what it is that the members of the group have in common. The next step is to give the group a name – in this case, the name noun. Then, instead of saying "words like apple, *moon and car behave such and so", he can say more simply, "nouns* behave such and so".

When we begin to examine a language for the purpose of describing it, we perceive at once that there are many correspondences between the language and the real-world phenomena expressed by the language. For example, in the real-world there are substances and in the language certain words (nouns) which name the substances; in the real-world there are qualities and in the language certain words (adjectives) which suggest the qualities; in the real-world there are different attitudes of mind and in the language there are certain verb forms (moods) which distinguish these attitudes.

However, as we look closely, we find that the correspondence between language and reality is not perfect; indeed, we find paradox and a contradiction everywhere. Nouns

do not always name substances; adjectives do not always suggest qualities; the same mood form may express different attitudes, and different mood forms may express the same attitude.

Such vagaries are inevitable, for language is a growth. Languages do not strive for logic and symmetry; they strive for communication. Therefore, a grammatical system should not be more logical and symmetrical than the language it describes.

SELF ASSESSMENT EXERCISE 1

Explain what you understand by the following:

1. formal definition
2. syntactic definition
3. notional definition

3.2 The Parts of Speech

Any approach to language which hopes to go beyond the fact that speech involves sequences of linguistic units (whether these be words, morphemes, phonemes, or whatever) must articulate classes of units at a certain level, so that their occurrence with respect to each other may be specified. One such classification is the traditional one into 'parts of speech', first articulated by the grammarians of Classical Antiquity – most authoritatively by Dionysius Thrax, in the third century AD, substantially similar systems of parts of speech have gradually been developed for a large proportion of the languages of the world.

The vocabulary of the English language is customarily divided into eight major divisions called 'parts of speech': nouns, pronouns, adjectives, *verbs, adverbs, prepositions, conjunctions and interjections. Some* books set up a special category for the words, a, an and the, which are called articles. These words, however, do not differ in any essential way from certain adjectives, and it is more usual to consider them with the adjective group.

Grammarians have frequently proposed a reduction of these categories. Some writers would put prepositions, adverbs and conjunctions together and call them all particles – i.e. indeclinable relation words. Others wish to treat adverbs and prepositions together as one group, or nouns and adjectives, or nouns and pronouns. Good arguments can be advanced for some of these arrangements, and some simplification may eventually be made; meanwhile we can make do with the familiar eight-term classification.

We should understand, however, that four of the parts of speech – *nouns, verbs, adjectives and adverbs – differ essentially from the others.* These categories are (i) partly identifiable by form, and (ii) practically unlimited in number. Consider the

series beauty, beautify, beautiful, *beautifully. No one of these can ordinarily be substituted for any of the* others. Thus we say 'That's a beauty', but not 'That's a beautify'; 'I'll beautify it', but not 'I'll beautiful it', 'a beautiful woman', but not 'a beautifully woman'. Similarly arrive and arrival, amusing and *amusingly, soft and soften are not interchangeable. This correlation* between four sets of forms and four sets of functions is the ultimate justification for setting up these four word categories.

All the other word groups in the language are closed classes (whether they are treated as four groups or more). That is, they are limited in number, and the class membership changes only very slowly. We may coin new nouns and verbs at will, but we cannot easily coin new junctions or prepositions. Furthermore, these other classes are not identifiable by form. Verbs, for example, are identifiable often by signs like be (be-friend, behead), or –fy (beautiful, identify), but no similar forms mark conjunctions.

Some difficulties are involved in treating the words left over from the major classes as a small number of parts of speech. This inevitably involves lumping together words that behave quite differently: because and and, for example, are both called conjunctions, though they actually have little in common. The conventional treatment also tends to festoon the major classes with little groups of words essentially dissimilar. Thus, *where is put in the same class with beautifully, some in the same class* with beautiful. This procedure is awkward, but we can find our way along if we pay close attention to subdivisions.

A few words do not fit in any of the conventional groups. Such a word is the 'to' that precedes the infinitive: "It's time to stop", or the 'it' in "Is it true that he died?" There are not many such highly specialized words, however, and they create no serious problem.

Most grammars follow the same pattern in defining the parts of speech. Nouns and verbs are defined notionally (i.e. according to meaning): a noun is a word that names a person, place or thing (e.g. man, box, *beauty, John); a verb is a word that makes an assertion or indicates* action or being (e.g. want, hit, come, be, sleep). All the other parts of speech are defined syntactically, on the basis of the definition of noun and verb: an adjective is a word that modifies a noun (e.g. big, *terrible, foolish); an adverb is a word that modifies a verb (yesterday, beautifully); a pronoun is a word that replaces or* stands in the place of a noun (e.g. he, she, it, you, who, etc). Preposition is a word relating other parts of speech (e.g. in, under, *without, on); a conjunction is a word joining other parts of speech (e.g. and, that, because, if) and an interjection is an exclamatory word (such*
as hey, ouch, whoa).

This system seems neat and simple, and indeed it serves fairly well in practice, but close scrutiny (as we shall see later) tempers with one's admiration somewhat.

Most of us begin our study of grammar with the notion that the parts of speech are watertight compartments. We believe not only that all words in context can be distributed among the eight categories but also that a given word in a given context must belong to one category and not to any of the others.

The actuality is not so simple; all of the compartments leak. As commonly defined, each part of speech bears certain resemblances to others, and the categories run together at border lines. Can we say that *his in "That is his cat" is a pronoun and not an adjective, or that it is an* adjective and not a pronoun? We can, of course, frame the definition of *pronoun or of adjective so as to include or exclude the word, but it is* probably more enlightening to call it a pronominal adjective (or adjective pronoun), thus indicating that it has characteristics of both groups.

Similarly, at some points nouns can scarcely be distinguished from adjectives or from pronouns. Adverbs approach prepositions in the direction and conjunctions in another. Some words are both verb-like and noun-like. We can reduce the confusion somewhat by paying close attention to definition, but no definition of the traditional parts of speech can eliminate overlapping entirely.

SELF ASSESSMENT EXERCISE 2

1. Name any four categories of parts of speech and provide three examples of each.
2. What part of speech are the following words? Ada, die, Nigeria, *or, hei, unfortunately.*

3.3 Parsing

In traditional grammar, parsing refers to the grammatical exercise involving the description of sentences and words by giving names to the grammatical categories of various elements, for example, subject, predicate, verb, object, number, case, gender, person, etc. To parse a word is to examine it in two different points: (i) what part of speech it is, and (ii) what part it plays in the building of a sentence.

Of the eight parts of speech the only kind of word that cannot be parsed in relation to the part it plays in the building of a sentence *is interjection. An interjection is unlike all the other parts of speech* because it does nothing in the sentence, i.e. it does not help to make the sentence as the other parts of speech do. If it happens to occur in the middle of a sentence, it is not connected with any word either before or after. Sometimes it does not occur in any sentence, but stands quite alone. So, in parsing such a word as oh!, pooh!, ah!, alas!, etc, the only thing we can say is that it is an

interjection.

All the other parts of speech stand in some connection with other words, and must therefore be parsed. Thus, if we have to parse in, in such a phrase as "a bird in the hand", we say not merely that it is a preposition, but a preposition having hand for its object. It shows what the bird has to do with the hand, or the hand with the bird. Also, if you were parsing the sentence: "My brother tortured our cat", you would say that brother was a common noun, singular number, masculine gender, third person, nominative case. You would say that tortured was a finite verb, past tense, third person, singular number, indicative mood. In the older forms of English language, when inflectional endings were more numerous, parsing was less difficult than it is now when we have but few of these inflectional endings left to guide us. Now we have to look chiefly to the *work that a word does in a sentence, and not expect so much help from* the form or ending.

For an illustration, let us parse some parts of speech.

How to Parse Nouns

To parse a noun you have to show four different things concerning it:

(a) of what kind it is, - whether Proper, Common, Collective, Material or Abstract;
(b) of what gender it is, - whether Masculine, Feminine, Common or Neuter;
(c) of what number it is, - whether Singular or Plural; and
(d) in what case it is, - whether Nominative, Accusative, Genitive, etc.

As an illustration, let us parse this sentence:

The Master of this class teaches French without a book

Master: Common noun, Masculine gender, Singular number, Nominative case, Subject to the verb 'teaches'.
Class: Collective noun, Neuter gender, Singular number, Accusative case after the preposition 'of'.
French: Proper noun, Neuter gender, Singular number, Accusative case after the verb 'teaches'.
Book: Common noun, Neuter gender, Singular number, Accusative case after the preposition 'without'.

How to Parse Pronouns

To parse a pronoun you have to show five different things concerning it:

(a) of what kind it is – whether Personal, Possessive, Demonstrative, Relative (i.e. Conjunctive), or Interrogative.
(b) of what gender it is – whether Masculine, Feminine, Common or Neuter.
(c) of what number it is – whether Singular or Plural. (d) of what person it is – whether first, second, or third
(e) in what case it is – whether Nominative, Accusative, etc.

For example, to parse the pronouns in the sentence:

I have written down your names in my book

We proceed thus:

I: Personal pronoun, common gender, singular number, first person, nominative case, subject to the verb 'have written'.
Your: Possessive adjective qualifying the noun 'names'.
My: Possessive adjective qualifying the noun 'book'.

How to Parse Finite Verbs

The points to be explained in the parsing of a Finite Verb are shown in their proper order in the two following tables:

Kind of Verb	Conjugation	Voice	Mood Tense	Form of Tense
Transitive Intransitive	Strong Weak mixed	Active Passive	Indicative Imperative Subjunctive	Present Indefinite Past Continuous Future Perfect Future Perfect- in the past continuous

Number	Person	Agreement
Singular Plural	First Second Third	Agreeing in number and person with its subject or subjects, expressed or understood

For an illustration, let us parse the verbs in the following sentences:

1. James has been fishing all the morning

2. James and I will be promoted next year
3. He worked hard that he might win a prize

1. He's been fishing: Intransitive verb, weak conjugation, Active voice, Indicative mood, Present Perfect-Continuous tense, having 'James' for its subject, and therefore in the singular number and third person.

2. Worked: Intransitive verb, Weak conjugation, Active voice, Indicative mood, Past tense, having 'he' for its subject, and therefore in the Singular number and third person.

3. Might win: Transitive verb, Strong conjugation, Active voice, Subjunctive mood, Past tense, having 'he' for its subject, and therefore in the Singular number and Third person.

The rule relating to the agreement between a Finite verb and its subject is called Concord: "a verb must be in the same number and person as its Subject or Nominative". Several special rules exit for working out this general concord or agreement. One of the rules states: "when two or more singular subjects are connected by and, the verb is plural" as in:

(a) Time and tide wait for no man
(b) Ada and Mary are here

The above is a sample of how parsing was done. Of course someone was bound eventually to ask what good all this did. Did grammatical terminology teach you anything except grammatical terminology? Did learning to parse sentences or diagram sentences cause you to produce better sentences? In the early decades of twentieth century many educators asked these questions and answered them with a resounding 'No'. Linguistics, by contrast, is less concerned with labels, and more with the criteria of analysis which lead to the identification of these elements, and with the way in which speakers use these elements to relate sentences in the language as a whole.

SELF ASSESSMENT EXERCISE 3

1. What do you understand by parsing?
2. Parse the nouns in the following sentences:

(a) John won the gold medal
(b) Samuel gave John a car
(c) Girls play football

3.4 Concatenation

To grasp the real structure of the English sentence, one must understand not only the words that occur but also the principles of their arrangement. An English sentence does not consist simply of a string of words in free relation to one another. It consists of groups of words arranged in a series of levels, each word group being made up sub-groups, until we get down to the single word.

In this discussion, we will adopt the view that all sentences of English have a simple linear structure; that is, that every sentence of the language could be satisfactorily described, from the grammatical point of view, as a string (or sequence) of constituents (which we assume to be words). As an abstract illustration of what is meant by the term 'string*' (which is the technical term used in mathematical treatments of* the grammatical structure of language) we may consider the following instances:

a + b + c + d

The plus-sign is employed here to indicate concatenation, a term used in the formal representation of linguistic structure to refer to the process of linking elements together by placing them in sequence to from strings. The string results from the combination of the constituents or elements, in a particular order. What the order denotes depends upon the interpretation given to the system in its application to particular phenomena. In English, for example, the left-to-right ordering of written sentences as allowed by the convention is a particular kind of string. In transformational-generative grammar a language is considered as a set of strings which consist of elements linked together by the process of concatenation. We assume that the combination of words resulting from the application of a grammatical rule constituted a string, with the order of the concatenated words being determined by the order in which the words occur in sentences of the language.

In English grammatical terminology the notion of syntagmatic relationship does not necessarily presuppose an ordering of the elements between which the relationship held, instances abound of both sequential and non-sequential combination of elements. A string is a particular kind of syntagm (an ordered arrangement of parts) as concatenation is a particular kind of combination.

4.0 CONCLUSION

In this unit, we have tried to show the linguistic practices of the traditional grammarians. You have seen that traditional grammar represents an amalgam of methods and principles traceable to many scholars of the ancient period. Although their methods and interests differ from current practices, we still owe them a lot of

gratitude for the work they did.

5.0 SUMMARY

You have learnt in this unit:

- what the different 'parts of speech' are;
- what formal, syntactic and notional definitions mean;
- what is meant by 'parsing', and how to parse; and
- what 'concatenation' means.

6.0 TUTOR MARKED ASSIGNMENT

(a) State the parts of speech of the words in italics in the following sentences:
   (i) The criminal lawyer won the case
   (ii) He bought the car for her
   (iii) This is an interesting book
   (iv) He did it because he is compassionate
   (v) The house is behind the church

(b) Parse the verbs in the following sentences:
   (i) She drove to Lagos
   (ii) He has been sleeping since noon
   (iii) They worked hard to pass their examinations
   (iv) Come tomorrow

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UNIT 3 MEANING AND THE NATURE OF THE SENTENCE

CONTENTS

In this unit, we will discuss meaning and the nature of the sentence in traditional grammar. The unit is arranged as follows:

1.0 INTRODUCTION

The traditional grammarian set for himself certain methodological procedures based on his perception of the nature of language. He saw that if language is a reflection of thought, there must be correlations between the patterns in which we think and the patterns of language that express our thoughts. For example, we think of things, to which we give names and about which we then make predications or statements. Thus, the traditional grammarian began his description with complete, meaningful statements (each consisting of a subject plus a predication about this subject), and analysed these statements into their constituent parts. Each part must, in some way, contribute to the meaning of the whole statement.

There is a bewildering variety of approaches to the definition and determination of 'meaning'. Distinctions are made between 'emotive' and 'cognitive' meaning; between 'significance' and 'signification'; between 'performative' and 'descriptive' meaning; between 'sense' and 'reference'; between 'denotation' and 'connotation'; between 'signs' and 'symbols'; between 'extension' and 'intension'; between 'implication', 'entailment' and 'presupposition'; between the 'analytic' and the 'synthetic', and so on. The terminology is rather confusing since it is used without any high degree of consistency and uniformity between different authors. It is inevitable therefore that the terms we shall employ here will not necessarily carry the same implications as the same terms employed by other authors.

2.0 OBJECTIVES

At the end of this unit, you will be expected to know:

- how meaning is expressed in Traditional Grammar
- different kinds of relationships between words
- the types of sentences.

3.0 MAIN CONTENT

3.1 Meaning in Traditional Grammar

Semantics may be defined as the study of meaning. From the earliest times down to the present day, grammarians have been interested in the meaning of words, and frequently more interested in what words mean than in their syntactic function. A practical manifestation of this interest is seen in the innumerable dictionaries that have been produced throughout the ages, not only in the West, but in all parts of the world where language has been studied. As we saw in the previous units, the categories of traditional grammar were to a large extent determined by their characteristic 'modes of signifying'.

Meaning was seen by the traditional grammarian as either lexical or grammatical. Lexical meaning is the essential meaning of words classed as substantives (nouns and other nominals), verbs (including modals, auxiliaries and verbals), and their modifiers (adjectives and adverbs respectively). Grammatical meaning is the property of the words (and affixes) which signal relationships between the words that have lexical meaning. Thus articles, prepositions, and conjunctions are said to have grammatical meaning. Words that have lexical meaning carry the message content while words that have grammatical meaning are essential to the grammaticality of sentences. Thus, different classes of words have different functions in the language.

Traditional grammar was founded on the assumption that the word was the basic unit of syntax and semantics. The word was a 'sign' composed of two parts: the form and the meaning. For them, the semantic relationship holding between words and 'things' was the relationship of 'naming'. Thus, it became customary in traditional grammar to distinguish between the meaning of a word and the 'thing' or 'things' which were 'named' by it. The distinction, as was formulated by the medieval grammarians, was that the form of a word signified 'things' by virtue of the 'concept' associated with the form of the word in the minds of the speakers of the language; and the 'concept', looked at from this point of view, was the meaning of the word (its significatio). This was the traditional view of the relationship between words and 'things'. This view was made the basis, in principle, for the philosophical definition of the 'parts of speech'

according to their 'modes of signifying'.

However, the terminology employed did not entirely eliminate the possibility of confusion in the application of the term 'signify'; the form of a word could be said to 'signify' both the 'concept' under which 'things' were subsumed and also the 'things' themselves. At this point it will be useful to introduce the modern term for 'things' in so far as they are 'named' or 'signified', by words. This is the term of referent. We will say that the relationship which holds between words and things (their referents) is the relationship of reference: words refer to (rather than 'signify' or 'name') things. In other words, the form (word) is related to its referent through the mediating (conceptual) meaning associated with both independently.

SELF ASSESSMENT EXERCISE 1
Explain what you understand by:
(a) Lexical meaning
(b) Grammatical meaning

3.1 Words and Word Relationships

In spite of what we have said in the previous section, it is still not easy to specify what words mean. For example, consider the word table, which has many varieties of meaning, as indicated by expressions like *dining table, table of contents, water table, the teacher's table, and so* on. Even if we restrict ourselves to the most basic sense of the word *table and perhaps define it as an object with a flat top and four legs, our* intuitions as to what a table is will vary. Clearly, words can only be defined in terms of other words, and definitions of words are exact only to the extent that everyone understands the same thing by them and uses them in the same way.

Despite the problems in specifying the meaning of a word through a definition, communication can take place because people do have some basic idea what words refer to. In this respect, words have a denotative meaning, which is akin to a definition. Table refers to an object with a flat top and four legs; this is its denotative meaning. However, words also have a connotative meaning, which includes varied aspects. The connotative meaning of a word may include shades of feeling and judgment. A full account of a word must include both its denotative and connotative meanings.

Philosophers and linguists have also long been interested in semantic relationships among words. We are all familiar with such pairs of words as sun and son, which have different meanings and are spelled differently but are pronounced the same. In studying language usage, pronunciation is more important than spelling, so both words would be represented phonetically as [s n]. This relationship is called *homophony: two words with different meanings but have the same pronunciation*. The term may be

extended to apply to words like bank, *foul and degree, each of which has several meanings but one* pronunciation and spelling. All the meanings of bank, for example, are referred to by the single phonetic form [bænk].

A more interesting relationship is synonymy, in which the meanings of words are supposedly alike but the pronunciations are different. It has often been argued that no two words can have exactly the same meaning. For example, such words as little and small might be interchangeable in nearly all situations, but individual speakers may insist that there are minor differences. Still, we refer to such pairs as *synonyms because they seem to mean pretty much the same thing.*

Antonymy is the relationship that holds between words that are opposite in meaning. Although opposites can usually be recognized easily, the exact nature of antonymy is more subtle. A great many antonyms are pairs of words that represent opposite degrees of some semantic property. For example, such pairs as warm and cool, hot and cold, and *torrid and frigid each represent approximately the same distance away* from some neutral point along a continuum of climate, but they lie in opposite directions. However, this property of opposites is not the only relationship subsumed by antonymy. Pairs like buy and sell exhibit a reciprocal relationship, whereas pairs like white and black exhibit a presence/absence (of colour) relationship.

The fact that some meanings are 'related' in a way that others are not disturbs the symmetry of the simple opposition between synonyms and homonyms. The question is: How different must the meanings associated with a given form be before we decide that they are sufficiently different to justify the recognition of two or more different words?

In their attempts to demonstrate the 'natural' origin of language, the Greeks introduced a number of principles to account for the extension of a word's range of meaning beyond its 'true' or 'original' meaning. The most important of these principles was metaphor ('transfer') based on the 'natural' connection between the primary referent and the secondary referent to which the word was applied. Examples of 'metaphorical' extension might be found in the application of such words as mouth, *eye, head, foot and leg to rivers, needles, persons in authority, mountains* and tables, respectively. In each instance there is discernible some similarity of shape or function between the referents. Various types of 'extension' or 'transference' of meaning were recognized by the Greek grammarians. Meanings that are more or less clearly 'related' in accordance with such principles are not traditionally regarded as being sufficiently different to justify the recognition of distinct words. The traditional semanticist would not say that the mouth of a river and the *mouth as a part of the body are homonyms; but rather that the word mouth has two related meanings. We have, therefore, in addition to* synonymy and homonymy, what has come to be called more recently *multiple meaning*

(sometimes called polysemy). The distinction between homonymy and multiple meaning is evident in the organization of the dictionaries we customarily use: what the lexicographer has classified as homonyms will be listed as different words, whereas multiple meanings will be given under one entry.

Also, some words can enter into relationship with other words to form *compounds or idioms; for example, sidewalk and kick the bucket. Some* of the most common idioms involve the particles on, off, in and out in constructions with a variety of verbs, particularly in slang expressions like tie one on, knock it off, sit in and freak out.

The meaning of a word is inherent in it in a subtle way that is difficult to specify. However, the use of a word is a matter of record; it exists in sentences that have been uttered. Dictionaries do not give the meanings of words; they simply indicate the ways in which words are used. Modern editors of dictionaries generally do not sit down, select a word, and ask what it means. Instead, they glean sentences in which that word occurs from the literature of the language, sort the sentences into groups in which the word appears to be used the same way, and select the best paraphrase to characterize each usage. From sentences-of-record, some sort of intended meaning is inferred; and this meaning is further described through paraphrases. Thus, a good dictionary will give at least one example for each 'meaning' of a word; the chosen example was actually used (among many others) to establish that 'meaning'.

One major problem in lexical representation is the multiplicity of meanings of certain common words such as good and eat. Thus, in expressions like good government, good apples, good time and good *upbringing, the meaning of good varies with the meaning of the noun* that it modifies. Similarly, the process of eating varies, depending on whether one is eating soup, peanuts, oranges or steak, or whether one is 'eating his heart out' or 'eating his words'. This is one of the problems that made the study of meaning seem futile to linguists for many years. Hard-core philosophers even point out that the 'meaning' of a given *chair* is different at any point in time because the actual lexical class of the word 'chair' is constantly being altered. Nevertheless, most linguists feel that meaning must be described, and so they extract the basic features inherent in the meanings of words. Therefore, it may be true that a word like eat will vary in meaning according to a wide variety of conditions, but there is a basic sense of eating that is understood to involve taking matter into the mouth and swallowing it. Hence, one can isolate such basic notions as matter, mouth, and swallow as essential components of the meaning of the word eat.

SELF ASSESSMENT EXERCISE 2

1. Explain, with the aid of examples, what you understand by *lexical meaning and grammatical meaning.*

2. Explain the following terms and provide two examples of each in English:
   (a) synonymy
   (b) homonymy
   (c) antonymy
   (d) polysemy

3.3 The Sentence in Traditional Grammar

(a) Definitions of the Sentence

Perhaps the most familiar definition of the sentence widely used in grammar books is this one:

"A sentence is a group of words which expresses a complete thought".

It will be seen that this depends entirely on the meaning of 'complete thought', and this is not as obvious as it might seem. If we take a group of words like: "The boy went to the store", we might all agree that the thought is complete. The group of words makes a statement sufficient to itself, not depending on any other group of words. The phrase to the store, which could occur quite naturally in answer to the question *where did he go*? is not regarded as a sentence because it is not independent. That is, it cannot occur except as the answer to a question.

But suppose we have an utterance like He didn't have any. Is it complete or not? Presumably it is not, for if we were to hear it by itself we would get no sufficient meaning from it. We should have to ask who *is he? and Any what?. The utterance would be altogether dependent on* other utterances preceding or following it. Yet, this stretch of words – *He didn't have any – is undoubtedly a sentence, in the sense that writers* of English would have no hesitation in writing it with a capital letter at the beginning and a period at the end.

Thus, the words 'complete thought' in this definition cannot mean logically complete. For the logically complete thought will often turn out to be not the sentence but the paragraph, the essay, the chapter, or even the whole book. In the logical sense we do not complete a thought until we finish writing whatever we are writing. So, if this means anything at all, the words 'complete thought' must mean something quite special – something like 'grammatically complete thought'. But of course this begs the question, for we must still ask 'How do we know when a thought is grammatically complete?', 'What are the forms that make it so?'

Another common definition attempts to approach this problem. This is the one which defines a sentence as "a group of words containing a *subject and a predicate". This*

gives us something tangible; the only trouble is that it isn't true.

If we look at the word groups that acceptable writers of English punctuate as sentences, we find that most of them, to be sure, contain subjects and predicates. Not all, but most. Imperative sentences, of course, like Take your shoes off your feet, have no subjects, and in dialogue writing, many sentences have neither subject nor predicate. Even in sober and conservative expository writing, you will find a considerable number of word groups without subject and predicate.

By the definition we are considering, He didn't have any is a sentence, for it has a subject (He) and a predicate (didn't have any). So if the student knows what a subject is and what a predicate is, this definition might be of moderate service to him. The trouble is that, whereas most sentences in expository writing have subjects and predicates, most word groups with subjects and predicates aren't sentences. We have seen that *He didn't have any is a sentence because it has a subject and a predicate.* But because he didn't have any is not a sentence although it has the same subject and predicate. For it to be regarded as a sentence it would ordinarily be attached to some other word group like: I didn't borrow *money from him because he didn't have any.*

We have seen above the hazards involved in seeking a philosophical definition of the sentence. Like most other language features, sentences are more easily illustrated than defined. The best we can do is to examine the make-up of these units, the structures that typically compose them, and then try to recognize them.

(b) Classification of Sentences According to Meaning and Word *Order*

It is generally agreed that sentences can express four basic kinds of meaning:
(i) facts (declarative sentences)
(ii) commands (imperative sentences)
(iii) questions (interrogative sentences)
(iv) exclamations (exclamatory sentences)

There is less agreement, however, on whether we should apply these labels according to the intent behind the sentence or according to the word-order. For example, the sentence: "You will apologise immediately *to the Secretary" would normally be felt as a command, though it has the* form of a declarative sentence. In the sections that follow, the classification is chiefly formal, though some of the conflicts of form and meaning are noted.

Declarative Sentences

The declarative sentence is used chiefly to make an assertion; usually it states a fact, but sometimes a probability, a possibility, or an impossibility. Most of the sentences that we use are declarative sentences. Examples:
(i) The ball rolled into the net
(ii) We may never have a trouble-free session again
(iii) They are all in the same class
(iv) The earth is round

The normal word-order of the declarative sentence is subject-verb or *subject-verb-complement. This order is usually changed, however, when* an adverbial modifier introduces the sentence as in: Beyond the school *lies the Aso Rock. Occasionally, the object is placed before subject and* verb as in: Azikiwe, we may never see again.
The declarative form is often used in commands as in the following:
(v) You will kindly do what you are told (the imperative form would be: kindly do what you are told).
(vi) You must report immediately to the police
It is also used in questions:
(vii) She told you I could pay the bill?
(viii) He's waiting in the parking lot?

Imperative Sentences

An imperative sentence expresses a command or a request:
(i) Get out of here!
(ii) Have another drink!
(iii) Be ready at noon!

These sentences illustrate the typical imperative form: the imperative mood of the verb, with the subject omitted. Sometimes, however, the subject is expressed:

(iv) You get out of here!
(v) You be ready at noon!

There is usually no formal difference between an imperative sentence with expressed subject and a declarative sentence. Thus You sing out of context may be either a request that you do the singing (imperative) or a remark that you know how to sing (declarative). But sentences using the verb be can be distinguished by the form of the verb:

(vi) You be the singer (imperative
(vii) You are the singer (declarative)

Interrogative Sentences

The interrogative sentence usually asks a question:

(i) Have you seen Sam?
(ii) Do you know that John is sick?
(iii) Did the doctor say it will be twins?
(iv) Is the food good?

When no interrogative word is used, the typical word-order is auxiliary *verb – subject – principal verb as in sentences (i)-(iii) above. When the* verb be is used, the order is verb-subject. This latter order, once popular in English, occurs now only with the verb be and sometimes with have: *Have you a pen? Even have commonly takes the auxiliary verb: Do you have a pen?*

Interrogative sentences are also introduced by interrogative pronouns, adjectives, or adverbs:

(v) Who was the last to come out of the class?
(vi) What bus is this?
(vii) Where is it going?

When an interrogative adverb is used, as in the last example, the positions of subject and verb are the same as those in questions without the interrogative word. When interrogative pronouns or adjectives are used as subjects or modifiers of subjects, the order is subject-verb-complement *as in declarative sentences; but when they are used as* complements or modifiers of complements, the order is complement-*auxiliary verb – subject – principal verb:*

(viii) What did you eat?
(ix) What food did you eat?

The interrogative form is sometimes used for exclamations:
(x) Did he run!
(xi) Did I like fresh corn!

Exclamatory Sentences

An exclamations sentence expresses feeling or emotion. Exclamatory sentences are often introduced by what or how, as a modifier of the complement:

(i) What a teacher the facilitator is!
(ii) What an impression he made!
(iii) How hot it is!

The order is thus complement-subject-verb. Note the difference between this and the interrogative sentence with be:

(iv) How hot it is!
(v) How hot is it?

Frequently we express feeling or emotion with the declarative form:

(vi) He is a rascal
(vii) He is a rascal!

The difference between these sentences can be indicated in writing only by punctuation, in speech only by intonation.

(c) Classification of Sentences According to Clause Structure

Sentences may be classified according to the number and kind of clauses they contain. Usually four types are named: simple sentences, compound *sentences, complex sentences and compound-complex sentences*.

(i) Simple Sentences

A simple sentence is a sentence containing one main clause and no subordinate clause:

(i) He hit the referee with the ball
(ii) Students do assignments

When a sentence contains two or more verbs joined by a coordinating conjunction, we still describe it as a simple sentence:

(iii) The man got up and slowly walked away
(iv) The student raced the car, shot out of the driveway and hurtled down the road

It is a simple sentence also if there are two coordinate subjects:

(v) Richard and Rose kissed and made up

Here the verbs share the subjects, and the subjects share the verbs. Only when each verb has its separate subject do we have more than one clause and hence a compound or complex sentence.

(ii) Compound Sentences

A compound sentence consists of two or more main clauses:
(i) John opened the gate and the dog ran out
(ii) The player got up but he was unable to continue
(iii) Give me the knife and then help me to hold the chicken
(iv) Jane swept the room, Mary dusted the furniture and Alice mopped the floor

Two main clauses in compound sentences are most often connected by coordinating conjunctions as above, but there are several other possibilities:

(v) He kept pressing the bell for several minutes; however, there was no answer (with conjunctive adverb)

(vi) The class ended at five, and consequently, we had to hurry to catch the bus (coordinating conjunction plus conjunctive adverb)

(vii) I turned on the cold water; it was most refreshing (a semi-colon standing between the two clauses).

In the last sentence it is punctuation alone that indicates that we have one compound sentence rather than two simple sentences. The choice between a compound sentence and two simple sentences is purely by the demands of rhetoric and style.

(iii) Complex Sentences

A complex sentence is a sentence containing at least one subordinate clause:

(i) She handed the letter to James, who chuckled as he read it.
(ii) The businessman, who had much goods to clear, caused all his consignments to be conveyed by trucks as there is no railway

There are three kinds of subordinate clauses: Noun clause, Adjectival clause and Adverbial clause. A noun clause is one which does the work of a noun in relation to some word in some other clause; an adjective clause does the work of an adjectival in relation to some word in some other clause, and an adverbial clause does the work of an adverb in relation to some word in some other clause. Consider these examples:

(iii) Where Gen. Aguiyi Ironsi was buried is still unknown (Noun clause, subject to the verb is)
(iv) No one has seen the place where Gen. Aguiyi Ironsi was buried (Adjectival clause qualifying the noun place)

(v) Without knowing it the footballers camped where the battle was fought (Adverb clause qualifying the verb camped)

(iv) Compound-Complex Sentences

A sentence containing two or more main clauses and at least a subordinate clause is called a compound-complex sentence:

(i) Lawrence licked the envelope, which cut his tongue, and he bled profusely.

(ii) While Jane swept the room, Mary dusted the furniture and Alice mopped the floor.

(iii) The girl he loved couldn't be bothered with him; he therefore contemplated suicide.

(iv) I knew that Don was ill, but I didn't know that he suffered from measles.

4.0 CONCLUSION

We have tried in this unit to show how traditional grammarians handled the meanings of words, how they treated words and word relationships, and the way they categorized sentences. Words have both denotative and connotative meaning. Relationships among words include homophony, synonymy, antonymy and polysemy. Sentences could be classified according to meaning and word-order, or according to clause structure.

5.0 SUMMARY

You have learnt in this unit,

- what semantics is,
- what homophony, synonymy, polysemy and antonymy mean, and
- the types of sentences.

6.0 TUTOR-MARKED ASSIGNMENT

Indicate in the space provided:

(a) whether the following sentences are declarative, interrogative or imperative, and
(b) whether they are simple, compound, complex, or compound-complex:

(i) - - - Many believe that our survival depends upon our capacity to think independently and logically.
(ii) - - - She looked as if she was going to be ill; I became suspicious.
(iii) - - - You approve, don't you?

(iv) - - - Will you close the doors, please?
(v) - - - Everything she cooks smells like curry powder.
(vi) - - - Thanks for letting me share the day with you.
(vii) - - - To state the problem clearly is imperative.
(viii) - - - The means must be justified by the end.
(ix) - - - I wondered why he did that.
(x) - - - The class began to discuss ideas that were fairly profound.
(xi) - - - Continue from where you are and set an intermediate goal that you can reasonably expect to reach.
(xii) - - - Death always comes as the best possible solution in classical tragedy

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UNIT 4 A CRITIQUE OF TRADITIONAL GRAMMAR

CONTENTS

In this unit, we shall critically examine traditional grammar pointing all its weaknesses and strengths. Attempts to solve the weaknesses gave rise to the development of new approaches to the study of language. The unit is arranged as follows:

1.0 INTRODUCTION

We have tried in this module to show what traditional grammar is, and to demonstrate the way it analyses various aspects of language. In this unit, we shall attempt to show the areas of weaknesses and strengths of this model of grammar in the analysis of language.

2.0 OBJECTIVES

At the end of this unit, you will be expected to:

- identify the weaknesses of the traditional grammar
- identify the strengths of the traditional grammar.

3.0 MAIN CONTENT

3.1 Weaknesses of the Traditional Grammar

(a) The Parts of Speech

It is easy to get the impression from traditional grammar that parts of speech are almost god-given – neat pigeon-holes into which the words of a language can be sorted. There is plenty of historical excuse for this feeling, of course, as people have adopted this

attitude, with few exceptions, since the time of the Stoics. But it is a misleading attitude, and in a linguistic approach we should try to avoid the distortions that an inflexible grid of this kind can provide.

Traditional grammar classified words into parts of speech. Nouns and verbs were defined notionally, i.e. according to meaning (e.g. a noun is a word that names a person, place or thing; a verb is a word that makes an assertion, or indicates an action or being) and all the other parts of speech are defined syntactically, on the basis of the definition of noun and verb (e.g. an adjective is a word that modifies a noun; an adverb is a word that modifies a verb; a pronoun is a word that replaces a noun, etc). The double basis of definition – notional and syntactic – is apparently a logical weakness; for in order to make these definitions valid, we should have to define their terms (name, thing, assertion, being, etc*)* which is not an easy task.

A noun, we are told, is the name of a person, place, or thing. In the sentence: The car is red, car is a noun because it names a thing. But red must also be a noun, for it names a colour. If a colour isn't a thing, what is it? ; a verb, we learn, is a word that expresses action, being, or state of being. Then departure must be a verb because it expresses the action of departing. Indignation must be a verb, for it expresses the state of being indignant. But of course these are not verbs in English and a grammarian would wish to call them so. As with the noun, it is not easy identifying the word class on the basis of features not stated in the definition.

And even if we grant that the notional definitions are sound, it is doubtful that they serve their intended purpose in the teaching of grammar. Young learners do not master the definition of noun as they proceed from that to an identification of nouns. They learn what nouns are by having a great many nouns pointed out to them, and they learn verbs in the same way. Their recognition is based on formal additional characteristics of nouns and verbs, though they may pay lip service to the notional definition. Perhaps the notional definition is best characterized as a useful fiction.

The whole description of the English 'parts of speech' rests on little more than guess, intuition, and accident. There is no particular reason why we should say that English has eight parts of speech. It just happened that early grammarians sorted out English words in this fashion and later grammarians imitated them.

(b) Syntactic Analysis

Some of the shortcomings of traditional grammar have to do with analysis of complex sentences. Traditional grammar has no problems with sentences like (1) below:

1. A child won the prize
   Sentences like (2)-(4), however, are less simply analysed:
2. It was a child who won the prize
3. What the child won was a prize
4. There was a child who won a prize

Traditional grammar introduced special terms for words like it, what, *there, as used in these sentences. Yet, these seem ad hoc, designed* rather to solve embarrassment encountered in treating the variants of simple sentences like (1) than to get at the heart of the language.

Subordinate clauses in traditional grammar are equated to parts of speech. The subordinate clause of sentence 5 (b) below is comparable to a simple object, and accordingly, it is called an 'object clause':

(5) a. We expect their arrival at noon
    b. We expect that they will arrive at noon

Because of this treatment of syntax, parallel constructions are treated at different points in the grammar rather than under one heading. For example, consider the following:

(6) a. We expect them to arrive at noon
    b. We expect their arriving at noon

Since the verbal element in 6(a) is an infinitive, traditional grammar treats such patterns with other infinitive constructions. The verbal element in 6(b) is a gerund and this variant is treated under gerunds. Users of such grammars must track down the parallel constructions in several places instead of regarding sentences 5(b), 6(a) and 6(b) as embedded variants of the simple sentence 5(a).

A different kind of problem led to a departure from traditional grammar especially among American linguists in the first half of the twentieth century. Traditional grammar did not lend itself well to the treatment of many non-European languages. Some languages like Japanese do not have a separate part of speech corresponding to pronouns. Moreover, verbs and adjectives may fall into one class, as in Japanese. Other languages as Chinese and Vietnamese have no inflections, making it difficult to determine the parts of speech in traditional manner. Still others like Eskimo, combine constituents so that a sentence is equivalent to a word. To treat these languages suitably, linguists set out to develop a grammatical approach that would analyse any language in terms of its own structure.

Finally, traditional grammar devoted much of the syntactic discussion to uses of forms. For example, if nouns are inflected for case, uses of each case are described. It appears to assign the reason why certain grammatical features of a language occur, and how they must behave. The same procedure applies to verb forms and to other parts of speech. Syntax in this way is an extension of morphology.

(c) Reliance on Latin Grammatical Model

English grammar books that were produced by the traditional grammarians were not English grammars at all; they were Latin grammars disguised. This was not particularly surprising, in view of the millennium of concentration on Latin studies to the exclusion of almost everything else. The grammar that the early grammarians knew was Latin grammar, and when they decided to 'grammarise' English, they simply transposed the Latin structure and the Latin terminology and called it English grammar forgetting that English and Latin are strikingly different languages. They not only express their meanings in totally different ways with totally different structural features, but they don't always express the same meanings. Languages are not convertible into one another the way dollars are convertible into Naira and pounds, and the first mistake of the 18th century grammarians was that they didn't understand this.

This is why, for example, such English grammars describe six tenses. English doesn't have six tenses. It has two tenses if looked at in one way or several dozens if looked at in another way. But it happens that Latin does have six tenses, differentiated by inflectional endings, and the grammarians simply took the English translations of the six Latin tenses and called them the English tense system. In the same way, grammar features such as voice, mood, case, which are important in Latin as in other highly inflected languages, were sought out and emphasized in English. Some grammarians were so ingenious as to discern five or six cases in the English noun. Meanwhile the essential features of English grammar – the basic signals by which the language transmits its meanings – were largely ignored.

Let us illustrate this reliance on Latin framework with the case system. By case grammarians normally refer to a kind of variation in the actual form, or shape, of the noun, which shows the noun's relationship to other parts of speech, or its function in a sentence. This variation in the form of a noun is called inflection, and a language which displays it is called an inflected language. English has hardly any inflectional endings for its nouns; it has the genitive case (as in cat's) and a general case which is used everywhere else (cat, cats). To call cat in 'The cat came' and 'I kicked the cat' different cases, is simply to misuse the word case, for there are clearly no differences between the endings of the two nouns. In examples like these, we know the difference between the doer and the receiver of the action by the position of the noun in relation to the verb.

The general point to be made here is that the description of a language must not be carried out using the descriptive framework originally devised for the specific study of some other language – even if there are strong cultural affiliations with this other language. When inflections are found in a language, parts of speech, for example, are most securely identified by them. Since Latin had characteristic inflections, it could be treated in accordance with the procedures of traditional grammar.

From the above discussion, we thus see that in traditional grammar, there is a tendency to treat Latin as a kind of authority to turn to when doubts arise about grammar.

(d) Reliance on the Written Form of Language

In traditional grammar, there was very little recognition of the extent of the difference between spoken and written forms of language. Many grammarians and lexicographers, particularly in the 17th century, were aware of the existence of such a difference but did little to analyse it. And most authors paid only lip service to the existence of the spoken language. In a way, this is not surprising, it is partly due to the way in which Latin was taught, almost solely as a written language. But more important than this, the neglect is due to the fact that it is extremely difficult to study speech without some mechanical aids to make the speech permanent and therefore more precisely analyzable.

The rules of written language must not be forced onto speech, as they so often were. Writing is a later and more sophisticated process than speech. Speech is the primary medium of linguistic expression: we begin to speak before we write, most of us speak far more than we write in everyday life, all natural languages were spoken before they were written, and there are many languages in the world today which have never been written down. All these go to show the superiority of the spoken form over the written form. To base our statements about language on writing rather than on speech is therefore a reversal of linguistic priorities, and leads to all kinds of confused thinking. The two media should be considered separate systems of communication.

A distinct but related aspect of the partial account of language given in traditional studies is that the material presented does not even cover the whole range of a language's written forms, but is restricted to specific kinds of writing – the formal styles, in particular. Anything which smacks of informality tends to be carefully avoided, or if mentioned, castigated as 'slang' and labelled bad grammar – even though formality may be in regular and widespread use among the educated, we do not, after all, use the same kind of formal language when at home or when writing letters to friends as we do when we are giving a speech or applying in writing for a job. A language can be used at many levels of formality, and it should be one of the tasks of the descriptive linguist to take account of these differences, and not to select some levels as 'right' and others as 'wrong'. For example, we are all familiar with the 'rule'

in English which tells us that we should use whom and not who as the relative pronoun in a sentence like: The man – you were *talking to is a foreigner. But such rules simply distort the reality of* English. It is not a question of whom being correct usage, and who being incorrect: each is appropriate in certain circumstances and inappropriate in others.

In addition, areas of language structure other than grammar are disregarded in most traditional accounts: the pronunciation system of languages is treated scrappily, usually only in connection with the formulation of spelling rules or rules for elocution.

(e) Prescriptivism

We have noted earlier that the teaching of Latin grammar and the study of Latin literature contributed immensely in promoting misleading principles of analysis associated with traditional grammar. One of such principles was that the preservation of the classical tongues, which were perfect examples of eloquence, was the main task of literature. Thus, vernaculars were clearly inferior. Spanish and French, for example, were seen simply as "examples of much-decayed languages" (Crystal, 1971:53). Languages, it was felt, were corrupted by commoners and preserved by the educated. Dictionaries, moreover, were only to define words used by the best authors. Grammars came to be considered as preserving a language's purity. Their role was to tell people authoritatively how to speak and write. Only the best authors, the literary giants, were to be studied as examples of what a language was like. It assumed that language was a system embodied in the writings of the best authors, something to be sheltered from change. Where usage differed from books, usage was corrupt. So, traditional grammars drew farther and farther away from language as it was, and more and more it became a policeman of correctness. This blinded its advocates to the potential of language to renew itself from generation to generation.

And when English grammars came to be written, especially in the 18th century, the authors, steeped in these Latinate and literary traditions, regularly produced rules of 'correct' usage (normative rules, as they were sometimes called) which bore little relation to the facts of everyday speech.

We have mentioned earlier Dryden's rule about not putting prepositions at the end of a sentence, though it is doubtful whether there has ever been a time in English when prepositions were so restricted in their placement in a sentence.

Here is what a noted traditional grammarian wrote against a construction that was being taken up by everyone: The bridge was being built replacing it with The bridge was building:

> As to the notion of introducing a new and more complex passive form of conjugation, as, The bridge is being built, … it is one of the most absurd and monstrous innovations ever thought of…. This is certainly no better English than The work was being *published, has been being published, had been being published, shall or will be being published, ... and so* on… what a language shall we have when our verbs are thus conjugated? (Goold Brown. 1884. The *Grammar of English Grammars. New York: William* Wood and Co. p.379).

Cardinal Richelieu of France had established an Academy to standardize and purify French language. In 1698, Daniel Defoe proposed a society similar to the French Academy,

> to encourage polite learning, to polish and refine the English tongue, and to advance the so much neglected faculty of correct language, to establish the purity and propriety of style, and to purge it from all the irregular additions that ignorance and affectation have introduced, and all those innovations in speech, if I may call them such, which some dogmatic writers have the confidence to foster upon their native language, as if their authority were sufficient to make their own fancy legitimate… (H. Morley. 1889 (Ed) *The Earlier Life and the Chief Earlier Works of Daniel Defoe. London pp.125-126)*

It is easy for us to laugh at these, and of course, normative grammarians have given a bad name to traditional grammar, which did not deserve it. To anyone who has gone through a language course since the early 1950s, 'traditional grammar' doubtless has a bad sound. Textbooks and teachers using supposedly up-to-date methods in teaching foreign languages or English mention traditional grammar either unfavourably or not at all; it embodies, for them, all the outmoded practices of reciting grammatical paradigms, translating to English instead of learning to speak, and worrying about what language ought to do rather than what it does. Ferdinand de Saussure summarises the weaknesses thus:

> Traditional grammar neglects whole parts of language, such as word formation; it is normative and assumes the role of prescribing rules, not of recording facts; it lacks overall perspective; often it is unable to separate the written form from the spoken word (Ferdinand de Saussure. 1959. A Course in General Linguistics. Trans. Wade Baskin. New York: McGraw Hill, Inc. p.82).

SELF ASSESSMENT EXERCISE 1

Discuss any two weaknesses of the Traditional Grammar.

3.2 Strengths of Traditional Grammar

It is easy to paint a picture in black and white in discussing traditional approaches to language study. And at the moment, the black has certainly been stressed, for the purposes of the argument. But we must not forget that linguistics has a great deal to be grateful for in the work of many early scholars. Any emphasis on weaknesses is, however, a useful one, as it has a chastening effect. It is easy to be smug about language, to rely on traditional grammar for all occasions, and when it does not work, to think that the problem lies with your not understanding the principles. The purpose of the last section has been to show how inadequate traditional grammar and lay beliefs can be as a source of information to account for all we should know about the proper working of language. It has helped to emphasize how complex the reality of language is. In this section, we shall outline the main legacies of traditional grammar.

We are indebted to traditional grammar for the modern notion of sentence, the parts of speech and for numerous technical concepts, such as subject and predicate. For the most part, the traditional grammarians talked of categories which actually do exist in English. They got balled up not so much on the categories themselves as on the definition and description of them. The terminology of traditional grammar provides a useful framework for describing the outward structure of sentences and continues to serve as the point of departure for all schools of grammatical analysis. It is important to emphasize that the terminology is directed to outward structure rather than semantic content.

Moreover, we are indebted to traditional grammar for certain basic procedures that are an inescapable part of any approach to language analysis. One of the procedures involves diagramming. In this, they sought to develop a framework that would make possible the exhaustive description of every possible sentence by representing the structural relationship of sentence components graphically. Modern linguists still find this very useful though they differ with traditionalists primarily in the kind of diagrams they use and the claims they make about what the diagrams represent. A basic technique associated with traditional grammar and which continues to be used in all modern approaches to language is paradigm analysis, which involves the examination of related forms and the analysis of these forms into elements that are ‘same’ and ‘different’. Thus, the paradigm walk, walked and walking can be analysed as consisting of a constant walk, to which may be added variables, the suffixes –ed, and ing. Traditional grammar was at its best in describing the inflections, idioms and sentence forms of particular languages, especially the differences from language to language. This had a practical purpose too, for it put the emphasis on what had to be learned if one already knew a language and wanted to study another. The same principles are expounded in ‘contrast’ grammars today.

In principle, traditional grammar is an analytical and descriptive science, but in practice it has often been associated with pedagogical approaches that stress the supposed correctness of certain constructions and incorrectness of others, often on the basis of Latin models. Many modern linguists have therefore criticized traditional grammarians for adopting a prescriptive rather than descriptive approach to language study. It would be a mistake, however, to downplay the importance of traditional grammar simply because it has sometimes been put to use in ways that are open to question. It is important to distinguish between the methodology and a resulting body of knowledge on the one hand and a totally extraneous attitude about 'correctness' on the other. The fact is that traditional grammar had much the same goals that are now proclaimed by modern linguists. Prescribing rules in language analysis enjoys renewed popularity in current theories of language as 'rule- governed behaviour'.

It would be wrong to censure authority in language simply because it is authoritarian. Every culture recognizes some styles of speech or writing as better than others, at least, under certain circumstances. In our culture, there is a standard, or prestige dialect that more or less coincides with the formal modes of expression used among persons who are not acquaintances, and who do not belong to the same social class, in short, who are not relaxed with one another when they speak. In writing, it more or less coincides with the style that must be used in a letter to a stranger. As this is not a dialect that is ordinarily learned in the home, it has to be learned later, and its rules of usage are what we generally think of when someone mentions correct speech. Normative grammar is unassailable when it identifies itself with a prestige dialect and honestly recognizes its practical and esthetic aims. It goes wrong when it polishes correctness as a badge of superiority.

To put it simply, traditional grammar is the grammar that many of us learned in elementary school. Such notions and techniques as parts of speech, parsing, and the Read-Kellogg sentence diagrams provide a simple and accurate analysis for a sentence like we do not have any *money. The prescriptive tendencies of many traditional grammarians,* however, would hinder analysis of the semantically equivalent sentence *we ain't got no money, a variant that occurs with some frequency in* certain dialects. They would simply treat this sentence as ungrammatical. Thus, the traditional approach is viewed today as useful, but often incomplete. Thus, slang might be appropriate under some conditions, and a form of literary expression under others, but the appropriateness of slang is never viewed as a sign of quality, while that of literary expression frequently is. This, of course, is the linguistic side of social stratification: the speech of superior people is regarded as superior speech.

But at the moment, there is a renewed interest in traditional grammar, largely inspired by contemporary group of linguists who find in the traditional grammarians their spiritual predecessors. They hold that particular languages are individual forms taken

by an underlying oneness common to the race. This notion of universality can be traced to the ancients, but it was encouraged by the linguistic situation prevailing in Western Europe throughout the middle Ages: Latin was the vehicle of learning; the vernacular was the vehicle of commerce and daily living. Even after full dignity was accorded to each of the Roman languages and Latin was no longer regarded as superior, the sense of community among European scholars persisted.

4.0 CONCLUSION

In this unit, we have discussed the weaknesses and strengths of the traditional grammar. It must be stated that the weaknesses and strengths mentioned above do not necessarily apply to the work of individual since they are stated in extreme fashion. The strengths are those claimed by one group for itself, and the weaknesses are those pointed out by representatives of the opposing view.

5.0 SUMMARY

You have learnt in this unit:

- the weaknesses of traditional grammar
- the strengths of traditional grammar
- our debts to the traditional grammarians with regard to the study of language.

6.0 TUTOR-MARKED ASSIGNMENT

1. Mention and explain three issues that critics often raise against traditional grammar.
2. Do you think that traditional grammar left any legacies for modern linguistics? Explain in detail with appropriate examples.
3. Are the methodologies and procedures of the traditional grammarians totally useless in modern grammatical studies?
   Explain in detail.

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MODULE 3 ELEMENTS OF STRUCTURAL GRAMMAR

UNIT 1 ORIGIN OF STRUCTURAL GRAMMAR AND ITS VARIANTS

CONTENTS

In this unit, you will learn about Structural Grammar and how it originated. You will also know some of its variants – Tagmemics and Scale and Category (Systemic Grammar).

The unit is arranged as follows:

1.0 INTRODUCTION

In the previous module, we saw that traditional grammar was concerned largely with the analysis and classification of forms. These grammars followed the models of Latin grammars. However, when the importance of Latin diminished, and scholars began to observe the shortcomings of the Latin-based grammars, the search for a suitable grammatical model gave rise to what we now call Structural Grammar. This model views language as consisting of various layers or strata – phonological, morphological, etc, and each layer is treated separately. In this unit, we shall discuss the origin, and the aims and methods of structural grammar.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- state what Structural Grammar is
- explain why Structural Grammar came into being and how it operates
- state what Tagmemics and Scale and Category are all about.

3.0 MAIN CONTENT

3.1 Origin of Structural Grammar

A combination of factors provided the impulse away from traditional grammar toward something both more objective and more accurately descriptive. We mentioned in the last unit of the last module that the techniques of traditional grammar were inadequate in handling, not only some syntactic constructions, but also the analysis of most non- European languages. Exploration and expansion of trade had brought about an increased awareness of the great variety in languages, and tentative comparisons of English and other languages were made. Throughout the late 18th and 19th centuries, scholars became interested in comparative linguistics, and the study of lexical and syntactic relationships among languages. Sir. William Jones had established a connection between Latin and Greek with Sanskrit, a language spoken in India. This observation prepared the way for the development of comparative linguistics as we know it today. The implicit or explicit identification of linguistics with the methods used in the historical and comparative study of the earliest stages of Indo-European languages was in part due to the success of this discipline (during the 19th century) in providing proof of the genetic relationships between Indo-European languages and in identifying precise rules which govern linguistic change. Comparative grammar attained such a degree of certainty and exactness that it came to be regarded as the linguistic study which is scientific par excellence. This 'scientific' appeal inspired scholars into finding ways of analyzing language scientifically.

With the wide appeal empiricist philosophy enjoyed in the intellectual community at this time, there was greater respect for the methods and results of science. Social scientists and philosophers, envious of the dramatic achievements in the 19th and early 20th century natural science, asked: 'How can we be scientific too?' The quest for this led to the advent of structural linguistics.

What is Structural Linguistics?

The exact time when the label 'structural linguistics' was first used is uncertain. But today, it designates those trends of linguistic theories to deliberately and explicitly try to gain insight into the systematic and structural character of language. In other words, any approach to the analysis of language that pays explicit attention to the way in which linguistic features can be described in terms of structures and systems is referred to as structural linguistics. In structural linguistics, the relationship between the corpus of data and the theoretical description had to be a direct one. Any linguistic statements about universals, or in fact any theoretical terms at all which were not directly related to the phenomena were ruled out; the only useful generalizations about language were inductive generalizations.

The structuralist theory of language was the first major new approach to linguistics in the 20th century. Introduced probably by the Swiss linguist, Ferdinand de Saussure and pioneered in the United States by Leonard Bloomfield, structuralism flourished for about thirty years until early 1960's. In its emphasis on the investigation of concrete linguistic data, structuralism logically followed the late 19th century neo-grammarian school. But structuralism was geared toward descriptive linguistics.

Structural linguists analyse language in accordance with external form. This typically involves isolating, classifying, and segmenting the observed language data. For example, a structuralist encountering English for the first time would begin by collecting samples of English utterances and would then record the strings of sounds that constituted those utterances. The structuralist would find that sounds like [p] and [b] in English contrast because they distinguish words like pit and bit whether the [p] sound is produced with accompanying aspiration would be considered rather insignificant because it would not affect the meaning of what was being said.

After isolating and classifying significant sounds of a language, the structuralist would notice that certain sounds appear together in recurring segments that signal some form of meaning. Thus, the sounds *p,r,o would often be found in succession (pro-) to signal "in favour of"*. The structuralist would then classify the larger units. For example, a word like child would be labelled a noun because it has inflections for the possessive and the plural: child, child's, children, children's. By contrast, I with the three additional forms: me, mine, my is a pronoun because it has forms characteristic of this morphological class. Book and *table would be placed in the same class because they could both be found* in utterances like: The___ costs a lot of money, but in utterances like: The man____ the house. In summary, structuralism began with concrete language data and organized these data into levels of structure for the purpose of description.

Structural linguists view languages as consisting of various layers or strata. Each layer is treated separately, you don't mix levels. The first layer is the phonological (analysis of the sound system of a language). Thereupon the forms are analysed in a morphological stratum. Subsequently, sentences are treated in a syntactic stratum in which *nominals (so-called) to distinguish them from the morphological class of* nouns), verbals, and so on, are identified. Relationships between these layers are described. For example, the representation for the morphological affix indicating the genitive is labelled {Z} at the morphological level. This corresponds to three variants at the phonological level: /s, z, ɪz/. The precise distribution of these and other such phonological variants are determined. The study of relationships between layers was known by compound terms such as *morphophonemics.*

Structural grammars aimed to be highly rigorous. The elements of any one language, whether at the phonological, morphological, or other levels, were solely identified by their form. Definitions based in part on meaning were rejected. Unlike the practice of traditional grammar, nouns were not to be identified as 'names of persons, places, or things' but rather as elements identified by inflections. This approach was held to be greatly superior to that of traditional grammar, by which words like fire, beauty, possibility did not fit the traditional definition, for none of these is the name of a person, place or thing.

Structural grammars were especially successful in treating exotic languages at the phonological and morphological levels. In contrast with earlier grammars for exotic languages, these were not presented as languages similar in some respects to Latin, different in others. Instead, the elements were identified by their role in the various layers.

There are many variants of structural grammar, but here we shall discuss only two: Tagmemics and Scale and Category grammars.

SELF ASSESSMENT EXERCISE 1

1. What was the immediate cause of the emergence of Structural Grammar?
2. Explain what you understand by 'Structural Grammar'.

3.2 Tagmemic Theory

Kenneth L. Pike produced in his book Language in Relation to a *unified Theory of the Structure of Human Behaviour, published in 1950,* a wide-ranging discussion of current methods in linguistics and an attempt to lay the foundation of a comprehensive interpretation of language within its cultural setting. Pike elaborated a theory which he called gram(m)emics, and later tagmemics, based on the notion that utterances can

be analysed simultaneously according to three hierarchies: a lexical one (in which the minimum unit is the morpheme), a phonological one (in which the minimum unit is the phoneme, or the distinctive feature), and a grammatical one (in which the minimum unit is the tagmeme or gram(m)eme).

The tagmemic theory views language as a particular kind of human behaviour. In this view, language data are patterned behaviour within a patterned context. The patterning extends to human behaviour in general, and the same kinds of pattern characterize both aspects of human behaviour – verbal and non-verbal. Such behaviour types (verbal and non-verbal) are equally meaningful.

Let us consider some patterns that are discoverable within the verbal portion of behaviour. These patterns will show sameness and co-occurrence in various ways. Consider the following examples:

1. Our boss asked us to leave
2. We asked John to leave
3. John asked us to leave
4. John was asked to leave by our boss
5. We elected John boss
6. We elected John to do the dirty work
7. We went

A patterning may be discovered in the above examples in that identities of sound features recur. In boss and asked we find two tokens of an identity of sound pattern; in to and asked there recurs a second identity pattern. In the above examples, certain words may be identified as same or similar in terms of sound pattern and as same in terms of meaning, e.g. boss in (1), (4) and (5). To express this second type of patterning, we must provide a framework for expressing this identity of items. We see that some items once identified may occur in the same positions with respect to some sequences of items. For example, our boss and we occur before asked just as John. Notice also that in these sentences the class of *our boss, we, and John may occur initially, and in that position they are* the 'subject' of the sentence.

Classes of words exist to perform functions. Some classes perform only one. For example, the class of correlative conjunctions and or (perhaps including either, neither, nor and whether) serves just one purpose: to join together elements of equal rank. Usually the two things joined are themselves members of a single class: Mary and John (two nouns), to be or not to be (two verbs), it's slimy and wet (two adjectives).

More often, a class performs two or more functions. Then it becomes necessary to name the syntactic operations both in terms of the class that performs the function and

the function that it performs. In sentences (1) and (2) above, our boss and we respectively exhibit a grammatical pattern: 'Subject-as-Actor'. Description of this pattern consists in (i) identifying a position or slot; (ii) associating a structural meaning with the slot; and (iii) correlating this slot with a morpheme class within the lexical level.

The combination of class and function is sometimes called a 'slot-class correlation', and the term for it is tagmeme, and the class of items grammatically acceptable in each slot is called fillers. Tagmemes are the particles of syntax. The adjective in: one sure thing, one thing sure and *the thing is sure occurs in three different tagmemes, since each of those* positions represents a different function – the meanings are not the same. The adverb clearly in clearly he can't see and He can't see *clearly occurs in two tagmemes: adverb-as-sentence-modifier and* adverb-as-verb-modifier.

As with other levels, particles are ranged in strings. A typical string in syntax is 'noun-as-subject plus verb plus noun-as-object': Monkeys love *bananas. Syntactic strings are called syntagmemes, that is, tagmemes* taken together. A number of other simple sentence syntagmemes can be mentioned: noun-as-subject plus linking verb plus adjective-as- complement (Lead is soft); interrogative-pronoun-as-complement plus linking verb plus noun-as-subject (who is that man?).

Syntagmemes are the different syntactic patterns that a language provides for. Besides sentence syntagmemes, there are subordinate syntagmemes, like noun phrases and prepositional phrases. In the prepositional phrase by the author, we find an additional noun tagmeme: noun-as-preposition-object. In the noun phrase: the visible stars we find adjective-as-premodifier, whereas in the noun phrase: the stars visible we find adjective-as-postmodifier: the functions are different because normally the first means 'stars whose magnitude is great enough to make them visible' while the second means 'stars that can be seen because conditions (the weather, for example) are favourable'.

Identical tagmemes can be arranged in different syntagmemes. The result then 'means the same' but the 'style' is different. I didn't see John and John I didn't see contain the same noun-as-direct-object, but it occurs at the end of the first sentence and at the beginning of the second. *The gate is straight and straight is the gate are different syntagmemes* with identical tagmemes in reverse order.

We have tried to give a summary of the kinds of patterning that are attributed to language in this theory and examined briefly some of the formal ways of accounting for this patterning.

Tagmemic grammar is well suited for describing morphology, and it is adequate for describing syntactic patterns that have been identified in the data the linguist has collected. But the scheme is incapable of going beyond the immediate corpus.

Assume, for example, that in a language the subject slot is filled by a noun. If an expanded corpus shows that this slot can also be filled by a pronoun, we must either revise the original statement, formulate an additional statement, or somehow redefine nouns and pronouns so that both are members of some larger class that can be taken as filler for the subject-slot.

Because of the great variety of alternative patterns available in the syntax of most languages, any stem of tagmemic notation devices or equations more complex. The question of course is not really the complexity of the descriptive system as such. If a language has complexities, a description of it will also have complexities. The problem therefore is to find a way to describe syntactic structures so that systematic patterns are discernible in the maze of variety that engulfs the investigator.

Although many structuralists have approached syntax in terms of tagmemic description, it has often seemed just as reasonable to offer a simple description of a few typical sentence patterns. A few examples, often in the form of a sample text, have served to illustrate the most common sentence types. The goal has been to exemplify the typical rather than to provide an exhaustive account of all possible sentence types. The typical grammar has usually contained a listing of phonemes, an extensive discussion of morphology and a mere hint of syntax.

SELF ASSESSMENT EXERCISE 2

(a) What are the aims of Tagmemic Grammar?
(b) How useful is it in the analysis of language?

3.3 Scale and Category Grammar (Systemic Grammar)

National boundaries are usually insignificant in the development and propagation of scientific theories and methodologies. But clearly the first effects of new development will be felt in the immediate circle of a scholar's colleagues and pupils. Transformational-generative theory started in America but has now spread its influence to almost all centres of Linguistics in the world. Tagmemics, likewise American in origin, has found adherents in Europe and elsewhere. In Great Britain, the work of J.R. Firth and the theories of the context of situation and of prosodic analysis associated with him, represent a variant of structural linguistics. Since Firth's death in 1960, work in these fields has continued, along with work on other lines, but a body of linguistic theory stemming from Firth's teaching has been developed by Michael Halliday. It represents, in fact, an attempt to do what Firth never did, namely, to work out an explicit theory of language and of linguistic description on the basis of Firth's teaching and his published writings. For this reason it was first known as 'Neo-Firthian Linguistics'. To what extent Halliday's theory has actually developed

what Firth would have worked out for himself or would acknowledge as his own, and how far Halliday has projected his own thinking on to Firth's is open to question.

Syntactic analysis in the London style is commonly called 'systemic grammar' (other, less significant terms have also been used). The fundamental 'categories' of Halliday's linguistic description, introduced and explained in Categories of the Theory of Grammar, are four in number: unit, structure, class and system; additionally these categories are related to each other and to the phonic substance along three scales: rank, delicacy, and exponence. The prominence of the two terms, scale *and category, also led to the use of scale and category linguistics by* some commentators to refer to this development.

The general conception of language assumed in the theory contrasts linguistic form with substance (phonic or graphic representation) on the one side, and with situations (in relation to which linguistic form has meaning) on the other. Central in linguistic form are grammar and lexis (lexis being the vocabulary of a language, consisting of its lexical items). Grammar and lexis are related to their phonic representation through phonology (i.e. the distinctive sound units and sound features of the language), and to their graphic representation through orthography (the alphabet and spelling rules of the language). On the other side, the semantic functions, or meanings, of grammatical and lexical elements are stated in terms of contexts of situation abstracted by the linguist as descriptive and analytical frames within which to summarise the multiple relationships between linguistic forms and the world of human experience wherein they are meaningfully used.

Phonology serves to link grammar and lexis to their phonic representation. This envisages phonology very much as Firth envisaged. Within this framework, important work has been done relating to intonation of English sentences to their grammatical structures and to the various semantic distinctions.

Units in grammar are such entities as sentences, clauses, phrases, words and morphemes. They belong to the same level, and are related to each other in terms of size or inclusion: sentences include, or are made up of clauses; clauses are made up of phrases (or groups); phrases are made up of words; and words are made up of morphemes. Likewise at the phonological level, tone-groups are made up of feet, feet of syllables, and syllables of phonemes.

The interrelations of units in size or inclusion are referred to as the scale *of rank, and in moving within one level (grammatical or phonological)* up or down in size in a description, one is moving up or down the rank scale. Thus, broadly, Halliday's rank corresponds to tagmemic level.

Along the rank-scale, units, except the smallest at each level, exhibit structures, that is to say, an ordered internal composition of units next below on the rank-scale within the level; sentence structures consist of clauses, clause structures of phrases or groups, and so on. It is a tenet of systemic grammar that structures must always be regarded as comprising the units next below in rank. If a clause contains only one word, it must be analysed as a clause containing only one part consisting one word. Tagmemic does not impose such a requirement, and clauses can be described directly as composed of word tagmemes.

Part of the recursive possibilities of linguistic structures are treated in terms of what is called rank-shift: a unit is shifted in rank when it occupies a structural place, not in the structure of the unit next above, but in the structure of a unit in the same rank-size as itself or below it. For example, adverbial phrases can occur as part of other phrasal categories (by the house in our garden), and in English, relative clause constructions shift sentences to the position of modifiers in nominal group structures (I admitted (him) to my house; the man admitted to *my house was an ex-convict).*

In conformity to what has been said, units other than the highest in rank (the largest or most inclusive) at each level are grouped into classes according to the functions they can fulfil in the structure of units next above them. For example, in English clause structure, nominal groups or phrases form a class in that they can (in general) function in the positions of subject and complement; and nouns form a class because they constitute the head, with or without a modifier, of noun groups.

Each class is either a closed class, to which new members cannot readily be added, like the class of English prepositions, or an open class, whose membership is freely extensible, like the English nouns and verbs. Classes consist of the units that comprise their membership; in the case of word classes the members are words.

Along the scale of 'delicacy' the subclasses of a class are said to form systems, and when the practicable limits of sub-classifying have been reached in lexis, the individual lexical forms themselves constitute the terms of systems.

The scale of exponence relates form to substance, that is, the abstractions of grammar, lexis, and phonology to the actual phonic (or graphic) data, the exponents. Any descriptive move nearer the data is a move along the exponence scale. Thus, is passing from predicate as an element of clause structure to verb group, one is passing nearer to the actual data, and in passing from verb to enjoy as a lexical member of the subclass of transitive verbs, one comes nearer still to the data; and the limit on the scale of exponence is reached when the verb enjoy is finally referred to as an uttered sound sequence, or is narrowly transcribed as [en i] (or written in an actual letter

sequence 'enjoy'). Logically, these three basic scales, rank, delicacy and exponence are independent in the theory, since they concern different sorts of relationships.

In order to grasp the rationale of systemic grammar, it is important to appreciate that its advocates do not normally suggest that it is more successful than transformational grammar at carrying out the task for which the latter was designed – namely, defining the range of grammatical sentences in a language. Systemic grammar aims rather to provide a taxonomy for sentences, a means of descriptively classifying particular sentences.

Systemic grammarians claim, with some justice, that their sort of theory is much more relevant than the generative approach to the needs of various groups of people who deal with language: while Chomskyan linguistics appeals to the psychologist, systemic linguistics appeals to the sociologist. The psychologist wants a theory that describes languages, so that he can see what kinds of languages human beings are capable of using; the sociologist wants to be able to describe any patterns that emerge in the particular choices that given types of individual make in given circumstances from the overall range provided by their language. Other purposes for which systemic grammar is held to be more relevant than transformational grammar are literary criticism and language teaching.

At the same time, there are problems about the assumptions underlying systemic theory. Alongside the notion of system, Halliday introduces into syntax the notions rank and delicacy. 'Rank' refers to a scale of sizes of grammatical unit, roughly speaking; the lowest-ranking unit is the morpheme, the highest-ranking is the sentence, and for any given language there will be a fixed number of intermediate ranks (English is said to have five ranks in all). Any grammatical system will operate at a specific rank. If we think in terms of Chomskyan hierarchical diagrams, Halliday is saying, as it were, that sentences can be represented not merely as trees but as trees which are regimented in such a way that along any branch there are the same number of intermediate nodes between the 'root' and the 'leaf'. For Chomskyan grammars, this is untrue; some morphemes are dominated immediately or almost immediately by the root S node, other morphemes are reached only via a long chain of intermediate nodes and branches representing the application of many rules. Halliday appears, with his notion of rank, to be putting forward a new universal of syntactic structure. It is likely that he did not appreciate what he was committing himself to in introducing the term.

As for delicacy, this is a scale of relative preciseness of grammatical statement. Thus, car will be distinguished from shiny at a very gross syntactic level, since there are few verbal contexts in which one of the words could be substituted for the other in a syntactically well-formed sentence; on the other hand, car and hovercraft will be distinguished only at a more delicate level – the two are largely syntactic but

hovercraft does not take –s in the plural. The notion of 'delicacy' might be harmless, except that Halliday's motive for introducing it is to argue that there is, in principle, no end to the process of increasing the delicacy of grammar: at a delicate enough level even the words boy and girl, for instance, would be syntactically distinct.

Some scholars have refuted this, maintaining that boy and girl are syntactically equivalent at the most delicate level. What Halliday has in mind is that, for instance, the utterance 'This girl is pregnant' is more probable than 'This boy is pregnant'; but this is because of the physiology and because people do not often utter patent untruths, not because the latter sentence is in any way un-English.

4.0 CONCLUSION

In this unit, we have tried to present, in general outline, what structural grammar is and how it works. We have also discussed two variants of structural grammar – Tagmemics and Scale and Category. Although there are several variants of structural grammar, the above represents, in general, the aims and objectives of the theory.

SELF ASSESSMENT EXERCISE 3

(a) What do you understand by Scale and Category Grammar?
(b) Explain the following terms:
    (i) rank-shift
    (ii) delicacy

5.0 SUMMARY

In this unit, you have learnt about:

- the origin of structural grammar;
- Tagmemics; and
- Scale and category grammar.

6.0 TUTOR-MARKED ASSIGNMENT

1. Explain what you consider to be the benefits of structural framework in the analysis of language.
2. (a) Compare and contrast Tagmemic model with Scale and *Category model*
   (b) Which do you consider more appropriate in language analysis?

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UNIT 2 THE PRACTICE OF THE IMMEDIATE CONSTITUENT ANALYSIS

CONTENTS

In their thorough revision of syntactic theory, the structuralists replaced grammatical rules with sentence patterns, and the Reed-Kellogg diagrams with immediate constituent diagrams. In this unit, we shall discuss the practice of Immediate Constituent Analysis. The unit is arranged as follows:

1.0 INTRODUCTION

We mentioned in Unit 3 that to grasp the real structure of the English sentence, one must understand not only the words that occur, but also the principles of their arrangement. An English sentence does not consist simply of a string of words in free relation to one another. It consists of groups of words arranged in a series of levels, each word group being made up of subgroups, until we get down to the single word. To be clearly comprehensible, the immediate constituents of a sentence must be signaled strongly and clearly. That is, the reader must be able to know instantly what the units are, what goes with what, and what modifies what. If these are clear, then the analysis becomes easy.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what 'Immediate Constituent' is
- apply the IC procedure in the analysis of English sentences
- show to what extent it can handle all sentences of English.

3.0 MAIN CONTENT

3.1 What is Immediate Constituent Analysis?

The term Immediate Constituent (IC) was introduced by Leonard Bloomfield, the pioneer of American structuralism, to refer to the major divisions that can be made within a syntactic construction at any level. The immediate constituents of a construction are the two or more units of which it is composed. They are constituents because they compose or constitute the structure. They are immediate because they act directly on one another.

There is an obvious parallelism between immediate constituent analysis and the traditional procedure of 'parsing' sentences into 'subject' and 'predicate', and each of these, where appropriate, into clauses, phrases and words. For example, in the sentence: Poor John ran away, the two immediate constituents are Poor John (subject) and ran away (predicate). The immediate constituents of each of these two complex forms are poor and John, and ran and away respectively. The simple sentence Poor John ran away whose subject is a noun phrase, made up of the noun John modified by the adjective poor has a predicate that is a verb phrase, consisting of the verb ran modified by the adverb away. In this way we have accounted for all the units at various levels.

One can distinguish three periods of development in the theory of constituent structure. Bloomfield himself did little more than introduce the notion and explain it by means of examples. He spoke of a 'proper analysis' of the sentence into constituents as 'one which takes account of the meanings'. His followers, notably R.J. Wells and Zellig S. Harris, formulated the principles of constituent analysis in greater detail and replaced Bloomfield's somewhat vague reference to 'taking account of the meanings' with explicitly distributional criteria. Finally, in the last century, the theory of constituent structure has been formalized and subjected to mathematical study by Chomsky and other scholars.

3.2 The Practice of Immediate Constituents Analysis

This technique, usually referred to as IC analysis, is like structural grammar's version of Traditional diagrams. The idea here is that sentences are constructed from groups of words, often paired, rather than from single words added one onto the next. These groups of words in turn cluster with other groups, layer upon layer of word pairs and pair groups, which eventually build a sentence. One can begin the IC analysis at the word level and work one's way up to the sentence, or one can begin with the sentence and work back to the word level.

Let us take the sentence: Poor John ran away. Using an immediate constituent diagram, we would represent the information thus:

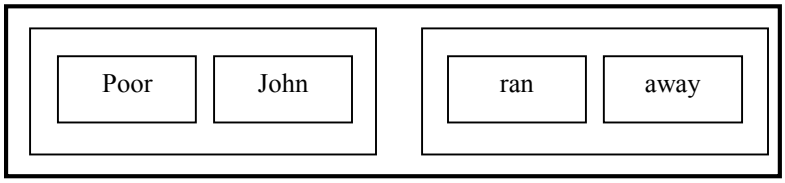


Fig. 1: ran away

In this figure a box represents a unit or a constituent. The smallest boxes represent the smallest constituents, presented here as words. We thus see that the major division lies between the unit poor John and ran away in other words, between the traditionalists subject and predicate.

We can discern from figure 2 that the major division in the sentence lies between the unit poor John and the unit kicked his younger sister ferociously. *The predicate is then broken down first, into kicked his younger sister, then his younger sister, then younger sister, and finally* into the individual words. The next division of the subject is into the individual words.

The structuralist's diagrams have several disadvantages. Although the word order of the sentence is preserved – an improvement on Reed- Kellogg diagrams – such diagrams are rather difficult to read. Furthermore, the categories of the individual words are not indicated, and the syntactic information given is often incomplete. For example, in the figures above, we are not given complete array of syntactic information that indicates which words can fit into which slots. structural linguists realised this, hence they came up with Test Frames in an attempt to overcome this problem.

Test Frames

Test frames are blank spaces in simple sentences that may be filled in with any example of a particular class of word, such as a noun or an adjective. For example, noun test frames customarily set up any or all of three types of sentence structure as shown below:
1. The ___ laughs ('The' or 'A[n]'___ verb)

An analysis of the sentence: Poor John kicked his younger sister ferociously *would be represented thus:*

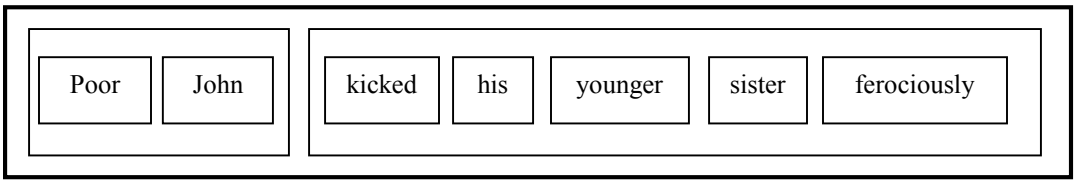


Fig. 2

2. He was riding a _____ rapidly (subject, predicate, 'the' or 'a[n]' ___ adverb)

3. Put it on that _____ (subject, predicate, preposition, [modifier]____)

Notice that each version of the above illustrates a different position, and therefore a different function in the sentence which a noun can fulfill. The blank in (1) calls for a subject, the blank in (2) for a direct object, and the blank in (3) for an object of a preposition. Note that nouns can also serve other functions in a sentence but these three will illustrate the technique.

A test frame exercise demonstrates two important points about English syntax. The first, of course, is that speakers of English know what goes where; they are competent in the use of the language. Even very small children can put the right kind of words into the blanks. Speakers may not know that it is nouns they are inserting – that is, they may not know the jargon of grammatical analysis – but they know what belongs in the noun slots.

The second point is that the English language is quite regular in its signaling of nouns. This signaling is accomplished in two ways; first, by position in the order of words in the sentence (the subject noun, for instance, nearly always comes at the beginning of the sentence), and second, by the use of function words called determiners, words like the, *a, an, this, those, my, etc. Determiners will only work with noun test* frames, but other kinds of function words can help identify verbs: these are the auxiliary, or helping verb forms be and have, and the modal verb forms like may, will or can.

Let us show further how IC works in the analysis of English.

Immediate Constituents of Whole Sentences

If there are no sentence modifiers, the IC's of a sentence consist of the subject as one and the verb or verb cluster as the other. The sign '/' marks the division between the IC in the following sentences:

1. My friends/were waiting for me at the station.
2. He/hardly knew what he was doing

3. The mountains to the north/were covered with snow
4. The people upstairs/complained

The subject is most likely to be a noun or noun cluster or a pronoun, but it doesn't have to be as in the following:

5. Climbing the steps/took a lot out of her
6. What she did/can now be told
7. Now/is the time to make plans for next year.

Now look at this sentence:

8. Usually the boys in the family milked the goats in the morning

If we divided this sentence between subject and verb, we would get a meaningless unit: usually the boys in the family. Clearly this is wrong, for usually does not go just with the noun cluster but with everything that follows. Therefore, this sentence must be divided thus:

Usually/the boys in the family milked the goats in the morning That is to say, the IC's of this sentence are the adverb usually as one and the whole following sentence pattern as the other. The meaning of it us*ually applies to the whole meaning of what follows, not just to the* noun cluster alone. Usually in this sentence is called a sentence modifier – an element which modifies a whole sentence pattern. Here are other examples of sentence modifiers:

9. Sometimes/we had yam for breakfast
10. Last night/the cat got out
11. In the afternoon/John fell from the tree
12. When we had finished eating/he washed the dishes

In all of these examples, the sentence modifiers precede the sentences they modify. This is not the only possible position for them. Sometimes, with special signals operating, they come after the modified sentence or within it.

In sum, then, the IC division of whole sentences may be stated thus: if there is no sentence modifier, the IC's are the subject as one and the verb cluster as the other; if there is a sentence modifier, the IC's are the sentence modifier as one and the sentence pattern as the other. With the sentence modifier cut off, the sentence pattern may then be divided into subject and verb cluster:

Usually/the boys/milked the goats in the morning
(mod.) (subj.) (pred.)

3.3 Immediate Constituents of Noun Clusters

Noun clusters in English are also arranged in a series of layers, and again the arrangement is perfectly regular. Consider this sentence:

The young bronze artist from Lagos won the prize

Since there is no sentence modifier, this sentence consists of a subject and a verb cluster:

The young bronze artist from Lagos/won the prize

Now, we have a noun cluster on the left. It consists of a headword artist, with three modifiers before it and one after it. In dividing a noun cluster into its IC's, we first cut off the modifier after the headword. If there is more than one, we cut off the last one first and work back to the headword:

The young bronze artist/from Lagos

Then, we cut off the first modifier before the headword and work in to the headword:

The/young bronze artist/from Lagos

That is to say, the IC's of the cluster are the young bronze artist as one and the P-group from Lagos as the other. The P-group does not modify the headword alone; it modifies the headword plus the other modifiers. The first modifier before the headword doesn't just modify artist alone; it modifies young bronze artist. Young modifies bronze artist, and of course, bronze modifies artist. So all the cuts shall go like this:

1. The young bronze artist from Lagos/won the prize
2. The young bronze artist/from Lagos
3. The/young bronze artist
4. Young/bronze artist
5. Bronze/artist

Now, suppose the noun cluster were this: the young bronze artist from *Lagos who was standing with one leg. We have two modifiers after the* headword, a P-group and an S-group. We cut off the last one first:

The young bronze artist from Lagos/who was standing on one leg

The last modifier modifies everything that precedes. The rest of the cluster is cut as before.

3.4 Immediate Constituents of Verb Clusters

The arrangement of IC's in verb clusters is similar to those in noun clusters except that the direction is reversed. In a noun cluster, we cut off the modifiers after the headword first, then those before it. In a verb cluster, we cut off those before the headword first, then those after it. Take this sentence:

1. The boys/usually answered rudely when they were questioned.

The verb cluster has the headword answered with one modifier before it and two after it. We cut off the one before the headword first:

usually/answered rudely when they were questioned

Usually modifies not just the verb but all the rest of the cluster. 'What did they do usually?': 'Answered rudely when they were questioned'.

Now, we cut off the last modifier after the headword:

answered rudely/when they were questioned.

The S-group modifies *answered rudely* not just *answered*. But it doesn't modify *usually;* it is part of the construction modified by *usually*:

answered/rudely

Auxiliaries before the verb are treated just like any other modifiers:

2. Rev Sam/was waiting impatiently in the church
3. was/waiting impatiently in the church

The auxiliary was modifies all the rest of the cluster, giving waiting patiently in the church a particular meaning of time. The rest of the sentence will be cut off like this:

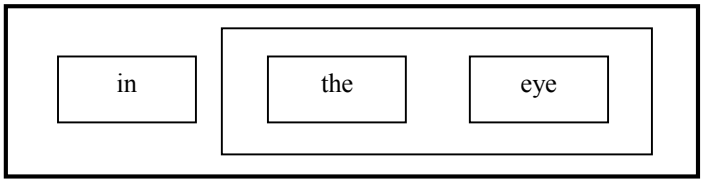
waiting impatiently/in the church
waiting/impatiently

In the church modifies, not just waiting but waiting impatiently.

Objects, adjectives, etc, in the verb cluster are simply treated as units and are cut off in turn:

4. She/cooked the stew in the morning
5. Cooked the stew/in the morning
6. Cooked/the stew

Immediate constituent analysis does not seem to be an improvement in the art of understanding organization within sentences. Generally speaking, immediate constituents are successive words that form a unit. Given a string of three words, such as in the eye, the problem to the structuralists would be to determine which word is the more closely associated with –in or eye? The obvious answer, in this case, is eye and the unit formed by the eye goes with in. An immediate constituent diagram would present the information thus:



However, IC analysis demonstrates two important points about English syntax. The first reinforces what we already knew from using test frames: English syntax is highly positional in structure – English is a word-order language, and words placed next to each other are usually semantically connected. The second point is that groups of words in English do indeed function as single units of syntax. In our examples, the word group poor John functions as subject; the groups kicked his *sister ferociously functions as predicate.*

4.0 CONCLUSION

In this unit, we have given the major details of constituent analysis and how it works. As an alternative to traditional grammar, we have tried to show the areas where it operates differently both in aims and functions.

5.0 SUMMARY

You have learnt in this unit:

- what structural linguistics is;
- what Immediate Constituent Analysis is; and
- how Immediate Constituent Analysis works in the analysis of English

6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by the term 'Structural grammar'? Use examples to illustrate your answer.
2. Explain each of the following techniques and evaluate its importance:
   (a) Test frames
   (b) Immediate Constituent analysis
3. Cut the following constructions into their immediate constituents:
   (i) Both the boys live near us
   (ii) Fortunately, it was a lovely examination
   (iii) The robbers attacked the house near us that was built last year
   (iv) He went to the store in his motorcycle
   (v) When the facilitator gets here, we can start the exam.

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UNIT 3 ELEMENTS OF THE CLAUSE

CONTENTS

Syntax, rather than parts of speech, gave structural grammarians the most trouble in the realm of practical analysis. To the structuralists, the business of the grammarian was to determine the sentence patterns of English and, if possible list them. In this unit, we shall look at the elements of the clause.

The unit is arranged as follows:

1.0 INTRODUCTION

It is true that if we carefully look at the English we speak and hear and read and write, it seems to be made up of utterances infinite in variety. But if we look into the structure of the language, we find that our expressions are reducible into relatively few structures repeated endlessly. Structuralists recognized this and also recognized that units of language are more easily illustrated than defined.

In this unit, we shall see how the structuralists perceived the units of language.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what is meant by sentence patterns
- state what sentence formulas are.

3.0 MAIN CONTENT

3.1 Sentence Formulas and Sentence Patterns

Syntax, rather than parts of speech, gave structural grammarians the most trouble in the realm of practical analysis. Working with detailed IC analyses, the structuralists nevertheless derived six basic syntactic patterns, which they called sentence formulas. A sentence pattern was a sequence of word classes and word group. According to the Structuralists, the business of the grammarian was to determine the sentence patterns of English and, if possible, to list them.

The following types of sentence patterns were identified:

Type 1: Noun/Pronoun + Verb
Type 2: Noun/Pronoun + Verb + Adjective
Type 3: Noun/Pronoun + Verb + Noun/Pronoun
Type 4: Noun/Pronoun + Linking Verb + (D) + N
Type 5: Noun/Pronoun + Verb + Noun/Pronoun + Noun/Pronoun
Type 6: Noun/Pronoun + OVerb + Noun/Pronoun + Noun/Pronoun

Type One

The first pattern is basically a Noun (or Pronoun) tied to a Verb. When a noun and a verb occur in a sentence in such a way that the form of one is affected by the form of the other, we say that the noun and the verb are *tied. We further say that a noun tied to a verb is the subject of the verb.* That is what a subject is: a noun (or equivalent) tied to a verb by a concurrence or agreement of forms.

If we use the symbol N for Noun, P for Pronoun and V for Verb and a two-ended arrow to show the tie, we can write the formula for the pattern as N V. Examples of pattern of this type are:

1. He left
2. Dogs bite
3. It hurts
4. They won

Actually, the pattern occurs rather infrequently in this minimal form. Usually there is some kind of expansion. For instance, the noun may be preceded by a determiner (D) or some other modifier as in:

5. The lion roared
6. My car knocked
7. The boys won

Or the verb may have an auxiliary. In this case, the tie is between the noun and the auxiliary (D + N Aux + V): D N Aux

8. The lions were roaring
9. He had left
10. The car may knock

Or the verb may be modified by an adverb or other modifier (D + N Aux Adv)

11. The lions were roaring loudly
12. Agnes has gone away
13. My brother may visit unexpectedly

All of these are variations of pattern one: N N. The pattern may be very considerably expanded and still be basically the same.

Type Two

This pattern is basically a noun tied to a verb with an adjective. This may be written as: N V + Adj. Only a limited number of verbs occur in this pattern. By far the most common is the verb be:

N V Adj
1. Agnes was unhappy
2. He seems better
3. Students are comfortable
4. John looked foolish

As in pattern one, all the usual kinds of expansion can occur without altering the pattern:

D N (Aux) V Adj
5. The boys were unhappy
6. The boys had been unhappy
7. The food tasted terrible
8. I am getting sick

Type Three

The third pattern consists of a noun tied to a verb with a second noun following: N V + N. The second noun in this pattern is what is traditionally called an object or a direct object. The verb in the pattern is sometimes called a transitive verb. The following are examples:

N V N
1. She plays soccer
2. Cows eat grass
3. He slapped her

With expansion, we could have: (D) N Aux V (D) N

4. She was playing soccer
5. He was washing the car
6. My brother likes the girl
7. Nobody has seen the thief

Type Four

The fourth pattern also consists of a noun tied to a verb with another noun following. The difference is that in pattern three the two nouns refer to different people or different things, whereas in this pattern they refer to the same person or the same thing as in the following:

Type Three: That man killed my father
Type Four: That man is my father

In Type three man and brother are different people; in Type four they are the same person. The signal differentiating the two patterns is of course in the verb. The verb of Type four is what is called a linking *verb. We shall write this as LV, and thus the formula for the pattern will* be: N LV + N. By far, the most common linking verb is be, though *become and remain occur in this pattern sometimes. Various other verbs* may equally occur.

(D) N LV D N

1. That chief is her husband
2. He is a lawyer
3. Her father became my teacher
4. We remained friends
5. John looked a fool

Type Five

The fifth pattern consists of a noun tied to a verb with two other nouns (or noun equivalents) following. In traditional usage, the first of the following nouns is what is called an indirect object, the second a direct object. *The following are examples:*

D N V D N D N
1. My father gave my brother a beating
2. She sent me her picture
3. Henry told us a lie
4. Mr. Fred taught his children French
5. The student asked him a question

Type Six

The sixth pattern has the components noun-verb-noun-noun. The difference between five and six is that in five the second and third nouns refer to different people or different things, whereas in six they refer to the same person or the same thing:

Pattern Five: John gave my uncle a car
Pattern Six: John thought my uncle a genius

In five above, uncle and car refer to different things; in six uncle and *genius refer to the same individual.*

The signal differentiating patterns five and six – like that distinguishing three and four – is the verb. Some verbs, like give and send will ordinarily make the two following nouns refer to different people or things; others, like think and elect, will make the two nouns refer to the same person or thing. Oddly enough, traditional grammar has no special terms for these verbs, though it does have terms for the nouns involved. The nouns in five, as we have seen, are called, respectively, indirect *object and direct object. Those in six are called object and object complement. Thus, in John thought my uncle a genius, uncle is an object* and genius is an object complement.

Just to give it a tag, let us call the verb in type six an object complement *verb and abbreviate it OV. Then we can distinguish the two types like* this:

Type Five: N V+N + N
Type Six: N OV + N + N

Here are more examples of Type Six:

(D) N OV N (D) N

1. His teacher made him the captain
2. We elected Umaru President
3. Nobody considered him a pastor

There are a few verbs which occur in both type five and type six. Usually, there is then some additional signal telling which pattern is meant. If not, the sentence will be ambiguous, since part of understanding English is being able to tell these types apart. A verb occurring in both patterns is the verb call. It occurs in five in He called *me a taxi and in six in He called me a slave where it might mean 'The* chief summoned a slave to wait on me' (type five) or 'The chief said I was a slave' (type six).

3.2 Summary of Sentence Types

Let us summarize our six main sentence patterns:

Type 1: N V Mothers cook
Type 2: N V + Adj Students are noisy
Type 3: N V + N John eats apples
Type 4: N LV + N My son is a doctor
Type 5: N V + N + N James gave him a pen
Type 6: N OV + N + N He called her a whore

As we mentioned at the beginning of this unit, the structural grammarians believed the work of a grammarian was to determine the sentence types or patterns that exist in a language and to list them. It is rather difficult to determine all the sentence types that exist in a language. Apart from being a boring adventure, usually at the end of the exercise, nothing new is said. Sentence formulas can generate a limited number of simple sentences without accounting for some syntactic distinctions.

For example, the formula can generate *The boy showed me his car* but it cannot explain the underlying connection that holds between *it* and *The car was shown to me by the boy*.

4.0 CONCLUSION

We have tried in this unit to show how structural grammarians account for the sentences of English. With the use of some formulas, many simple sentence patterns of English can be generated although this could not answer all the questions one could ask about English.

5.0 SUMMARY

You have learnt in this unit:

- what is meant by sentence formulas;
- sentence patterns of English that are derivable from sentence formulas; and
- the limitations of this procedure in deriving English sentences.

6.0 TUTOR-MARKED ASSIGNMENT

1. Provide three sentences each from the following formulas:

   (a) N V
   (b) N V + N
   (c) N LV + N
   (d) N OV + N + N

2. Write the formula for each of the following sentences:

   (a) The best student made the speech
   (b) The Governor appointed him chairman
   (c) Helen laughed
   (d) The assembly was quiet
   (e) His daughter is an engineer
   (f) The principal awarded him a scholarship

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UNIT 4: A CRITIQUE OF STRUCTURAL GRAMMAR

CONTENTS

In the preceding units of this module, we discussed the principles and methods of structural linguistics. In this unit, we shall appraise these principles and methods.

The unit is arranged as follows:

1.0 INTRODUCTION

We noted above that Structural linguistics developed in an independent way in two places at once - Europe and America. But the two approaches were radically different, each being very much the product of its own history, and each taking advantage of the kind of linguistic material which it found immediately available. The Europeans had a continuous tradition of philosophical thought which stemmed from the classical times, and an immediate background of historical study of language which came from 19th century 'comparative philology'. Thus, most of the data about language concerned the development of classical and, to a lesser extent, modern European tongues. Based entirely on written records, their discussion of language had usually been from the viewpoint of textual interpretation – for example, in biblical studies, literary criticism, or history. Work on living languages had been considered secondary, and limited to the activities of a few attempt to plot the differences between regional dialects and to construct 'dialect atlases'.

The tradition which the early European linguists grew up with was very different from that available to American scholars, who had had relatively little direct contact with the European situation. Here, linguistic research began by turning to sources most available, the American Indian languages, and their orientation was completely different. There were no written records in the case of these languages, and there were no earlier descriptions – hence it was impossible to develop a purely historical interest or to use writing as the basis of linguistic analysis. These languages were also so

different from European languages that it was obvious that classical procedures and terminology were going to be of little value; and in any case, many of the scholars involved had developed a strong distrust of the distortions which they were aware Latinate descriptions could impose. There was also a reaction against the use of meaning as the basis of an analysis of a language – again a contrast with the way in which considerations of meaning, logic, and so on, had been used for the definition of grammatical categories in the European philosophical orientation. The first task of the linguist, it was felt, was to describe the physical forms that the language had. The emphasis was therefore on a meticulous description of the individuality of each language's structure, based on the only available source – the living speech activity of the users.

There was thus a simultaneous development in linguistic studies on both sides of the Atlantic, with neither side in the early days knowing much about what the other was doing. However, the subject we now call linguistics took its present form from the contributions of scholars from the two places. In this unit, we shall give some general strengths and weaknesses of structural grammar without distinguishing from which approaches they are derived.

2.0 OBJECTIVES

At the end of this unit, you should know:

- the merits or strengths of Structural Grammar
- the demerits or weaknesses of Structural Grammar.

3.0 MAIN CONTENT

3.1 The Strengths of Structural Grammar

The contribution of the 19th century towards the development of a scientific approach to language cannot be underestimated, even though the preoccupation throughout this period was almost totally historical. Earlier study of language history was haphazard and vague. There was little objective, systematic analysis of similarities and differences between language forms, or of the chronological changes in a language. If similarities were noted, it was often to dismiss them as coincidental; differences were dismissed as unimportant, or reinterpreted to suit the presuppositions of a particular original theory. If the changing nature of language was considered at all, it was part of a natural process of corruption, measured against the changeless status of Latin. The first to point out objectively the fact of a systematic language similarity was a French Jesuit missionary named Coeurdoux, who showed in 1767,
with many examples, that Latin and Sanskrit had definite grammatical and lexical

correspondences; but his suggestion was not published until much later, and by that time, Sir William Jones had said the same thing more emphatically, and included Greek and Celtic in his observations. Most scholars agree that the scientific study of language originated from these observations.

Structural grammars made many contributions to our understanding and description of language, especially in dealing with morphology. Because of these contributions, and because many grammars and other handbooks apply their findings, the approach of structural grammar disregarded. The morphological classifications as well as the terminology of these grammars are used generally in linguistic study.

Structural grammars were especially successful in treating exotic languages at the phonological and morphological levels. In contrast with earlier grammars, exotic languages were not presented as languages similar in some respects to Latin and different in others. Instead, the elements were identified by their role in the various layers. Classical languages were described according to their characteristics, with regard for those of other languages.

The 'phonemic principle' is the most obvious and typical acquisition of structural linguistics. Not only has some of the earliest and essential work in structural linguistics been devoted to phonemic analysis, but the methods of phonemic analysis have been transferred (not always for the better) to other areas of linguistics.

In spite of differences between traditional and structural grammars, they are alike in maintaining an analytic approach to language. Both approaches aim to determine the constituents of words and sentences, concentrating, as we have noted, on forms. Structural grammars also concentrate on analysis, but give special attention to intonational patterns. Such presentations of syntax are in keeping with the theoretical bases of analytic grammars. They start with a selected corpus, identify the forms in the corpus and describe how they are used. Syntax, in this way, is an extension of morphology.

Analytic grammars and dictionaries (based on the presentation of analytic grammars) are especially useful to native speakers. These have an intuitive understanding of their language. In using grammars, dictionaries, and other handbooks, they may simply be interested in verifying details. Non-native speakers may, however, find such works less helpful; for they must learn how to express themselves, for example, to master the possible ways of producing particular constructions. Non-native speakers find grammars treating these several ways under one heading more helpful than one that treats them separately under their morphological elements.

Between the years 1933 and 1957, structural grammar placed great emphasis on analyzing the sound systems of language. This emphasis developed primarily for three reasons: (i) interest in descriptive rather than historical studies, (ii) the accessibility of sounds and the avoidability of techniques for analyzing and describing them, and (iii) practical applications of linguistics.

In opposition of the totally historical view of language of the previous century, Saussure emphasized the importance of seeing language from two distinct and largely exclusive points of view, which he called *synchronic and diachronic. The distinction was one which comparative* philologists had often confused, but for Saussure –and, subsequently for linguistics – it was essential. Synchronic linguistics sees language as a living whole, existing as a 'state' at a particular point in time. We can imagine this state as the accumulation of all the linguistic activities that a language community (or some section of it) engages in during a specific period, for example, the language of the present-day working class in Lagos. In order to study this, the linguist will collect samples within the stated period, describing them regardless of any historical considerations which might have influenced the state of the language up to that time. To consider historical materials is to enter the domain of diachronic linguistics. This deals with the evolution of a language through time, as a continually changing medium – a never-ending succession of language states. Thus, we may wish to study the clause from old English to Middle English, or the way in which Shakespeare's style changes from youth to maturity: both would be examples of diachronic study. These two points of view were often not clearly distinguished before Saussure; that they must be distinguished is denied by few linguists today. Giving due emphasis to the synchronic (which had been the neglected dimension before Saussure) helps to clarify the important point that a diachronic investigation always presupposes, to some extent, a synchronic study. It is impossible to consider the way a language has changed from one state to another without first knowing something about the two states to be compared. As a result, the living language received more attention than it ever had before, and speech, in particular, came into the ascendant.

The second Saussurean dichotomy which has endured till today, though with modifications, is that between langue and parole. The problem which Saussure was trying to solve arises out of the intolerable ambiguities which surround language. Saussure made a distinction among three main senses of language, and then concentrated on two of them. He envisaged language (human speech as a whole) to be composed of two aspects, which he called langue (the language system) and parole (the act of speaking). Briefly, the division is as follows. Language is that faculty of human speech present in all normal human beings due to heredity, but which requires the correct environmental stimuli for proper development. Langue was considered by Saussure to be the totality (the 'collective fact', as he put it) of a language, deducible

from an examination of the memories of all the language users. It was a storehouse: 'the sum of word-images stored in the minds of individuals'. The idea is very similar in principle to the notion of competence as later defined by Chomsky, though it differs in its cumulative emphasis and styles, langue has to be related to the actual usage of individuals. This leads to parole, the actual, concrete act of speaking on the part of an individual. It is a personal, dynamic, social activity, which exists at a particular time and place and in a particular situation – as opposed to *langue, which exists apart from any particular manifestation in speech. Parole is, of course, the only object available for direct observation by* the linguist. It is identical with the Chomskyan notion of performance.

Making a conceptual distinction of this kind is certainly an aid to clear thinking on the subject of language, and linguistics as a whole has benefited. The two concepts have also been modified over the years, as different schools of thought have taken them up and built certain conceptual structures on their basis.

In summary, structural grammar is empirical; it makes exactness methodological requirement and insists that all definitions be publicly verifiable or refutable. It examines all language in terms of the phonological and grammatical systems, which can be determined by empirical methods. Because its description is structural, the uniqueness of each language is recognized and done justice; but it also facilitates comparison, since the method also reveals what languages have in common. It describes the minimum required contrasts that underlie any construction nor conceivable use of a language and not just the discoverable in some particular use.

3.2 Weaknesses of Structural Grammar

We have tried above to highlight the strengths of Structural Grammar. Here, we shall discuss some of the weaknesses of structuralist approach to language analysis.

While structural grammars were successful in their phonological and morphological analyses, they treated complex syntactic strings poorly. For example, relationships among sentences like 1(a) and 1(b) below were not well handled.

1. (a) A child won the prize
   (b) The prize was won by a child

Although 1(b) is a variant of 1(a), structural grammars would treat this variant as a different form. Capable treatment of such sentence variants was produced only by a further grammatical approach, the transformational – generative grammar.

In principle, the item-and-arrangement model of structural grammar can provide a comprehensive description of any language. Phones are classified into phonemes. These basic units are arranged to form words. Once words are described, it is a simple matter, in principle, to state the rules for arranging words to form sentences. This is the structuralist stand. But when you start to do the description you will discover that it is no simple matter. In practice, the variety of sentence patterns occurring in any language has seemed to defy exhaustive description.

Recourse to introspection or to the notion of the mind (or intuition) was rejected by structuralists based on the notion of verifiability. To them, the sole proper object of study was thought to be a corpus of utterances; it was held that linguistics had the purpose of providing procedures for cutting up the utterances, and for grouping together the resulting segments. The classes and categories which were set up in the process of these operations were considered to be scientific constructs, conceptual fiction which were useful in the course of the description, but did not correspond to any psychological reality. Thus, structural grammar prescinds from psychological factors that are important to all speakers.

One of the most obvious casualties in this approach was semantic study. Semantics was traditionally the section of linguistics in which the least degree of precision had been reached, and in which recourse to 'mentalist' notions appeared to be the least dispensable. Consequently, an attempt was made to achieve linguistic description without considering meaning. The attempt to eliminate meaning was made not only in the field of phonology and morphology, but even in the field of semantics itself! In their situational description of meaning, the assumption that the 'relevant' linguistic facts can be correlated with the 'relevant' non-linguistic items in a completely objective manner has concealed many non-linguistic assumptions.

Some of the problems connected with the treatment of the morpheme depended on the way the notion of meaning was employed. The definition of the morpheme as a minimum meaningful unit was in many ways misleading. Besides, lacking a workable method to deal with meaning, a confusing use of terms like 'zero' elements and of 'p*ortmanteau' morphs was introduced. In, for example, cats two* morphemes were identified: cat, meaning 'cat', and –s, meaning 'p*lural'. The way in which cat also meant 'singular' was not* very clearly explained, and the same analysis was imposed on languages for which it was intuitively less satisfactory. Artificial solutions were suggested for cases like foot, feet or sing, sang to make them match mechanically the cases cat, cats and love, loved. Structural grammar has not produced any complete grammars comparable to the exhaustive treatments by traditional methods, concentrating on critical studies of how grammars should be written, partial sketches of exotic languages, and partial structural analysis of familiar languages. Structural grammar devotes attention to surface structures and has no regard for deep structure. For many, the structural grammar's goal is the description of language, and not its

explanation. In attempts to comprehend language, structural grammar does not enjoy the attention of modern scholars, but anyone concerned with the facts of language finds it useful.

4.0 CONCLUSION

We have tried in this unit to point out some of the weaknesses of structural grammars. It must be mentioned that the discussion on the strengths and weaknesses by no means applies to the work of individual linguists, since they are stated in extreme fashion. The strengths are those claimed by structuralists, and the weaknesses are those pointed out by representatives of the opposing views.

5.0 SUMMARY

You have learnt in this unit:

- the strengths of structural grammar, and
- the weaknesses of structural grammar

6.0 TUTOR-MARKED ASSIGNMENT

1. Mention and discuss three areas where structuralist principles and methods are still employed in the analysis of language.
2. Mention any two weaknesses of structural grammar and discuss their effects on linguistic analysis

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MODULE 4 EARLIER VERSIONS OF TRANSFORMATIONAL GRAMMAR

Unit 1 Finite State Grammar and Phrase Structure Grammar
Unit 2 Popular Models of Transformational Grammar – Syntactic Structure and Aspects Models
Unit 3 A Critique of these Early Models

UNIT 1 FINITE STATE GRAMMAR AND PHRASE STRUCTURE GRAMMAR

CONTENTS

In this unit, we shall examine two theoretical models of linguistics proposed by Chomsky in Syntactic Structures (1957). Both are presented in a formalized way as generative models. The first, finite state grammar, corresponds to a communication theory conception of language as a Markov process, employed in statistical linguistics. The second and more powerful model, the phrase structure grammar, is not limited to the consideration of the transitions from one word to the following in a sentence, but uses symbols like NP (Noun Phrase), VP (Verb Phrase) (which may contain more than one word); it incorporates an analysis in terms of parsing which had been elaborated by structural linguistics as Immediate Constituent Analysis. Both models start with a finite amount of apparatus and can generate an infinite number of sentences of a language.

The unit is arranged as follows:

1.0 INTRODUCTION

Structural grammar was the major theoretical model of language analysis in the early 1950's. The Immediate Constituent Structure provides an analysis of sentences which in some respects gives an intuitively satisfactory account of syntactic structure. However, structural grammatical framework was regarded as semi-explicit in a number of ways. Chomsky's objective of a generative grammar represents the first thorough-going attempt to come to grips with the problem of grammatical explicitness.

The innovative idea of a generative grammar in language amounted to a furthering of the ideas of European structuralism and also to an outgrowth of Harris's ideas from his "Co-occurrence and Transformations in Linguistic Structure" (Language, 1957:33). Specifically influential in the development of generative model of the theory of linguistic structure was Harris's observation that morphemes which occur together may share a component, just as phonemes which occur together may. Much of Chomsky's early work, especially his *Syntactic Structures, advanced there ideas. Mathematics was at a stage* to be most helpful to the linguists wishing to explore Harris's suggestion. During the 1950's, automata theory received much attention. Many scholars saw the great breakthroughs in language translation through the use of computers. The possible theoretic models for a formalized description of language examined by Chomsky in his *Syntactic Structures reflect appeal of mathematical principles for the* linguist in the 1950's.

For the linguist wishing to describe the structural relationships among morphemes in a formal way, the grammar must be finite even though the number of possible morpheme sequences is infinite. The communication theoretic view is as follows:

> Suppose that we have a machine that can be in any one of a finite number of different internal states, and suppose that this machine switches from one state to another by producing a certain symbol (let us say an English word). One of these states is an initial state; another is a final state. Suppose that the machine begins in the initial state, runs through a sequence of states (producing a word with each transition), and ends in the final state. Then we call the sequence of words that has been produced "a sentence". (Chomsky, *Syntactic Structures*, 1957:18-19).

This view gave rise to finite state grammar, and subsequently to phrase *structure grammar.*

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- state what finite state grammar is and how it works
- explain what phrase structure grammar is and how it works.

3.0 MAIN CONTENT

3.1 Finite State Grammar

In Syntactic Structures (1957:24), Chomsky suggests that "the simplest type of grammar which, with a finite amount of apparatus, can generate an infinite number of sentences" is a finite state (or Markov-process) *grammar. While finite-state grammar is not a serious candidate for an* adequate grammar and has rarely been proposed as a model of describing a syntactic system, it does merit some consideration.

A finite-state grammar is a grammar that is an abstract device but one that may be viewed as a kind of machine. Such a machine defines a language as the set of sentences produced from the initial state to the final state. The machine has a finite number of states and the capacity to change from one state to another as it registers different systems. A machine defining a language this way automatically follows a sequence of operations programmed into it. The set of words produced by the machine defines a finite state language and the machine producing that set of sentences is called finite state grammar. A finite state grammar may be extended by altering the operations the machine is programmed to carry out. These are based on the view that sentences are generated by means of a series of choices made from 'left-to-right': that is to say, after the first, or leftmost element has been chosen, every subsequent choice is determined by the immediately preceding elements. According to this conception of syntactic structure, a sentence like:

1. This man has brought some bread.

Might be generated as follows: The word this would be selected for the first position from a list of all the words capable of occurring at the beginning of English sentences. Then, man would be selected as one of the words possible after this; has as one of the words that can occur after *this and man; and so on. If we had selected that instead of this for the* first position, the subsequent choices would have been unaffected:

That man has brought some bread.

Is an equally acceptable sentence. On the other hand, if we had first selected those or these, we should then have to select words like men for the second position, followed

by words like have for the third position – the possibilities for the fourth and subsequent positions being as before. And if we had selected the initially, we could continue with either man and has or men and have.

One way of representing graphically what has just been said in words is by means of the state diagram shown below. (This is slightly more complicated than the one Chomsky gives on p.19 of Syntactic Structures).

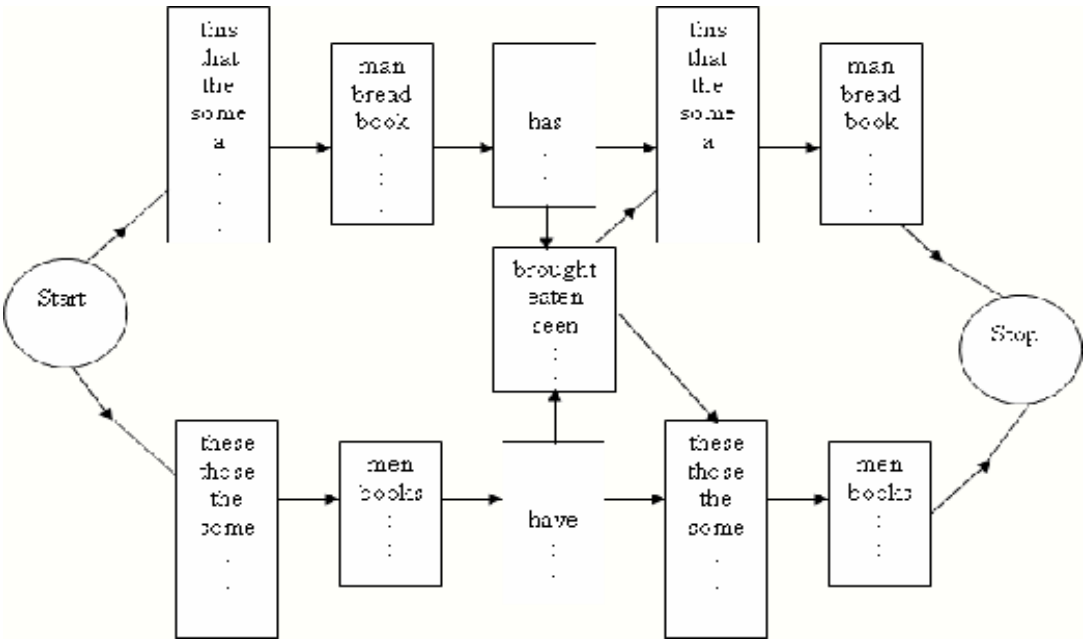


Fig.1: State Diagram

The diagram may be interpreted as follows: we can think of the grammar as a machine, or device, which moves through a finite number of internal 'states' as it passes from the initial state ('start') to the final state ('stop') in the generation of sentences. When it has produced a word (from the set of words given as possible for that 'state') the grammar then 'switches' to a new state as determined by the arrows. Any sequence of words that can be generated in this way is thereby defined to be grammatical (in terms of the grammar represented by the diagram).

The grammar illustrated in the diagram above will generate of course only a finite number of sentences. It can be extended, however, by allowing the device to 'loop' back to the same or some previous state at particular points of choice. For example, we could add 'loops' between {this, that, the, same, a,…} and {man, bread, book,…} and between {these, those, the, some,…} and {men, books…} making possible the selection of one or more elements from the set {awful, fat, big,…}, and thus the generation of sentences beginning:

That awful man…
That big fat man…
Some big fat awful men…

The grammar could also be extended in an obvious way to allow for the generation of compound sentences like (3):

2. That man has brought us some bread and this beautiful girl has eaten the cheese.

Sentences such as this are still very simple in structure; and it would clearly be a complicated matter, even if it were possible, to construct a finite state grammar capable of generating a large and representative sample of the sentences of English. It would be observed, for example, that we had to put the both with this, that, etc., and with these, those, etc. We should also have to put {awful, fat, big, etc.} in several different places because this awful man and these awful men but not *these awful *man and *this awful men are acceptable. Problems of this kind would* multiply very quickly if we seriously set about the task of writing a finite state grammar for English; and the conception of syntactic structure that underlies this model of description has little to recommend it other than its formal simplicity. But Chomsky proved that a rejection of finite state grammar as a satisfactory model for the description of a natural language is more solidly based than it would be if it rested solely upon considerations of practical complexity and our intuitions as to how certain grammatical phenomena ought to be described. He demonstrated the inadequacy of finite state grammars by pointing out that there are certain regular processes of sentence formation in English that cannot be accounted for at all, no matter how clumsy or counter-intuitive an analysis we are prepared to account for within the framework of finite state grammar.

SELF ASSESSMENT EXERCISE 1

1. Define 'finite state' grammar.
2. To what extent is finite state grammar adequate in accounting for all and only the sentences of English?

3.2 Phrase Structure Grammar

This is a type of grammar discussed by Chomsky in Syntactic Strutures (1957). Phrase structure grammars contain rules which are capable, not only of generating strings of linguistic elements, but also of providing a constituent analysis of the strings, and hence more information than finite state grammars. They are not, however, as powerful as transformational grammars, as the latter are more capable of displaying certain types of intuitive relationship between sentences.

Phrase structure grammars are currently looked upon as a bit old- fashioned by some linguists, but they remain a practical tool for the teacher and are a substantial part of the available literature, so they cannot be ignored.

A phrase structure grammar is a series of rewrite rules. These rules break down sentences, establishing their basic structures, regardless of the final form the sentences may take after transformational rules have applied. Each rule in a phrase structure grammar has the form:

X Y + Z

which means 'X consists of Y an Z'. The first phrase structure rule, for instance, is:

S NP + Aux + VP

Which means that a sentence consists of a noun phrase (NP) followed by an auxiliary element (Aux) like tense that in turn is followed by a verb phrase (VP). Successive phrase structure rules indicate what NP, Aux, VP, and other constituents consist of, until there are no more constituents in the sentence to account for.

No complete phrase structure grammar for English has yet been fully accepted. It is possible that none ever will be; for the phrase structure rules depend in part on the theories that underlie them, and these change with the linguist and the year.

The phrase structure grammar (PSG) has two specific functions to fulfil. First, it must indicate what chunks can be combined in a given language to form constituents of one or more such chunks. For example, if a native speaker of English is asked to look at sentence (3) below and make some kind of logical division of that sentence into parts, he or she will come up with something like the arrangement in number (4). Every speaker of English, including the most linguistically unsophisticated, will reject number (5) as a possible division:

3. The baby kicked over the lantern
4. The/baby
   The baby/kicked over
   kicked over/the lantern
   the/lantern the baby/kicked over the lantern
5. The baby kicked
   baby kicked over the/lantern
   the/elephant kicked

That is, the native speaker has some kind of intuitive feeling that the *baby is a constituent, and that the individual words are constituents, and* that kicked over the lantern is a constituent. He has no such feelings about possible combinations like kicked over the or baby kicked.

The second function of the PSG is to tell us in what basic order the constituents are to be arranged. Native speakers of English will accept number (6) below, but not any of the other examples:

6. The elephant went stumbling through the orchard.
7. *Stumbling elephant the through the orchard went.
8. *Through stumbling elephant the orchard went
9. *The orchard went through stumbling the elephant

It is customary in Transformational grammar to put an asterisk in front of sentences that would not be considered grammatical by native speakers.

Having explained the two functions of PSG, it is time to bring in the actual rules:

S = NP + VP
NP = (Det) + N
VP = V + (NP)

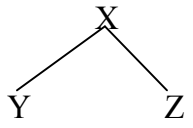
This is a partial set of PSG rules for English. The first one tells us that S (sentence) is composed of NP (Noun Phrase), and a VP (Verb Phrase) in that order. The second rule says that a Noun Phrase – an NP is composed of a Noun (N) which may be preceded by a Det (Determiner). The parenthesis around an element indicates that it is optional. The third rule says that a VP (Verb Phrase) is composed of a V (Verb), which may optionally be followed by an NP (Noun Phrase).

This set of rules will permit all of the sequences in examples (10)-(13), but will not allow any of (14)-(17):

10. Ngozi screamed
11. The boy left
12. The girl drank a milkshake
13. Some boys saw Elizabeth
14. *Screamed Ngozi
15. *Boy the left
16. *Milkshake a drank girl the
17. *Boys some Elizabeth saw

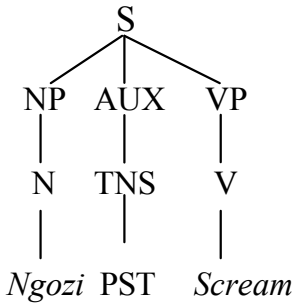
The acceptable sentences above are made up of words arranged in a particular order. We shall refer to words out of which sentences are composed as its ultimate constituents (they are not further analyzable at the syntactic level). The order in which the ultimate constituents occur relative to one another may be described as linear structure of the sentence.

But how does this system assign to sentences the appropriate phrase structure? The answer to this question is given by a convention associated with the operation of 'rewriting'. We can use the partial phrase structure grammar above to generate the deep structure of some sentences. To illustrate how the deep structure is generated, we can use a *tree diagram. The relationship between the phrase structure rules and a* tree diagram is quite strict; a phrase structure rule of the form X Y + Z matches the tree:

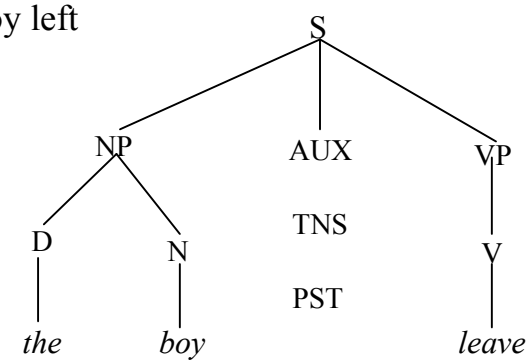


Let us generate the deep structure underlying sentences (10)-(13):

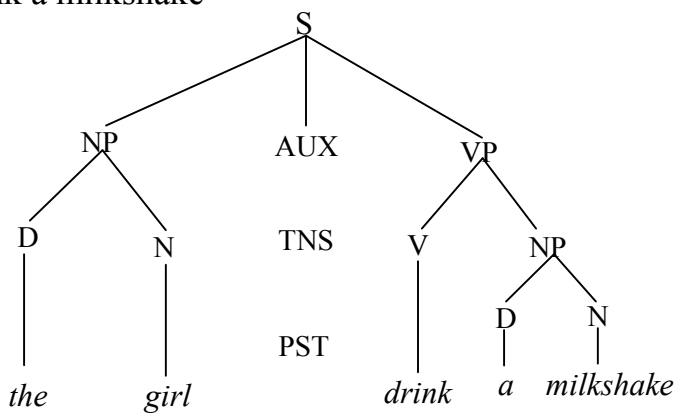
10. Ngozi screamed



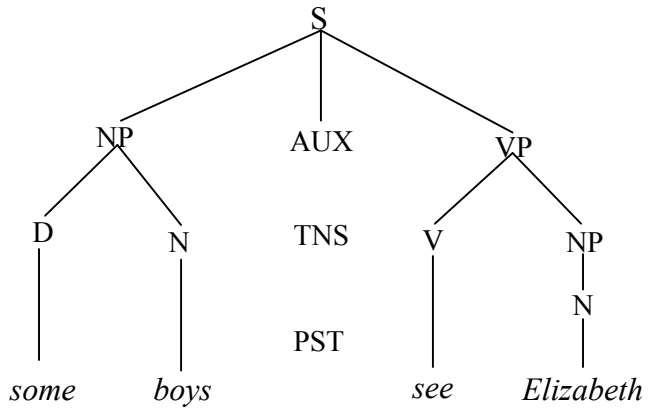
11. The boy left



12. The girl drank a milkshake



13. The boys saw Elizabeth



It is obvious that the phrase markers given above convey the following information: in (10), the terminal elements Ngozi + screamed is an S which consists of two constituents, NP (Ngozi) and a VP (screamed). In (11), the terminal elements the + boy + left is an S which consists of NP (the boy) and a VP (left); the NP consists of two constituents, Det (the) and N (boy). In (12) the terminal elements the + girl + drank + a milkshake *is an S which consists of NP (the girl) and a VP (drank a* milkshake). The NP to the left of VP consists of two constituents, Det (the) and N (girl); the VP consists of V (drank) and an NP (a milkshake), and the NP to the right of VP consists of two constituents, Det (a) and N (milkshake). We can account for (13) in the same way.

We thus see that the phrase structure grammar is much more satisfactory than the finite state grammar. Any set of sentences that can be generated by a finite state grammar can be generated by a phrase structure grammar, but the converse does not hold: there are sets of sentences that can be generated by a phrase structure grammar, but not by a finite state grammar. Phrase structure grammars are intrinsically more powerful than finite state grammars – they can do everything that finite state grammars can do – and

more. Phrase structure grammars contain rules which are capable not only of generating strings of linguistic elements, but also of providing a constituent analysis of strings, and hence more information than finite state grammars.

SELF ASSESSMENT EXERCISE 2

1. Define 'phrase structure grammar'
2. State two functions of phrase structure grammars
3. Using the partial PSG rules discussed above, generate the deep structure of the following sentences with the aid of tree diagrams:
   (a) The student passed the exam.
   (b) Some scholars received their pensions.
   (c) Students drive flashy cars.

4.0 CONCLUSION

In this unit, we have tried to present in an outline, what finite state grammars and phrase structure grammars are. Neither the traditionalists nor the structuralists provided an adequate account of the syntax of natural languages. Although the grammars we have discussed are not without problems in syntactic analysis, they recognize that language is creative, if not infinite. Therefore, grammars must be generative.

5.0 SUMMARY

You have learnt in this unit:

- what finite grammars are;
- what phrase structure grammars are; and
- how to use tree diagrams to generate deep structures of sentences.

6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by a tree diagram?
2. Compare and contrast finite state grammar and phrase structure *grammar.*
3. Draw the deep structure trees for the following sentences:
   (a) The Vice Chancellor attended the party
   (b) She wept
   (c) Most lawyers are Senior Advocates
   (d) The musician performed

7.0 REFERENCES/FURTHER READINGS

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UNIT 2 POPULAR MODELS OF TRANSFORMATIONAL GRAMMAR – SYNTACTIC STRUCTURES AND THE ASPECTS MODELS

CONTENTS

In this unit, we shall discuss the popular models of Transformational Grammar – Syntactic Structures and the Aspects of the Theory of Syntax.

This unit is arranged as follows:

1.0 INTRODUCTION

In the previous unit, we considered two models of grammar proposed by Chomsky: the finite state grammar and the phrase structure grammar. From our discussions, it is immediately obvious that it would be impossible to account for all the sentences of a language in terms of the rules of any of the grammars. For example, the rules of phoneme succession cannot account for sentences, and it was also shown in the previous unit that a left-to-right generation, unit by unit, in terms of morphemes or words also cannot account for all the sentences of a language.

There are processes, as for instance, grammatical conjunction, which are not satisfactorily described in terms of phrase structure (John and Peter is neither John/Peter nor John and/Peter). There are cases, like the one of the active-passive relation (which exists between John admires *sincerity and sincerity is admired by John) which, in spite of being* grammatical rather than semantic relations, cannot be expressed by a phrase structure grammar. Difficulties of this kind are eliminated if the phrase structure grammar is limited to the sentence constituting the *kernel of the language: a set of simple, declarative, active sentences* (in fact, probably a finite number of these), while all other are considered as transforms of the kernel sentences, are derived from these through the application of transformational rules. In fact transformations do not operate on actual sentences but on more abstract structures, or strings of symbols underlying the sentences.

In this unit, we shall discuss the transformational grammars propounded by Chomsky in Syntactic Structures (1957) and Aspects of the Theory of Syntax (1965).

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- state what transformational grammar is
- discuss the transformational grammar suggested in Syntactic Structures
- describe the transformational grammar as improved and expanded in Aspects.

3.0 MAIN CONTENT

3.1 'Syntactic Structures' Model of Transformational Grammar

The first point that must be made is terminological. Whereas a phrase structure grammar is one which consists solely of phrase structure rules, a transformational grammar (as originally conceived by Chomsky) does not consist only of transformational rules. It includes a set of phrase structure rules as well. The transformational rules depend upon the previous application of the phrase structure rules and have the effect, not only of converting one string of elements into another, but, in principle, of changing the associated phrase marker. Furthermore, they are formally more heterogeneous and more complex than phrase structure rules. We shall go on to give some examples of transformational rules, but we first need to introduce an appropriate set of phrase structures. We will use those given by Chomsky in Syntactic Structures (p. 111) – with one or two minor changes – as follows:

1. Sentence = NP + VP
2. VP = verb + NP
3. NP $\left\{\begin{matrix} \text{NP sing} \\ \text{NP pl} \end{matrix}\right\}$
4. NP sing D + N
5. NP pl D + N + s
6. T the
7. N {man, ball, door, dog, book,…}
8. Verb Aux + V
9. V {hit, take, bite, eat, walk, open, …}
10. Aux Tense (+N) (+ have + en) (+ be + ing)
11. Tense $\left\{\begin{matrix} \text{present} \\ \text{past} \end{matrix}\right\}$

12. N {will, can, may, shall, must}

It will be observed that this set of rules allows for a wider range of choices. Both singular and plural noun phrases are accounted for by rule (3); and a large number of tenses and moods are introduced (instead of just the simple past tense of, for example, The man hit the ball) by means of the element Aux and its subsequent development. Rule10) implies that every string generated by it must contain the element Tense and may contain, in addition, one or more of the other strings of elements in brackets. (Elements like s in rule (5), and -en or -ing in rule (10) are morphemes rather than words. In fact, have, be, the, and all the elements listed on the right hand side of rules (7), (9) and (12) may also be regarded as morphemes. But we need not dwell here upon the difference between a 'word' and a 'morpheme'.

Assuming that the lists given in rules (7) and (9) are considerably extended, this system of phrase structure rules will generate a large (but finite) number of what we may call underlying strings. It should be emphasized that an underlying string is not a sentence. The transformational rules have yet to be applied. One of the strings generated by these rules is:

the + man + present + may + have + en + open + the + door

(which, given the transformational rules of Syntactic Structures, underlies both the active sentence: The man may have opened the door and the corresponding passive: The door may have been opened by the *man). Try to verify that this string is indeed generated by the rules and* construct the associated phrase marker.

Chomsky derived passive sentences from underlying strings in Syntactic Structures by means of an optional rule which we may give, rather informally, as follows:

13. NP1 + Aux + V + NP2 NP2 + Aux + be + en + V + by + NP1

This rule differs in various represents from the phrase structure rules. Not just one element, but a string of four elements, appears to the left of the arrow; and the operation that is carried out by the rule is quite complex – involving the permutation of the two NP's (this is indicated by the subscripts) and the insertion of the elements be, en and by at particular points.

There is, however, an even more important difference between the phrase structure rules (1)-(2) and the transformational rule (13); and this has to do with the way in which we interpret the symbols which occur in the rules. In a phrase structure rule, a single symbol designates one and only one element in the string to which the rule applies. But the transformational rule, a single symbol may refer to a string of more

than one element, provided that the string in question is dominated by (i.e. derived from) this symbol in the associated phrase marker. It is in this sense that transformational rules are said to operate upon phrase markers rather than simply upon strings of elements.

We will first of all illustrate what is meant by this statement with reference to a purely abstract example. Given that the string a + d + e + b + f + c + g + h has been generated by a set of phrase structure rules which assign to it the phrase marker illustrated in Fig. 3 below can easily reconstruct these rules for itself), this string

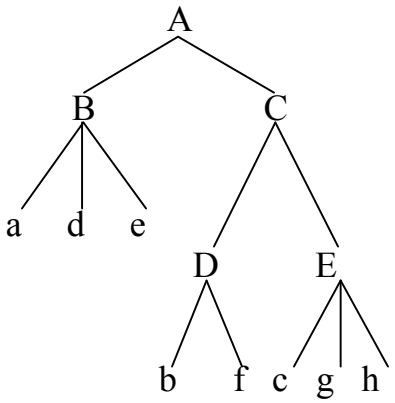

Fig.3

will be converted by means of the transformational rule B + D + E E + B into the string c + g + h + a + d + e with the associated phrase marker shown in Fig. 4 below:

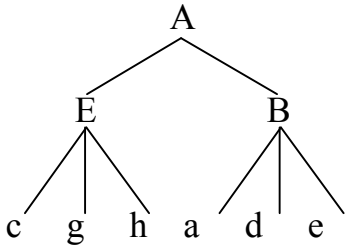

Fig.4

In other words, since the string of terminal symbols itself constitutes part of the phrase marker, we can say that the rule converts one phrase marker into another; and this is the defining property of transformational rules. The rule we have just given has the effect of deleting everything dominated by D (including D itself) and permuting B and E, keeping their internal structure intact. The phrase marker given in Fig.3 and the phrase marker given in Fig.4 may be described, respectively, as underlying and derived, with respect to the transformation in question.

If we now look at our illustrative underlying string (the + man + present + may + have + en + open + the + door) and at the associated phrase marker (which I have left the reader to reconstruct for himself), we shall see that the + man is wholly dominated by NP, Present + may + have + en by Aux, V by V (this is an instance of 'self *domination')* and the + door by NP. This means that the transformational rule (13) is applicable and, if applied (for it is an optional rule), will convert the underlying string into 13(a) with the appropriate derived phrase marker:

13. (a) the + door + present + may + have + en + be + en + *open* + *by* + *the* + *man*

But what is the appropriate derived phrase marker? This is a difficult question. Granted that NP2 becomes the subject of the passive sentence, that be + en becomes part of Aux in the same way that have + en or may is, (this, as we shall see, is necessary for the operation of subsequent rules) and that by is attached to NP2 to form a phrase, there are still a number of points about the structure of the derived phrase marker that remain unclear. Two possible phrase markers are given in Figures 5 and 6. It will be observed that they

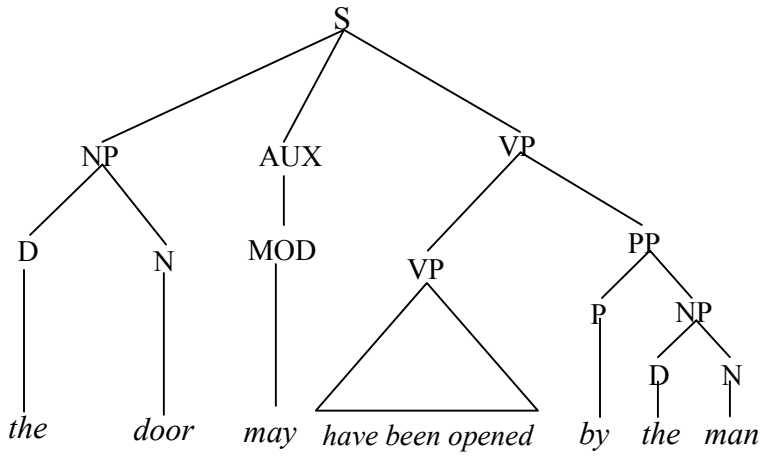

Fig.5

differ in that one takes by + NP1 to be a part of the verb phrase whereas the other treats it as an immediate constituent of the sentence, equivalent in 'status', as it were, to NP2 and VP. (It will also be noticed that I have put a question mark where the label for the bracketed phrase by + NP1 should be).

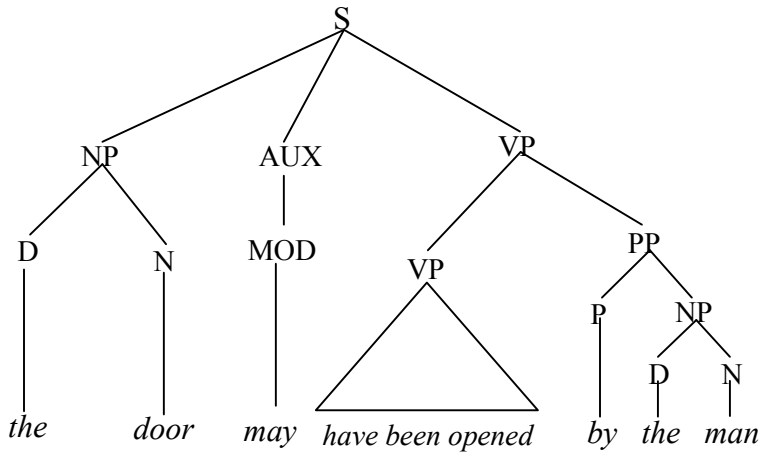

Fig.6

We have touched here, on an important theoretical problem. The derived string produced by one transformational rule may serve as the underlying string for the operation of a subsequent transformational rule, and will therefore need to have associated with it the appropriate derived phrase marker. Chomsky and his followers have worked on this problem and have tried to establish a set of conventions according to which a particular kind of formal operation (e.g. deletion, permutation or substitution) is defined to have a particular effect upon the typology of the phrase marker it transforms; and we have followed these conventions when we decided that the effect of rule B + D + E E + B operating upon the underlying phrase marker shown in Fig.3 was the derived phrase marker in Fig.4. But this was a very simple example from the point of view of the operations involved and the shape of the phrase marker to which they applied; and furthermore it was a purely abstract example unaffected by any empirical considerations.

For want of space, we will introduce and briefly discuss transformational rules in Syntactic structures. This is the obligatory 'number transformation'.

14. Present $\begin{Bmatrix} \text{S/NP} \quad \text{sing} \\ \text{/elsewhere} \end{Bmatrix}$

This is a context-sensitive rule, which says that present is to be rewritten as s if and only if it is immediately preceded in the underlying string by a sequence of one or more elements dominated by NP string in the associated phrase marker, but is to be rewritten in all other contexts as 'zero' (i.e. as the absence of a suffix). It is this rule which accounts for the 'agreement' between subject and verb manifest in such sentences as

*The man goes vs *The man go or The man is tall vs *The man are tall. If* it applied to 13(a) it yields.

14. (a) the + door + s + may + have +en + be + en + open + ed + by + the + man

It will be observed that what we might call the 'abstract' verbal suffix s is here introduced in front of the element to which it is subsequently attached (in the same way that en and ing are introduced by phrase structure rule (10) in front of the element to which they are attached. We have called these 'abstract' suffixes because, as we shall see, they assume a variety of forms, including 'zore', in various contexts.

The rule by which these 'abstract' suffixes are placed after the appropriate stems (the 'auxiliary transformation') may be given as follows:

15. $$\begin{Bmatrix} T \\ en \\ ing \end{Bmatrix} + \begin{Bmatrix} M \\ have \\ be \end{Bmatrix} \qquad \underset{V}{\begin{Bmatrix} M \\ have \\ be \end{Bmatrix}} + \underset{V}{\begin{Bmatrix} T \\ en \\ ing \end{Bmatrix}}$$

This rule says that any pair of elements the first of which is tense, en and *ing and the second of which is M, have, be or V are to be (obligatorily)* permuted, the rest of the string to the left and the rest of the string to the right remaining unchanged. If the rule is applied to 14(a) it will permute s + may (i.e. Tense + M), en + be and en + open (en + V), successively from left to right, yielding:

15 (a) the + door + s + may + have + be + en + open + ed + by + the + man

One more transformational rule has yet to apply, which puts a word- boundary symbol (we shall use a space) between every pair of elements, the first of which is not M, have, be or V and the second of which is not *Tense, en or ing. Applied to 15(a), this yields:*

16. (a) the door +s +may + have be +en open + ed by the man

And this is the form that our illustrative string would have after all the relevant transformational rules have operated.

Finally, in a grammar of the kind outlined by Chomsky in Syntactic Structures, there is a set of 'morphophonemic' rules, which will convert the string of words and morphemes into a string of phonemes. These would rewrite may + s as the phonemic representation of what is spelled *may, open + en as what is spelled opened (be + s as*

what is spelled is, run + en as what is spelled ran and so on). We end up therefore, as we should, with the phonemic representation of The door may have been opened by the *man.*

Most of you who are unfamiliar with Chomsky's system of transformational grammar may have found it rather tedious following this step-by-step derivation of a single sentence. But you will now have acquired a sufficient understanding of the way the grammar is designed and operates for you to appreciate the significance of some of the more general points made in this unit and what will be discussed in later units. At this stage in our discussion of transformational grammar, it may be helpful to introduce a diagram showing how the grammar outlined in Syntactic Structures was organized (see Fig.7). The input to the grammar is

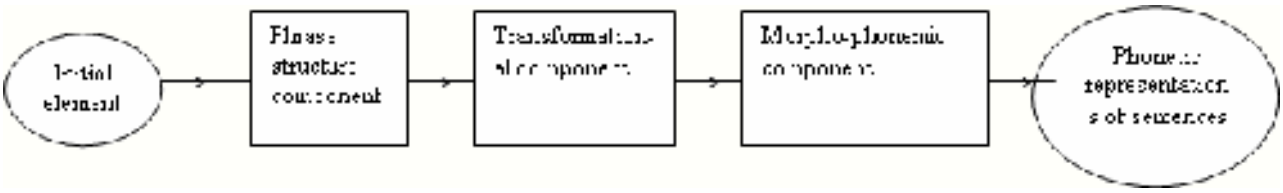

Fig.7

the initial element which generates a set of underlying strings by means of the phrase structure rules in the first 'box' of the diagram. The second 'box' comprises the transformational rules, of which some are optional and others obligatory. These rules take, as their 'input', single underlying strings, or pairs of underlying strings, and by successively modifying these strings and their associated phrase markers, generate as their 'output' all and only the sentences of the language, represented as strings of words and morphemes, and assign to each sentence its derived constituent structure. The third 'box' of rules then converts each of these sentences from its syntactic representation as a string of words as morphemes to its phonological representation as a string of phonemes.

According to this model of generative grammar, different types of simple sentences are accounted for by means of optional transformational rules. For example, all the following sentences are related in that they derive from the same underlying string:

(i) The man opened the door
(ii) The man did not open the door
(iii) Did the man open the door?
(iv) Didn't the man open the door?
(v) The door was opened by the man
(vi) The door was not opened by the man
(vii) Was the door opened by the man?
(viii) Wasn't the door opened by the man?

They differ in that: (i) has had no optional transformation applied to the underlying string; (ii) has had the Negative transformation applied; (iii) the Interrogative; (iv) the Negative and Interrogative; (v) the Passive; (vi) the Passive and Negative; (vii) the Passive and Interrogative; and (viii) the Passive, Negative and Interrogative. Of these eight sentences, the first (a simple, active, declarative sentence) is defined by Chomsky in Syntactic Structures, as a kernel sentence. It should be emphasized that non-kernel sentences, such as (ii)-(viii), are not derived from kernel sentences, such as (i), but from a common underlying string. That is to say, there are no sentences generated without the application of at least a small number of obligatory transformations, including rules comparable in effect with rules (14) and (15) above.

Compound sentences in which two clauses are coordinated (e.g. The man opened the door and switched on the light), are generated by means of conjoining and embedding transformations, respectively, which take as 'input' a pair of underlying strings (e.g. the + man + past + open + the + door and the + man + past + switch + on + the + light) and combine them in various ways. Conjoining and embedding transformations constitute the class of generalized transformations in Syntactic Structures; and it is the repeated application of these rules which accounts for the existence of such recursive structures as: This is the… that lived in the house that Jack built or… a big, black, three-foot long… wooden box (p.48). All the generalized transformations are of course optional.

So much, then, by way of a general summary of the earlier version of transformational grammar, presented in Syntactic Structures. Chomsky claimed that one of the advantages of this system, the third and most powerful of his 'models for the description of language' was that it could account more satisfactorily than phrase structure grammar for certain types of structural ambiguity. To take one of Chomsky's famous examples: a sentence like Flying planes can be dangerous is ambiguous (cf. To fly planes can be dangerous and Planes which are flying can be dangerous); and yet, under both interpretation, the immediate constituent analysis would generate both interpretations the same way. But it would be possible to generate a sentence like Flying planes can be dangerous within a phrase structure grammar and to assign to it two different phrase markers – differing with respect to the labels assigned to the node dominating flying. But this would not be an intuitively satisfying account of the ambiguity; and it would fail to relate the phrase flying planes, on the one hand, to planes which are flying, and, on the other, to someone flies planes. The transformational analysis accounts for the ambiguity by relating two different underlying strings to the same derived string. Many other examples could be given of structurally ambiguous sentences which can be accounted for rather nicely in terms of transformational grammar.

In a similar way, sentences with similar surface structures can be assigned different deep structures. Consider the following sentences:

(i) John is anxious to help
(ii) John is difficult to help

Here, we are dealing with sentences which have similar surface structure, but different deep structures. The first would have a deep structure

John pres + be anxious for John to help

and the second a deep structure like:

For someone to help John pres + be difficult

For now, we shall not go into details as we shall go into the derivation of these sentences in subsequent units. Let us highlight the features of the transformational grammar propounded in Aspects (1965).

SELF ASSESSMENT EXERCISE 1

1. Generate five sentences from the following rules:
   (a) S = NP + Aux + VP
   (b) NP = Det + N
   (c) Aux Tense (N) + (have + en) (be + ing)
   (d) VP = V + NP
   (e) N = man, ball, etc
   (f) V = bit, took, kick, etc.

2. Write out five sentences of your own and generate phrase structure rules for each.

3.2 'Aspects' Model of Transformational Grammar

In the last section, we presented a summary of Chomsky's transformational grammar as contained in Syntactic Structures (1957). In 1965, in Aspects of the Theory of Syntax, Chomsky put forward a of transformational grammar, which differed from the earlier theory in a number of important grammar, which our purpose, it will be sufficient to mention only the most clear differences the Syntactic Structures grammar and what we may call an Aspect – type grammar. Once again, a diagram may be helpful (cf. Figure 8 below).

The most striking difference between the two grammars, as represented in Figures 7 (previous section) and 8, is the additional 'box' of rules in the Aspects-type grammar labeled 'Semantic Component'. In Syntactic Structures, it was argued that,

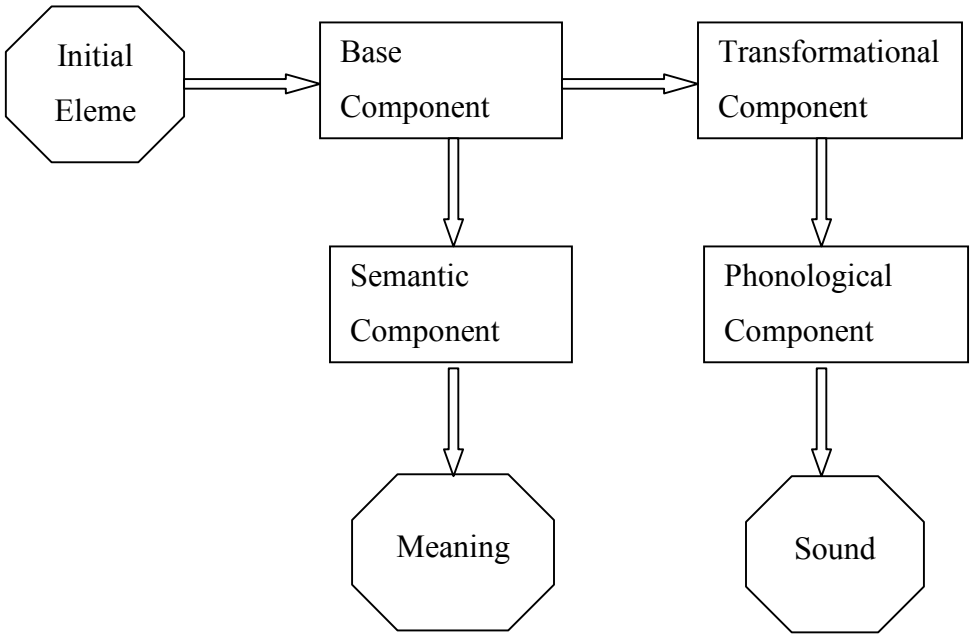

Fig.8

although semantic considerations are not directly relevant to the syntactic description of sentences, there are 'striking correspondences between the structures and elements that are discovered in formal, grammatical analysis and specific semantic functions' (p.10) and that 'having determined the syntactic structure of the language, we can study the way in which this syntactic structure is put to use in the actual functioning of the language' (p.100). In the years that followed the publication of Syntactic Structures, Chomsky and his collaborators came to the conclusion that the meaning of sentences could, and should, be submitted to the same kind of precise, formal analysis as their syntactic structure, and that semantics should be included as an integral part of the grammatical analysis of languages. The discussion of sentences such as: *Colourless green ideas sleep furiously* pointed out a sense in which grammar is independent of meaning. The subsequent distinctions concerning degrees of grammaticalness point out the need for a formal specification of how these degrees are to be judged. There are sentences that we would call ungrammatical yet acceptable, and there are other sentences that are grammatical but unacceptable. It is where semantic and grammatical criteria overlap that this problem is raised. The grammar of a language is now seen by Chomsky as a system of rules relating the meaning (or meanings) of each sentence it generates to the physical manifestation of the sentence in the medium of sound.

In Aspects, as in Syntactic Structures, the syntax falls into two parts. But the two syntactic components operate somewhat differently. It is now the base of the grammar (which is roughly comparable with the phrase structure part of the earlier system) rather than the transformational grammar accounts for the semantically relevant

options, including the possibility of forming recursive constructions. The difference between a declarative and an interrogative sentence, or between active and a passive sentence, is no longer described in terms of optional transformations, but in terms of a choice made in the base rules. For example, there might be a base rule of the following form:

1. (a) VP Verb + NP (+Agentive)

and the selection of the element Agentive would distinguish the strings underlying passive sentences from the strings underlying the corresponding active sentences. There would then be an obligatory transformational rule corresponding to rule (13) above, operating if and only if the 'input' string contained the element Agentive. This proposal has the advantage that, if we formulate the transformational rule correctly, it gives us a label for the node dominating by + NP2 in the derived phrase markers associated with passive sentences.

The base rules generate an indefinitely large set of underlying phrase markers (which represent the deep structures of all the sentences characterized by the system); and these are converted into phrase markers (which represent the surface structures of the sentences) by the transformational rules, most of which (apart from 'stylistic' rules) are now obligatory. The meaning of each sentence is derived, mainly if not wholly, from its deep structure, by means of the rules of semantic interpretation; and the phonetic interpretation of each sentence – its physical description as an acoustic 'signal' – is derived from its surface structure by means of the phonological rules.

We need not go into the more technical details which distinguish an *Aspects-type grammar from the conceptually simpler system of Syntactic Structures. All that remains to be added to this account of the* general characteristics of the later version of transformational grammar is that various semantically relevant grammatical notions are now explicitly defined in terms of deep structure relations. (This was merely hinted at in Syntactic Structures). We may note, in particular, the description b e t w e e n the 'logical' (deep structure) and 'grammatical' (surface structure) subject of a sentence. The 'logical' subject is that NP which is immediately dominated by S (= sentence) in the deep structure; the 'grammatical' subject is the left-most NP which is immediately dominated by (the top-most) S in the surface structure. For example, in a sentence like:

Jane was persuaded by Ann to take up teaching

the grammatical subject is Jane (it is this notion of 'subject' which is relevant to the statement of the agreement holding between the subject and the verb in English: *Jane was persuaded* vs *They were persuaded*, etc). But the deep structure of this sentence as

shown below, consists of one sentence (S2)

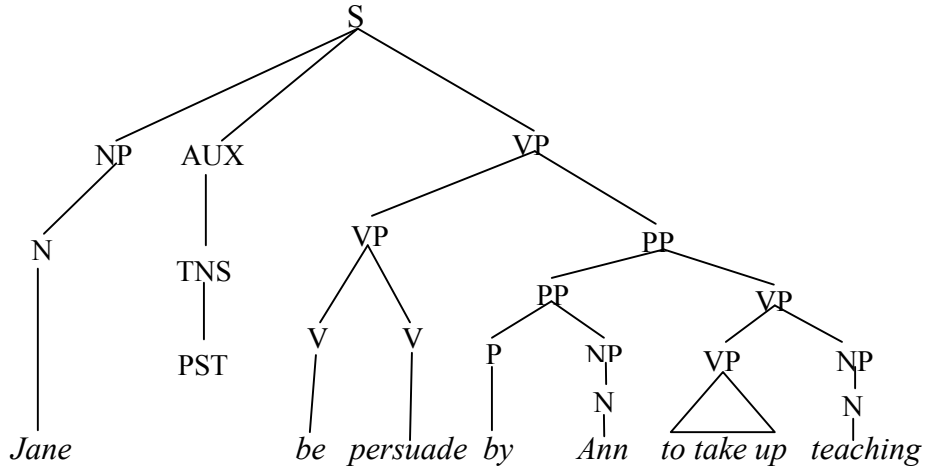

Fig.9

embedded within another (S1); and each sentence has its own logical subject. Figure 9 shows a representation of the deep structure of the above sentence. It will be seen that the logical subject of S1 (the matrix sentence) is Ann, and that of S2 (the embedded sentence) is Jane. Furthermore, the deep structure subject of S2 is identical with the deep structure object of S1 (that NP which is immediately dominated by VP). As Chomsky points out, it is these deep structure relations that are essential for the correct semantic interpretation of the sentence.

Another feature that seems to distinguish Aspects from Syntactic Structures is the more explicit recognition that traditional grammatical concepts are, in the main, quite correct, as is the traditional concept of universal grammar. There were obvious gaps in the traditional account of syntax, as well as some inconsistencies in the distinction of substantial versus formal universals. Chomsky believes that the distinction between deep structure and surface structure enables us to appreciate the lasting contribution of traditional grammar, and to see why the structural linguist rejects universal grammar.
The original form of the transformational grammar was tripartite; it involved:

(i) a phrase-structure grammar that produced terminal strings;

(ii) a transformational component that, through obligatory and optional additions, deletions, and rearrangements, produced the final grammatical representation of all sentences in the language, and

(iii) a morphophonemic component that rewrote these sentences into the proper sequence of phonemes.

The distinction between the phrase structure component (the base) and the transformational component suggests the difference between deep structure (what the base produces) and surface structure (the grammatical representation effected by

transformations, and the phonological representation produced by the morpho-phonemic component). Chomsky finds that this distinction, though variously formulated, is as old as syntactic theory itself (Aspects, p.199).

The foregoing represents the major innovations in Aspects. In subsequent units we shall discuss other modifications since the advent of Aspects.

4.0 CONCLUSION

We have tried in this unit to present the popular models of Chomsky's transformational generative grammar as propounded in Syntactic Structures and Aspects of the Theory of Syntax. The two grammars differ in some respects. However, the original proposals of Chomsky have continued to be modified ever since the publication of Aspects.

5.0 SUMMARY

You have learnt in this unit,

- the Transformational Grammar as proposed in Syntactic Structures;
- the Transformational Grammar as proposed in Aspects; and
- the differences between the two grammars.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss two differences between the Transformational Grammar of Syntactic Structures and that of Aspects.
2. What were the main reasons for the introduction of the Semantic component into the grammar?
3. Provide deep structure trees for the following sentences:
   (a) The child was bitten by the ant.
   (b) Flying planes can be dangerous.
   (c) He asked her to visit Lagos.

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UNIT 3 A CRITIQUE OF THESE EARLY MODELS

CONTENTS

In this unit, we shall present a critique of these early models of Transformational grammar.

The unit is arranged as follows:

1.0 INTRODUCTION

In addition to the insights it has given rise to and the revealing studies it has engendered, Transformational Grammar has engaged the attention of many of the leading intellects in linguistics in the United States where it originated, and to a lesser, though an increasing, on the continent of Europe and elsewhere around the world.
Chomsky's work is animated by interests in the history of psychology, philosophy, and scientific methodology. They are, he would claim, legitimate aspects of linguistic research; indeed, aspects which it is necessary to take into account if linguistics is to provide a meaningful and interesting insight into language. Thus the progress of Chomsky's research has corresponded to a widening of horizons for linguistics, to a re-establishment of links with other fields which had been severed in the search for 'language considered in and for itself' (Saussure, 1949:317) to a reintegration of linguistics as a branch of psychology after the attempt to establish it as a completely autonomous science. The rapid spread of transformational ideas among linguists not only in the United States but throughout the world, and the readiness to throw aside traditional views have brought into the open a widely-felt dissatisfaction with the narrowness of purpose and method imposed on itself by linguistics.

Is Transformational Grammar therefore a 'revolution' in linguistics? Many scholars, especially of the London School don't think it is. In this unit we shall discuss the impact of Transformational grammar of linguistic study as well as the lapses that have

been highlighted by its critics.

2.0 OBJECTIVES

At the end of this unit, you should be able to explain:

- how transformational grammar reshaped linguistic study
- the areas where scholars feel dissatisfied with transformational grammar.

3.0 MAIN CONTENT

3.1 A Critique of the Early Models of Transformational Grammar

Generative transformational grammar strongly affected theoretical studies of language. Linguists holding the theory explored syntactic problems, attempting to clarify relationships between syntactic patterns as traditional grammars had clarified morphological relationships. Patterns like passivization, 'raising', and so on, were scrutinized; if grammars were to account for the total structure of language economically, they might hope to solve, for example, with one set of rules the process involved in raising subjects equivalent to the subject of the matrix verb as in (1) below, and those differing from it, as in (2) and (3).

1. I expect to come
2. I expect him to come
3. I expect that he will come

Intensive investigations of such problems led not only to various solutions but also to great concern with syntax. That concern is a major contribution of transformational grammar.

Moreover, the emphasis placed on syntax has brought this segment of language greater prominence. A new large-scale handbook on English places far more emphasis on syntax than on morphology or phonology. Yet this grammar does not adhere closely to the theory proposed by Chomsky. The effect of transformational theory may, then, be indirect, in focusing emphasis on syntax without determining the procedures used in presenting syntactic patterns.

Transformational grammar has also exerted an influence on the teaching of language. An example is the use of 'sentence combining'. In learning to write, students often set down one simple sentence after another, without using devices like cleft sentences to indicate emphasis, without subordinating matters that are less essential, and so on. 'Sentence combining' instruct such students in understanding such relationships.

As we have noted, transformational grammar treats cleft sentences as variants of simple sentences. Similarly, relative clauses and other subordinate clauses are embedded through transformational rules. By applying this view of such complex sentences, teachers of rhetoric have been successful in improving the writing skills of such students.

A major impact of generative transformational grammar has had to do with psychological investigations involving language. Earlier psychological study of language was often limited to external, in keeping with the attention linguists gave to surface forms. Investigations were carried out on possible recall of lists of words. These yielded little information on language or on its control by the brain. The deep structure proposed by transformational grammar, on the other hand, offered possibilities of studying patterns of far greater interest. Cognitive psychology thereupon undertook to determine the reality of such constructs as subjects and predicates of clauses. Investigators of language acquisition examined the sequence of mastering complex structures, such as passive as opposed to active sentences. Such investigations are continuing, not only on language acquisition, but also on language loss, as in speakers with brain injuries, on the difficulties, as with neurotic and psychotic speakers. Investigations of all these kinds are carried out to determine the common features a language.

Features and characteristics common to all languages have come to be known as universals. They receive support from such observations as the ability of all infants to acquire any language. That ability must rest on basic features underlying all languages. One readily observed universal is the existence of sentences in all languages. Another is the universal use of consonants. But investigators seek more specific universals. The interest in universals has been heightened by understanding of control of language by the brain, especially by greater knowledge of areas that control semantic, syntactic, and phonological functions. As such understanding has been increased, further problems have been disclosed, among them the modifications of sentences and longer sequences, known as discourse, or text. These problems will not be examined here.

Having mentioned some of the insights of transformational grammar, let us look at those central concepts of grammatical theory for the generativists have received the most criticism over the years. I believe classifying them will at least remove whatever share of the resistance to the theory is based on misunderstanding.

Competence and Performance

Probably no notion within transformational-generative grammatical theory has aroused more controversy than the competence/performance distinction. Criticisms of the distinction ranges from the assertion that it is 'almost incoherent' (Labov, 1972:110) to the conclusion that it is coherent enough, yet 'too confining' (Clark & Haviland, 1974:92), since so many systematic aspects of language do not fall under the generativists' conception of competence. It might be pertinent to give this quotation in full:

> *many linguistics have come to find the study of linguistics competence … too confining. There are simply too many interesting linguistic phenomena that do not fit under this rather small umbrella, yet are amenable to linguistic investigation… problems such as the structure of conversations…, the relation of meaning to context…, the perceptual difficulty of surface structures… the production of speech errors and speech hesitations..., and other similar phenomena.*
>
> (Clark and Haviland, 1974:92)

If we bear in mind that 'linguistic competence' is no more than the name for the non-reducible core of language – those aspects of language that form the autonomous purely linguistic system characterized by a formal grammar, it becomes clear that many things we 'know' about language do not fall under the generativist's competence as defined by Chomsky. Our competence is our tacit knowledge of the structure of our language. For example, we know that saying I'm hungry can convey a request to be fed, and we know that we should devoice our consonants and vowels when speaking in the library or in the church. This sort of knowledge is not competence, because it is not strictly linguistic. The generalizations underlying this knowledge undoubtedly fall within the domain of cooperative communication and proper social behaviour.

'Linguistic performance' refers to 'the actual use of language in concrete situation'. There hardly exists an aspect of performance to which competence does not contribute. One could not describe fully (much less explain) a particular instance of whispering in a library or a church without reference to the social convention of silence in libraries or churches. Just as all non-marginal linguistic phenomena demand a theory of performance for their explanation, it seems inconceivable that any aspect of language use could owe its explanation only to competence. Competence simply represents the speaker's knowledge of linguistic structure. Explaining speech production therefore requires a model of language in which the competence model is supplemented with other explanatory devices. Even in interpreting metaphorical explanations, if our competence did not supply a 'normal' reading, we wouldn't even recognize it as metaphorical.

Another common dissatisfaction with the competence/performance distinction is that, for any given linguistic phenomenon, no hard-and- fast criterion exists to decide which aspects of that phenomenon should fall under competence. Some linguists have explicitly avoided referring to the distinction for that reason (e.g. 'communicative competence' has become fashionable). But still, enough is known about the systems interacting in language that the role competence plays in a particular phenomenon is often clear. For example, it hardly seems likely that the fact that in most English dialects two modal auxiliaries do not follow each other pertains to anything but competence, or that the fact that one does not normally shout obscene expletives in church has any explanation but a performance one. Although there are borderline cases, clear cases where the distinction between competence and performance are undoubtful are many, and they are enough to rely on.

Linguistic Universals

Another area of criticism of transformational grammar concerns linguistic universals. Scholars have argued that there is nothing 'universal' about generative transformational grammar since grammatical properties differ from language to language, especially as gleaned from the study of child language acquisition. Some scholars even attempt to overthrow the notion of 'linguistic universal' by hypothesizing the common origin of all languages. They argue that description of individual languages is more rewarding than searching for universals. However, these critics miss the mark.

The term 'universal grammar' is used to refer to that which is true of language by biological necessity. Hence universal grammar is "taken to be the set of properties, conditions, or whatever that constitutes 'the initial state' of the language learner, hence the basis on which knowledge of language develops" (Chomsky, 1980:69). Particular aspects of universal grammar have typically been motivated by reference to the lack of the stimulus available to the child language learner. Why is it, for example, that a child born of Nigerian parents in England acquires English language the same way as English children? Take, for example, the way children form correct questions from declarative sentences. How are children trained to form them? The principle is not learned, but forms part of the conditions for language learning. Whether languages have one ancestor or not, the problem for the child is the same – to construct a grammar on the basis of limited input available. Universal grammar studies the conditions that must be satisfied by the grammar of all languages. In other words, it characterizes human language as a whole. It should be noted that not all features common to all languages of the world are properties of universal grammar. There may be universals which arise independently of innate principles: it may be a universal that every language has a word for arm or that no language has more than thirty vowels, but it would be wrong to attribute these universals to properties of Universal

Grammar. Also, it does not follow that every putative universal must be instantiated in every language. For example, for each type of grammar rule (transformations, deletions, filters, etc) there may well be universal properties governing the behaviour of rules of that type. Yet, it may be that not all languages manifest all rule types. If a language had some deletion rules, one would hardly wish to conclude that the facts of that language 'falsify' some claim about the universal properties of such rules.

Simplicity and Evaluation

Another criticism concerns the 'simplicity' measure as a way of evaluating grammars. The criticism is that Chomsky, in insisting on simplicity of grammars has implied that exceptions to grammatical rules should be very 'costly', and therefore, rules should be constructed so as to yield the smallest number of exceptions possible. They argue that transformational grammarians have implied, by so saying, that actual language can be wholly generated by rules. Many schools of linguistics, as a result, have rejected Chomsky's 'cost-benefit' analysis of language.

However, this criticism of the simplicity measure turns out to be a rejection of scientific linguistics itself. Science, by definition, is the search for order in nature. Scientists take it for granted that their goal is to formulate the most elegant (i.e. the most order-reflecting) hypothesis possible, consistent with data, about the particular area under investigation. Although philosophers extensively debate scientific methods and the ontological status of constructs, this general point has hardly been questioned.

Linguistics, then, is the search for order in language. The goal of linguistics is to formulate the most elegant hypotheses possible about how language works, consistent with data. No formula exists for how to do this, nor is there an automatic decision procedure for picking out one of several competing theories as more elegant than the others. Yet, certain points are uncontroversial. One is that given two theories that cover the same range of facts, the one in which the facts follow from a small number of general principles is better than the one that embodies myriad separate statements and auxiliary hypotheses. Another is that it is methodologically correct to reduce redundancy within a theory; to reduce the number of postulates while preserving the scope of the predications. Scientists (including linguists) often talk about 'simplifying' a theory or about constructing a theory with. Generally, they mean a less redundant theory as described above. It becomes obvious then that the simplicity criticism is unscientific.

Psychological Reality

The last criticism we shall discuss concerns introspection or the use of intuitions in grammaticality judgments. Critics claim that a concept is labeled 'psychologically real'

only if it plays a particular kind of role in a particular kind of experimental procedure. They based their arguments on processing studies. More recently, other sorts of experimental data have been cited as evidence that grammatical theory is at odds processing certain facts and hence lacks psychological reality.

It seems to me that negative conclusions based on processing studies about psychological reality of grammatical theory are not compelling. Any theory that is based on psychological data and has as its principal goal the explanation of those data is ipso facto a psychological theory. A theory that does this correctly is a theory with 'psychological reality'; a theory that fails to accomplish this lacks psychological reality.

Now, where does grammatical theory fit into this picture? Largely, but not exclusively, its data base has been speaker introspections about the well-formedness and interpretation of sentences. Surely, introspections count as psychological data if anything does. If that were all there were to it, then the constructs of grammatical theory could be considered psychologically real to the extent that they correctly explained such data.

But that is not all there is to it. Introspections are only one of many potential sources of psychological data about language. Data from studies of speech perception and sentence processing also count psychological data. So do data gleaned from observations of aphasic speech, speech errors, and the acquisition of language by native and non-native speakers. A psychologically real theory of grammar must therefore be judged on more than its ability to explain complexities; it must be shown to be compatible with all these sources of data.

4.0 CONCLUSION

We have tried in this unit to present a critique of Chomsky's transformational-generative grammar. In spite of the criticisms discussed above, transformational generative grammar remains the most popular grammatical model in use today in the analysis of language.

5.0 SUMMARY

In this unit, you have learnt about:

- the merits of transformational generative grammar, and
- the criticisms of some concepts of transformational generative grammar

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss three ways by which Transformational Generative grammar has influenced language analysis since the early sixties.
2. Discuss three criticisms against Transformational Generative grammar.
3. How sustainable are the criticisms you discussed?

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