

Traditional grammar, thus defined, did present a model of linguistic analysis which had a number of intrinsic weaknesses and limitations which are now known as fallacies in traditional grammar. In fact, the traditional model of syntactic analysis has been rejected because of these fallacies.

2.1.1. The Latinate Fallacy : The traditional grammarians of English borrowed Latin grammar as the model for describing English or any other language. As a result, the grammar of English was written without any in-depth study of the linguistic facts of English. The English version of Latin grammar passed on as the grammar of English. For example, Latin has six case forms – Nominative, Vocative, Accusative, Genitive, Dative and Ablative. And as case is an inflectional category it is marked on the nouns in Latin. The traditional grammarians of English maintain that English also has six case forms, though actually we have two case forms for English nouns – John (unmarked case) and John's (marked or possessive case) – and three case forms for English pronouns – he, his, and him (nominative, possessive and objective respectively). This shows that the case system of English was borrowed from Latin and imposed on English. The underlying belief was that languages belonging to the same family would have similar features, structures, and grammatical categories.

This fallacy of using the grammatical model of one language for the description of another is known, therefore, as Latinate fallacy. Modern linguists would say every language is a unique system and, therefore, it has to be studied in its own right and merit.

2.1.2. The Semantic Fallacy : The traditional grammarians used meaning in the definition or description of grammatical categories. This use of meaning as a tool or criterion in linguistic description makes grammar unscientific because meaning itself cannot be scientifically captured. Meaning is vague; context-bound and subjective.

Let us consider the definition of an interrogative sentence in traditional grammar. “An interrogative sentence is one that asks a question.” Now, a sentence like “Could you pass me the salt? is an interrogative sentence as we all know. But does it ask a question ? Of course, no. It is actually making a request. The point is that such meaning-based definitions are misleading, fallacious and, therefore, unscientific. The definition of an interrogative has to be form-based or structure-based and not meaning-based. This is true of many definitions in traditional grammar being only meaning-based & thus fallacious.

2.1.3. The Logical Fallacy : The traditional linguists held that the rules of grammar should be governed by the laws of logic. This belief they inherited from the speculative grammarians of the Middle Ages who thought that human language mirrored the universe and because the principles of logic governed the universe they governed language also.

But we find that in every human language there are expressions/utterances which may not be considered valid from the point of view of logic. Expressions like ‘rounder’ or ‘more perfect’ are very common for the speakers of languages (as in English) though they are not logically valid (as something can be either round or not/either perfect or not). Therefore, such expressions by the native speakers of their logical validity. In English, the traditional grammarian’s observation that it has three tense forms – past, present and future – is an example of logical fallacy. As there are three times – past, present and future – there has to be three tenses. But we know that English has no future tense; futurity is expressed with the help of various linguistic devices, like the use of modals, like shall or will, etc. Tense is an inflection and there is no future tense marked on an English verb.

In Bangla, for instance, we have three tenses –

khaj	–	eat (I eat)
khelam	–	ate (I ate)
khabo	–	shall eat (I shall eat)

And all the tenses are marked on the root verb kha as inflections. But in English we have only the Present and the Past Tense. The logic that three times will have to be represented by three tenses is not linguistically validated.

Please note here that this traditional statement regarding three tenses in English is also an illustration of Latinate fallacy as well as semantic fallacy.

In modern linguistics we say that there need not be always a one-to-one correspondence between tense and time. Time is a semantic category and Tense is a grammatical category and there may not be a logical one-to-one correspondence between the two. This is true of sex and gender and countability and Number.

2.1.4. The fallacy of ‘lack of explicitness’ : Many definitions or descriptions in traditional grammar are not explicit. In other words, they are not clearly, precisely and unambiguously stated. For example, let us take Jespersen’s definition or description of subject (and also predicate) in his famous book Essentials of English Grammar :

“In such a simple sentence as the dog barks – and naturally also in clauses like that the dog barks or when the dog barks – we call the dog subject and barks predicate.”

The grammarian’s description of the notion ‘subject’ is inexplicit and yet he assumes that the reader/learner understands what a ‘subject’ is.

2.1.5. The fallacy of mixing up different criteria : The traditionalists mixed up various criteria in their description of grammatical items and structure. Sometimes they used semantic criteria, sometimes formal and sometimes functional. Depending on the context, they would describe the same item in different ways and assign it different categorial status. For example, they would describe the same item in different categorial status. For example, they would describe ‘science’ as a noun, let us say, in a structure like He’s studying science and would call it an adjective in a structure like He is studying in science college because in the latter sentence science functions as a modifier of the noun college. Thus they mixed up different criteria leading to a descriptive framework which does not remain scientific. Modern linguists, therefore, reject such a framework and they are in favour of a consistent and formal set of criteria for defining different word-classes.

2.1.6. The Written form fallacy : The traditional linguists used the written form of the language as their data and, therefore, their description of a language was the description of the written form of the language. The spoken form was completely ignored. From the modern linguist’s point of view, this is a fallacy because speech is primary and the written form is only a codification of speech. This fallacy led to the neglect of phonology in traditional grammar. You will perhaps remember that we have already said that the traditional linguists dealt with two basic units in language – word and sentence.

2.1.7. The prescriptive fallacy : The traditionalists prescribed, in many cases, the norms of language use for the native speaker. For example, many grammarians had suggested that split infinitives should be avoided. But many native speakers use this structure; they would prefer ‘to kindly grant me’ to ‘kindly to grant me’. A grammarian’s job is to observe data i.e. native speaker’s speech and then describe in faithfully and scientifically instead of prescribing norms for the speaker. In other words, linguistics, according to the modern linguists, should be descriptive and not prescriptive.

2.1.8. The fallacy of ignoring language variations : The traditional grammarians considered language ‘monolithic’. They ignored different varieties of the same language – dialectal and register varieties – and paid attention to only one variety, the written language of great literary writers of the past. This is a huge fallacy because language is what people speak and all varieties of a language need to be scientifically studied.

2.1.9. Summary : We have touched on some of the major fallacies in traditional grammar. This we did in order to make you understand why this model of linguistic description was later discarded by the structural linguists of the twentieth century.

The traditional grammarians thus gave us a model of linguistic description which was based on ‘parsing’. They described the parts of speech, grammatical form and function of a word in a particular sentence and then divided sentences into parts (i.e. different constituents, phrases, clauses, etc.) and described their grammatical forms and functions by capturing their syntactic interrelations. Though they came under severe criticism from the structuralists (1920s – 1960) they presented a model which, in spite of its intrinsic limitations and the fallacies in practice, did have insights that were used by the linguists after the structuralists.

The traditional grammarians used meaning and intuition in their descriptive framework as a tool but later linguists like Chomsky and the Chomskyans did utilise the native speaker’s intuition as data, though not as a tool in their framework.

The structuralists’ severe reaction against the traditionalists made the pendulum swing to the other extreme and it appears that the traditionalists’ lack of “scientificness” made the structuralists ‘scientific’ with almost a vengeance and in the latter units we will look into this ‘scientific’ model of syntactic analysis in some detail and see what sort of reaction they attracted from their successors in the field, namely the transformational generativists.

As the course proceeds we will keep on seeing all these paradigms of the 20th century and affirming the ancient truth about science : The history of any science is a history of successive modifications. And when the modifications can no longer explain the truth a scientific paradigm is discarded and replaced or superseded by another.

2.1.10. Review Questions 1 :

- (a) What is meant by a ‘fallacy’?
- (b) Answer in one or two sentence(s) on what you understand about the following
 - (i) Latinate fallacy
 - (ii) Written form fallacy
 - (iii) Logical fallacy
- (c) What fallacies of traditional grammar would you associate with the following statements ?
 - (i) Noun is the name of a place, person or thing.
 - (ii) ‘I don’t find none’ – this sentence means ‘I find someone because two negatives make an affirmative.
 - (iii) Shall and will are makers to prove that English has a future tense.
 - (iv) A speaker of English should say “It’s I” in place of it’s me.
- (d) What role does meaning play in traditional grammar ?

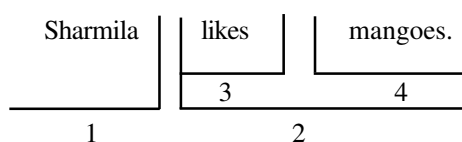
2.2. Structural Syntax

Introduction : We have already seen that the structural linguists (1920s – 1960) rejected the traditional grammarian’s model of linguistic analysis because of what they called ‘fallacies’. In our units on phonology and morphology you have already seen how methodical the structuralists were and how structure-based their descriptions were (Please remember that our courses on phonology and morphology are basically structural phonology and structural morphology). At the level of syntax also they were highly meticulous about making linguistics a science and capturing the syntactic interrelations between the constituents rigorously scientifically without any dependence on meaning or ‘logic’.

2.2.1. Immediate Constituent Analysis : The framework of syntactic analysis used by the structuralists is known as immediate constituent analysis. In this system their objective was to capture the interrelations between the immediate constituents in a structure, meaning, which elements are immediately related to each other in the structure. In other words, they made a distinction between constituents and immediate constituent. Let us consider the following sentence.

Sharmila likes mangoes.

There are three constituents in this sentence. But the syntactic interrelations between the three are different from each other. A constituent analysis (not immediate constituent analysis) of this sentence might only capture the linear constituency relations between the three constituents. But how these three are hierarchically related will also have to be captured for which the structuralists postulated the framework of immediate constituent analysis. An illustration of the above sentence will help you understand the point. The sentence – Sharmila likes mangoes – has at the highest level of hierarchy immediate constituency relation between ‘Sharmila’ and ‘like mangoes’. And then ‘like’ and ‘mangoes’ are immediate constituents of each other at the next lower level of hierarchy. We can represent this immediate constituency relation by using the following box diagram.



Here 1 and 2 are immediate constituents and 3 and 4 are immediate constituents. The important point is that 1 and 4 are not immediate constituents though they are constituents in the same structure. The basic presupposition is that all the constituents in an utterance do not carry equal syntactic load or enjoy equal syntactic status. Their syntactic status is determined by their position in the syntactic hierarchy.

You will have noticed from this diagram that the linguists have used bracketing convention to capture the IC interrelations. And this bracketing convention they have borrowed from mathematics.

This bracketing helps to disambiguate structures and their interrelations which are otherwise ambiguous.

Let us consider the following problem :

$$3 \times 2 + 7 = ?$$

The answer to this problem could be either 13 or 27 because this structure is ambiguous. The ambiguity lies in the order of application of the two processes – multiplication and addition. If we apply multiplication first and addition next we get 13 but if we apply addition first and multiplication next we get 27. In order to disambiguate the structure the mathematicians use the bracketing convention. For example,

(i) $(3 \times 2) + 7 = 13$

but (ii) $3 \times (2 \times 7) = 27$

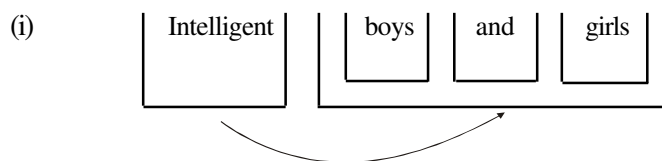
See that the ambiguity is resolved and for (i) you can have only one answer 13 (and not 27) and for (ii) you can have only one answer 27 (and not 13).

This bracketing principle has been used by the structural linguists for resolving ambiguity in linguistic structures. Let's take the following linguistic structure :

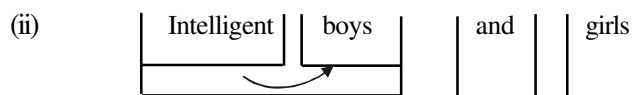
Intelligent boys and girls.

This is an ambiguous structure because 'intelligent' may refer to 'boys and girls' (both boys and girls are intelligent) or on the contrary, it might refer to only 'boys' and not girls (boys who are intelligent and girls). The ambiguity lies in the scope of modification of the adjective 'intelligent'.

By using the bracketing convention (box diagram is basically a bracketing convention) we can disambiguate this linguistic structure in the following way :



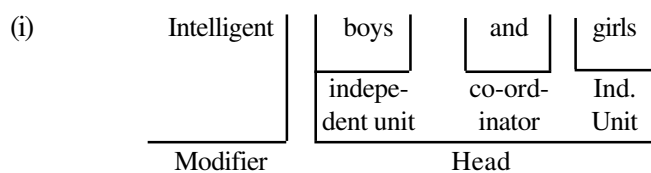
Here 'intelligent' modifies both boys and girls.

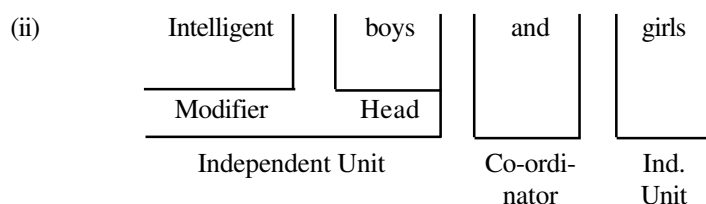


Here 'intelligent' modifies only 'boys' and 'girls' are outside the scope of modification.

This model of syntactic analysis is known as Immediate Constituent analysis (or IC analysis). And the structuralists not only capture the relations between the constituents in a structure by bracketing them but also by labelling them. Without the labels this bracketing system would be inadequate and inexplicit. The labels used by them can be categorical labels, like noun, verb, adjective, etc. or functional, like subject, predicate, verbal complement, head, modifier, etc. As functional labels in linguistic structures capture functional interrelations between the immediate constituents, they are more insightful and explanatory compared to categorial labelling.

And, therefore, in this course we have used this functional labelling. Let us now add functional labels to the diagrams given above.





In our IC analysis framework we will follow the structuralists' five structures which they evolve in terms of five sets of functional interrelation.

1. The structure of predication.
2. The structure of complementation.
3. The structure of modification.
4. The structure of subordination.
5. The structure of co-ordination.

2.2.2. The structure of predication : In the structure of predication the structuralists use binary cuts to arrive at two immediate constituents will have to be subject and the other one predicate. (Here the structuralists have used these two categories more or less the same way as the traditionalists).

Now consider the following sentences :

1.

Yasmeen
Subject

passed	away.
Predicate	

2.

The book on the table
Subject

is mine.
Predicate

3.

That he is very intelligent
Subject

is beyond doubt.
Predicate

2.2.3. The structure of complementation

This is also a binary structure in which one constituent is 'verbal' and the other one is 'complement'. For example,

4.

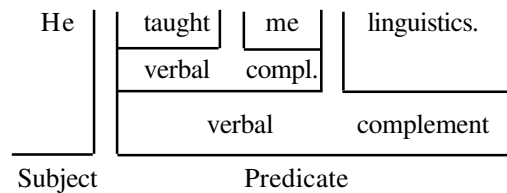
John
Subject

is	a teacher.
verbal	complement
Predicate	

In this structure the complement is grammatically a complement in the sense of traditional grammar. In traditional grammar they say that a complement is an element without which the sentence remains incomplete and ungrammatical. Therefore, in structures with be-type or become-type verbs the verb will be functionally called verbal and the element(s) following the verb will be complement.

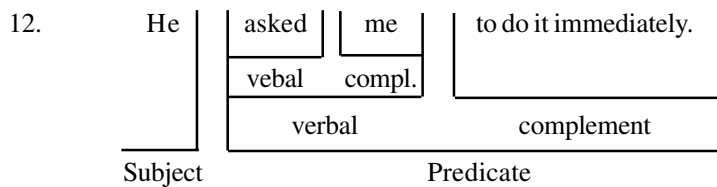
Consider the following sentences with be-type and become-type verbs.

and intuition about the structure will tell you that me is immediately related to taught as well as linguistics is immediately related to taught. (He taught me and he taught linguistics – appears to be the meaning). Therefore, me and linguistics cannot be immediate constituents. So the linguists capture the syntax of this sentence the following way.

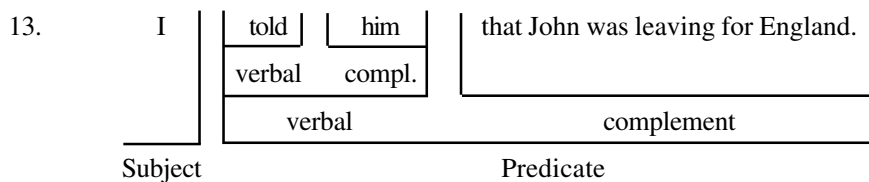


(Please note here that this is not very scientific to call the verb + the first object as the verbal but this is the better of the two options in the framework.)

Let us work out a few more sentences with this structure.



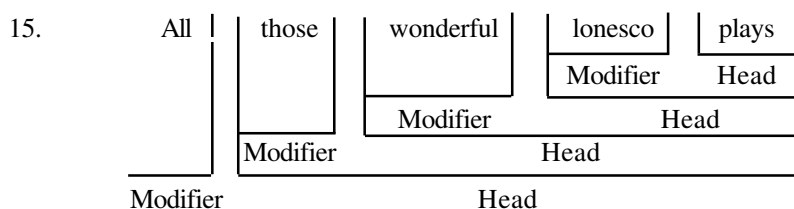
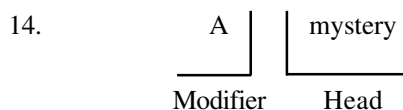
(The infinitival phrase ‘to do it immediately’ is the second object of the ditransitive verb ‘asked’.)

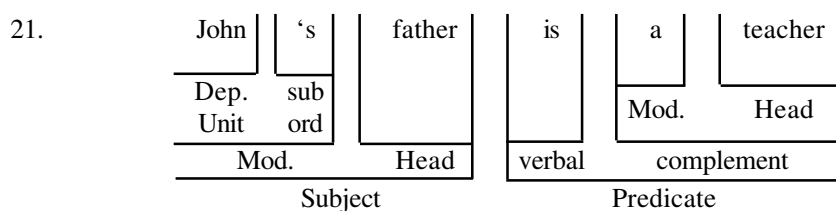


Here the that-clause is the second object.)

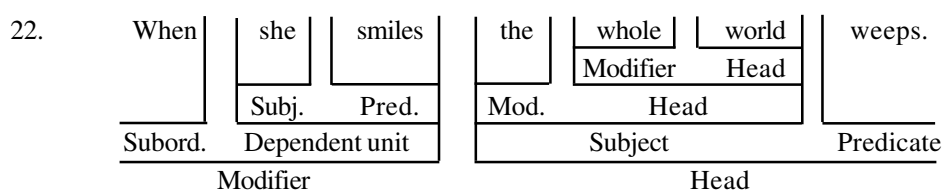
2.2.4. The structure of modification

In this binary structure of modification we have two elements – Head and Modifier. Modifiers usually perform adjectival or adverbial functions. But any element modifying another will be called a modifier and that which it modifies will be called a head. Look at the following examples.





(Here the possessivizer('s) subordinates the noun phrase John).

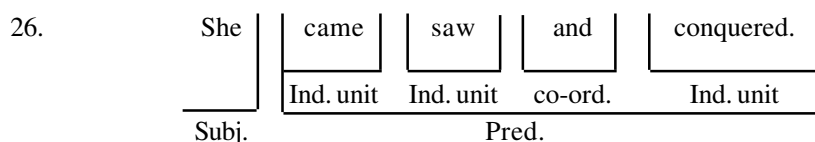
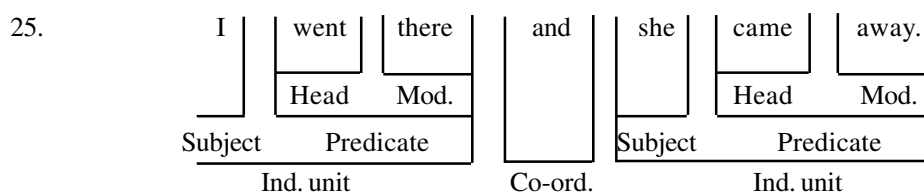
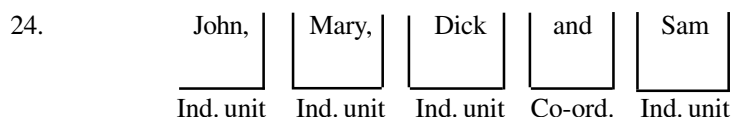
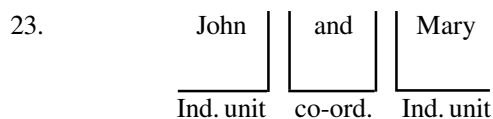


(Here the subordinating conjunction when subordinates the sentence she smiles which is reduced to a subordinate clause to the main clause the whole world weeps.)

2.2.6. The structure of co-ordination

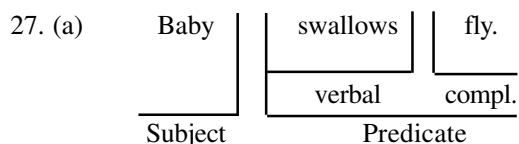
This is the only structure in IC analysis which is non-binary. The immediate constituents in this structure, therefore, will be more than two – Independent Unit – Co-ordinator – Independent Unit. The total number of independent units could be as many as possible depending on the structure.

Look into the following structures.

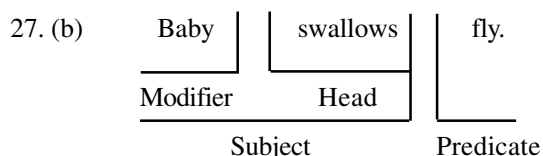


This framework of syntactic analysis is different from that of the traditional grammarians. The structuralists' claim that they could analyse any sentence in a language within this framework appeared to be valid during the heyday of American structuralism. Even this model of syntax

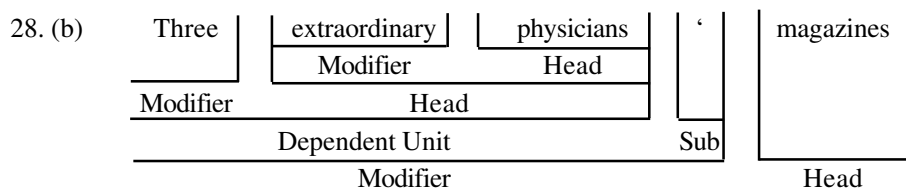
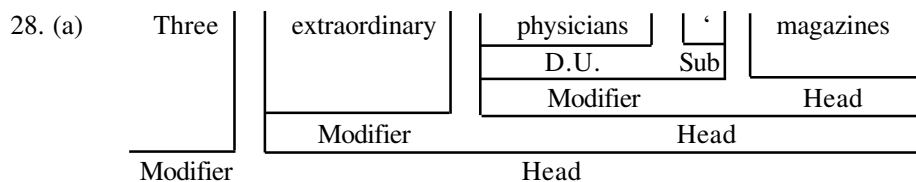
could capture ambiguity and resolve it to a certain extent by showing two different sets of interrelations in two different IC structures.



(The meaning captured is : Baby swallows the fly.)



(The meaning captured is : Small swallows fly.)

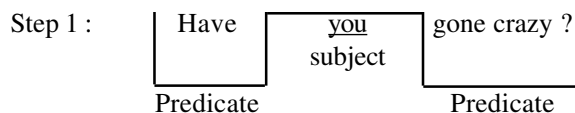


2.2.7. Non-contiguous IC structures

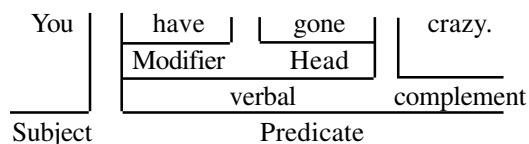
Elements belonging to the same constituent may not occur in their normal word order always. This is true of all human languages. Sentences having such constituents with displaced word order present certain problems in IC analysis. Consider the following interrogative sentence.

29. Have you gone crazy ?

Here the verbal unit have gone is non-contiguous because of the inversion. The auxiliary element have has been shifted from its normal position to the left of the subject NP you. In such cases the linguist would show the discontinuous elements first, rewrite them, and then label them.



Step 2 : This sentence may be rewritten as



Let us consider a few more sentences with discontinuant elements.

30.

He	has	already	done it.
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Rewritten as : He has done it already.

31.

Neither	John	nor	Jonathan could do it.
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Rewritten as :

John	neither nor	Jonathan	could	do	it.
ind. unit	co-ord.	ind. unit	Mod.	Head	compl.
Subject			Predicate		

2.2.8. Summary : Now that we have presented the structural model of syntax in a simplified way rather briefly, you could possibly say that there is nothing revolutionary in this framework. But in spite of it there is no denying the fact that this model had a significant role in the development of the later models of syntax in modern linguistics. It systematized traditional formulations following its own theoretical stance. The framework was first outlined by Leonard Bloomfield in his *Language* (1933) and later elaborated and formalized by the Bloomfieldians. The framework has many weaknesses and limitations and cannot answer many questions satisfactorily but it has drawn our attention to innumerable questions that it has raised. And in the process of trying to understand these questions and solve these problems about language and linguistics, this model appears to be inadequate, mindless and mechanistic, thereby leading to the birth of a more adequate and effective model of syntactic analysis proposed by the new generation of linguists.

2.2.9. Review Questions 2 :

Give immediate constituent analysis of the following English sentences. Use topless box diagrams.

- (i) Drink wet cement and get really stoned.
- (ii) As you sow so you reap.
- (iii) Whenever I feel the world is moving too fast I go to the post office.
- (iv) His wife asked him to clean the dishes.
- (v) I told her not to play on the railway lines.
- (vi) He seems to be an honest politician.
- (vii) But honesty is the best policy.

Review Questions 3 :

Capture the ambiguity in the following structures with the help of immediate constituent analysis.

- (i) She gave her dog biscuits.
- (ii) The mayor asked the police to stop drinking at midnight.
- (iii) She wanted the bucket on the mat with holes in it.
- (iv) He wants to meet the girl in the library.
- (v) The report that the students are studying is true.

2.3. Transformational Generative Syntax

2.3.1. Introduction : In the preceding part of this unit on syntax you have had some idea about the model of syntactic analysis within the structuralist paradigm. This model continued to be the most dominant model of syntax during the four decades of the twentieth century – from the twenties through the fifties. But the inherent weaknesses of this framework started showing themselves in different levels and with respect to various syntactic structures. As a result of this, the basic assumptions of this approach were questioned and its theoretical foundations were shaken. A completely new model of syntactic analysis was proposed as an alternative to the structuralist model by Noam Chomsky in his famous book Syntactic Structures in 1957. This proposal came in the form of a challenge to American structuralism and hence known as Chomsky revolution. In the following sections we will try to look into this Chomskyan model of syntax and see why this model is called revolutionary.

2.3.2. Limitations of the structuralist model : The model of linguistic analysis proposed by the structuralists had its foundations in Behaviourism in Psychology. As a result, the structuralists' notions about language, linguistic data, objectives of linguistic study and procedure used in linguistic analysis were firmly rooted in their commitment to the behaviouristic model of understanding language, language use, language organization and language acquisition.

(i) The structuralists looked upon language only as a form of behaviour – they called it 'verbal behaviour' – and they never believed in anything 'mentalistic' or 'cognitive' about language. They thought, as Bloomfield says in his *Language* (1933), "language is the totality of utterances made in a speech community." So language for them was the total number of sentences produced by the native speakers of a language.

But Chomsky rejected this notion about language. Under the influence of cognitivism, he understood language as a mentalistic activity. The sentences or utterances produced are only what Ferdinand de Saussure called 'parole'. Language is not merely the product but, more importantly, the process responsible for the product. This innate, intuitive judgment about sentence formation, about the well-formedness of utterances is language and this is what Chomsky calls 'competence'. And, therefore, the scientific description of language has to be a scientific description of this 'language competence'.

(ii) For the structuralists, data for linguistic analysis would be a 'linguistic corpus' – a phonetically transcribed version of native speakers' speech collected through informants which the linguist considers to be a representative sample.

But the Chomskians would consider the whole of a language as data. For them the data is also 'linguistic competence'.

(iii) The goal of linguistics for the structuralists was to identify data, record it, describe it within their descriptive framework, and finally classify data into categories or classes at different levels of representation. You will remember that they did apply this principle of identification and classification at the level of phonology – speech sounds first identified and then classified as vowels / consonants, high vowels/low vowels, plosives/fricatives/nasals, etc. At the level of morphology and syntax the same practice continued and we had various classifications of morphemes, words and constituents of a sentence. The structuralists did perform this activity

of classification quite rigorously and meticulously in order to make linguistics an autonomous science.

But is classification or should it ever be the ultimate goal of a science? Chomsky calls it a lower level science as it is taxonomic (classificatory). It fails to capture what a science (or an empirical science) does. So the Chomskyans would say that linguistics has to construct a comprehensive theory on language, if it has to be a science in the real sense of the term. The structural linguists have failed to give us any empirical theory which would explain language organisation and language acquisition.

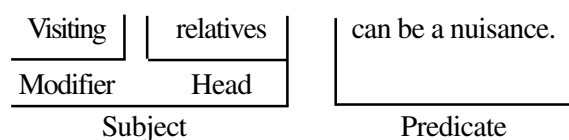
Only a transformational generative model of grammar could adequately capture language through empirical theory construction and raise linguistics to the level of a science.

(iv) And the procedure for language study, therefore, cannot be the structuralists' procedure which is highly ambitious (they used 'discovery procedure') but a procedure which is less ambitious and workable (the Chomskyans call it 'evaluation procedure').

The structuralists, therefore, had a 'physicalist' approach to language (language as 'verbal behavior'). They could conceive of language only in its sentential reality or surface reality. For them the utterance or the sentence as produced was the only reality to be captured. So the sentence was explained by them in terms of the linguistic interrelation that was visible or perceivable at the level of the surface reality. This led to their inability to account for innumerable linguistic structures in which surface level evidence was inadequate for explaining them.

In order to show that dependence on the surface level of the sentence is in itself a limitation for the real or adequate explanation of the syntactic reality, Chomsky presents a few cases of structural interrelations.

2.3.3. Cases of structural ambiguity : We saw earlier that certain cases of structural ambiguity could be resolved within the structuralist syntactic framework. But there are other cases of structural ambiguity which cannot be explained in terms of the available surface interrelations between the constituents / immediate constituents of a sentence. For example, let us examine the following structure :



The structuralist would capture only one meaning of the ambiguous structure – visiting relatives – in the above way of treating visiting as modifier of the Head relatives. And, as we can see it, the meaning captured is – Relatives who visit (someone) can be a nuisance. But any speaker of English intuitively knows that this structure has another meaning – For someone to visit (his) relatives can be a nuisance. And this second meaning cannot be captured by the structuralists in their IC analysis framework.

This shows that the grammar of the language fails to capture what the native speakers perceive. The grammar can give us only the half-truth, and, therefore, according to the transformationalists, is not an adequate model of scientific description. An effective model of grammar must capture the two meanings (on the basis of two different sets of interrelations between constituents) : (i) relatives subj and visit verb (ii) visit verb and relatives object. Then only the structural ambiguity in this sentence can be accounted for and resolved.

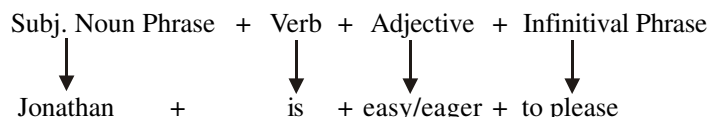
2.3.4. Cases of constructional homonymy

When two structures are similar but are not understood similarly they are said to have constructional homonymy. Look at the following sentences.

Jonathan is easy to please.

Jonathan is eager to please.

These two sentences are structurally similar. Both have the construction –



But in spite of this apparent similarity these two sentences are understood differently. The first sentence, as you know, means – “It is easy to please Jonathan” but the second one means – “Jonathan is eager for (Jonathan to please someone)”. This meaning difference is due to the difference of the syntactic relations between Jonathan and please in the two structures. Whereas in the first please is the verb and Jonathan is its object – (someone pleases Jonathan), in the second Jonathan is the subject and please is its verb (Jonathan pleases someone). The structuralists, it is argued, cannot capture this difference in their syntactic analysis of these sentences; they would treat them similarly as they appear to be similar in the structure on the surface. So structural syntax fails to capture once again (as in the cases of structural ambiguity) what the native speakers capture intuitively.

Please consider the following cases of constructional homonymy.

1. (a) The plucking of flowers
(b) The rising of the moon
2. (a) The visitors are asked to leave the hall by the president.
(b) The visitors are asked to leave the hall by the side door.

2.3.5. Cases of deletion

Sometimes in a language two different sentences appear as one due to the deletion of some elements from their basic structures.

‘Mary loves linguistics more than her husband.’ This sentence appears to have structural ambiguity because it has two meanings. But this ambiguity can be resolved if we can reconstruct the sentence in its original structures (two structures).

- (a) Mary loves linguistics more than her husband. (loves linguistics).
- (b) Mary loves linguistics more than (she loves) her husband.

From these two sentences – (a) and (b) – the elements in the brackets have been deleted, thereby leading these two sentences to the same structural configuration. Thus the ambiguity in the sentences can be resolved in terms the feature of deletion.

But the structuralist explanation for this sentence would not be able to capture the ambiguity as they have no mechanism to retrieve deleted elements because of their theoretical position that a sentence is what appears as the speaker’s speech and not what the speaker intends to speak. They do not believe in anything ‘understood’ or ‘underlying’ or ‘deleted’ in a structure.

Once again, the structuralist model of syntax fails to capture the native speaker’s intuition about cases of deletion.

2.3.6. Cases of paraphrase relation

Let us consider the following sentences.

1. (a) The police diverted the traffic.
- (b) The traffic was diverted by the police.
- (c) The traffic was diverted by the country road.

Sentences 1(a) and (b) are constructionally different but they are understood similarly by the native speakers of English. And sentences 1(b) and (c) are very similar in structure but understood differently in spite of their apparent similarity. On the basis of their surface similarity the structuralists would give similar syntactic description for 1(b) and (c) and because of the structural difference between 1(a) and (b) they would give different structural configurations for 1(a) and (b). This means the grammar goes contrary to the native speaker's intuition. We know that 1(a) and (b) are active and passive counterparts of the same sentence and they have paraphrase interrelations between them. On the other hand, in 1(b) the prepositional phrase by the police is understood not as a mere prepositional phrase but as the by + NP structure in a passive construction where the NP following by is the real agent subject; in 1(c) by the country road is understood as a prepositional phrase (indicating direction) and the agent is not present in the structure. This fundamental difference is perceptible to the native speaker and therefore, has to be captured in the syntactic configuration. But the structural grammarians fail to capture it. They fail because they can't capture paraphrase relation between 1(a) and (b) and constructional homonymy between 1(b) and (c).

2.3.7. Summary : These and many other kinds of syntactic structure the structural linguists fail to analyse the way the native speakers understand them primarily because they analyse sentences as they are in their surface manifestations. But the surface structure is a level, as we have seen already, where the real or logical interrelations between elements in a sentence are not always captured. The surface structure hides a lot of things which the native speaker's intuition can find out and, therefore, an adequate and scientific model of grammar should also find out. If the surface structure is not a reliable level for verification of actual relations or undistorted relations between the constituents of a sentence, the grammar needs to go to a level where these are visible and capturable.

Following this line of argumentation Chomsky realises that the complete dependence on the surface structures of sentences is the reason for the structuralist syntax to have been so inadequate, incomplete and, therefore, 'unscientific' in the right sense of the term.

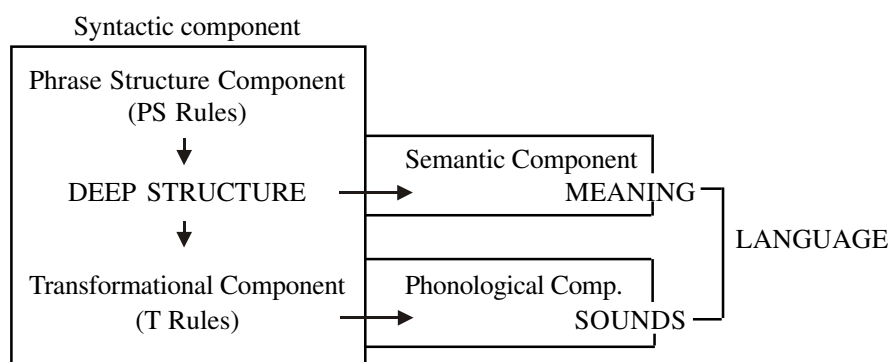
Please notice here that the pendulum has once again swung to the other extreme. Those who rejected the traditional framework on the ground of its 'unscientificness' are being discarded by the linguists of the latter school on the same ground. Chomsky's argument seems to be that the structuralist model is inherently incapable of handling human language which has various levels of understanding and syntactic interpretation.

That is why Chomsky says that a really adequate grammar of a language has to be "an 'externalisation' of native speaker's 'competence'". We have to assume, therefore, that the 'surface' reality of a sentence is not the only reality; there is another linguistic reality of a sentence beyond this surface reality. And Chomsky calls this reality the 'deep structure' reality. So he postulates that every sentence has to be studied and captured in terms of these two levels of

representation – the surface structure level and the deep structure level. We need the deep structure representation of a sentence because the surface structure does not give us the ‘whole truth’ about a sentence. And our postulation of the deep structure would help us to identify and explain all kinds of sentences – actual as well as potential.

For Chomsky, therefore, the deep structure is the level for semantic representation, it is that level where all real and logical interrelations between elements in a sentential configuration are captured. So it is this level that helps us to capture all the meanings of a sentence.

But Chomsky’s postulation has a number of implications. In order to capture semantic representation at the level of the deep structure the linguist has to construct a set of rules (syntactic rules) which will ‘generate’ the deep structure of a sentence (‘generate’ in generative grammar means not to produce, but “to explain or enumerate explicitly”). At that level semantic interpretation(s) will take place and after that the deep structure will be mapped on to its surface structure with the help of another set of syntactic rules. The first set of rules Chomsky calls Phrase Structure Rules (PSR) and the second set of rules are Transformational Rules (TR). So his scheme of grammar is something like the following :



This somewhat detailed discussion was necessary for you to understand the theoretical position of the framework called TG (Transformational Generative Grammar). It was also relevant for your understanding of the development of grammar during the last several decades. Now you are familiar with all the three schools of linguistic analysis and their strengths and weaknesses to a certain extent. You have already seen that TG is not a modification of structural grammar. It is a replacement of the structural framework. Therefore you will see from now on a different approach in syntactic analysis where we will capture or try capture interrelations between elements at the level of the deep structure.

2.3.8. Review Questions – 4

- (i) Mention two major weaknesses of structural grammar. And briefly explain why we call them weaknesses. (100 words)
- (ii) What is constructional homonymy ? Give 2 examples. (60 words)
- (iii) What is the difference between ambiguity in structural ambiguity and ambiguity due to deletion of elements ? Give examples and illustrations. (60 words)
- (iv) What does Chomsky mean by ‘deep structure’ in transformational grammar ? What are the motivations for postulating ‘deep structure’? (150 words)

2.4. Introduction

Now that you are familiar with the theoretical position of the generative grammarians, we can get into the details of their practical analytical framework. We have told you already that this framework tries to capture a structure the way the speakers of the language understand it.

Our plan is to begin with the parts of the sentence like the noun phrase, the verbal group, the verb phrase, etc. and their constituents and then capture the sentence as a higher unit. And in doing so we will not get guided by the surface relations but by the deep structure relations. And the most convenient device for doing so will be the use of the tree diagram. The tree and its branches will give us the constitutional picture of the sentence from the point of view of the native speaker's intuition about the sentence.

2.4.1. The Noun Phrase (NP) Structure

We have already mentioned that a Noun Phrase is a part of a sentence. but before discussing the noun phrase we must clearly state what we mean by a sentence. Many traditional grammars (traditional school grammars, to be precise) define a sentence as a group of words which "express a complete thought". This definition is not very satisfactory because we may not be very sure about : "What is a complete thought ?" Take for example the following sentences :

(1) my neighbours were shouting at each other very loudly.

(2) I could not concentrate on my studies.

(3) My neighbours were shouting at each other very loudly and I could not concentrate on my studies.

If (1) expresses a complete thought and (2) also does the same, what is (3) then ? Does it express one complete thought or two ? But you all know that all of these three are sentences. We find the question raised here a little disturbing because the definition of a sentence as an expression of a complete thought is meaning-based and, therefore, vague. The structuralists banished meaning from the domain of linguistics because of this. But we know that the transformational generativists reinstated meaning, though very cautiously, in linguistics. They recognized meaning as an important element in language but did not use meaning as a criterion or tool for analysis.

In our syntax course, therefore, we will define 'sentence' by trying to capture its features, both functional and structural, in a variety of ways at the same time Collins Cobuild English Grammar (1990) has the description of sentence in the following way :

Sentence : a group of words, which express a statement, question or command. A sentence usually has a verb and a subject and may be a simple sentence, consisting of one clause, or a complex sentence, consisting of two or more clauses. A sentence in writing has a capital letter at the beginning and a full stop, question mark, or exclamation mark at the end.

So 'sentence' is defined comprehensively in terms of (i) functions (statement, question, command) (ii) constituents (verb, subject) (iii) types (simple, complex) and (iv) punctuation.

A sentence, thus, can be of three (or may be four) types— simple, having one independent clause complex, having one independent clause and one or more dependent clause(s), compound,

having more than one independent clause and compound–complex which has more than one independent clause and one or more dependent clause and one or more dependent clause(s).

Simple sentence : John loves Mary.

Complex sentence : If you work hard, you will do better.

Compound sentence : John loves Mary but Mary hates John.

Compound-complex sentence : He is a fool and you know that fools rush in where angels fear to tread.

This classification of sentences are similar to that in traditional grammar to a great extent. But there are differences also. In modern syntax we use terms like clause and phrase very differently. For us, a clause is more comprehensive and inclusive. Verbal structures with -ing and structures with the infinitive to + verb phrase will be treated as clauses. For example, the following sentences have clauses in them which the traditionalists would call phrases :

(a) She wants to live for hundreds of years.

(b) She enjoys listening to music.

(The underlined elements are clauses in modern grammar). These two sentences in our syntactic analysis, therefore, are treated as complex sentences and not simple sentences.

Phrases will be used in the sense of parts of a clause. So a sentence has (or may have) clauses, clauses have phrases and phrases are made of words. So a noun phrase, prepositional phrase, adjective phrase, adverb phrase, etc. function as parts of clauses and when the clause itself is an independent sentence the phrases naturally are parts of that sentence.

2.4.2. Basic sentence (or clause) patterns

The basic sentence patterns in English are of the following types.

(1) Jyoti sings. (Subject - Verbal)

S V

(2) She is a teacher. (Subject - Verbal - Complement)

S V C

(3) He loves cricket. (Subject - Verbal - Object)

S V O

(4) Father bought me a shirt. (Subject - Verbal - Indirect object - Direct obj.)

S V O_i O_d

(5) John made Mary his secretary. (Sub - V - obj. - obj. compl.)

S V O C

If we expand these constituents of the basic sentence types we can do it by expanding the phrases under these functional categories into clauses. So a subject NP can be expanded into a

clause (or sentence for that matter) an object NP or a complement can also be expanded in the similar way.

In the basic sentence type, therefore, we have the essential elements which are obligatory elements or nuclear elements (like S, V, O, C) without which the sentence would be ungrammatical. But it is also possible to have optional or marginal elements in a sentence which can be dropped and yet the sentence would remain 'grammatical' or 'acceptable'. Such marginal elements are called adjuncts. Examine the following sentences :

- | | | | | |
|-----|-----|------------------|-----------------|--------------|
| (a) | She | was listening to | my lecture | attentively. |
| | S | V | O | Adjunct |
| (b) | She | slept | in the library. | |
| | S | V | Adjunct | |

In these two sentences the adjunct is a grammatically (not semantically) redundant element. But even then, an adjunct can also be expanded into a clause.

After this brief discussion on the sentence and the basic sentence patterns along with various functional units in a sentence you would like to come back to the Noun Phrase (NP).

A phrase, we repeat, is a group of words which constitute part of a clause (or sentence). A noun phrase then is a group of words in which the head is a noun.

In the same way, an adjective phrase has an adjective as its head, an adverb phrase an adverb as its head, a prepositional phrase a preposition as its head. And in a verb phrase we have a verb (or a verbal group, to be precise) as its head.

When we say that in a noun phrase the noun is the head, what are the other elements in it other than the head ? The other elements, if any, would naturally be the modifiers of the head noun.

Let us take a few examples.

1. girl (NP consisting of a noun only without any modifiers)
2. a beautiful girl (NP consisting of the head noun 'girl' and the premodifiers 'a' and 'beautiful')
3. girls from a respectable family (NP consisting of the head noun 'girls' and the postmodifier which is a prepositional phrase 'from a respectable family')
4. a beautiful girl from a respectable family (NP consisting of a head noun, premodifiers and post-modifiers).

You will have realized that a premodifier occurs before the head noun and a post-modifier comes after the head noun. And they can be more than one on either side of the head noun.

2.4.3. In this course we will discuss six major structures of the noun phrase.

The NP with premodifiers (s) : We said already that an NP can occur without any Pre- or Post-modifiers. In that case we will capture the structure of the NP the following way with the help of a tree diagram :