UNIVERSITY OF CALICUT

SCHOOL OF DISTANCE EDUCATION

STUDY MATERIALS

M.A. ENGLISH

(FINAL - 1997 ADMISSION ONWARDS

PAPER - X (OPTIONAL - V)

LINGUISTICS

CUP /9716/13/100 - 1

UNIVERSITY OF CALICUT

SCHOOL OF DISTANCE EDUCATION

STUDY MATERIALS

M.A. ENGLISH

(FINAL - 1997 ADMISSION ONWARDS

PAPER - X (OPTIONAL - V)

LINGUISTICS

ABSTRACT OF CONTENTS

DIACHRONIC VS. SYNCHROMIC

The distinction between the diachronic and synchronic approaches to the study of language was first made by Ferdinand de Saussure who is considered as the father of modern linguistics. The two other important contributions he made are 1) the distinction he made between language and parole and 2) the view that language is a system of systems.

"Synchronic" which is often referred to as descriptive study of language is concerned with language as it exists at a particular point of time. (For example, the study of English as existed during Shakespeare's time). The diachronic or historical study of a language is concerned with the historical development of a language (History of the English language may be cited as an example).

Synchronic description is not restricted to the analysis of modern spoken language. Synchronic analysis can be carried out in respect of dead languages also. Diachronic study of a language always presupposes a synchronic study of a language. Saussure makes an analogy of chess to make this point clear. Apart from time there may be other factors also which determine the developemnts from one synchronic "state" to another.

To put it briefly, the synchronic linguistics describes a state whereas diachronic linguistics describes relation between successive terms. In general the study of static linguistics is much more difficult than the study of historical linguistics.

PRESCRIPTIVE VS. DESCRIPTIVE

Modern linguistics makes certain assumptions of which the important ones are the following.

1) Speech is primary, writing secondary 2) There are no backward languages 3) Change is natural for languages 4) There are no pure forms of languages and 5) Linguistics is descriptive, not prescriptive.

The prescriptive grammarian tells the speakers what forms they should use and what they should not. They blindly followed whatever conventions were followed by those who went before them.

The descriptive approach to language is different from the other approach in the sense that it believed in the theory that the task of the linguist is to describe how languages function

Both prescriptive and descriptive linguists make use of rules.. But the prescriptivist rules are like rules of government and descriptivist's rules are like rules of physics.

Prescriptivist approach does become important when a unifies literary standard is called for. But even literary standards are subject to change.

SPEECH Vs. WRITING

Speech and writing are two modes of communication. The traditional grammarians never gave any importance to speech. They believed that speech is corrupt version of writing.

The modern linguists on the other hand believe that speech is more important for more reasons than one. For example children start speaking first and only at a later stage do they start writing.

However, writing also is important in its own way. Sometimes spoken language does make use of certain items which are used in the written form. Both the modes are to be given equal importance because in communication both play complementary roles.

1. DIACHRONIC AND SYNCHRONIC APPROACHES TO THE STUDY OF LANGUAGE

Ferdinand de Saussure a Swiss scholar is usually reffered to as the father of modern linguistics. His seminal work Course de Linguistic General (A course in General Linguistics) was published in 1915. (It was a posthumous work). It is a collection and expansion of notes taken by Saussure's students during various lectur courses that he gave. Though it is rather

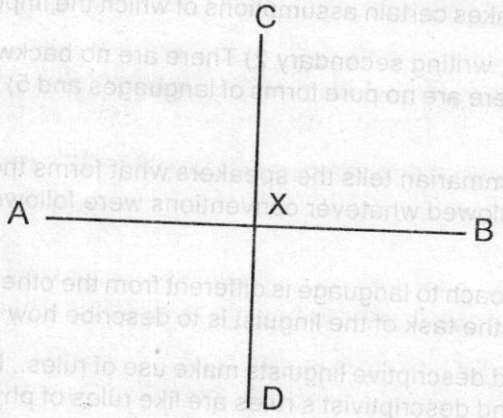
fragmentary in character its influence has been tremendous in European linguistics since it played an important role in the shaping of linguistic thought in Europe.

Saussure is mainly remembered for the three major contributions he made to Linguistics. Firstly,he made a distinction between two approaches to the study of language. the synchronic approach and the diachronic. Secondly, he distinguised between langue (anstract knowledgs of language) and parole (concrete manifestation of language). Thirdly, he established that language is a system of systems where linguistic symbols are combined to form a meaningful string of symbols.

Now let us look at the terms "synchronic" and "diachronic" a little more closely. The Synchronic (or descriptive) study of the language is concerned with that language as it exists at a particular point of time. Thus if we make a study of Malayalam as it was spoken in 1940's or the English of Arundhati Roy's time,, it would be a synchronic study. It means that the point of time which we talk about in a synchronic study need not necessarily be fixed in the present. It may be as distant from us as the existing documentation. In contrast to this, the diachronic (or historical) study of a language is concerned with the historical development of that language through time. A study of the history of Malayalam language is diachronic. These two points of view were often not clearly distinguished before Saussure. This does not mean that the two approaches, Synchronic and diachronic, cannot be usually combined for the solution of specific linguistic problems.

Saussure draws the inter-relationship of the two dimensions in this way:

Here AB is the Synchronic "axis" of simultaneities. CD is the diachronic "Axis of succession". Ab is language at an arbitrarily chosen point in time on the line CD (at x), CD is the historical path the language has travelled, and the route which it is going to continue travelling.



"Ever since modern linguistics came into existence", Saussure complained, "it has been completely absorbed in diachrony". He thought that linguistics having accorded too large a place to history, should "turn back to the static view point of traditional grammar but in a new spirit and with other procedures".

It is important to note that synchronic description is not restricted to the analysis of modern spoken language. We can carry out a synchronic analysis of "dead" languages if written records are available. However, the description of a "dead" language is likely to be incomplete as it will be impossible to check the validity of certain statements made about the language for want of evidence.

It is also to be noted that it is impossible to consider the way a language has changed from one state to another without some knowledge of the two states to be compared. This need not be a pair of complete synchronic descriptions, but some non-historical analysis is essential as preliminary. It follows that a diachronic investigation always presupposes a synchronic study (see David Crustal (1973). In a way comparative linguistics, in its most usual sense is diachronic as it is concerned with relationships between languages over periods of time. In the three dichotomies, langue - parole, paradigmatic - suntagmatic and synchrony - diachrony, the first

two have correlative terms of which neither can be studied without taking the other into account. The third one is not so, synchrony can in fact be studied quite separately from diachrony. In a sense Saussure turned the traditional view of historical linguistics upside town. (see Lepschy (1972). the nineteenth - century linguistics was primarily concerned with the diachronic whereas the twentieth - century linguistics gives focus to synchronic descriptions. It implies that historical considerations are irrelevant to the investigation of particular temporal. "States" of a language. The application of this principle may be illustrated by means of a famous analogy used by de Saussure, where he compared languages to games of chess.

In the course of a game of chess the state of the board is constantly changing.But at a point of time the state of the game can be fully described in terms of the positions occupied by the several pieces. It does not matter how the players arrived at the particular state of the game. This state is describable synchronously without reference to the previous moves. Similarly, languages, according to Saussure, are constantly changing. Just as the state of the chess board at some particular point of time can be described without reference to the earlier moves which contributed to that particular state, the successive states of a languages can be described independently of one another. (See de Saussure (1964) for more details).

The distinction between synchronic and diachronic description must not be understood to imply that time is itself the determining factor in language - change. There are many factors both within and outside the language which may determine its development from one synchronic "state" to another. The passage of time merely allows for the complex interaction of these factors. Also, it should be noted that the notion of diachronic development is applied in the comparison of "states" of a language relatively far removed from one another in time. The temporal sequence in which the begining and the end of a sentence are arranged is, from the view of linguistic study, of a different kind from the temporal sequence along with language changes. The possibility that we might begin a sentence in one language and finish it in a different one need not worry us because our language is changing all the time even though we are not aware of it. Of course language takes more time to change than we take to utter a sentence. The language we use is an essentially synchronic system, even though it involves the use of strings of elements which may manifest themselves, in the spoken utterance, along a time sequence.

In short, the aim of general synchronic linguistics is to set up the fundamental principles of any idiosyncratic systems, the constituents of any language - state. Diachronic linguistics studies relations between successive terms that are substituted for each other in time. The study of static linguistics is generally much more difficult than the study of historical linguistics. That is because evolutionary facts are more concrete and striking. It is easy to follow a series of changes. But the linguistics that penetrates values and coexisting relations presents much greater difficulties.

Unit II

PRESCRIPTIVE VERSUS DESCRIPTIVE APPROACHES TO LANGUAGES STUDY

There are cerain important features which make modern linguistics stand apart from the linguistics of previous periods. For example, whereas in the traditional approaches written form of a language got prominence, speech is primary in the new approach. The modern linguistics takes the view that there are no backward languages and there are no forms of language which are pure. It also takes the position that change is natural for languages.

The traditional grammarians not only assumed that written language was more fundamental than the spoken, but also that a particular form of the writtenn language, namely the literary language was "more correct" than all other forms of the language, written and spoken. They even thought that it was their mission as grammarians to "preserve" this form of the language from "corruption". But the modern grammarians believe that linguistics is descriptive and not prescriptive, contrary to the view taken by the traditionalists.

A prescriptive grammarian tells the speaker what forms and what rules they ought to use. They started prescribing their do's and don't's when they discovered that current speech was quite different from the kind of languages they imagined to be pure and beautiful. John Dryden. for example, did not like prepositions at the end of a sentence. He considered them ugly. Every grammarian since Dryden blindly repeated that a sentence ending with a preposition (often referred to as "preposition stranding") was "incorrect". At the same time it is a common knowledge that sentence like "This is the house they lived in" or "Who did they speak to " are perfectly alright to the educated native speakers of English. But a prescriptive traditionalist would consider it wrong for the native speakers to end a sentence with a preposition. Similarly there has been a belief that there exists an absolute standard of correctness, Dictionaries which included certain words which are "bad" (lie ain't or finalize) were violently condemned. The fact is that people who by every other standard must be judged to be cultivated speakers do use ain't (see Gleason Jr. (1965.)

one of the important points that the prescriptive grammarians miss is that language is not a "monolithic" phenomenon. The same language will have regional and social variations and each socially or regionally differentiated form of the language has its own standard of "purity" and "correctness" immanent in it. This makes us believe that the linguists' first task is to describe the wa y people actually speak (on write) their language, not to prescribe how they should speak and write. This is what we mean by descriptive approach to the study of language. In this approach, a linguist describes the forms and rules the native speakers actually use. A descriptive linguist would simply observe that a certain construction (or constructions) is acceptable because native speakers use it. If the linguist succeeds in generalizing properly from the data before him, he produces a descriptive grammar. A successful descriptive grammar provides for any sentence in the language, a description. Such a description is a selection, of rules which properly combined, define a sentence pattern which may be considered as exemplified by a given sentence. (see Gleason Jr. (1970.)

Both the prescriptive and the descriptive grammarians make use of "rules". The rules which the prescriptive grammarians make use of, like the rules of government, tell the people what they should or should not do. The rules of the descriptive grammarians, on the other hand, are like the laws of physics or biology. They describe what actually happens or is done.

At the time, it should be remembered that in distinguishing between what is descriptive and what is prescriptive, the linguist is not saying that there is no place for prescriptive studies of language. There might be valid cultural, social or political reasons for promoting the wider acceptance of some particular language or dialect at the expense of others. There might be administrative or educational advantages in having a sort of unified literary standard. However, it should be borne in mind that the literary standard in itself is subject to change. Also the so called literary standard will be based on the speech of one socially or regionally determined class of people and so it need not necessarily be "more correct" or "purer" than the speech of any other class or region.

To put it briefly, it is high time we made a fresh look at the whole concept of language itself. The terms "standard" language, "non-stansard" language etc. are relative. It is said that the language that is spoken in one part of China is completely unintelligible to the people in the other part of the country though the language spoken is Chinese! In the light of these it is incorrect for anyone dictating to us to speak certain variety of our first language or other languages. Naturally prescriptive becomes an outdated notion and what is important is to describe the behaviour of a language or languages. A suitable descriptive grammar of English will include statements which will form a sentence pattern "subject - verb - object". Thus we get a sentence like "I saw him". It should be possible to find the proper rules, combine them into this sentence pattern, and thus provide a description for the sentence. Many linguists have rejected prescriptive grammars as pernicious distortions. the fault is not that these grammars are prescriptive, but that they are based on inadequate or false description. the usuages which are condemned are often quite obviously neither understood nor correctly diagnosed. There is even a temptation to prescribe patterns which seem some how attractive even if not in actual

use and perhaps incompatible with established and approved constructions. To put in a nutshell linguistics is a descriptive, not a prescriptive science.

THE TWO MODES OF COMMUNICATION SPEECH AND WRITING

Language is generally defined as a means of communication. In communication both spoken and written mode assume significance in their own way. In fact, there was a time when written language received more attention than the spoken form. The traditional grammarians held that the spoken form of language was inferior to the written form. They considered the spoken form as a corrupt version of the written language. As a result, their descriptions were based on the written language and they tended to ignore the spoken language altogether. When the traditional grammarian maintained the principle of the priority of the written language, he has thinking primarily of the language of literature and he would tend to say that the literary language was the "noblest" or most "correct" form of the language.

The modern linguists, on the other hand, believe that the spoken form is primary and that the system of writing is baed on the spoken form. For them speech is primary because in our daily life we make use of speech more than we make use of writing. Secondly, there are many languages for which no writing system has been evolved as yet. At the same time there is no language only with the written form and no spoken form. Also, historically the written form appeared much later than the spoken form. The relative antiquity of speech and writing, is however, of secondary importance. Far more relevant to understanding the relation between speech and writing is the fact that all systems of writing are demonstrably based upon units of spoken language. (see Lyons (1969.) to cap it all, children learn to speak their first language and learn to write only later.

In fact, speech and writing are two basic manifestations of a language. Each has its own function. In some areas there may be a one - to - one correspondance between speech and wriing. But in a number of areas there is no one - to - one correspondance between the units of speech and the units of writing. In other words, the relationship between speech and writing is not so simple or easy, for they are by no means identical. For example, no writing - system represents all the significant variations of pitch and stress which are present in spoken utterances. The conventions of punctuation to distinguish different kinds of sentences and the practice of italicizing words for emphasis is constitute an indirect and imperfect means of supplying this deficiency.

Most linguists now prefer to study the spoken forms of the language. they argue that the oral approach is justified, firstly by the fact that historically it is evident that speech must have preceded writing. The earliest form of writing dates from about 3300 B.C. but the spoken form of language must have been used much earlier. If one wishes to study language, one should go to the primary source, that is spoken language, rather than to the derived, secondary source, that is written language. That is because written language is a"language" only to a minority of the word's polulation. The question of how to represent spoken language exactly has been a problem though the phonetic transcription might come nearer to it.

In this context, it is to be remembered that in the more advanced civilizations a highly developed written language is in daily use by millions. reading of the newspapers can be taken as an example.Literature, scientific and legal writing etc. are also to be taken into consideration. Some of them are based on oral languages and others are not. Sometimes developments in written language do have an influence on spoken language. For example, the words "chortls", "galumph" etc. from the writing of Lewis Caroll and words like UNESCO derived from written initials have found a place in the spoken language. Also, children sometimes refer to words they have come across in comics. This might even affect the adult language (see Wallwork 1976). Exceptionally a written language becomes completely independent of the spoken language from which it originally derived. This happened notably in the case of Latin, which was used for centuries in Europe as the language of religion, administration and scholarship.

The earliest form of writing is probably that of the Sumerian civilization about 3300 B.C. The forerunners of our written signs were nearly all pictorial or photographic, where a picture conveyed a message. Primitive picture conveyed messages in the same was as modern cartoons. Later the pictures were simplified and conventionalised. Some times the symbols even represented ideas. Signs gradually came to be associated not with the thing or idea which they represented, but with the sound of group of words.

Think	Speech representation	Written representation
Idea	→ (symbol) →	(Symbol)
(e.g. "sun")		

At another stage symbols represented, not individual sounds, but syllables. This is true of Japanese even today. the development of the modern alphabet where symbols represent sounds is much more economical.

The system of writing thus may be categorized into pictographic or ideographic (where each sign corresponds to a thing, an object, an idea etc.) Logographic (where each sign corresponds to a word). syllabic (where each sign corresponds to a syllable), alphabetic (where each sign corresponds to a sound unit that makes a difference in meaning) and phonetic (where each sign corresponds to a sound). Word symbols have advantages over symbols for smaller units: many more can be packed on a page, and the scribe if he knows the system well enough, can go faster than if he must write syllable by syllable, and faster still than if he must go letter by letter.

In the description of a spoken language, the linguist generally finds that he must recognize units of three different kinds (as well as many others): Sounds, Syllables and Words. the systems of writing take one or other of these units as basic, alphabetic systems being based on "sounds" syllabic on, "syllables" and ideographic on "words".

To sum up, let us admit that there are two major independent forms of the "same" language - the written and the spoken - which are similar in several respects and independent in certain other respects. In English for example, intonation is there in spoken form and not in the written form. On the contrary, there are certain items which appear in the written form and not in the spoken form. For example the structure "passengers are requested to refrain from smoking" will not find a place in the spoken variety.In short, speech and writing are to be seen as two basic manifestations of language, which are to be given importance when we define language as a tool of communication.

REFERENCES

Bolinger, Dwight. Aspects of language, New York:
Harcourt, Brace & Word, inc. 1968.

Crystal, David. Linguistics, Harmondsworth:
Penguin Books 1973

de Saussures, Ferdin and Course in General Linguistics, London:
Peter Own 1964

Gleason. Jr., H.A. An Introduction to Descriptive Linguistics, New Delhi:
Oxford & IBH Publishing Co. 1970

grammar
New York, Holt, Rinehart and Winston Inc. 1965.

Structural Linguisstics London:
and Faber 1972

Lyon. John Introduction to Theoretical Linguistics:

Cambridge University Press, 1969

Vera, S.K. & Krishnaswamy. N. Modern Linguistics: An Introduction. Delhi

Oxford University Press 1989

Wallwork, Jf. Language and Linguistics. London:

Heinemann Educational Books 1976

MODEL QUESTIONS

I Write an essay on each of the following

1) Diachronic and synchronic approaches to languages
2) How does prescriptive approach to the study of language differ from the descriptive approach?
3) Consider speech and writing as two important modes of communication.

II Write short answers (in a paragraph) on the following:

1) The basic assumptions of modern linguistics
2) Writings as a mode of communication
3) Study of a "state" of language
4) The importance of descriptive approach in the study of grammar

Prepared by

Dr. K.V. SURENDRAN

Institute of English and Foreign Languages

Kannur University

Thalassery - 670 661

SPEECH:
PHONETICS AND PHONOLOGY

INTRODUCTORY

Speech is as old as man and speech in one sense, is civilisation itself. The way we talk tells more about us than any other activity of our life. How do we talk? What is the mechanism behind the production and reception of speech sounds which enables a social group to communicate with each other? We communicate through language which is (scientifically) defined as a system of arbitrary vocal symbols by means of which human beings communicate (co-operate). Only human beings are able to communicate using symbols which have meaning dependant on conventions, and they are functional only with a particular group.

Symbol is a specialised sign. The difference between the symbol and sign is only up to a degree. Sign is a denotation while symbol is a connotation. There are vocal symbols and visual symbols; the language of gestures is non-vocal. Visual symbols are secondary to vocal symbols and we usually use it in writing and reading.

"Arbitrary" means a signifier is "selected by a signified without any rhyme. There is nothing intrinsic in composing sounds in a word.

The speech community is defined by the criterion of mutual intelligibility. If the code used by the encoder (speaker) is intelligible to the decoder (listener), it is assumed that he belongs to the same speech community. The thoughts or parts of the thoughts of encoder are put into the minds of the decoder by means of this system i.e., the language.

A speech event can be analysed into following components

encoding] [code] [decoding

(Speaker) (Message) (Hearer)

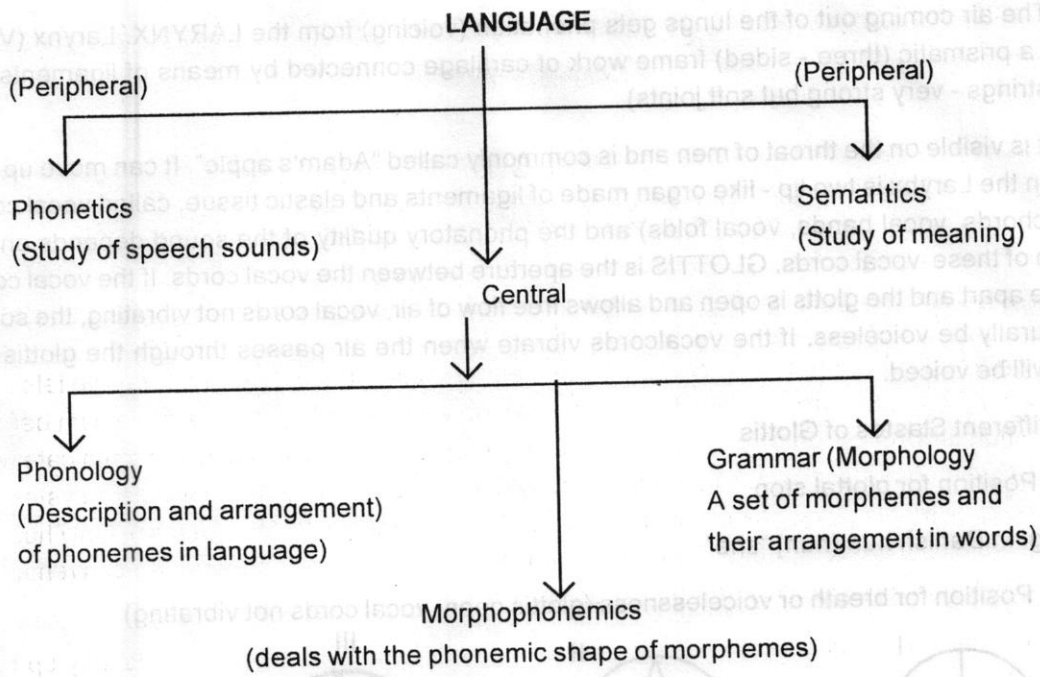
Encoder selects the sounds from the whole of the language. Once the message is uttered the speaker has no control over it. The decoder interprets the message.

Linguistics is concerned mainly with the message or code.

Spoken language consists of succession of sounds (phones or linear/segmental feature of sounds) emitted by the organs of speech, together with certain "attributes" (prosodies or supra segmental features of speech). These successions of sounds are composed of speech sounds and glides. Speech sounds are certain acoustic effects voluntarily produced by the organs of speech. They are the result of definits actions performed by these organs. A "glide" is the transitory sound produced when the organs of speech are passing from the position for one speech sound to that of another by the most direct route. Glides occur as that natural and inevitable result of pronouncing two speech - sound one after the other. Most of the glides acquiring in English require no special consideration in the practical teaching of language.

Phonetics and Phonology

Charles F Hocklett in his "Course in Modern Linguistics" analyses language into various sub - systems.



Phonetic and semantic sub systems are labelled as peripheral subsystems because sounds and meaning (interpretation) have closer relationship with the external world. Phonological and gramatical and morphemic subsystems are considered as central because they are more confined to language itself.

PHONETICS - "Phone" means a "speech sound" and "phonetics" is the study of speech sounds.

A speech event involves production, transmission and reception of speech sounds. Hence speech sounds can be studied from these angles and accordingly there are three different branches for phonetics - i.e., articulatory phonetics (production); acoustic phonetics (transmission); and auditory phonetics (reception of sounds)

THE SPEECH MECHANISM

The speech mechanism can be described in terms of

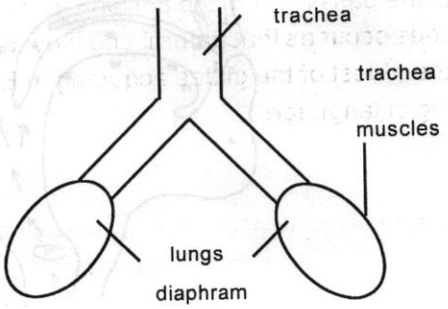
I. Respiratory system (source of energy for the procuction of (lungs, traohoa) sounds;

II. Phonatory system (gives voice to the sounds)

III. Articulatory system (Modulates the air column enabling us to produce different types of sounds

(pharynx, the oral cavity and the nasal cavity)

The respiratory system of the human body, which includes the lungs and the intercostal muscles which help the lung - walls to contract and expand and whose primary function is to breath - in the air for the existence of life; supplies the source of energy for the production of speech sounds. It is the air from the lungs pumped out through the windpipe (trachea), passion through the glottis into the oral cavity which ultimately passes off the lips as speech.



The air coming out of the lungs gets phonation (voicing) from the LARYNX. Larynx (Voice box) is a prismatic (three - sided) frame work of cartilage connected by means of ligaments. (fibrous strings - very strong but soft joints).

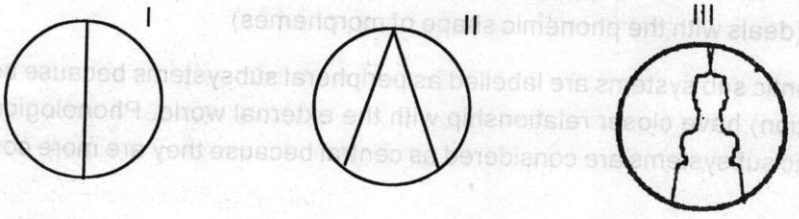
It is visible on the throat of men and is commonly called "Adam's apple". It can move up and down. In the Larybx is two lip - like organ made of ligaments and elastic tissue, called vocal cords (vocal chords, vocal bands, vocal folds) and the phonatory quality of the sound depends on the position of these vocal cords. GLOTTIS is the aperture between the vocal cords. If the vocal cords are wide apart and the glotts is open and allows free flow of air, vocal cords not vibrating, the sound will naturally be voiceless. If the vocalcords vibrate when the air passes through the glottis the sound will be voiced.

Different Stastes of Glottis

I. Position for glottal stop.

Eg. In Danish hun (hun) "she"

II. Position for breath or voicelessness (glottis open, vocal cords not vibrating)



III. Position for voiced sounds
(vocal cords vibrating)

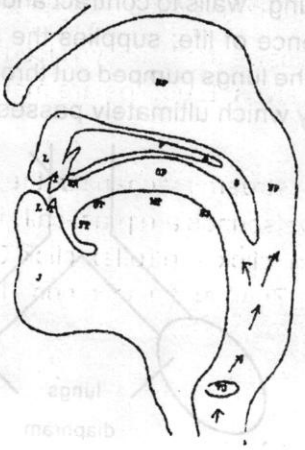
IV. For whisper state, glottal area will be equal to that of III but tension will be different (All voiced sound will become voiceless or less voiced in whisper state.)

V. For Murmer glottal area will be greater than that of III but less than that of II.

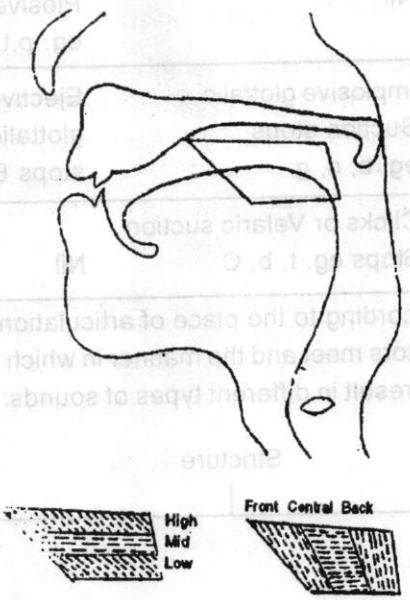
Human vocal apparatus is the articulatory system for the speech mechanism. "Articulation" is the bringing together (or near each other) of two organs in the production of speech. It is in the vocal tract the air coming out from the lungs through the larynx gets modulated producing different types of sounds. A look at the sagittal section of the human vocal tract will help us to understand the process of speech.

ORGANS USED IN SPEECH

NP. Nasal Passage
L. Lips
T. Teeth
AR. Alveolar ridge
TT. Tip of tongue
J. Jaw
FT. Front of toungue
MT. Middle of tongue
OP. Oral Passage
P. Palate
H. Hard Palate
S. Soft Palate
VC Vocal Cord
BT Back of tongue



VOWEL CHART IN THE MOUTH



The variation in the modulation of the air column in the vocal cavity results in the variation in the quality of the sounds produced. Such variation is effected with the help of the articulators (the supra - glottal speech organs) active (movable) and passive (static) in the oral cavity. Tongue and the lower lip are the active articulators while the entire roof of the mouth and teeth form the passive articulators. The various possible positions of the active articulators in relation to the passive articulators (i.e. Strictures) result in different types of sounds. Speech sounds are classified according to the place (point) of articulation (i.e. where the two articulators meet) and manner of articulation (i.e. how the air is pushed out).

We have already noted that Air - Stream Mechanism is the basis of all sounds. There are three types of air - stream mechanisms (1) pulmonic air stream mechanism where the "initiator" (i.e. it sets the air stream in motion) is the walls of the lungs. An air - stream can be either "ingressive" (sucking - in the air) or egressive (puffing out of air). Pulmonic egressive air stream is the basis of almost all the speech sounds in all the languages. Pulmonic ingressive air stream mechanism might occur in non-linguistic situation but very rarely in linguistic situation

2) Glottalic air - stream mechanism. Here the initiator is the larynx with closed glottis. In Glottalic ingressive air stream larynx will be put down and the sounds produced are termed as "implosives" (i.e. Plosives with a suction of air) (noted as b, d, g).

While plottalic eggressive air stream produces "ejectives"

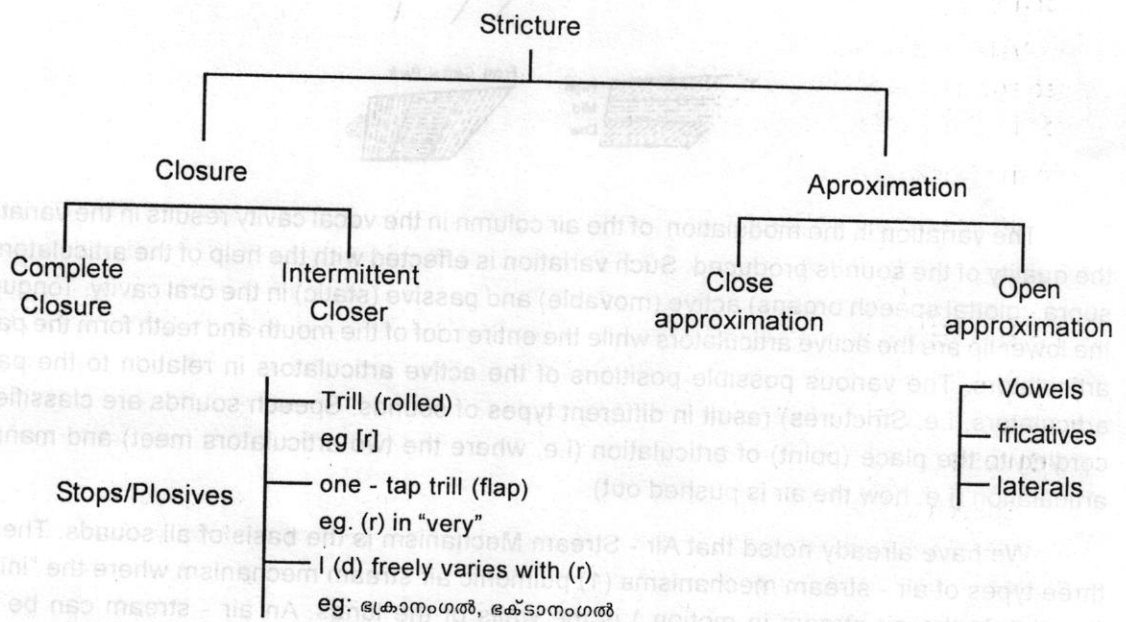
(/p'/, /t'/, /k'/) Implosive are usually voiced. Some African languages like Swahili Hansa, and Xhosa Igbo have implosives. Ejectives are marginal. Implosive are available in Sindh, an Indian language.

3) In Velaric air - stream mechanism the initiator is the back of the tongue set against the velum. Velaric egressive sounds are practically impossible. While velaric ingressive air stream will result in "clicks" (dental click - retroflex click C - lateral click - b). Clicks are common in some African languages like "Zulu" and also in non - linguistic contexts.

To sum up, the theory behind the production of plosive consonants are as shown in the table below.

Air Stream-mechanism	Ingressive	Egressive
1) Pulmonic	Nil	Plosives (or pulmonic pressure stops) eg. p,t,k
2) Glottalic	Implosive glottalic Suction stops eg. b, d, g	Ejectives or glottalic pressure stops Eg. p', t', k'
3) Velaric	Clicks or Velaric suction Stops eg. t, b, C	Nil

Sounds are classified according to the place of articulation and manner of articulation. ie. The point where the two articulators meet and the manner in which air passes through the stricture. Different types of strictures will result in different types of sounds:



In addition to these classifications sounds are classified into two major divisions – oral and nasal - depending on the passage through which the air escapes while uttering a sound (fig.1) The air coming out through the glottis can escape either through the oral cavity - if the velum (soft palate) is raised so as to touch the back wall of the pharynx, closing the nasal passage (velic passage/nasopharynx) or through the nasal passage by lowering the velum, thereby opening the velic passage. In the former case we hear oral sounds while in the latter the sounds are nasals. There can be a third position where the velum will be slightly raised allowing the air to pass through both the passages - oral and nasal. In this case sounds will be nasalised.

When the air passes through the glottis if the vocal cords vibrate the sound will be voiced and if not, voiceless. The number of vibrations of the vocal cord in unit time (per second) determines the frequency of the sound. The more the number of vibrations the higher the frequency. Among men, women and children, children's voice has the highest frequency while men's voice has the lowest.

In short, sounds are defined based on the following factors:

1. The Air Stream mechanism (initiator)
2. Nature of the air stream (ingressive/egressive)
3. State of glottis (voiced/voiceless)
4. State of the velum (oral/nasal/nasalized)

5. Active articulator (lower lip. apex, centre, back uvula)
6. Passive articulator (Upper lip, alveolum, palate, velum, back wall of pharynx
7. Nature of stricture (closure, approximation etc.)
8. Degree of closure / approximation.

Note the following terms:

Velum or soft palate is the rear end of the root of the mouth (a point of articulation)

Velic - is the nasal passage in the trachea, when the velum is lowered air from the lungs passes through the velic passage in the pharynx.

Velar - is the sound produced when the active articulator (back of the toungue) touches the velum (passive articulator) et. /K/, /g/, /h/, /x/ etc.

Velaric - is the name of the air stream mechanism where the back of the tongue sets air in the pharyngeal region into motion.

Velarized - is used to refer to the "secondary articulations" where the back of the tongue is raised against the velum while a primary articulation is carried out. eg. The second /l/ in the English word "little" is a velarized alveolar lateral. marked by a diacritic [~]

(i) Alveolar lateral [l]

(ii) Velarized alveolar lateral [r]

Unit II

THE DESCRIPTION AND CLASSIFICATION OF VOWELS AND CONSONANTS

1. VOWELS

Speech sounds are broadly classified into two groups: vowels "(vocoids) and consonants' (contoids). The terms vocoids and contoids are in the phonetic level while vowels and consonants are used at the phonemic level.

A vocoid / vowel is a voiced sound during the production of which air excapes through the mouth over the centre of the tongue freely and continuously, unaccompanied by any audible frictional noise. Eg. The medial sound in the words pit, pet, pat, pot, put. Vowels are the carriers of chest pulse and hence they form the nucleus of a syllable. Vowels are articulated with a stricture of "open approximation" i.e. the active articulator, the tongue, is raised towards the passive articulator, the roof of the mouth, so as to leave sufficient space between them for the air to escape freely and continuously. The highest level to which the tongue can be raised thus to produce a sound without any frictional noise is called the "vowel limit".

Vowels are classified on the basis of (1) the position of the lips (rounded / unrounded). (2) the part of the tongue that is raised (front, centre, back) and (3) the height to which it is raised (high, mid, low). If the lips are drawn together so that the opening between them is more or less round during the utterence of the vowel, it is called a rounded vowels. Lip rounding can be either "close" or "open". Fully rounded vowel like (u) as in "pull", "pool" have "close liprounding" where as the (o) in "caught" has "open lip - rounding" Unrounded vowels are those during the articulation of which the lips are "spread" or neutral. Eg. The vowels in the words, lip, leaf, left. If the spreading of the lips is very marked, the vowels may be termed as 'spread' eg. The vowel (ae) in "pat".

Based on the part of the tongue that is raised vowels are classified into front, central and back vowels. Front vowels are those in the production of which the front of the tongue is raised towards the hard palate. There will be sifficient space between the tongue the tongue and the palate for the air to escape without any audible friction. Eg. The vowels /i:/, /I/ or and (e) in the words "seed"

"sing" and "said". Back vowels are produced by raising the back of the tongue towards the soft palate allowing the air to pass through them without any friction. Eg. (a:) in car (u:) in "cool". Those vowels which are produced by raising the central region of the tongue against the middle part of the roof of the mouth are called central vowels. Eg. // in "cup", "but" /3:/ in "heard" "bird".

On the basis of the height to which the tongue is raised, vowels can be classified into high/ close; high - mid;/ half - closehalf open / low - mid; and open / low. (The terms close, half close, half - open, are used by British linguistics and by those who follow the British tradition. American linguists use the term high, - mid, low - mid, and low, corresponding to the British terms referred to above). High / close vowels are those which are produced by raising the tongue close to the roof of the mouth. Eg. (i) "leap" (u:) "pool".

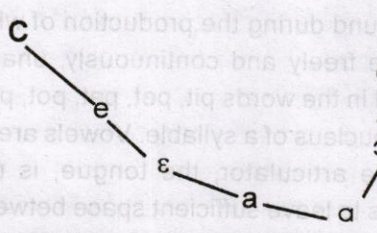
Low / open vowels are produced by keeping the tongue very low (lowering the tongue) in the mouth (ie. away from the roof of the mouth). Eg. /a:/ in "calm" (∂ e) in "cat". There are two more major positions in between high and low half - close (high - mid) and half - open (low - mid.) All these four positions are at more or less equal distance from each other.

The state of tension of the tongue is also considered as a factor affecting vowel qualities. Based on the state of tension of the tongue, vowels are classified as "tense" (fortis) and 'lax' (lenis). Tense vowels require considerable muscular tension on the part of the tongue: lax vowels are those in which the tongue is supposed to be held loosely Eg (i:) in "feet" or "leap" is more tense than (i) "fit" or "lip".

Vowels are generally described by a three - term label indicating the above three criteria viz. the position of the lips (rounded / unrounded) the part of the tongue raised (front, back or central) and the height to which it is raised (close, open, half - close, half - open).

CARDINAL VOWELS

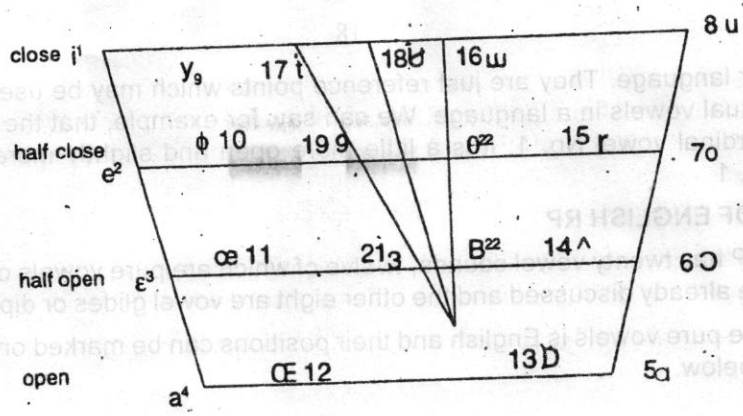
Linguistic enquiries to identify the vowel area in the vocal tract and to fix the place of each of the possible vocoid articulations have led to the concept of cardinal vowels. The term CARDINAL (important) was introduced by A.M. Bell, but later on the concept of cardinal vowels came to be associated with Daniel Jones. Cardinal vowels are fixed and unchanging reference points established within the total range of vowel quality to which any other vowel sound can directly be related. Eight primary cardinal vowels form the core of the system. Cardinal vowels 1 and 5 (i.e. i and ɑ) have been established first and are called "hinge vowels" the three vowels.



e, ɛ, and a have been inserted on auditory basis. Similarly the three back vowels o, O and u have been added. The Cardinal vowels are also called "peripheral vowels" because they occupy the periphery of the vowel area. Cardinal vowels are, therefore, eight arbitrarily selected, exactly determined, qualitatively invariable, auditorily equidistant and peripherally situated reference points in the human vocal area.

Cardinal vowels are not the vowels of any particular language but points of referencde with which the vowels of any language can be compared and described. In the other words they serve as a yard - stick to understand and describe the vowels of specific languages.

Practical phonetics shows that consonants can be acquired by direct attention to tactile and muscular sensation, whereas in learning vowels it is necessary to direct attention more particularly to the acoustic qualities of the sounds. A way of making written descriptions of vowels intelligible to a large circle of readers of different nationalities is to describe the sounds with reference to a scale of "cardinal vowels" i.e., a set of fixed vowel - sounds having known acoustic qualities and known tongue and lip - positions. The widely used cardinal vowel diagram ..... given by Danie Jones.



Cardinal vowel No. 1 is produced with the greatest degree of closeness and the greatest degree of frontness. If the tongue is raised any higher or any further forward from this position, a frictional noise will result and the sound produced will not be a vowel, but a consonant. There cannot be a closer or a fronter vowel. Cardinal vowel No. 5 is produced with the greatest degree of backness. The tongue cannot be lowered further, nor retracted further without producing a frictional noise in which case the sound produced will be a consonant Cardinal vowel Np. 4 is articulated with the front of the tongue as low as possible, ie., as far away from the tongue as low as possible (frontmost and openest). No. 8 is uttered with the closest and backest vowel position : No 2 and 3 are at equal distance from no. 1 and 4; these four ie., 1,2,3, and 4 are vowels of the front series. Similarly No 6 and 7 are at equal distance from No. 5 and No. 8; these four are of the back series. Cardinal vowels 1 to 5 are unrounded, articulated with various degrees of lip - spreading. Cardinal vowels 6 to 8 are rounded, with various degree of lip - rounding.

The cardinal vowels are described below with three - term labels and with their phonetic symbols

Cardinal Vowel No. 1 front close unrounded / i /

Cardinal Vowel No. 2 front half-close unrounded (e)

Cardinal Vowel No. 3 front half-open unrounded (ɛ)

Cardinal Vowel No. 4 front half-close unrounded /ɑ/

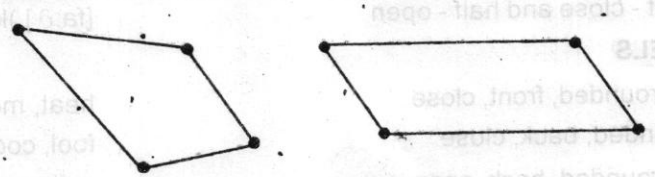
Cardinal Vowel No. 5 back open unrounded (a)

Cardinal Vowel No. 6 back half - open rounded (ɔ)

Cardinal Vowel No. 7 back half - close rounded /o/

Cardinal Vowel No. 8 back close rounded /u/

An X - ray photograph of the tongue positions of the cardinal vowels Nos. 1,4,5 and 8 will give us the following diagram, when we join these extreme positions viz., that of No.1 (closest and frontest), No.4 (openest and frontest), No.5 (openest and backest.) And No. 8 (closest and backest). The tongue positions for the production of all vowel sounds will be within this boundary.



SECONDARY CARDINAL VOWELS

There are ten secondary cardinal vowels derived from the above eight primary ones. It is possible to produce cardinal vowels No. 1 to 5 with lips rounded (they are called secondary cardinal vowel Nos. 9-13) and No. 6 to 8 with lips unrounded (they are called secondary cardinal vowels No. 14-16). No. 17 and 18 have tongue positions intermediate between those of 1 and 8.

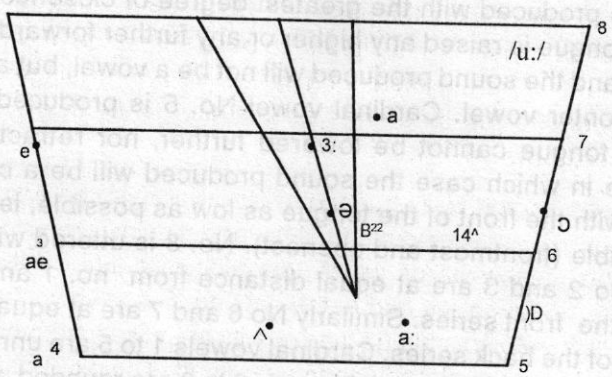
We should take care to remember that the cardinal vowels are not actual vowels existing

in any particular language. They are just reference points which may be used as a yard stick to describe the actual vowels in a language. We can say, for example, that the English vowel /i/ is very near to cardinal vowel No. 1: it is a little more open and slightly more towards the back compared to No. 1

THE VOWELS OF ENGLISH RP

English RP has twenty vowel sounds, twelve of which are pure vowels or monophthongs of the type we have already discussed and the other eight are vowel glides or diphthongs.

The Twelve pure vowels is English and their positions can be marked on the cardinal vowel chart as shown below.



Tongue position of the pure vowels of Rr.

The vowels in English are described below with three term tabels. Their symbols and words illustrating them are also given.

7 SHORT VOWELS

/I/	Unrounded, front (Slightly retracted Half - close (Slightly raised)	hit, pit, sit
/ə/	Unrounded, front, between half - close and half - open	met, pet, set
/∂e/	Unrounded, front, open (closer to half open)	hat, cat, pat
/ ɒ/	rounder, back,open	hot, pot, dot
/u/	rounded, back, slightly fronted Half - close (Slightly raised	full, put, push
/^/	Unround, central, half - open	hut, cut, but
/e/	Unrounded, central, between half - close and half - open	father, clever [fa:∂])klev ∂

5 LONG VOWELS

/i:/	Unrounded, front, close	heat, meet, seat
/u:/	rounded, back, close	fool, cool, pool
/ɑ/	Unrounded, back, open	calm, harm, car
/ɔ:/	rounded, back, half - open	all, short
/3:/	unrounded, central, between half - close and half - open	bird, girl

In the English pronouncing dictionary, Daniel Jones has distinguished the long vowels from the short by the addition of a sign / :/ for length. Thus the long and short vowels are represented as

/i:/ /i/Ǫ:/ // o/ /u:/, /3:/ /e/

A.G Gimson in the English pronouncing Dictionary, on the other hand, has treated the long

and short vowels as separate phonemes, representing them with different symbols

/i:/ /i/, :/ɔ/p/, /u:/ /u/, /3:/ /e/

This is because there is a slight qualitative difference also between the long and short vowels in each set, in addition to the difference in length.

DIPHTHONGS

Diphthongs are sounds during the articulation of which the tongue starts in the position of a pareticular vowel and moves in the direction of the position of another vowel, within a single syllable. In other words, diphthongs are vowel glides or vowels with a changing quality; the glides should take place within one syllable. Thus, in the production of the English diphthong/ ei/ the tongue moves from the position of /e/ to the position of /i/. If the two vowels belong to two different syllables, the glide will not be considered a diphthong but a sequence of two vowels. For example, the monosyllabic word, eyes has the diphthong /ai/ since it is in single syllable. But in being /bii ω/ the two vowels belong to two different syllables and hence this glide does not constitute diphthong, but a sequence of two vowels.

Diphthongs are represented by sequence of two symbols, the first indicating the starting point and the second the direction of movement. The starting point is referred to as the first element of the diphthong and the point towards which the glide is made as its second element. For example, in /ei/, /e/ is the first element and /i/ the second. Since vowels of changing quality are called diphthongs, vowels that do not change their quality are called monophthongs or pure vowels. Th 12 pure vowels of English have already been described. The eight diphthongs of English are described below.

THE DIPHTHONGS OF ENGLISH RP

The diphthongs of RP may be classified into closing diphthongs and centring diphthongs

Closing diphthongs - 5

Diphthongs in which the glide is from one vowel position to that of a close or high vowel may be called closing diphthongs. Closing diphthongs in English are /ei/, oi/, ai/ and /au/ of these diphthongs, three glide in the direction of the front vowel /i/, viz., /ei/, /oi/ and /ai/. They may be called fronting diphthongs. The other two viz., /eu/ and /au/ glide in the direction of the back vowel /u/. They may be called retracting diphthongs. The closing diphthongs of RP are represented below illustrated in words.

Closing diphthongs

/ei/ make, pale, cake

/oi/boy, coy, toy

/ai/ high, sky, why

∂/du/no,boar

/au/how, cow

Centring Diphthongs - 3

There are three diphthongs in RP which glide in the direction of the central vowel /∂/viz /i ∂/ ε∂/ and u∂/. These may be called centring diphthongs.

The centring diphthongs of RP are represented below illustrated in words:

Centring Diphthongs

/∂/ here, mere, tear, sheer

/ε∂/ pair, there, hair, where

/u∂/ poor, sure

Diphthongs in which the first element has greater "prominence" than the second element, which is only highly sounded, are called falling diphthongs. The prominence of the sound under goes a diminution as the articulation proceeds. All the closing diphthongs and the centring diphthongs in English are falling, the second element being less prominent.

In unaccented syllable, as in the second syllable of period, /piəriəd/, the first element of the diphthongs may be the weaker of the two elements ie., the prominence increases as the articulation proceeds. Thus the first element/ i/ of the diphthong /iə/ in the second syllable of the example is weaker than the second element /ə/. Such diphthongs with a stronger second element are called rising diphthongs. The centring diphthongs /iə/ and /uə/ are also "falling" with greater stress on the first element, but the "rising" varieties of these also occur in RP in weakly stressed syllables as in the second syllable of the example given. In the word "experience" / ikspiəriəns/ the first /iə/ is falling and the second one rising.

Unit III

2. DESCRIPTION AND CLASSIFICATION OF CONSONANTS

Consonants are classified on the basis of the manner of articulation and place of articulation. Consonants are either voiced or voiceless (breathed) sounds. During the production of voiced sounds vocal cords will be vibrating. Consonants are produced with a stricture of close approximation, ie, by means of an obstruction in the mouth or by narrowing the air passage resulting in a frictional noise

Based on the place of articulation consonants are classified as follows:

1. Bilabial : articulated by two lips eg:/p/, /b/, /m/
2. Labio-dental : articulated by the lower lip against the upper teeth. eg: /f/, /v/
3. Dental : articulated by the tip of the tongue against the upper teeth.
   /θ/ in "three", "think"
   (ð) in "this"
4. Alveolar : articulated by the tip or blade of the tongue against the teeth - ridge / t/,/d/,/n/,/l/,/s/,/z/
5. Post - alveolar : articulated by the tip of the tongue against the back of the adveolar ridge (ie. the part of the roof of the mouth that lies immediately behind the teeth ridge). The active articulator, i.e. the tip of the tongue is held close to, but not touching the rear part of the teeth - ridge. eg: /r/ in 'right' 'record'.
6. Palato - alveolar : articulated by the blade of the tongue against the teeth -ridge with raising of the main body of the tongue towards the palate. ie. along with alveolar articulation the tongue is raised towards the hard palate.
   eg: [ʃ] "ship"
   [ʒ] in "pleasure"
   [tʃ] in "chair", "church"
   [dʒ] in "judge", "jam"

In this case the active articulators are the tip, blade, and front of the tongue, and the passive articulators the teeth -rdige and the hard plate.

7. Palatal : articulated by raising the front of the tongue against the hard palate.
   Eg: / j/ in "you"
8. Velar : Articulated by raising the back of the tongue towards the soft palate or velum.
   Eg: / k/ in "pack", "cat"
   /g/ in "get"
   (ŋ) in "king"
9. Glottal or laryngal : Articulated in the glottis. Two vocal cords are the articulators (both active)
   Eg: / h/ in "he"

The sound commonly known as the "glottal stop" or "glottal catch", but more accurately termed the "glottal plosive consonant", represented as, is not an essential sound of the English

language. In forming the sound the glottis is closed completely by bringing the vocal cords into contact, the air is compressed by pressure from the lungs, and then the glottis is opened (by separating the vocal cords) so that the air escapes suddenly. It is neither breathed nor voiced. An exaggerated form of this consonant constitutes the explosive sound heard in coughing. A common kind of cough phonetically represented is as follows.

There are some languages with sounds produced at the uvula and also at the pharynx. In addition to the above classification most of the Dravidian languages like Malayalam have RETROFLEX sounds which are produced by curling the tip of the tongue against the roof of the mouth.

(!) as in (v a ! a) "bangle" (retoflex lateral)
(l) as in (m a l a) "rain" (retroflex continuant).

MANNER OF ARTICULATION

This refers to the nature of the "stricture" involved in the articulation of sounds i.e. how the passage of air in the vocal tract is controlled or modified. Based on the manner of articulation, sounds are classified as follows:

1) Plosives or Stop Consonants (Stops):

They are formed by complete closure of the air-passage at some point during an appreciable time. The articulators come into firm contact with each other, thus blocking the air-stream thereby increasing the air pressure (due to compression). Simultaneously there is a velic closure blocking the nasal passage so that the air passes only through the oral cavity and not through the nose. On release of the closure by separation of the articulators, the air escapes with a stricture of complete closure and sudden release. While the organs articulating a plosive consonant are actually in contact they form what is termed the "stop". In the case of voiceless consonants eg. /p/ no sound is heard during the stop, in the case of voiced consonants eg. / b/ some voice is heard during the stop.

The explosion of a plosive consonant is formed by the air as it suddenly escapes at the instant when the stop is released. The rush of air necessarily continues for an appreciable time after the contact is released. A plosive consonant therefore cannot be fully pronounced without being followed by another independent sound, viz, the sound produced by this rush of air. This sound may be voiced or voiceless: When we pronounce a voiceless plosive eg/p/ it itself, is generally followed by a short breathed sound which may be represented by [h], thus [p^h].

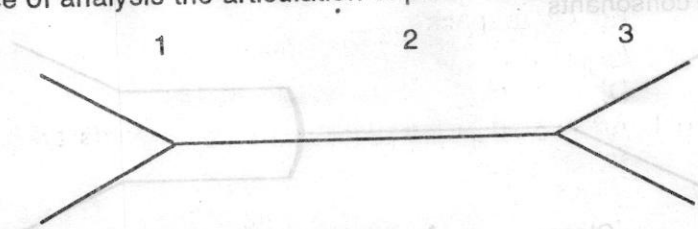
Incomplete plosives: When a plosive consonant is followed by another plosive or an affricate sound in the same word, the first plosive is not fully pronounced. Eg: / k/ in "act", "picture".

The tongue doesn't leave the roof of the month in passing from the / k/ to the / t/ or /t ʃ/.

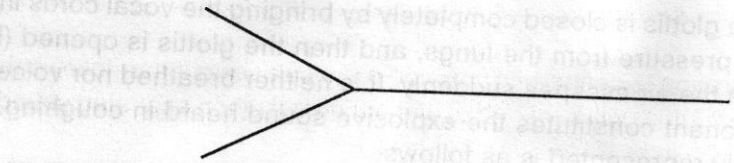
Nasal plosion: In sequences consisting of a plosive immediately followed by nasal, eg: /tn/ in /m∧tn/ "mutton" /b∧tn/ "button", the plosive is not pronounced in the usual way. The "plosion" heard during such sequences is not formed by the air escaping through the mouth but through the nose. In such cases the mouth closure is retained and the air suddenly escapes through the nose at the instant when the soft palate is lowered for forming the nasal consonant. This is known as nasal plosion. Eg: /pn/ in "sharpness" /pm/ in "topmost".

Lateral plosion: In sequences consisting of a plosive immediately followed by a lateral consonant, such /t1/ in /li tl/ "little" /tl/ in /midl/ "middle", the plosion of /t// and /d/ is lateral, that is the tip of the tongue doesn't leave the teeth ridge in pronouncing the sequence.

For convenience of analysis the articulation of plosives can be represented as follows

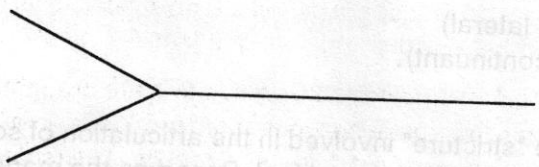


Shutting phase ie, approximation — Closure phase ie, closure — Opening phase ie release Burst/ plosion/implosion

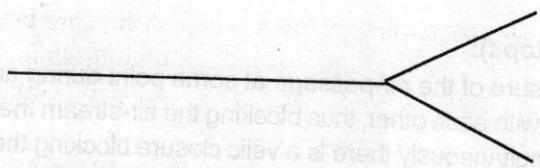


Unreleased plosive
Eg: /p/ in cup

Nasal plosion



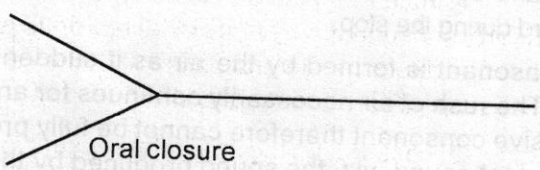
Oral closure



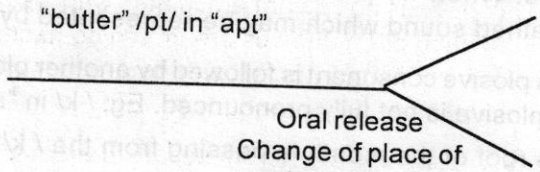
eg. /b^tn/"button" closure
/pm/ in "top most"

nasal release

Lateral plosion

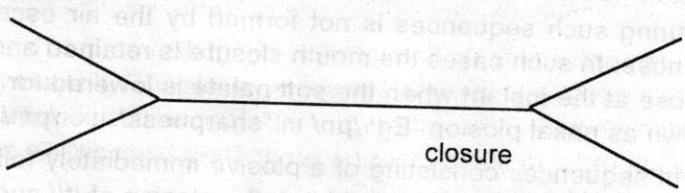


Oral closure
Eg. /tl/in
"butler" /pt/ in "apt"



Oral release
Change of place of
active articulator

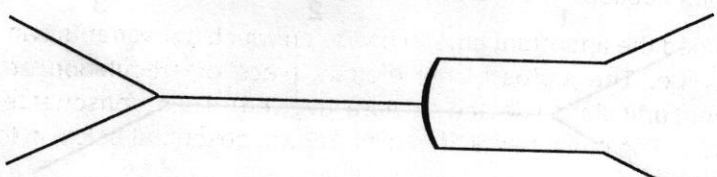
Double plosives/Plosive Clusters



closure

Double consonants involves more muscular energy. Duration may not be exactly double but more than that of single consonants

Affricates



Shutting Closer

Release phase modified into close Approximation resulting in audible friction Eg. /t'/, /d_2/

It is devided in to three phases

(1) Aspirated plosive: Aspiration is defined as a period of voicelessness that follows the voiceless closure phase of a plosive. There will be a puff of air coming out when aspirated sounds are produced.

(2) Affricates: In the production of affricates also there is complete closure. The oral and nasal passage of air being completely blocked. But here the oral closure is removed slowly and instead of the explosive sound in the production of plosive consonants, an audible friction is heard. The release of air is gradual in affricates and sudden in plosives. The affricate consonants in English are /tʃ/ as the first sound in chair and /d_3/ as the first sound in jam.

(3) Affricates: In the production of affricates also articulators are brought so close together that the air in escaping through the narrow space between them produces an audible friction on a hissing sound. The fricatives in English are /s, z,q, f, f, v, r, s, z/ and /h/. The fricatives and affricates are also known as sibilants.

(4) Trill or rolled: In the rpoduction of a trill or rolled the articulators are brought into contact with each other a number of times, producing a series of rapid intermittent taps. If we say rrrr (the tongue tip tapping against the teeth - ridge) the sound produced is a trill. It is considered typical of Scottish English.

Instead of a series ot taps, if a single tap is made, by the articulators quickly coming together and going away, we have a tap or a flap. For example, when /r/ occurs between vowels, as in very, sorry, and hurry, or after /θ/, as in thrive and thrift. It is pronounced as a tap

(5) Lateral: A lateral consonant is produced with the oral passage blocked at the centre, but open at the sides. English has one lateral consonant, viz.,/l/ as in lake. For its production, the tip of the tongue is raised to the alveolar ridge, blocking the oral passage at the centre. The sides of the tongue are lowered allowing ait to escape freely through the sides.

(6) Nasals: In the production of nasal consonants the soft palate is kept lowered so that the nasal passage of air is open, while the oral passage is completely blocked at some point. The lung air, as a result, escapes through the nose. Thus nasals are articulated with a stricture of complete oral closure. For instance, in the production of /m, the lips are in firm contacts blocking the oral passage and the soft palate is low, opening the nasal passage through which air escapes English has three nasal sounds, /m/ /n/ and /[ω]

(7) Frictionless continuants (Approximates): These are consonants which can be prolonged for a long time without any audible friction. The soft palate is raised, closing the nasal passage and the articulators are brought near each other but not close enough to produce friction. The /r/ in red, right etc. is articulated as a frictionless continuant.

(8) Semi -vowels (Approximates): Semi-vowels are gliding sounds in which the speech organs glide from one vowel position to another. The semi- vowels in English are /w/ as in west and /j/ as in yard. In the production nof /w/ the glide is from the tongue position of approximately /u:/ and for /j/ form the position of /i:/ to some other position. They function like consonants in the structure of a syllable despite their vocalic quality.

The frictionless continuants and semi - vowels may together be called approximates, ie., sound articulated with a stricture or open approximation, the gap between the articulators being wide enough for the air to escape without any friction.

We have examined the important criteria based on which consonants can be classified and described, viz., voice (ie. The states of the glottis), place of articulation (ie. the articulators involved), and manner of articulation (ie. the stricture involved). Thus, consonants can be described using three - term labels. The consonants of English RP are described below in this way, with each of them illustrated in words.

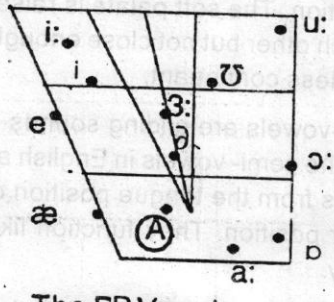
THE CONSONANTS OF ENGLISH RP

/p/voiceless bilabial plosive at. pin. pig

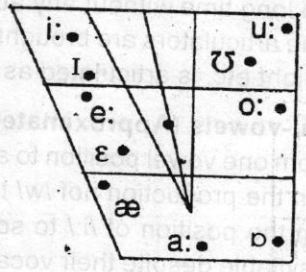
/b/ voiced bilabial plosive	bag, bull, beg
/t/ voiceless alveolar plosive	tap, tip, top
/d/ voiced alveolar plosive	dog, day, do
/k/ voiceless velar plosive	king, kite, caught
/g/ voiced velar plosive	girl, glass, dog
/f/ voiceless labio - dental fricative	fan, fish, front
/v/ voiced labio - dental fricative	van, vase, verb
/θ/ voiceless dental fricative	think, three, thin
/ð/ voiced dental fricative	this, then, they
/s/ voiceless alveolar fricative	sing, say, said
/z/ voiced alveolar fricative	zoo, zinc, Zebra
/ʃ/ voiceless palato - alveolar fricative	ship, shape, shop
/ʒ/ voiced palato - alveolar fricative	pleasure, measure, treasure
/h/ voiceless glottal fricative	hot, his, hat
/tʃ/ voiceless palato - alveolar affricate	church, chair, chin
/d_3/ voiced palato - alveolar affricate	jam, judge, jug
/m/ voiced bi-labial nasal	man, ham, mat
/n/ voiced alveolar nasal	pin, name, inn
/ŋ/ voiced velar nasal	sing, king, wing
/j/ voiced palatal semi-vowel	young, you, yet
/w/ voice bi-labial semi - vowel	wind, wail, van
/r/ voiced post - alveolar frictionless continuant	right, record, reap
/l/ voiced alveolar lateral	light, late, love

With this information the English consonants can be arranged in a table, horizontal rows containing sounds articulated in the same manner, and vertical rows with sounds articulated by the same organs.

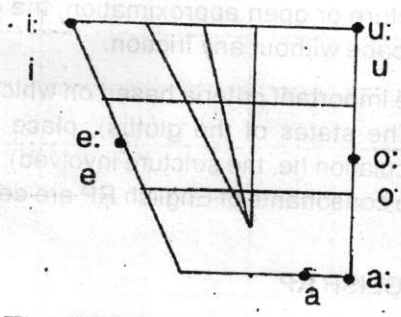
VOWEL SYSTEM



The RP Vowels



The GIE Vowels



The Standard Malayalam Vowels

CONSONANT SYSTEMS

Place → / ↓Manner	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Palatoalveolar	Palatal	Velar	Glottal
Nasal	m			n				ŋ	
Plosive	p b			t d				k g	
Africate						tʃ dʒ			
Fricative	fv		θ ð	sz		ʃ ʒ			h
Lateral				l					
Approxi-mants	w				r		j	(w)	

Total 24

Vl = voiceless; vd = voiced

THE RP CONSONANTS
(RP - Received Pronounciation of English)

Place → / ↓Manner	Bilabial	Labiodental	Dental	Alveolar	Palatoalveolar	Palatal	retroflex	Velar	Glottal
Nasal	m			n				ŋ	
Plosive	p b		t d					t d	k g
Africate							tʃ dʒ		
Fricative		f		s z	ʃ ʒ				h
Lateral				l					
Approximants		u					j		
Trial/tap				r					

Total 24

THE GIE CONSONANTS (GIE - General Indian English)

Place → / Manner ↓	Bilabial vl	Bilabial vd	Labio dental vl	Labio dental vd	Dental vl	Dental vd	Denti-alveolar vl	Denti-alveolar vd	Alveolar vl	Alveolar vd	Retroflex vl	Retroflex vd	Palatal vl	Palatal vd	Velar vl	Velar vd
Plosive Unasp	p	b			t	d			⊥		ṭ	ḍ	c	ɟ	k	g
Plosive Asp	ph				th						ṭh		ch		kh	
Fricative			f				s				ṣ		ś		h	
Nasal		m				n			n		ṇ		ñ		ṅ	
Lateral									l		ḷ					
Trill							r		R							
Frictionless Continuant			v								⊥		y			

Total 34

THE STANDARD MALAYALAM CONSONANTS

VOCOIDS AND CONTOIDS

The English consonants /l/, /m/, /n/ and /r/ sometimes function as syllabic, ie., as the nucler of syllables. Such consonants are known as syllabic consonants. Eg. The /n/ in mutton /mʌtn/ and the /l/ in little /litl/. Syllabic consonants are represented as /l/, /m/, /n/ etc.

The frictionless English sounds /w/ and /j/ which are phonetically of a vowel - like quality are functionally consonants. They are marginal in syllable structure and are preceded by the indefinite article a and not an. Thus certain sounds belonging to one class according tophonetic form fall into the other class according to function, ie., consonants functioning as vowels and vowel like sounds functioning as consonants.

Attempts have been made to solve this problem of confusion between terms. K.L. Pike in *The Phonetics* (1943) introduced two new terms to refer to forms alone, to replace the terms "vowel" and "consonant" viz., vocoid and contoid. The term syllabic is used for the syllabic or / element of syllable structure and non-syllabic for the marginal or C element. Thus we get our categories: syllabic vocoid, as the middle sound in bet /bet/, non- syllabic vocoid, as the first sound in yet /jet/ , syllabic contoid as the second sound in the second syllable of little /litl/ and non - syllabic contoid, as the first sound in pet /pet/. Syllabic vocoid (ie. vowels) and non - syllabic contoids (ie consonants) are the most common of these four categories.

Unit IV

SUPRASEGMENTALS (PROSODIC FEATURES): LENGTH, STRESS AND PITCH

The phonemes that we have so far considered viz, vowels and consonants, and be described, as segmental phonemes (also called primary phonemes) since they produce speech segments. There are also certain additional speech features, such as stress, ptich, length, etc. affecting speed sounds which may hence be called sound attributes or supra segmentals. When contrastive, ie, when they effect a change of meaning, they are described as suprasegmental phonemes. They are also called secondary phoneme or prosodic phonemes. Suprasegmentals signal phonetic phenomena affecting higher units of sound like words, phrases and sentences and not single segments, the phonemes.

WORD STRESS

All the syllables in a polysyllabic word in English are not articulated with the same force. Some are uttered with greater force than the others. Stress may be described as the degree of force with which a sound of syllable is pronounced. Every syllable is uttered with a certain degree of force and the one uttered with the greatest degree of force is called the stressed or accented syllable. Thus in cultivation /kʌ l - ti 'vei- ʃ n/ the stressed syllable is the third. In the word examination /³ig²zae⁴mi¹nei5 ʃ n/ all the five syllables are numbered according to the degree of force of utterance, no. I indicating the syllable with the maximum degree of force, and no.5 the one with the minimum force. Although there is a number of degrees of variation in stress, we usually distinguish only one or two stresses primary and secondary. The stressed syllable is said to receive primary or tonic stress or accent and the syllable next to that in the degree of force of utterance is said to receive secondary stress or accent. We mark the stressed syllable or primary accent with a short vertical stroke on top at the begining of the syllable. Secondary stress is marked with a short vertical bar below and at the begining of the syllable.

SENTENCE STRESS AND RHYTHM

In connected speech in English all the words are not uttered with the same stress. Some words are stressed and some are not. For example, in the sentence.

The 'leaves' rustle in the 'gentle' ʌ breeze the words leages, restless, gentle, and breeze are stressed and the rest unstressed. It is generally the relative importance of the words that decide the stress. The most important words are usually content words viz, nouns verbs adjectives, adverbs, demonstratives and question words, and they are usually stressed

(Demonstrative in English are this, these, that and those question words are what, why, who etc.) Function class words viz prepositions, conjunctions, artisles, personal pronouns, auxiliaries, relative pronouns etc are semantically insignificant and are not usually stressed. Look at the examples given below in which content words are stressed and function class words are not.

If you 'study' well, you will 'get' a 'first' class

This is the "key to the "kingdom of heaven".

The syllable which is stressed when a polysyllabic word is pronounced in isolation, will be stressed when it forms part of connected speech also. Thus in the sentence, "The 'book' is below the 'table'," the second syllable in the word *below* is stressed. Thus normally in both connected speech and in utterance of individual words cdertain syllables are prominent while others are not. In connected speech, however, the choice of the word receiving primary accent depends on the ,meaning the speaker wants to convey. For example, in the sentence,

'She laughed,'

if the speaker wants to emphasize that it was she and not any one else who laughted, the primary accent will be on she. On the other hand, if laughed is to be emphasized, then the primary accent will be on that word. Thus the meaning conveyed by an utterance largely determines the accentual pattern in connected speech. However, in normal speech, nouns adjectives, adverbs, main verbs and demonstrative and interrogative pronouns are more likely to receive accent, than prepositions, conjuctions, auxiliary verbs, articles and pronouns, ie., the utterances pronounced in the normal way without any special emphasis to any part content words receive accent and function class words do not.

RHYTHM

One of the important characteristics of English is that it is a language with a stress - time rhythm. This means that in English stressed syllables tend to occur at regular intervals of time. Thus, in the sentences.

'This is the 'dress I 'like'.

The time intervals between the accented syllables this, dress and like will be roughly the same. Irrespective of the number of unaccented syllables between two accented syllables, the time interval between them will be roughly the same. It is this phenomenon that gives English its characteristic rhythm. Such a phenomenon of certain features occuring at regular intervals of time is called isochrony. Stress in English is isochronous. In order to achieve this regularity of time interval, accented syllables may have to be prolonged and unaccented ones pronounced rapidly. Thus accent or stress in connected speech depends on the rhythmic balance of the sentence and the relative importance ascribed by the speaker to its different parts. Most Indian languages are syllable - timed, i,e., the rhythmic movement is based on syllabic quantity and not on stress, as it is in English which is a stress - timed language.

STRONG AND WEAK - FORMS

Since function class words are not usually stressed, most of them tend to "weaken". Many common English words have thus two or more forms of pronounciation, one "strong" form and one or more "weak" forms. This phenomenon is known as gradation, ie., the existence of two or more pronounciation for the same word. The strong forms are used when these words are accented, or when pronounced in isolation, and the weak forms when they are unaccented. For example, the indefinite article 'a' is pronounced as /ei/ in isolation, but in connected speech it weakens to /ə/ as in

've a pen /aiv ə pen

So also have /haev/ weakens to /həv/, /əv/ or even /v/. Forms like /eh/ and /haev/ are called strong forms and forms like /ə/, are called weak forms.

A weak form is generally distinguished from the strong either by (1) difference of a vowel sound as in /hæv/ and /həv/ (2) the dropping of a sound as in /hiz/ and iz/. or (3) the reduction of the length of sounds as in /hi:/and/hi/.

PITCH AND INTONATION

In connected speech the pitch of the voice is continually rising and falling. The pitch of the voice is determined by the rate at which the vocal cords vibrate, ie, their frequency of vibration. The more rapidly the vocal cords vibrate, the higher will be the pitch. The voice-pitch keeps on varying in connected speech. Four pitch levels, ranging from the lowest, marked (l), to the higher marked (4) are generally used. Most utterances in normal speech begin at pitch level (2) and the voice normally rises to level (3) just before the end of an utterance and the end is characterised by a terminal contour (TC). In relation to this, the term intonation is used to cover both the patterns of changes in the pitch of the voice and the terminal contour. Intonation refers to significant changes of pitch and stress narration to utterance, in other words, utterance bound pitch is called intonation. Falling and rising are the two basic intonation types. When you sing, 'sa ri ga ma pa dha ni sa', the pitch of your voice moves from low to high ie, the pitch rises. When you sing 'sa ni dha pa ma ga ri sa', the pitch of you voice moves from high to low, ie., the pitch falls. If you utter the word yes with, the pitch of your voice rising, pitch movement can be represented as Yes, and also in counting.

ˏOne, two, three.....

Such a pitch movement from a low to a high pitch, taking place within a single syllable is referred to as a rising intonation pattern. Two more examples are given below:

Sita/who passed the test, ./joined the`institute/

ˏPen, pencil, paper, ink.....

The same word *Yes* can be uttered with the pitch of your voice falling, the pitch movement being represented as,

`Yes

In listing the items, the last one has a fall,

ˏOne, two and `three

Such a pitch movement from a high to a low pitch is referred to as a falling intonation.

The two can be combined and the word uttered, bringing the pitch down and letting it go up again. Such a pitch movement is called a fall - rise intonation and may be represented as

ᵛYes

The term tonic or tone may be used to refer to fall, rise or fall rise ie., the type of pitch movement within a single syllable.

In speech we make pauses at certain points. For instance consider the sentence.

'Dogs are faithful, but their masters are not'. When we pronounce this sentence, we pause after faithful. Such a pause may be called a tone group boundary. The tone group boundary is indicated with a double bar.//

Eg: Dogs are faithful, // but their masters are not // Tone group boundaries divide an utterance into tone groups. Each tone group is a stretch of utterance between two pauses, ie, two tone group boundaries,. Thus in the above example, there are two tone groups, 'dogs are faithful' and 'but their masters are not'.

We have to decide three things about an utterance before we mark its intonation, viz.

(1) how many tone groups can it be divided into (ie., the choice of tonality).

(2) Where shall the tonic be (ie. the choice of tonicity-., and

(3) What kind of tonic is to be used (ie. the choice of tonic or tone).

Let us consider these one by one.

1. TONALITY

Normally tone groups are indicated by pauses and they coincide with clauses. Thus, there are as many tone groups as there are clauses in an utterance. For example, the sentence.

'When I went to the beach, I met Meera' has two clauses and two groups, and fullstop. Therefore, generally a tone group boundary coincides with one of these punctuation marks. In the above example, the three tone group boundaries coincide with the two commas and one fullstop. In "one, two, three, four", we have three commas, and one fullstop, marking four tone groups. Though this is generally so, there are exceptions.

When we want to give emphasis to a particular item of information in an utterance, we give it the status of a tone group. Thus, normally we utter the sentence.

'John went to the party with Mary' as a single tone group. If we want to emphasise the fact that he went with Mary and not with anyone else, we would utter it as two tone groups.

John went to the party //with Mary//

TONICITY

After dividing the utterance thus into tone groups, we have to decide which syllable is to carry the tonic or tone; the syllable carrying the tonic is called the nucleus or the nuclear syllable. Generally, a tone group in English contains one and only one tonic. In normal speech, unless some special meaning is intended the tonic falls on the last stressed syllable. Thus in the sentence.

I went to the party with Mary

The last stressed syllable is /m ∂e/ in /m ∂eri/ and this syllable carries the tonic. (The stressed syllables are marked with short vertical lines on top and the tonic with a slanting line, going up or down).

ˈI went to the ˊparty with Mary.

However, if we want to give emphasis to a particular word, then the tonic falls on the stressed syllable of that word. Thus, in the above sentence, if the meaning is, I went to the party and not anywhere else, with emphasis on "party", the tonic would be on the stressed syllable /pa:/ of /pa:ti/.

"I" went to the "party with" Mary.

If we want to say that it was I who went with Mary and not you or someone else, the tonic would be on I/ aI/

ˋI went to the 'party with' Mary

TONIC

After thus dividing an utterance into tone groups, and deciding which syllable carries the tonic or tone, the next step is to decide which tonic to use, rise, fall, or fall - rise. (it is possible to talk about other tonics like low - fall, high-fall, low-rise, high rise, etc. As already mentioned tonics are marked with short strokes slanting upwards left for fall, and right for rise. Stressed syllables carrying no tonic are marked with short vertical strokes, For example:

I went to the party with ˊMary (tonic on Mary)

ˋI went to the ˋparty with ˊMary (tonic on Party)

ˋI went to the ˋparty with ˊMary (tonic on I)

The shift in the tonic depends on the context, ie., the most important word in the tone group for the speakers in that particular context.

The choice of a particular tone or tonic for a particular type of utterance depends on the emotional attitude the speaker wishes to convey and also upon whether he wants to interpret it as a statement, a question, a command, or a request. The terms, declarative, interrogative and imperative are formal lables referring to grammatical categories, whereas statement, question, request and order are semantic lables referring to meaning. Generally a declarative sentence is a statement, an interrogative sentence a question, and an imperative sentence a request or a command, but this is not always so. Thus the sentence.

They are ready.

Is a declarative in form, uttered as a statement, but the same sentence may be uttered in a different way as follows:

They are ready?

is a declarative in form, used as a question. Likewise,, the sentence

Will he come to-day?

is an interrogative in form, used as a question, but

Would you open the window, please?

is an interrogative in form, used as a request.

Now let us look into the intonation patterns of these different types of sentences. In fact, there are no hard and fast rules regarding the choice of a particular tonic for a particular type of utterance. The following, however, will be useful as general guidelines.

A) FALLING TONE

The falling tone is used in the following contexts:

1) In declarative sentences uttered as ordinary statements without any implications, and when the tone group is final (If the tone group is non-final, we use a rising tone) as in

I went to the party

The water is warm

2) In wh-questions (ie., questions beginning with a question word like what, why etc.) uttered in the normal way, ie., expecting some information in the reply and sometimes ina cold unfriendly way:

'Why are you' late

'Where do you' live?

3) In commands as in,

Get' out!

will you 'stop' writing please? (as an order)

4) In exclamations as in :

What a 'lovely sight!

What a 'fine' day!

5) In tag questions which imply that the speaker is certain about what is said and he just expects the listener to confirm his statement.

'He is 'well// 'isn't he?//

We 'don't want to go^ // 'do we? //

on the other hand, if he wants the listener to answer his question then a rising tone will be used.

B) RISING TONE

The rising tone is generally used in the following context:

1) In incomplete utterances, often the first of the two clauses in a complex sentences are indicates somthing more to follow 9ie., when the tone group is non - final), as in

He is late // because he missed the bus

listing items, we use a rise each except the last one, as in

one, //, two, //, three, // 'four //

The fall on four indicates that the counting is complete

I 'bought 'books, 'pencils, 'papers and a 'pen

2) In declarative sentences used as questions as in

We will go for a picnic?

You are ready for the test?

3) In Yes/No questions (ie., questions expecting Yes or No answers as in

Are you dreaming?

Has your friend come?

4) In wh-questions asked in a warm, friendly way, indicating extra politeness and interest as in.

Why are you late?

Where did you go ?

5) In polite requests, as in

Please pass the salt

'Please 'open the door

6) In tag questions where the speaker wants the listener to answer his question and give information (instead of just confirming or confirming or agreeing to his statement as is generally done in tag questions).

'She has 'done the work //, hasn't she? (The speaker wants to know whether she has done it or not)

Mary is coming, isn't she?

C) FALL - RISE TONE

The use of a fall - rise tone indicates that the speaker implies things which are not explicitly expressed. The listener should understand more than a literal interpretation of the words. Thus the .....of saving 'the girl is pretty' without any implication would be

The 'girl is 'pretty

But if it is uttered with a fall - rise

The 'girl is$^{\vee}$ pretty

it implies that she is pretty, but she is stupid or something derogatory like that

The houses are$^{\vee}$ nice (but not the people in them)

I' didn't see 'you at the concert (You went somewhere else, after getting permission to go to the concert)

The intonation patterns of declarative, interrogatives, and imperative may be sound up as follows

1) DECLARATIVE

a) Declarative sentences uttered as statements, and if the tone group is final, we use a fall, but if the tone group is non -final, ie, there is something more to follow, we use a rise.

He 'won the prize

He 'won the ˏprize // as his per'formance was ˋgood //

b) In listing things we use a rise for every item, except the last which is uttered with a fall.

I bought ˏoranges. ˏgrapes and apples

c) When the speaker implies things which are not explicitly started, a fall - rise is used.

He is ˇrich (something like 'but not generous', or 'but stingy' is implied)

d) When declaratives are used as questions, we use a rise.

'We shall ˏstart now?

2) INTERROGATIVES

a) Yes - no interrogatives used as questions have a rising intonation.

Are you ˏready?

Yes - no interrogatives used as requests, also have a rise, would you close the ˏdoor?

When they are used as commands or order we use a fall

eg: Will you get ˋout

Generally while a rise indicates politeness, respect, and interest, a fall indicates authority indifference, direspect etc.

b) Wh - interrogatives normally take a fall,

'Why are you ˋlate?

When they indicate extra politeness and interest, we use a rise.

c) In an alternative interrogative or disjunctive interrogative where you have to make a choice, of the type.

Do you like tea,// or ˋcoffee?

The first tone group carries a rise, and the second one a fall,

Do you like ˏ tea, or ˋcoffee?

When there are more than two alternatives, all but the last tone group carry a rise, and the last one a fall.

Do you like ˏ tea //ˏ coffee, //ˏ milk,// or ˋ juice?

d) Tag questions generally take a fall, ie, when the speaker is sure that the listener will confirm what he has stated.

we ar'going out,ˋaren't we?

If the speaker is not quite sure about the listener's reaction and wants an answer from him, he would use a rise as in,

we are ˋgoing 'out,, aren't we?

3) IMPERATIVE SENTENCES

imperative sentences as commands take a fall and as requests a rise.

"Get ˋout:

Please 'pass the, salt.

4) Exclamatory sentence are usually said with a fall.

What a 'sunny ˋday:

Thus (a) the falling tone may be used in,

1) Ordinary statements without any implications

2) Wh-questions asked neutrally

3) Commands, and

4) Exclamations

b) The rising tone may be used in,

1) Incomplete utterances, often the first of the two clauses in a complex sentence,

2) Yes / No/ questions

3) Wh-questions asked in a warm friendly way, and

4) Polite requests

c) The fall - rise tone may be used to convey

1) Special implications not explicitly expressed.

As already seen, intonation in English, (as well as in may other languages) serves (1) a grammatical function and 2) an attitudinal function. In other words, intonation helps the hearer to make out whether a particular utterance is a statement or a question, a command, or a request. Thus, the same sentence, can be uttered as a statement (ie, When pronounced with a falling tone) or as a question (ie. When pronounced with a rising tone). Again, the same sentence can be uttered as a command with a falling tone, and as a request with a rising tone. For example,

'She is ˋclever (a statement)

'She is ˏclever (a question)

'Shut the ˋdoor (command)

Shut the ˏdoor (request)

Thus intonation serves an important grammatical function.

Moreover, with the help of intonation one can find out the attitude or mood of the speaker, whether he is sarcastic, Impatient, annoyed, concerned, interested in the hearer or in the subject of talk, etc. In general, while a falling tone indicates authority, unfriendliness, disrespect, indifference, matter - of - fact attitude, etc., a rising tone indicates politeness, respect, warmth, friedliness, interest, etc. The fall - rise tone is typically used for special implication such as insinuations, veiled insult, sarcasm, unpleasant news etc.

Unit V

TRANSCRIPTION SYSTEM

All the languages of the world are spoken tongues for language is primarily spoken. Most of these languages have alphabetic systems to record the speech. There are languages which have a one - to -one relationship between the sound and the alphabet. English language is one which shows remarkable difference between spelling (alphabet) and pronunciation. In order to overcome such difficulty different transcriptional systems have been devised.

Transcription is the method of writing down speech sound in a systematic and consistent way (also known as 'notation' or 'script'). Two main kinds or transcriptions are recognized:

PHONETIC (narrow) and PHONEMIC (broad). Square bracket [ ] enclose phonetic transcriptions and oblique lines / / enclose phonemic transcription. In phonetic transcription sounds are symbolised on the basis of their articulatory /audatory identity regardless of their function in a language. In phonemic transcriptional the only units to be symbolized are those which have a linguistic function, ie, the phonemes. A phonemic transcription looks simplest of all, as in this only the units which account for difference of meaning will be represented. Eg. /pin/, /pen/, /pæn. In a phonetic transcription on the other hand, the aim is not to judge the functional significance of sounds, in the context of some language, but to identify the sounds as such. A phonetic transcription of the English word "pen" for eg: might be [pʰɛn]: this indicates some quite suitable features of pronunciation, such as the 'aspiration' following the plosive and the slight nasalization of the vowel feature which are not phonemes in their own right.

Phonetic transcriptions which are relatively detailed are called narrow transcriptions; those which are less detailed are called broad transcriptions, In any transcriptions (whether phonetic or phonemic), each distinguishable sound is given its own 'symbol'. The whole range of available phonetic symbols is known as a 'phonetic alphabet'. The most widely used such alphabet is the INTER NATIONAL PHONETIC ALPHABET (IPA). IPA is an alphabet on Romanic basis designed primarily to meet practical linguistic needs, such as putting on record the phonetic or phonemic structure of languages ,Furnishing learners of foreign languages with phonetic transcriptions to assist them in acquiring the pronunciation, and working out Romanic orthographies for languages written in other systems or for languages hitherto unwritten. Numerous symbols and marks are also provided, by means of which many minute shades of sound may be represented, and which thus render the alphabet well suited for use in scientific investigations, e.g. in dialectology, in the historical study of languages, and in comparative philology. The constructions and use of the IPA are guided by the following principles:

1. When two sounds occurring in a given language are employed for distinguishing one word from another, they should whenever possible be represented by two distinct letters with out diacritical marks. Ordinary Roman letters should be used as far as practicable, but recourse must be had to new letters when those of the Roman alphabet are inadequate.

2. Where two sounds are so near together acoustically, that they cannot be phonemes in any language, they should be represented by the same letter. In narrow transcriptions they can be differentiated using diacritical marks or separate letters.

3. The non-Roman letters of the IPA should harmonise with the Roman letters Eg: Greek β - IPA β

4. The use of diacritical marks should be restricted for denoting length, stress, and intonation, in representing allophones of a phoneme, when a diacritic has general (wider) application (e.g. to indicate nasalization). And also for indicating minute shades of sound in scientific investigations.

Phonetic symbols are often the same as a letter of the alphabet, eg. [b] as in 'bit' /k/ as in 'kettle', but many new symbols have had to be invented to cope with the ranges of sounds heard in speech e.g. [ʃ] for 'sh' sound in 'ship'.

[θ] for the most 'th' sound in 'thin'

Most of the vowel sounds have had to be given a new symbol, to avoid overloading the five traditional vowel letters of the alphabet. But it is not possible to design letters for the representation of all distinguishable shades of sounds, but also other shades of sounds near to these. Hence the need for establishing systems of 'cardinal' sounds. The principle is of particular value in the case of vowels, and is indeed essential for their classification, for their comparison, and for establishing the best methods of representing them in writing.

A convenient system of cardinal vowels consists of a series of eight basic vowels of known formation and acoustic qualities, which serve as a standard of measurement, and by reference to which other vowels can be described. The selection of these eight cardinal vowels is based upon the principle that no two of them are so near to each other as to be incapable of

distinguishing words. These eight vowels are represented by the symbols [i,e,ɛ,a,ɑ, ,o,u] cardinal [i] is the 'closest' possible 'front' vowel, if the tongue were in a higher position the sound produced would be a consonant (fricative j). Cardinal (a) is the 'openest' of the 'back' vowels; if the tongue were retracted further, a fricative consonant of the type would result. Cardinal (e, ɛ) are vowels of the 'front' series intermediate between [i] and [a]; they are selected so that the degree for acoustic separation between ie, a, e - ɛ, and ɛ-a, are approximately equal. Cardinal u,o, and a are vowels of the 'back' series continuing the same scale of equal degrees of acoustic separation.

Unit VI

PHONOLOGY

Since the building blocks of a language are the sounds of which it is composed, their identification and description is the first concern of the structural linguist. The individual sounds of a language have no meaning by themselves. They become meaningful only when combined into units of groups of sounds called words, the study of meaningful units is called 'morphology'.

THE CONCEPT OF PHONEME, AND ALLOPHONE

The study of the sound structure of language is divided into two branches, (1) phonetics - study of the production, transmission and reception of speech sounds.

2) Phonemics - It analyses the function of speech sounds, and identifies the functional units in speech. Functional units are those by which we can distinguish one word from the other. E.g. In English substitution of the first sound in the word /pit/ by another sound ie. /bit/ effects a semantic difference. In other words, function of a sound is to distinguish one utterance from the other . Such utterances which differ in single sound unit (with corresponding semantic difference) is called 'minimal pairs' (eg: bit,pit, sit, kit etc.)

Such minimal difference of one sound is considered 'significant' to language and the sounds which differ are treated as two significant units of language or in other words they are treated as two separate phonemes.

A speech sound is a sound of definite organic formation and definite acoustic quality which is incapable of variation. A phoneme may be described roughly as a family of sounds consisting of an important sound of the language (generally the most frequently used member of that family) together with other related sounds which 'take its place' in particular sound sequences or under particular conditions of length or stress or intonation. The most frequent sound of a phoneme may be called the principal member or norm. Phonemes are capable of distinguishing one word of a language from the other words of the same language. The distinction between two phonemes is 'significant' (ie. capable of distinguishing one word from the other; the distinction between two sound is not necessarily significant. Different sounds which belong to one phoneme do not distinguish one word of a language from another, failure on the part of the foreigner to distinguish such sounds may cause him to speak with a foreign accent, but it will probably not make his words unintelligible. The 'distinctive' elements of language ie, the elements which serve to distinguish one word from another are the phoneme (not the sounds). Identification and description of phonemes in a language is called the phonemics or phonology of the language. In other words PHONEMICS is a technique for reducing language to writing.

Note: Some linguists use the term 'phonology' more or less equal to 'phonemics' i.e. they discuss the sound system of a language under two labels (1) phonetics and (2) phonology (phonemics) (ie, phonology - phonemics) while some other distinguish use the term 'phonology' to embrace 'phonetics' and 'phonemics'. ie. phonology - phonetics + phonemics. Strictly speaking phonetics is concerned with the pronunciation of a language (ie. how each sound is uttered by the native speakers) while phonemics tries to identify the significant sound units irrespective of the phonetic variation. In other words phonemics is not bothered about the insignificant variations in the pronunciation of a sound such as 'allophonic' variations.

DISTRIBUTION OF PHONEMES

From among the large number of sounds in a language phonemes are identified based on their distribution pattern. Distribution is the totality of the environment in which a linguistic element occurs. Distribution can be in (1) mutually exclusive positions (ie. one avoiding the other (2) substitutable positions with corresponding semantic difference or (3) free variation (either of the sounds can occur in the same place). When phonetically similar sounds occur in mutually exclusive positions they are considered as 'positional variants' of a single significant sound unit and will be treated as ALLPHONES of a single phoneme. For eg. Voiceless Plosives in English are slightly aspirated in the world initial position and plosives are not released in the word initial position while a third variety of plosives occur in word medial positions. For example the sound [p] in the three words pit, spit, tip are qualitatively different. This difference in pronunciations of [p] is only a 'phonetic difference' and it has no impact on the phonemic quality of [p]. ie. this difference is insignificant as far as the English language is concerned because it does not make any semantic difference in the language. The three occurrences of [p] will be transcribed phonetically as [ph it] (aspirated) [spot] unseparated [tip>] (unreleased). /p/ sound is a phoneme in English while [p] [ph] and [p>] are allophones of the phoneme /p/)phonemes are enclosed in slant lines. //, while phones are written with in square brackets [ ] ie. /p/ is a phoneme in English and [ph], [p] and [p>] are allophones of the phoneme /p/. Allophones always occur in 'COMPLEMENTARY DISTRIBUTION'. Sounds are said to be in complementary distribution when each occurs in a fixed set of contexts in which none of the other occurs Eg. [p^h] occurs in the word initial position where [p>] occurs in the word final position and also before another plosive (eg. [æ pt] 'apt' where [p^h] and [p] will not occur. [p] occurs in other contexts and [p^h] and [p>] can never occupy its position. In other words allphones are contextual modifications of a phoneme when we speak a language. Sounds always tend to be modified by their environments. Our symbols for language are sounds and we arrange them in various sequencs for communications. These different sequences determine the environment of a sound.

CONTRASTIVE DISTRIBUTION

When two sounds occur in mutually substitutable positions resulting in a sematic variation, the two sounds are said to be in contrastive distribution and they will be treated as two separate phonemes. Eg. in English /p/ and /b/ are in contrastive distribution because the substitution of /p/ in /pit/ by /b/ will result in another word /bit/ which is semantically different form /pit/ - and we get two words each corresponding to one of the phonemes. In other words /p/ and /b/ are two separate phonemes in English, each of the phoneme is responsible for the meaning difference of the two words. Conversely /pit/ and /bit/ are two separate words in English and the difference is in the two phonemes /p/ /b/.

In addition to the above types of distribution there is a third variety of occurrence labelled as FREE VARIATION. Here two phonemes can occupy one and the same place in a word (no semantic change) and it is not easy to predict the context in which each one occurs. This is a characteristic features of some of the dialects. For eg. The Muslim dialect of Malabar (Kerala) has got a freely varying pair, -/v/ (labio dental voiced fricative) and -b/ (bilabial voiced plosive) (eg/b/v/ /ba:pa/ and /va: pa/. Both means 'father). Similarly in Englih the word cut may be pronounced with the final /t/ aspirated as [$k^ht^{\wedge h}$] or unseparated as [k∧t]. Here [th] and [t] are in free variation in word final position. (non contrastive free variation ie. Allophones.)

Each language has its own phonological system, with differences from the systems of other languages. Thus English RP has a system of 44 distinctive sounds while standard Malayalam has a system of 53, with differences between the two systems. For instance, the voiced palato - alveolar /ʒ/ of RP as in pleasure and measure is absent in Malayalam, while the retronflex sounds in Malayalam like /ṭ/ḷ/ and /ṇ/ as in /kaṭa/ (shop) /vaḷa/ (bangle) and /paṇam/ (money) are absent in English RP, Again, French and most Indian languages have dental plosives whereas these sounds are absent in English. The voiced alveolar fricative /z/ as in zoo and zebra exists in English but not in Tamil. Kannada and Malayalam. The retroflex plosives /ṭ/ and /ḍ/ occur in most Indian languages but not in English. There are also differences

in the way in which sound are organized in each language. For instance, English permits /sk/ combination word initially, as in school, but in Hindi they do not occur word initially without a vowel in between. Again, English permits combinations such as /sp/, /st/ and /bl/ but several Indian language do not, even though their systems have those sounds. Thus, each language has its own system of sounds and also its own specific ways of organizing them into large units, which together constitute its phonology. Phonology or phonemics deals with the distinctive sound and their specific patterning in a particular language, ie, their functional behaviours, their combination possibilities or syllabic structure and the nature and use of such prosodic features as stress, pitch, intonation etc.

DISTRIBUTION (PHONOTACTICS)

The two kinds of distribution, already described, contrastive and complementary, refer to the occurrence of phones, those which occur in the same contexts, effecting a change of meaning are contrastive and those which do not occur in the same contexts are noncontrastive and those which do not occur in the same contexts are noncontrastive. Thus, phonemes are contrastive and allphones are noncontrastive or complementary in distribution.

Here we consider the distribution of phonemes in a particular language. Each language has its own restrictions regarding the distribution of its phonemes and their combinatory possibilities. This area is covered by pbonotacties, which can be considered a branch of phonology. It deals with the way phonemes combine to form syllable, in other words, it studies the structure of syllables in terms of phonemes and also their context of occurrence. The different phonemes in a particular language occur in specific contexts or environments. In phonology the term 'distribution' refers to the occurrence of phonemes in certain contexts or environments. ie, the possible combination of phonemes in a languages. For instance, the phoneme /ɔ/ never occurs in English word initially, ie, there is no English word beginning with /ɔ/. There fore we can state the distribution of /ɔ/ as, /ɔ/ occurs in word final and intervocalic (i.e. between vowels as in signing /siɔ iɔ/ positions, but not in initial positions.

THE SYLLABLE STRUCTURE AND TYPES

We have seen that phonemes are the units of speech sounds and that each phoneme is a member of family of related sounds called allophones. At a level higher than individual sound segments or phonemes, we have the unit called syllable. In every word made up of more than a single sound, at least one sound is heard to be more 'prominent' (stands out more distinctly) than the neighbouring sound, if there is only one such 'prominent' sound, the sequence is said to consist of one syllable. A word is made up of one or more syllables. Words like tree /tri:/ /hit/ , /hit/, and bell /bel/ have only one syllable each. They are called monosyllabic words. Words like calmer /ka:m ə/, letter /let ə/ and sister /sist ə/ have two syllables each and they are called disyllabic words. Words with more than two syllables are called polysyllabic. Examples are 'civilization', 'cultivation' 'humanity' etc.

Usually syllable division is marked with a hyphen.

Calmer	ka:-m ə/	(2 syllables)
Traveller	/træ -v ə -l ə/	(3 syllables)
Humidity	/hju:-mi-di-ti/	(4 syllables)

It is not always possible to mark syllable division in the orthographic representation since in English particular letter of the alphabet do not always represent particular sounds. Double letters represent singly as in summer /s^m ə/ and rubber rʌ b ə/.

The syllable is a natural division of speech and there are no hard and fast rules regarding the way in which a word should be divided into syllables. Actually each puff of air pushed out of the lungs produces one syllable.

The syllable can be analysed in terms of the elements which constitute it, viz., vowels and consonants. A syllable consists of one or more speech sounds. For example in eager /I:g ə/ the first syllable is made up of one speech sound, a vowel /i:/ and the second syllable is made up of

two speech sounds, one consonant and one vowel. /g/ and /ə/. The most prominent sound in a syllable is said to be syllabic. It is called the Nucleus (N) of the syllable. The vowel is the most important segment, the central element of a syllable. The rest of the sounds in a syllable are no syllabic or marginal. For example, in the word clip /klip/ which has a single syllable, the vowel /i/ is the nucleus and the consonants /k/, / l/ and /p/ are marginal elements. Thus the single syllable in eye /ai/ has only the nucleus. The consonant or consonants at the beginning of a syllable is called the releasing consonant'/s (R) or the onset and the consonant or consonants at the end of the syllable is called the arresting consonant/s (A) or the code. The nucleus is the central obligatory element of a syllable and the consonants are optional. If the syllable ends in a vowel (ie. without the coda), it is called open syllable and if it ends in a consonant (ie. with the coda, it is a closed syllable. The nucleus which is usually a vowel or diphthong is represented by the symbol V and the marginal elements by the symbol C. In the monosyllabic word bet /bet/ /b/ is the releasing consonant, /t/ the arresting consonant, and /e/ the nucleus/.

b	e	t	This syllable has the
RC	N	AC	structure CVC
C	V	C	

Some syllables have only the nucleus and hence its structure is just V; eg; I [ai] (first person singular); a[ei] (indefinite article) V. Some syllables have the nucleus and an arresting consonant: eg., all / :l/ VC; up/ʌp/ VC. Certain syllables have releasing consonant and the nucleus eg. lie /lai/ CV; he /hi:/ CV Some syllables have releasing consonant, the nucleus, and an arresting consonant.

Eg: Pet /pet/CVC; met /met/CVC

English permits more than one consonant to release a syllable and more than one consonant to arrest a syllable. The following syllables have two releasing consonants steel /sti:l/. CCVC; sleep /sli:p/ CCVC.

The following syllables have three releasing consonants:

Stream /stri:m/ CCCVC; street /stri:t/ CCCVC.

The following are syllables with two arresting consonants:

grasp/gra:sp/CCVCC; plant /pla:nt/ CCVCC

There are syllables with three arresting consonants.

tempt /tempt/ CVCCC; plants /pla:nts/CCVCCC

In English the number of releasing consonants may be upto three and the number of arresting consonants upto four. The study of syllable structure of this sort comes under phonotactics.

CONSONANT CLUSTERS IN ENGLISH

A consonant cluster is a sequence of two or more consonants occurring within a syllable. For example, the sequence /pl/ in the word play /plei/ is a consonant cluster, because both the consonants forming the sequence belong to the same syllable.

Unit VII

MORPHOLOGY

THE CONCEPT OF MORPHEME - TYPES OF MORPHEMES: FREE AND BOUND AFFIXES INFLEXION AND DERIVATION:

Morphology is the descriptive analysis of words. ie. the study of words in terms of its morphemes which are the minimal meaningful elements of language.

Leonard Bloomfield in his Language (1933) defines a MORPHEME as 'a linguistic form which bears no partial phonetic semantic resemblance to any other form' Eg. book [buk] is a

single morpheme as well as a word whereas 'books' is a single word but two morpghemes. It has got a free lexical morpheme 'book' and a bound grammatical morpheme's' indicating 'plural' number. Morphemes are generally defined as the minimum meaningful linguistic elements and they are isolated by comparing forms in a language.

Morphemes are the minimal distinctive units of grammar and the central concern of morphology. Its original motivation was as an alternative to the notion of the word, which had proved to be difficult to work with in comparing languages. Words, moreover, could be quite complex in structure, and there was a need for a single concept to inter - relate such notion as ROOT, PREFIX, COMPOUND etc. The morpheme, accordingly was seen primarily as the smallest functioning unit in the comparison of words.

C.F. Hockett defines morphemes as the smallest individually meaningful elements in the utterance of a language. He says: in order to determine a morpheme, pull out any portion of the utterance and ask the following questions:

1) Does the portion recur in various utterances with approximately the same meaning? If the answer is 'Yes' treat it tentatively as a morphine.

2) Can the form be broken into smaller pieces, each of which recur with approximately the same meaning, in such a way that the meaning of the whole form is related to the meaning of the smaller pieces.

If 'yes' the form is larger than a single morpheme. ie. it is a composite form. IF the answer is 'No', it is a single morpheme.

Morphemes are not only carriers of the same meaning but also appear everywhere in the same or similar phonemic shape. In most of the cases phonemic differences, if any, is accountable. Eg. (-s_ is a plural morpheme in English. It varies phonetically (ie. in pronunciation) as (-z) (-iz) in words such as 'pets' /pets/, /dogz/ 'roses' /rəuz!z. All the above contexts are prdictable.

ie, (-s) - occurs after voiceless sounds

(z) - after voiced sound

and (-iz) - occurs after sibilants, ie. s and z.

Here , in spite of their phonetic variation they belong to the same morpheme ie. the plural morpheme in English. Hence -s, z and iz are allomorphs (members) of the plural morpheme.

At the phonemic level /s/,/z/ and /I/ are separate phonemes in English because they can effect a change in words. But at the phonetic level they do not have the meaning of 'plural number' in English.

Similarly 'a' in English has got different status at different levels of analysis.

a - is an alphabet in English (The first letter a, A)

a - phonetic quality of this letter is (ei) (diphthong) in isolation (phonological level)

a - is an indefinite article morphologically.

Morphemes are generally short sequences of phonemes. These sequences are recurrent but not all recurrent sequences morphemes. It is the smallest unit grammatically pertinent. It is the smallest meaningful unit in the structure of a language. By smallest meaningful unit it is meant that a unit which cannot be divided without destroying or drastically altering the meaning. Morphememes are identified by comparing various samples of a language.

An ALLOMORPH is a variant of a morpheme which occurs in definable environments. A morpheme is a group of one or more allomorphs which conform to certain, usually rather clearly definable, criteria of distribution and meaning. The distribution of a morpheme is the sum of all the contexts in which it can occur in contrast to all those in which it cannot occur. A phenomenon is said to be CONDITIONED if it occurs whenever certain definable conditions occur. There are

maily two types of 'conditioning' in the distribution pattern of morphemes.

1) PHONOLOGICALLY CONDITIONED MORPHEMES

This isa regular pattern of conditioning where the phonetic shape of morphemes may change according to the phonetic characteristics of preceding or following sounds. Eg: the past tense morpheme in English.

is [t] ~ d ~ id ~ t

i.e. the past tense morpheme [-t] has got three allomorphs (3 shapes phonetically) -t, -d and -id each occurring in three different phonetic (sound/pronunciation) contexts. The distribution pattern of these three allomorphs are the following.

-t -occur after voiceless sounds

eg, walk [wɔ:k] walked [wɔ:kt]

-d -occures after voiced sounds

beg [beg] - begged [begd]

-id - occurs after [t] [d]

Pat [pæ] - patted [pætrd (past tense)

All the above three allomorphs are phonologically conditioned, because the influencing factor is the phonetic quality of the preceding consonant.

In words such as ox (sg) -oxen (pi)

child - children (pl)

go (present tense) - went (past tense)

put (present) -put (past)

the use of the plural suffix (-en) or the tense suffix (zero) are not phonologically conditioned. These suffixes occur with specific morphemes, hence they are morphologically conditioned. Note the following notations:

{ } enclose morpheme

∞ denote morphological conditioning.

~ - demote phonological conditions

' - Indicate glosses, translation or other indications of the meaning of items.

Morphologically conditioned (irregular) alternants with different phonemic shape such as go - went (past) are termed as 'suppletive' alternants.

Phonologically conditioned alternants are automatic alternants because they are natural consequences of connected speech, ie, when sounds are uttered in continuous sequence the articulators move fast from one position to that of the other thereby causing minor changes in the sound quality. One of the alternate forms is considered as the 'base form".

In short, A morpheme can have different shapes and these shapes stand in alternation; each representation is a MORPH; all the morphs which represent a given morpheme are the allomorphs of that morpheme. Invariant morphs are also there which is represented in all the environments by a single allomorph. eg. play (plei)

Separate morphemes are in "contrastive distribution" while allomorphs of the same morpheme will always be in complementary distribution (ie. occurring in mutually exclusive positions). Note the parallel terms in different levels of linguistic analysis.

phone	phoneme	allophone	phonological level
morph	morpheme	allomorph	morphological level
graph	grapheme	allograph	graphological level
ie. minimal unit	significant unit	positional variants of a single member	linguistic levels of analysis

Words of different phonemic shapes but of identical or closely similar meaning like 'big and 'large' 'find' and 'discover' can be called 'synonymous morphemes'. Words or parts of a word which have unique occurrence (ie. occurring only once, or only in one word) in a language is called UNIQUE MORPHEME. eg. 'ran' in the word 'cranberry' (a fruit like 'strawberry', 'gooseberry' etc.)

Every language has its own grammar. The grammar or grammatical system of a language is (i) the morphemes used in the language and (2) the arrangements in which these morphemes occur relative to each other in utterance.

MORPHOPHONEMICS is concerned with the phonemic shapes of morphemes. It establishes the relationship between morphemes and phonemes -ie. between grammar and phonology.

A phoneme is defined not as a speech sound or aliophone, but as a range of speech sound which functions as a point of contrast in an inter - locking net work of contrasts. Similarly, a morpheme in a given language is defined only relative to the whole morpheme stock of the language; a morpheme is something 'different' form all the other morphemes of the language. One can only define what a specific phoneme or morpheme of a specific language is, in terms of the operations and criteria used in discovering them. For the phoneme, the criterion is identity or difference in sound of whole utterances to native speakers, without regard to meaning, while for the morpheme, the criteria are both meaning and (previously determined) phonemic shape. For the relationship of a morpheme to any of its phonemic shapes, we used the phrase 'is represented by'. Eg. the English noun plural morpheme is represented by the phonemic shapes /z/ after a form ending in /d/ (voiced sounds) and is represented by /s/ after a form ending in /t/ (voiceless sounds).

The ways in which the morphemes of a given language are variously represented by phonemic shapes can be regarded as a code. This code is the morphophonemic system of the language. The morphophonemics of a language is never so simple. There are always instances of two or more morphemes represented by the same phonemic shape (eg. 'meet' and 'meat') and always cases in which a single morpheme is represented now by one phonemic shape, now by another (/s/and/z/ plural). The systematic description of any language must cover it.

TYPES OF MORPHEMES

Morphemes differ in (1) phonemic shape (2) relationship of the parts of the morpheme to each other and (3) the manner is which morphemes are formally connected with each other. That is, morphemes differ in their internal composition because morphemes may be composed of segmental phonemes (eg. vowels, consonants); suprasegmental phonemes (eg. stress, pitch, intonation) and combinations of both, 2) Morphemes are of different shapes and sizes and they have different canonial forms.

Eg. a 'definite article in English'

Canonical form V (vowel)

an "indefinite article — a -v

VC (vowel consonant) — an - vc

and (conjunction) — and - vcc

VCC etc.

Theoretically there is no restriction as to the shape and size of a morpheme.

3) The parts of the morphemes usually occur in continuous sequence if all of them are segmental; they are superimposed if they include segmental and supra segmental phonemes. eg. [e k s e s] 'excess' [e k s e s ' i v] 'excessive'

Formal relationships of morphemes to each other are (1) structural and 2) positional. The structural relationships of morphemes are of three different morphemic types: 1) additive 2) replacive 3) subtractive. These represent three basic morphological processes. Addition,

replacement and subtraction. Additive morphemes include roots, prefixes, infixes, suffixes, suprafixes and reduplicatives, Roots constitute the basic core of most words. Prefixes are bound elements which precede the root and suffixes are bound elements which follow the root. infixes occur within the root. Suprafixes are morphemes which consist wholly of suprasegmental phonemes and which are added to the root or stem.

Reduplication consists in the repetition of all or of part of the root or stem. Where only a part of the root or stem is repeated the repeated portion may be called a 'reduplicative'. (eg. tut - tut, hush - hush, willy - nilly) such reduplicatives may occur pre-posed, inter-posed and post-posed to the root or stem and they may consist of just the morphemes of the stem or there may be some added elements.

Replacive morphemes are those which replace parts of stems. They are structurally different from the additive morphemes which are added to the stems. Replacive morpheme may consist of any phonemic form. ie. They may be vowels, consonants, tones, nasalization or combinations of such segmental and suprasegmental features.

Subtractive morphemes: Phonemes may be subtracted from stems as well as added to them to signify some difference in meaning. Such subtractions are, however, much rarer than additions. They usually result from a historical process of sound change which becomes morphologically meaningful.

Position classes: Positional relationship of morphemes to each other are successive, included and simultaneous.

Affix is a grammatical term which subsumes bound forms of certain kinds. But parallel terms, prefix, suffix and infix are not grammatical. They refer to positional classes of the morphs which represent bound forms.

Eg: boy - s - noun affix represented by a morph /-z/ which is suffixed to the stem.

men-e-the noun plural affix represented by a morph

/-e-/ which is infixed with in the discontinuous representation /m-n/ of the stem.

Affix is a collective term for prefix, infix and suffix. i.e. a morpheme added to the base or root of a word to form a new stem.

Infix is an affix which is inserted within a word. Infixes are used extensively in Cambodian, Sudanese and in some American Indian languages.

Prefix is an affix which is added to the front of a root or stem. Alternative term is 'pre-base'.

Suffix is an affix added to the end of a word. It may be inflectional such as case - endings or the plural endings' (-s in boys) or derivational such as '-ness' in 'kindness', happiness. Alternative term is 'ending'.

Superfix is a term used to describe the suprasegmental or prosodic features of a particular word or utterance. Eg. the stress pattern which is distinguished (modifier + noun) in the phrase 'green house' from the compound 'green house'.

Note the following terms:

Base: A term used in morphology as an alternative to root or stem: it refers to any part of a word seen as a unit to which an operation can be applied, as when one adds an affix to a root or stem,. Eg. in 'unhappy' the base form is 'happy'; if -ness is then added to unhappy, the whole of this item would be considered the base to which the new affix is attached. Some analysts, however, restrict the term 'base' to be equivalent to 'root', ie. the part of a word remaining when all affixes have been removed. In such an approach happy would be the base form (the highest common factor) of all its derivations happiness, unhappy, unhappiness etc.

Root: A root is the base form of a word which cannot be further analysed without total loss of identity. It is that part of the word left when all affixes are removed. In the word meaningfulness. for eg. removing-ing-ful and -ness leaves the root mean. Roots (sometimes referred to as

'radicals') may be classified in several different ways. They may be 'free' morphemes such as mean or may be bound such as -ceive Eg. receive, conceive, deceive etc.). From another point of view, roots are sometimes classified as 'simple' (ie compositionally unanalysable in terms of morphemes or 'complex I 'compound' (ie. certain combinations of simple root forms, as in black bird, careful etc. Though for the latter the term stem is commonly used. From a semantic point of view, the root generally carries the main component of meaning in a word. From a historical view point, the root is the earliest form of a word.

Stem; A term used in linguistics as part of a classification of the kinds of elements operating Within the structure of a word. The stem may consist solely of a single or a single root morpheme (ie a 'simple stem as in man) or two root morphemes (ie. a compound stem, as in black bird, or of a root morpheme plus a derivational affix ie. a 'complex' stem, as in manly, unmanly, manliness). All have in common the notion that it is to the stem that inflection al affies are attached.

Inflectional (indfexion (al), inflect): A term used in mophology to refer to one of the two main categories or processes for word formation , the other being derivational. These terms also apply to the two types of affixes involved in word formation. Inflectional affixes signal grammatical relationship such as plural, past tense, and possession, and donot change the grammatical class of the stems to which they are attached , that is the words constitute a single paradigm eg. walk. walks walked, a word is said to "inflect for" past tense, plural etc.

Derivational (derived) : Basically the result of a derivational process is a new word. (e.g. nation- national) whereas the result of an inflectional process is a different form of the same word. eg. nations, nationalise distinction is not totally clear-cut, however (eg. how best to analyse -ly In English). Derivational affixes change the grammatical class of morphemes to which they are attached as in suffixation, eg, -tion is a noun - forming derivational suffix); They also usually occur closer to the root morpheme than do inflections, eg: nation -al - is + ing (s) Often they havé independently statable lexical meanings (eg. min -, sub-), though they are not always easy to identify (eg: -er). The combination of root and derivational affixes is usually referred to as the stem of the word i,e the element to which inflections are attached.

Certain features are characteristic of derivation
inflectional formations

Derivational formations	Inflectional formations
1. Belonging to substantially the same external distribution classes as the simplest member of the class in question	1. Do not belong to substantially the same external distribution classes as the simplest member of the class in question.
2. Tend to be "inner" formations.-	2. Tend to be "outer" formations.
3. Tend to be statically more numerous (ie, statistically more numerous in terms of morphological listing, not necessarily in terms of any particular context).	3. Tend to be statistically less numerous.
4. Have derivational morphemes with more restricted distribution. (A derivational morpheme eg. *Let* in eyelet, armlet, eaglet, hamlet, tend to have a more restricted distribution than an inflectional one. eg. -s plural suffix. Derivational morphemes tend to be more numerous, but occur in a smaller number of combinations.	4. Have inflectional morphemes with more extensive distribution.
5. May exhibit changes in major distribution class membership. For eg. derivational morphemes may verbalize adjectives. eg. enable endear, nominalise verbs eg. dancer, inheritance; adjectivise nouns, eg. truthful, gracious nominalize adjectives, eg. truth, fatalism and adverbalize adjectives eg: truthfully really.	5. Exhibit no changes in major distribution class membership.

Unit VIII

LINGUISTIC CONSTRUCTIONS: ENDO CENTRIC AND EXO CENTRIC, CO-ORDINATE AND SUBORDINATE

SYNTACTICAL CONSTRUCTION TYPES: ENDO CENTRIC

Construction (Construct): In its most general senses in Linguistics "construction" refers to the overall process for example, being "constructed out of a set of morphemes by the application of a set of RULES. More specifically it refers to the SYNTAGMATIC result of such a process, a particular type of construction (a "constructional type" or "pattern") being defined as a sequence of units which has a FUNCTIONAL identity in grammar of a language, such as SUBJECT +VERB+OBJECT (with reference to CLAUSES), or DETERMINER + NOUN (with reference to PHRASE). More specifically, it refers to a token of a construction type, in the sense of STRING. eg. the + man + is + walking. It is constructions of this last kind which are analysed into CONSTITUENTS, as in immediate constituent analysis. "Constructional homonymity refers to a grammatical string with more than one interpretation in terms of patterns of construction it contains.

Hockett discusses construction types as follows: The sentence -the old dog lay in the corner - contains two composite forms, "old/dog" and "lay/in the corner" built by different constructions but nevertheless showing certain similarities. In terms of meaning, an old dog is one kind of dog, and lying in the corner is one kind of lying. In each case, then one of the immediate constituent (IC's) modifies the meaning of the other. This is not true of all composite forms. Men and women, with ICs "men" and "women" refers neither to one kind of men nor to one kind of women; visit Bill" refers neither to one kind of visiting nor to one kind of Bill.

Construction types are helpful in comparing languages. They are also helpful in dealing with a single language because there are instances in which it is not easy to tell whether two constituents have been built by a single construction or only by two similar ones. In English, white/ house and little/house illustrate this. That the construction may not be identical is suggested by the fact that we might add little to the first form, giving little white house, but are not likely to add white to the second - no one says 'white little house'. But the constructions are certainly of closely similar type.

In grammatical analysis syntactic constructions are divided into two - endocentric and exocentric -based on their distributional criteria. Endocentric refers to group of syntactically related words where one of the words is functionally, equivalent to the group as a whole. ie. there is a definable "centre" or HEAD inside the group, which has the same distribution as the whole. It is opposed to exocentric. Endocentric constructions include noun phrases and verb phrases (as traditionally defined) where the CONSTITUENT items are SUBORDINATE to the head, eg. the big man, the man in black, will be going, and also some types of co-ordination eg. boys and girls.

Exocentric constructions refer to a group of syntactically related words where none of the word is functionally equivalent to the group as a whole. ie there is no definable "centre" or "head" inside the group; it is opposed to endocentric., The English basic sentence structure os "subject + predicate" is exocentric, by the definition (a predicative exocentric construction), as neither part can substitute for the sentence structure as a whole, eg/ the man fell/ cannot be replaced by either *the man* or by *fell* above.

Other types include "directive constructions" such as /preposition + nouns phrase / sequences (eg. on the table), Where the ADVERBIAL function of the whole is not equivalent to any of its parts ; /verb + object/ sequence (eg. kick the ball); and (connective constructions, where a connector element is followed by an attributive element (eg. seemed angry).

In other words, Endocentric constructions are those in which the unit as a whole belongs to substantially the same external distribution class (ie. Parts of speech) as the nuclear immediate constituent or both immediate constituents (there are rarely more than two). The word black bird consists of two morphemes black and bird and in terms of the syntactic structure of English,

bird constitutes the nucleus of such construction. The unit blackbird belongs to substantially the same distribution class as bird, ie. it takes the same suffixes and occurs in the same positions as the noun bird occurs. We must however, say that the classes are "substantially the same, rather than identical since blackbird obviously does not combine with red in red blackbird as bird does occur in red bird.

In some instances the resultant combination belongs to substantially the same class as both constituents. For eg. the word queen mother is a noun and both immediate constituents are nouns. A compound such as foot - pound - second is also endocentric.

Certain combinations appear to be endocentric, but are not. For eg. Red coat is a noun, and the nuclear immediate constituent coat, is also a noun. But this nuclear constituent belongs to a class for which the pronominal substitute is it, whereas the construction Red coat (railway porter) has the pronominal substitute he. Coat and Redcoat are to this extent not members of the same external distribution classes, and we treat such forms as red coat as exocentic. Similarly, butter fingers though is a noun, does not belong to the same external distribution class as the nuclear immediate constituent fingers. For the nuclear form butter fingers occurs with singular agreement. eg. (here comes) that butter fingers ('a person unable to hold things well, esp. one unable to catch a ball").

Exocentric constructions are those in which the unit as a whole belongs to a different external distribution class from the nuclear constituent or form both of the immediate constituents. For eg. pick pocket consists of a verb and a noun, of which the verb is the nuclear immediate constituent. The noun pickpocket belongs to a different external distribution class from the verb. nuclear constituent, pick and hence the construction pick pocket is exocentric. In the word income the immediate constituents are an adverb in and the verb come; the resulting combination being a noun, is exocentric, in that it does not belong to the class of either immediate constituent.

Both endocentric and exocentric constrictions may consist wholly of roots or may include non -roots as immediate constituents. Foe eg. eyelet is an endocentric root plus non root constructions. It belongs to substantially the same external distribution class as the nuclear constituent eye. The adjective fishy is an exo centric root - plus - non root construction. Because the resultant combination does not belong to the same class as the noun nuclear constituent fish.

CO- ORDINATE VS. NON -CO - ORDINATE AND NON - SUBORDINATE CONSTRUCTIONS:

Co- ordinate constructions are those in which the immediate constituents are of equal structural rank and belong to substantially the same external distribution classes. For eg. The adjective bitter sweet consists of two co-ordinate nuclear constituents. The same is true of queen - mother and God - man.

In the constructions eyelet an fishy the peripheral elements - let and - y are subordinate to the nuclear constituents. In black bird the peripheral black is subordinate to the nuclear bird.

In the word overall, as in the phrase the overall appearance, the immediate constituents over (a preposition) and all (a pronoun), exhibit a non - coordinate and non - subordinate relationship. In the syntax of English the parallel prepositional phrases constitute exocentric constructions, since the units as a whole do not belong to the same external distribution class as either of the immediate constituent.

Coordinate immediate constituents must consist entirely of nuclei or of non nuclei. Sub - ordinate immediate constituents consist of nuclei, combinations of nuclei and non nuclei or combinations of non nuclei;

Lessons prepared by
Dr. SREEDEVI.
Dept. of English
University of Calicut.

SYNTAX

Unit - 1

FORM CLASSES

It is essential that we know something about recurrent patterns in a language before we can discuss 'form classes'. The property of languages which makes them such effective and powerful tools of communications is that a speaker can say something that has never been said earlier by anyone and yet be totally understood, most often without either speaker or hearer being aware of the novelty. of a new utterance of putting raw materials. Neither the raw materials nor the patterns need be new. Yet the utterance can be completely new.

The nine basic patterns (kernel sentences or atomic sentences) which are the foundation of all sorts of sentences prove this point to the extent of 100%. We know that the building blocks to utterances are morphemes (minimal meaningful grammatical units) and the patterns are not just linear (from left to right writing and one following another in speaking) but hierarchical.

Let us take a few sentences from any of the nine basic patterns. For instance, let us have a few from Pattern No. V-NP 1-V tr-NP2

The (young) man bought a (new) watch (from the shop).

A/An (old) woman saw (lots of (dirty) clothes (in the waste bin).

The (wicked) daughters abandoned their (aged) father (there).

The (sick) men gave away their possessions.

The bracketed items are all totally optional. Except for the determiners. No morpheme is repeated anywhere.

Now for the sake of convenience of representation we shall take just two sentences which look exactly alike in structure.

The boy saw a new cat.

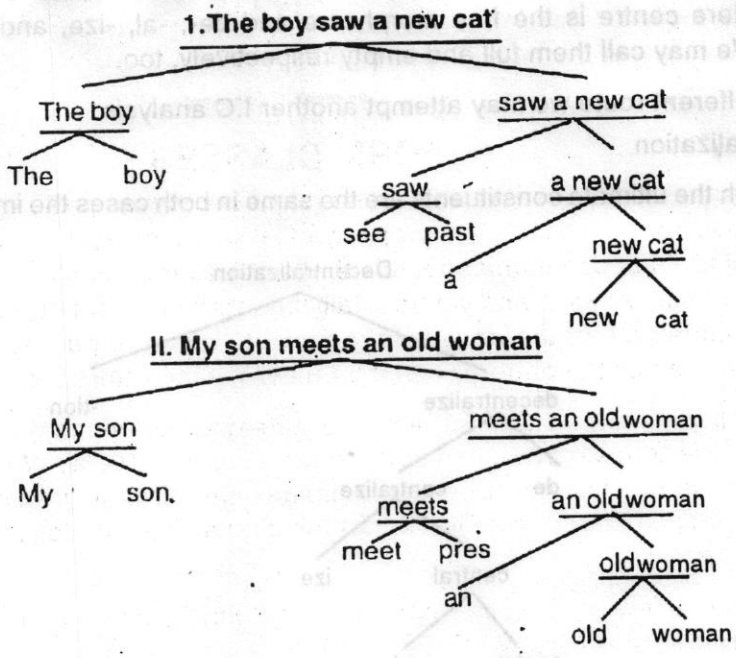
My son meets an old woman.

Using box diagram we can represent them as follows.

<table>
<tr><td colspan="2">The boy</td><td colspan="3">saw</td><td>a</td><td>new</td><td>cat</td></tr>
<tr><td colspan="2">The boy</td><td colspan="3">saw</td><td>a</td><td>new</td><td>cat</td></tr>
<tr><td colspan="2" rowspan="3"></td><td colspan="3" rowspan="2">saw</td><td>a</td><td>new</td><td>cat</td></tr>
<tr><td rowspan="2">a</td><td>new</td><td>cat</td></tr>
<tr><td>The</td><td>boy</td><td>see</td><td>Past</td><td>new</td><td>cat</td></tr>
</table>

<table>
<tr><td colspan="2">My son</td><td colspan="3">meets</td><td>an</td><td>old</td><td>woman</td></tr>
<tr><td colspan="2">My son</td><td colspan="3">meets</td><td>an</td><td>old</td><td>woman</td></tr>
<tr><td colspan="2" rowspan="3"></td><td colspan="3" rowspan="2">meets</td><td>an</td><td>old</td><td>woman</td></tr>
<tr><td rowspan="2">an</td><td>old</td><td>woman</td></tr>
<tr><td>My</td><td>son</td><td>meet</td><td>pres</td><td>old</td><td>woman</td></tr>
</table>

The above can be represented using branching tree diagrams



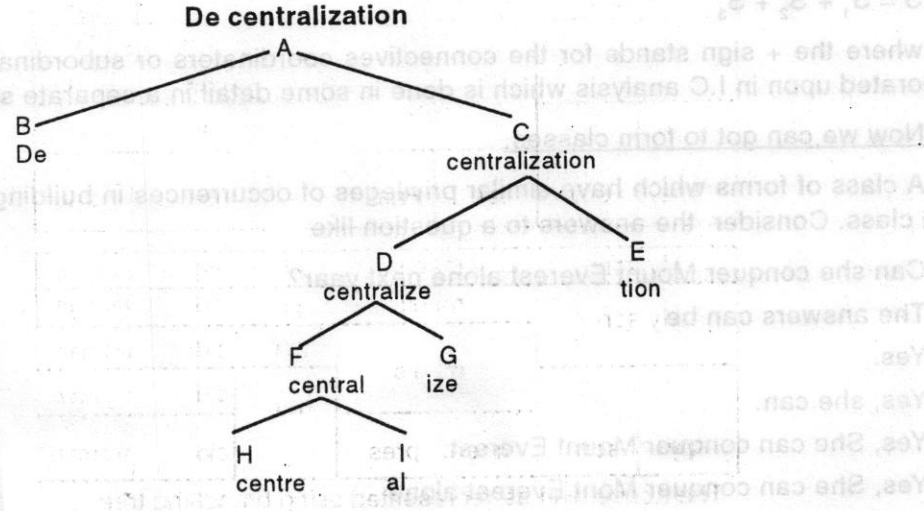
The sentences show the same hierarchical order. The similarity in meaning (note that it is not the sameness of meaning) for the structural kind is due to the similarity in order and hierarchical arrangement.

However, two sentences which have the same constituents may differ in meaning if the order is different, even though the hierarchical ordering is the same. For instance, (1) Peter is a bachelor and (2) Is Peter bachelor? or (1) My wife likes coffee hot, and (2) My wife likes hot coffee. or (1) Mother dear and (2) Dear mother. We are ignoring the suprasegmental phonemes here i.e. intonation).

I have already mentioned that all English sentences are derivable from the nine basic patterns. This is to say that a small and finite number of simple sentences gives an infinite number of sentences of the compound kind. This can be illustrated using immediate constituents and immediate constituent analysis. We shall start with words to grasp the idea.

I. De centralization : de-centr-al-iz-ation

B and C are the immediate constituents of A



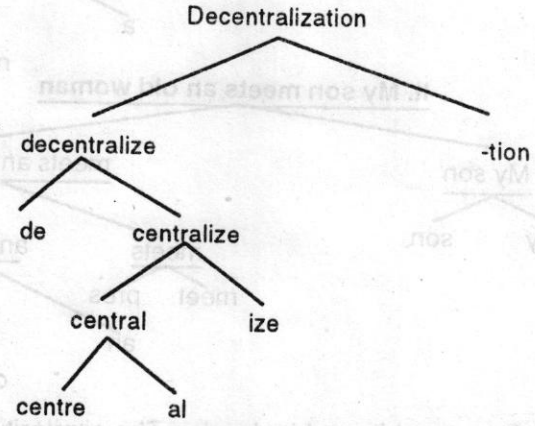
D and E " C
F and G " D
H and I " F

B,E,G,H and I are the ultimate constituents-those which cannot be further cut up into morphemes. Here centre is the free morpheme and de-, -al, -ize, and -tion are the bound morphemes. We may call them full and empty respectively, too.

Taking a different route we may attempt another I.C analysis.

II. Decentralization

Even though the ultimate constituents are the same in both cases the immediate constituents are not.



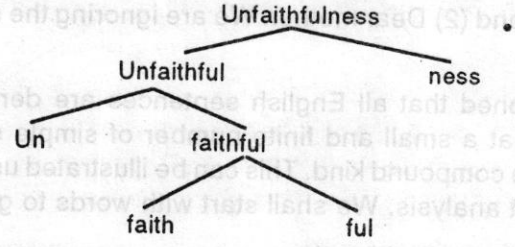
Note: Such different routes are not always possible.

The following is an easier example.

faith + ful = faithful

un + faithful = unfaithful

unfaithful + ness = Unfaithfulness



Just as words can be subjected to I.C. analysis, sentences can be too. Taking a sentence made up of three smaller sentences (clauses) this can be illustrated as

$S = S_1 + S_2 + S_3$

where the + sign stands for the connectives coordinators or subordinators. This will be elaborated upon in I.C analysis which is done in some detail in a separate section.

Now we can got to form classes.

A class of forms which have similar privileges of occurrences in building larger units is a form class. Consider the answers to a question like

Can she conquer Mount Everest alone next year?

The answers can be

Yes.

Yes, she can.

Yes, She can conquer Mount Everest.

Yes, She can conquer Mont Everest alone

Yes, She can conquer Mont Everest alone next year.

or the answers can be

No.

No, She can't etc.

Because all the above serve theame function and carry the same privileges, they are all interchangeable and so they belong to a single form class. I shall illustrate this with other simpler examples. Consider the sentences with the blank given below:

The .....is empty.

The blank can be filled using items like hall, room kitchen, box, safe, pocket, bucket, head, stomach, etc. All these items belong to the same form class, (We call them nouns).

Consider the sentence given below with a blank space.

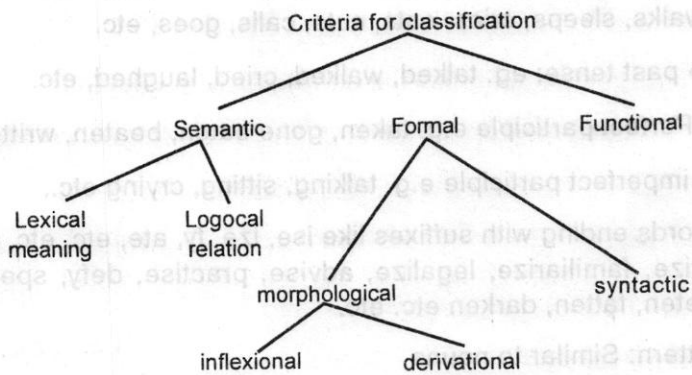
The hall is .....

The blank above can be filled using items like empty, full, spacious, airy, dark, noisy rectangular, square, large, big, narrow. All these items belong to the same form class. (We call them adjectives). Similarly consider the sentences given below with a blank in it.

Carl Lewis.....

The blank can be filled with items like ran, walked, slept, snored, fell said, cried, laughed, smiled, shouted etc. All these items belong to the same form class. (We call them verbs).

Even though there used to be other criteria for the classification of words into "PARTS OF SPEECH" like semantic, formal and functional characteristics as given below.



To these can be added a few other features too. Please refer to the subtitle: we are discussing 'formal' characteristics. To the formal characteristics like inflexions and derivations (affixes) we can add.

1) the position of the item in relation to the other classes in sentences (syntactic)

2) the suprasegmental features like stress, juncture and intonation (phonological) and the most important of all

3) the affinity of certain items for certain function words such that they are found close by.

(In the the above we are using the broad division of words into (1) lexical, formal, content words of conjunctives and (2) function words called grammatical, structural or functors. For instance, the function words called determiners are found along with and just before nouns; the modals along with and before verbs; the negators with and as a part of the verbal etc.

The structuralists give word classes as shown below:

FORM CLASS No.I NOUNS

a) Nouns can be, generally speaking, inflected to give the plural and the possessiveness.

Eg.

boy.....boys; boy's

girl.....girls; girl's

child.....children; child's

b) Words which end with the derivational suffixes like -er, or, -ment, -ness, -tion, -ess, = let, -ster, -hood, -ship, -dom, -etc., -ery, -age, -ee and the like are almost always nouns.

c) Stress pattern : In word pairs like 'produce - produce, 'present - pre sent, 'conduct, con duct, 'desert de sert etc. etc. the noun takes the accent on the first syllable.

d) Word order : Nouns fill certain characteristic positions in relation to parts of speech in sentences. It is easily possible for us to use test frames using which we can identify nouns. For instance, let us take.

The.....is beautiful. The.....are fresh.

The blanks are to be filled with nouns.

e) Relations with functors : Determiners - i.e. articles, demonstratives and possessives- immediately precede nouns or with the quantifiers and the adjectival phrases between them and the noun.

e.g.the young boy; this lovely baby; the first ten young boys; that first lovely baby; these last two children etc. etc.

FORM CLASS : II : VERBS

a) Inflexions : Verbs can be inflected in the following way;

verb + s → third person singular (or just singular) present tense

e.g. takes, walks, sleeps, cries, eats, cuts, calls, goes, etc.

verb + ed → past tense; eg. talked, walked, cried, laughed, etc.

verb- en → Perfect participle e.g. taken, gone eaten, beaten, written.....

verb+ing → imperfect participle e.g. talking, sitting, crying etc..

2) Derivation : words ending with suffixes like ise, ize, fy, ate, etc. etc. are always verbs

e.g. popularize, familiarize, legalize, advise, practise, defy, specify, crucify, separate, demacrate, sweeten, fatten, darken etc. etc.

3) Stress pattern: Similar to nouns

4) word order: The test frame given below may be used to identify verbs

The food ... excellent

The children .....there

The dog.....

The blanks will be occupied by verbs only.

5) Functors: Auxiliaries are closely attached to the verbs. In fact, we cannot use a verb in a sentence unless the auxiliary is added to the verb. The auxiliary is made up of 'tense modal, perfective and progressive'.

e.g. The <u>bird</u> is <u>singing.</u>

The baby <u>will</u> be hungry.

<u>Will</u> you do me a favour?

FORM CLASS III: ADJECTIVES

a) Inflexions: Adjectives usually take the comparative and superlative degree forms with the addition of suffixes <u>er</u> and <u>est</u> respectively. If they cannot be added, then the words <u>more</u> and <u>most</u> are used. The latter is called periphrastic inflexion There are a few irregular forms too.

e.g. rich - richer - richest fast - faster - fastest

beautiful - more beautiful - most beautiful

10/2/02

good- better-best

bad - worse - worst Irregular forms

little - less - least

b) Derivation: Words which end with markers like - y, ic, ous, - able, ive - less - ian - ite, -ist, -ful, -like, -ish etc. are almost always adjectives.

eg: creamy, electric, pious, valuable, edible, inquisitive, useless, Indian, favourite, Chinese. Communist, beautiful, childlike, feverish etc.

c) Stress pattern: Though both nouns and adjectives are lexical items and carry accent on one of their syllables, when compound nouns and sequences of adjectives and nouns appear, there is a pattern to be observed. As two consecutive primary stresses are rather unusual, the following pattern is seen.

black`board & 'blackboard (compound)

green 'fly & 'greenfly (")

a French`teacher (The teacher is French)&

A French teacher (One who teaches French)

d) The following test frame shows the positions where adjectives are found.

The .....boy is smart. The .....boy is.....

All..... girls are ambitious. All.....girls are.....

The sun is very .....

Diamonds are .....things

Midas was a .....king

e) Functors Intensifiers and downtoners are always found together with adjectives . e.g.

very rich, moderately rich, too hot, awfully sorry, certainly wrong, violently sick, somewhat, slim, a little strange, most enthusiastic.....

FORM CLASS IV: ADVERBS:

a) Inflexion : In many cases the adverbs take on comparative and superlative degree forms - the - er and - est suffixes - respectively fast - faster - fastest: hard - harder - hardest or the periphrastic kind quickly - more quickly - most quickly

The result is adverbs and adjectives are not distinguishable on the basis of inflexions.

b) Derivation: Words ending in-ly, ward (s), wise etc, are always, or almost always, adverbs (exceptions like lovely, kindly etc.) e.g. happily, gladly, firmly, sensitively, backward (s), forward(s), upwards (s), downward (s), heavenward (s), clockwise, weather-wise, centurywise etc. etc.

c) Stress patterns of adverbs follow those of verbs and nouns referred to earlier. Affixes do not affect stress,

d) The test frame of adverbs can- be as follows

We are using the standard sentence - structure of English here:

S → NP VP (Adverbials ± Prepositionals)

The woman sang <u>beautifully.</u>

The hammer came down <u>heavily</u>

The girl ran fast

The cat drank the milk <u>greedily</u>

e) Adverbs also can be intensified or toned down just like adjectives.

FUNCTION WORDS

The function words are a closed system consisting of a small and finite number of items without which sentence cannot be built.

(1) Determiners: the articles the demonstratives and the possessives.

(2) Auxiliaries: tense, modal, perfective and progressive.

(3) Propositions: in, on ∧ above, into, up, doen, etc. etc. and compound ones like in addition to, by the side of, inspite of etc.

(4) conjuctions: (connections, connectives, hooks):

(a) co-ordinators like and, but, or etc. etc.

(b) subordinators like when, if, ∧ because. though, as etc. etc.

(5) Interrogators: The question words like what, who, when, why where etc.

(6) Modifiers: intensifiers and downtoners

Apart from the above we have interjections, sentence initiators, pausers, and the like.

All these items can be subjected to further subdividing. But for our present purpose, this will do admirably well.

Unit-II

I.C. ANALYSIS (IMMEDIATE CONSTITUENT ANALYSIS)

I.C. analysis is a powerful tool, though not completely dependable and error proof, to represent structure of sentences. We shall try to demonstrate how it works using a simple example from algebra, Xx Y+Z We have a sequence of three symbols and two signs here but we are not sure how they are to be related. That is to say, the relation tends to be ambiguous; we can disambiguate it by using brackets.

Xx(Y+z) or (XxY)+Z

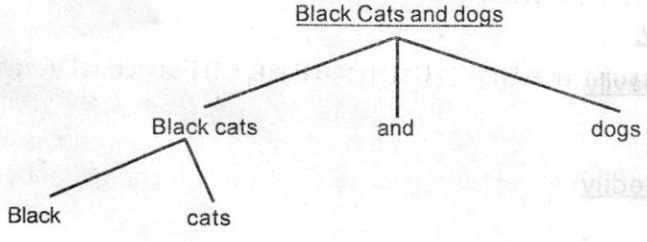
Brackets help in elucidating which stands with which and reveals the structural organization. Let us now use a phrase from language.

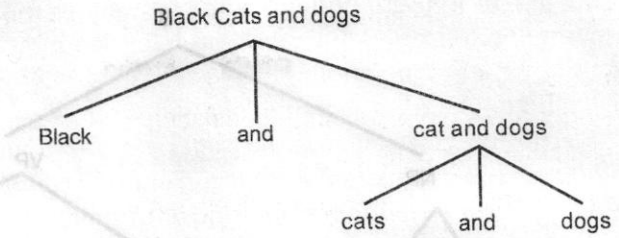
black cats and dogs

We can have here (1) black (cats and dogs) or (2) (black cats) and dogs. In (1) both cats and dogs are black, whereas in (2) onlycats are black.

The following is not ambiguous, despite the same form classes used as in the above phrase; dogs and black cats.

Which shows clearly that some words (or items) belong together. Unless what belongs to what is not clearly stipulated, there is the potential ambiguity calling for more than one structural organization. This idea can be elucidated using branching tree diagrams, or boxes, or brackets. All modes of representation mean the same.

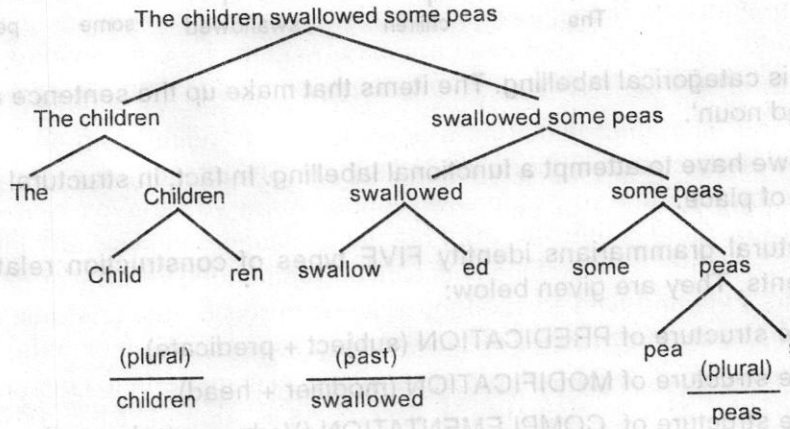




What we have done here is called Immediate Constituent Analysis. Now we shall take a simple sentence of the Atomic Type - V NP Vtr NP2.

The children swallowed some peas.

We proceed step by step as indicated in the branching tree diagram given below.



In the above

'The children' and 'Swallowed some peas' are the I.Cs of the sentence.

'The' and 'children' are the I.Cs of "The children".

'Swalloqwed' and 'some peas' are the I.Cs of 'swallowed some peas'. 'some' and 'peas' and the I.Cs of 'some peas'.

'The', 'Children'; 'swallowed', 'some' and 'peas' are called the ultimate constitute of the sentences.

Refer to Form Classes.

We are restricting our analysis to the lexeme level. It we are extending the analysis to the morphological level, we have to split some of the itmes to thier morphemic levels as shown in the diagram)

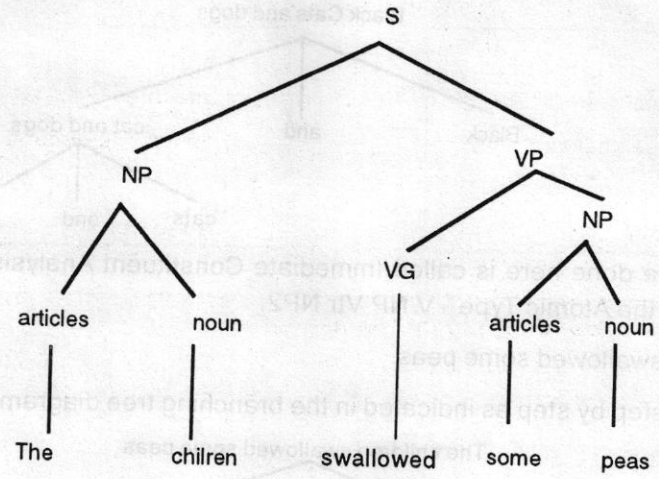
The residues in which no further cuts be effected are the ultimate constitutents.

In an I.C. Analysis the word order is never disturbed. For instance, 'swallowed' is always 'swallow and ed' and never 'past' + 'swallow'. In an I.C. Analysis the cuts are always binary. At every cut two segments are born. They always show hierarchy (i.e., the levels of construction). Questions are subjected to DISCONTINUOUS I.C. Analysis. We shall be ignoring it in our discussion.

Now we will attempt to identity and lable the constituents at the different hierachies (layers) so that we know better about the organization, where form classes appear and in what order etc. etc.

Broadly, there are two ways of labelling (1) Categorical and (2) Functional. A categorical label tells us about the category or class of the item and a functional lable tells us about what role of the item is in the structure i.e., noun, verb, adjective, adverb, etc. in the category lable and subject, object, modifier, complement etc. in the function level. Now let us take our sentence given above.

S= The children swallowed some peas.



This is categorical labelling. The items that make up the sentence are 'article, noun, verb, article and noun'.

Now we have to attempt a functional labelling. In fact, in structural grammar this occupies the pride of place.

Structural grammarians identity FIVE types of construction relating tot he function of constitutents. They are given below:

1. The structure of PREDICATION (subject + predicate)
2. The structure of MODIFICATION (modifier + head)
3. The structure of COMPLEMENTATION (Verb + complement)
4. The structure of SUBORDINATION (subordinator + dependent unit)
5. The structure of COORDINATION (independent unit + coordinator + independent unit)

we shall take each of the above one after another to illustrate.

1) SUBJECT + PREDICATE

Snakes | bite

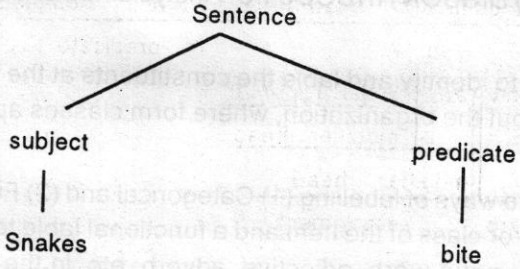
Some snakes | bite deep

Some of these snakes | do not bite deep at all

That some of these snakes do not bite at all | is | not true

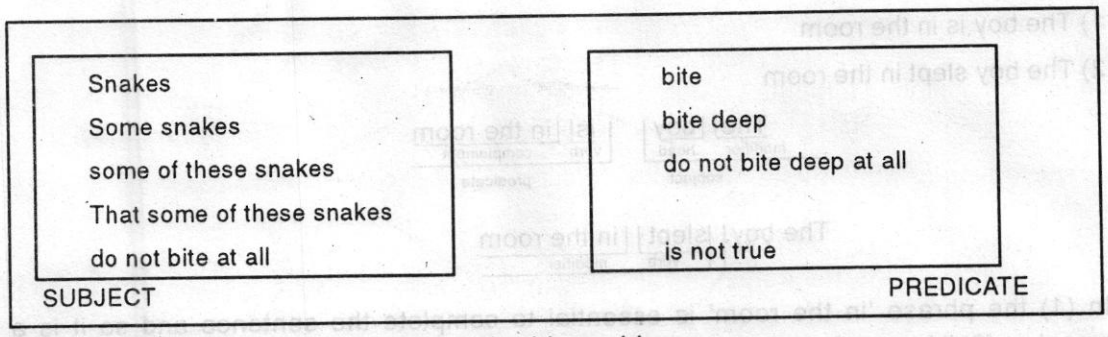
NOTE: THE LENGTH OR COMPLEXITY OF THE SENTENCE DOES NOT AFFECT THE I.C CUTS

The above can be represented in a branching tree diagram.

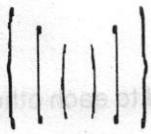


Some of these snakes do not bite deep at all

That some of these snakes do not bite at all is note true



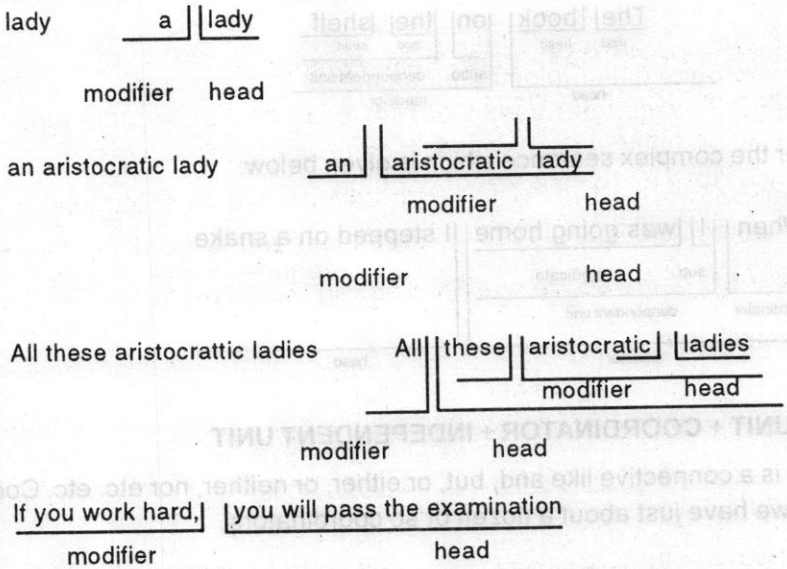
We may use brackets too to represent the hierarchies.



We may use any one of the above options to represent the structures

2) MODIFIER + HEAD

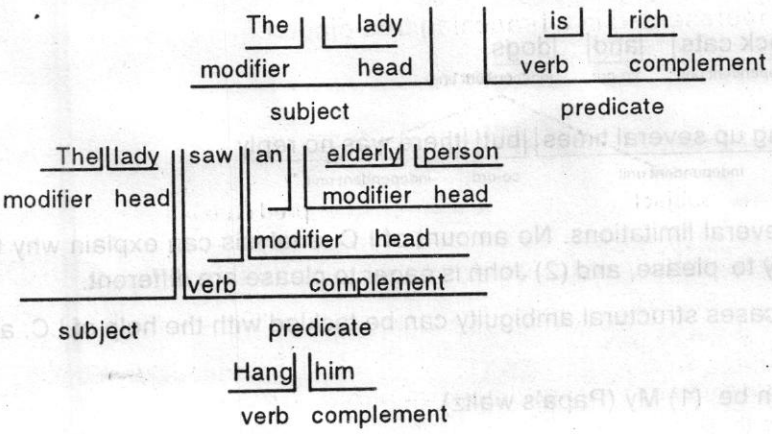
The word 'modifier' is self-explanatory; it modifies and the 'modified' may be a noun, an adjective, an adverb, a verb, a clause or a sentence. The item that gets modified is called 'HEAD' Remembering that the cut is always binary, let us try the following.



3) VERB + COMPLEMENT

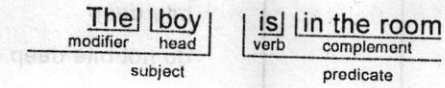
(NOTE: No distinction is made between object and complement here)

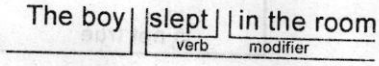
In several cases a distinction is to be made between complement and modifier. Consider the following



1) The boy is in the room

2) The boy slept in the room



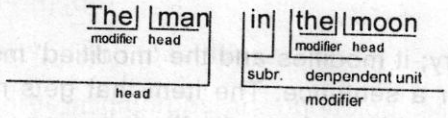


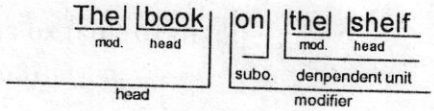
In (1) the phrase 'in the room' is essential to complete the sentence and so it is a complement; in (2) it is an adjunt and not obligatory. Accordingly, while labelling the items we have to ientify them as such.

4) SUBORDINATOR + DEPENDENT UNIT

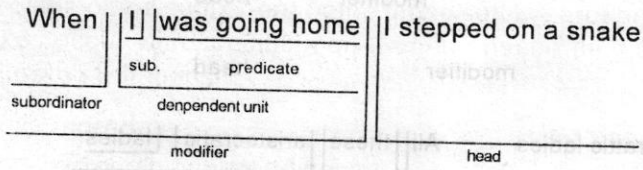
Consider the two NPS which are related to each other as shown below:

The man in the moon & The book on the shelf



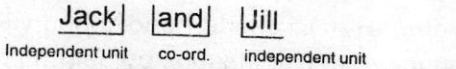


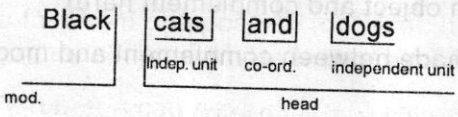
Now consider the complex sentence which is given below:

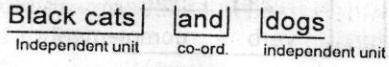


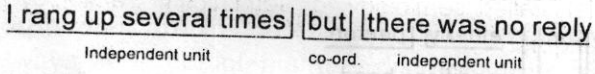
5) INDEPENDENT UNIT + COORDINATOR + INDEPENDENT UNIT

A coordinator is a connective like and, but, or either, or neither, nor etc. etc. Coordinator is a closed system and we have just about a dozen or so coordinators.









I.C. Analysis has several limitations. No amount of I.C. analysis can explain why the two sentences (1) John is easy to please, and (2) John is eager to please are different.

However, in many cases structural ambiguity can be tackled with the help of I.C. analysis e.g.

My Papa's Waltz can be (1) My (Papa's waltz)

(2) My Papa's waltz)

My child's fingers may be (1) (My child's) fingers

(2) My (child's fingers)

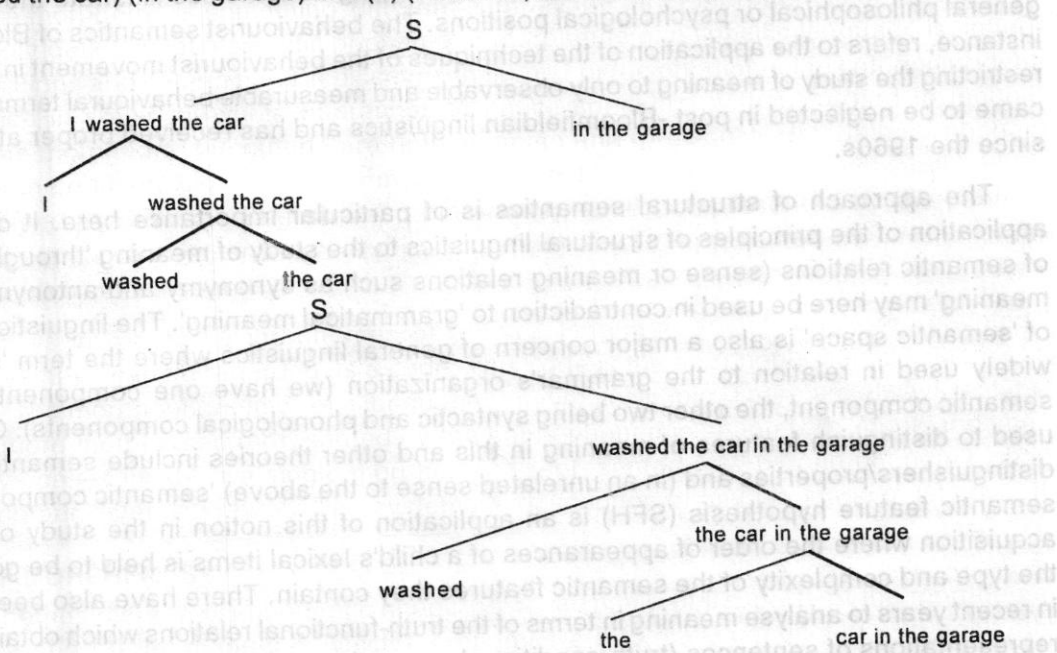
'Stop drinking after midnight' may be

(1) (Stop drinking) (after midnight)

(2) Stop (drinking after midnight)

This is as far as written expressions are concerned. On many occasions situation and surprasegmental features like pauses, intonation and juncture can help in disambiguating expressions. Recall "My French teacher" which can be (1) My 'French teacher or (2) My French teacher where stress comes to our help.

Only structural ambiguity can be resolved partially this way. Semantic ambiguity cannot be tackled. Using a branching tree diagram I am disambiguating "I washed the car in the garage". (1) (I washed the car) (in the garage) and (2) (I washed) the car in the garage)



Unit-III

SEMANTICS

'Semantic's is a major branch of linguistics. It is devoted to the study of meaning of words and sentences in a language. The term is also widely used in philosophy and logic, but not with the same range of meaning or emphasis as in liguistics.

There is an overlapping field called 'semiology' (or' semiotics'). "Semiology' is the term favoured in France following the swiss linguist.

Ferdinand de Saussure; 'semiotics'; is preferred in U.S.A. following Charles Peirce. The root of all the three words is 'sema' meaning sign (Greek). In fact, semiology had a denoyed birth in the present century and both Saussure and Peirce felt that it should exist. The discipline stands for the theory or science and analysis of sign and sign systems and their meanings, specifically those involved with communication between human beings in different societies and cultures. We have, by the way, study of animal communication systems called zoosemiotics.

Semiotics (semiology) is exceedingly comprehensive since it must cover verbal language in its different media of speech and writing and also non-verbal communication systems such as gestures and kinesics (i.e. body movements) and other codes of proximity/distance (proxemics), dress, mass media and so on. Semiotics thus overlaps with other disciplines like communication theory, linguistics, sociolinguistics and semantics.

Now back to semantics, Philosophical semantics examines the relations between linguistic expression and the phenomena in the word to which they refer, and considers the conditions under which such expressions can be said to be true or false, as also the factors which affect the interpretation of language as used. Its history of study which reached back to the writings of Plato and Aristotle in recent years includes the work of such philosophers and logicans as Charles Peirce, Rudolph Carnap and Alfred Tarski, particularity under the reading of semantics. It is the study of the meaning of expressions in terms of logical systems of analysis or calculi and is thus more akin to formal logic or mathematics than to languages the emphasis is on the study of the semantic properties of languages (as opposed to 'logical' languages), the term 'linguistic semantics' often being employed to make the distinction clear. The approaches of different linguists to meaning nonetheless illustrate the influence of general philosophical or psychological positions. The behaviourist semantics of Bloomfield, for instance, refers to the application of the techniques of the behaviourist movement in psychology, restricting the study of meaning to only observable and measurable behavioural terms, semantics came to be neglected in post -Bloomfieldian linguistics and has received proper attention only since the 1960s.

The approach of structural semantics is of particular importance here. It displays the application of the principles of structural linguistics to the study of meaning 'through the notion of semantic relations (sense or meaning relations such as synonymy and antonym). "Seantic meaning' may here be used in contradiction to 'grammatical meaning'. The linguistic structuring of 'semantic space' is also a major concern of general linguistics where the term 'semantic is widely used in relation to the grammar's organization (we have one component called the semantic component, the other two being syntactic and phonological components). Other terms used to distinguish features of meaning in this and other theories include semantic markers/ distinguishers/properties and (in an unrelated sense to the above) 'semantic components'. The semantic feature hypothesis (SFH) is an application of this notion in the study of language acquisition where the order of appearances of a child's lexical items is held to be governed by the type and complexity of the semantic features they contain. There have also been attempts in recent years to analyse meaning in terms of the truth-functional relations which obtain semantic representations of sentences (truth-conditional semantics, model-theoretic semantics).

Semantic field theory (SFT) is an approach which developed in 1930s which took the view that the vocabulary of a language is not simply listing of independent items (of dictionary entries), but is organized into areas, or fields within which words interrelate and define each other in various ways. The words denoting colour are cited as an example of a semantic field. The precise meaning of a colour word can be understood only by placing it in relation to the other items which occur with it in demarcating the colour spectrum.

Other areas of semantics include the diachronic study of word meanings (etymology), the synchronic analysis of word usage (lexicology) and compilation of dictionaries and thesauruses (lexicography). The term 'semantic' has many other uses, however. In the phrase 'semantic differential 'its has in fact very little to do with linguistic semantics being a technique devised by psychologists to find out the emotional reactions of speakers to lexical items and thus suggest the main 'affective' dimensions in terms of which a language's concepts are organized. In the phrase 'semantic triangle' it refers to a particular model of meaning proposed by Ogden and Richards in the 1920s which claimed that meaning is essentially a three-fold relation ship between linguistic forms. Concepts and referents, in the phrase 'procedural semantics; it refers to an approach in psycho linguistics which models the notion of sense' in terms of a set of mental operations that decide on the applicability of a lexical item to an entity, state of affairs etc. The term semantically has a much broader sense, being suggested as a very general defining property

of language as well as other semiotic systems.

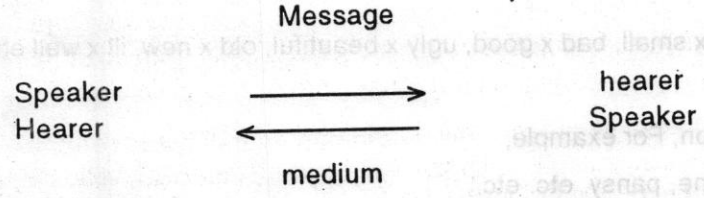
"Seme' (sor sememe). (cf. phoneme, morpheme, lexeme, toneme, grapheme, tagmeme, glosseme etc. etc) Componential analysis is an approach favoured by some semanticists whereby lexical items are distinguished and defined by sets of inherent distinctive features (or components, or semes, or somemes) possibly common to all languages linguistic universals). It is less commonly known as 'lexical decomposition'. It was first developed in anthropology in the 1950s for the study of kinship systems although an interest in components, especially in phonology, was developed in Europe by the Prague School of Linguistics.

The features are usually analysed in terms of binary contrasts e.g+/- (plus or minus) concrete, +/- animate, +/- human, +/- male, +/- adult, +/- countable etc. etc. This is no easy task at all, since no end may be visible to these binary contrasts.

Nonetheless, semantic features might usefully explain our intuitions about compatibility and incompatibility which line behind metaphor and personification. Selectional restrictions will morally permit nouns marked by + concrete and + animate features to be subjects with certain relevant verbs e.g. walk, eat, etc. Since only concretes and animate things can walk or eat. We cannot say "That man is a widow,' because man with its masculine feature cannot be linked to and equated with widow with its-- masculine features. On the contrary, That woman is a widow, is acceptable because both 'Woman' and widow have the same - masculine feature. Similarly, we cannot say 'two petrols' as petrol is - countable, but we can say two litres of petrol or two gallons of petrol. We cannot say every girls because every has the feature of singularity while 'girls' has the feature of plurality. In fables and fairy tales we see animals and birds speaking to one another. We say that they are personified. This is an instance of Coleridge's 'willing suspension of disbelief. "We can better illustrate this idea as follows.

A table has four legs. In spite of the four legs it is not a quadruped. It cannot walk. It is because the label 'table' is inanimate. The very fact that a table has four legs is metaphorical (just as we have 'the eye of a needle', The mouth of a cave. 'The hands of a clock' etc.) A cock crow; it does not smile or laugh. The reason by now is obvious a cock has not the human feature, only humans are capable of laughter or smiling.

Meaning is normally conveyed as follows.



The speaker thinks, encodes his thought in language and delivers the message in the form of sound which are transmitted over the medium (say, air) and which are heard by the hearer, decoded by him and understood. This process is reversed and it is endlessly repeated. The signals, the code (the phonic substance, syntax, meaning etc. etc) are the same for the members of one particular speech community. Anything that stands in the way of communication is referred to as 'noise'.

The following gives a list of things related to semantics. The list is just indicative and not complete.

I. Plurality of meaning is called Polysemy. When a word has more than one meaning, we call it polysemy.

Examples :

<u>BAY</u>

1. as in the Bay of Bengal
2. as in the bay horse

3. space between two columns, timbers
4. laurel tree, bay leaves
5. (Spenserian) to bathe
6. the second tine of a deer's horn

FLAG

1. to drop, to grow languid and spiritless
2. an iris, reed grass
3. as in national flag, Flag day, flagstaff etc.
4. a stone that separates in slabs, a flat paving stone

KEY

1. as in lock and key note
2. as in keyboard, key note
3. a low island or reef
4. a set of answers to problems
5. vital, essential, crucial as in key person

II SYNONYMY

Words having sameness of meaning are said to be synonymous. Synonymy is a matter of degree. Absolute synonymy is very rare.

Examples:

1. large, big, huge, enormous, great, gigantic, mammoth.....
2. small, little, tiny, wee, teeny - weeny, micro, minute, minuscule.
3. rich, wealthy, prosperous, moeyed, plutocratic.....

III. ANTONYMY

When words have somewhat opposite meanings we have antonym. Absolute antonym is rare.

Examples:

hot x cold, rich x poor, big x small, bad x good, ugly x beautiful, old x new, ill x well etc. etc.

IV. HYPONYMY:

This refers to calss inclusion, For example,

1. Flower, rose, lilly, jasmine, pansy, etc. etc.
2. Red - crimson, scarlet, russet, incarnadite etc. etc.
3. Animal - cow, sheep, fox, lion, horse, etc. etc.
4. Chronometer wristwatch, clock, timepiece, etc. etc.

V. HOMONYMY

This refers to words which are identical in both spelling and sound.

1. meet as in meeting and suitable
2. sole as in sole heir and shoe sole
3. grave as in grave business and digging one's grave
4. bear as in grizzy bear and bearing children

VI. PARTIAL HOMONYMY:

(also called heteronymy or homography)

This refers to words with the same spelling but different pronounciation.

1. lead (pron, 'led) - the name of a metal

-as in leader of men

2. bow - as bow and arrow

-as in bowed head

3. minute - sixty seconds

-small

VII. HOMOPHONY

Words which have the same pronounciation but different spellings are said to be homophonous.

1. Pale and pail. 2. meet and meat. 3. dear and deer. 4. bare and bear. 5. key and quay. 6. red and read (past tense)

VIII. AMBIGUITY

When an expression has more than one meaning, it is said to be ambiguous.

The sentence "The policemen were ordered to stop drinking after midnight, has several meanings and so it is said to be ambiguous.

But the above sentence is structurally ambiguous, the following has semantic ambiguity. As for me tomorrow, thou, shalt find me a grave man. 'grave' can mean (1) serious and (2) the pit where dead bodies are put.

Apart from the list given above, we have denotation, connotation and sennotation. The denotative meaning is the referential, lexical, cognitive or dictionary meaning; the connotative meaning, as the name suggests (co-notative) is the sense, the figurative/metaphorical one with all the associative ideas that crowd into our mind and the sennotative one is the emotive meaning (how meaning affects us emotionally). Denotative and connotative meanings are also called extensive and intensive meanings respectively.

Regrettably, all these can be grasped properly only on application in the proper contexts.

Unit-IV

COMPARATIVE PHILOLOGY

The end of the 18th century saw the begining of a new, important far - reaching development in the study of language. In 1786 Sir William Jones, of the English Judicial Service in India made the following celebrated statement.

> The Sanskrit language, whatever be its antiquity, is a wonderful structure; more perfect than the Greek, more copious than the Latin and more exquisitely refined, both in the roots and verbs and in the forms or grammar than could possibly have been and produced by accident; so stgrong, indeed, that no philosopher could examine then all three without believing them to have sprung from some common source, which, perhaps, no longer exists.

This observation sowed the seeds of comparative philology. Throughout the 19th cdentury reconstruction of the Indo-European ancestor language was pursued with enthusiasm; the language of Europe were subjected to comparative study and shown to be genetically related in the sense that they had all sprung from this common source. The primary concern of comparative philologists is to make statements comparing the characteristics of different languages or different historical states of a language-comparing a set of forms taken from cognate languages inorder to determine whether a historical relationship connects them,

Let us note the following:

There are thousands of words in English and Sanskrit which closely resemble one another, for instance,

English	Sanskrit (approximate spelling and pronunciation)
divine	devah
serpent	sarpam
brother	bhratah
sister	swasah
father	pitah
mother	matah
trigonometry	thrikona....

Researches have indicated that a large number of languages are derived from a common ancestor now referred to as Proto-Indo-European (PIE).

Let us now compare a few words from cognate languages.

The derivatives of the English verb 'be' in various languages are given below: note the remarkable similarity.

	Sanskrit	Lithuanian	Greek	Gothic	Latin
III Person singular	asti	esti	esti	ist	est
I Person singular	asmi	esmi	eimi	im	sum
I personplural	smas	esme	esmen	sijum	sumus

Now look at the Middle England 'brother' as it appeared in Sanskrit and European languages and 'father' given below. The spellings are approximate.

Sanskrit	Latin	Greek	Old Church Salvonic	Gothic	Old Irish	Old English
bratah	frater	phrater	bratru	brodar	brathir	brother
pitah	pater	pater	padre	padre	pere	father
(skt)	(Lat)	(Greek)	(Italian)	(Spanish)	(French)	(English)

Honey and an intoxicating drink made from honey are

IndoEuropean	melit	medhu
Greek	meli	melissa (bee)
Latin	mel	
Old English	milisc (honey sweet)	mildeaw (honey dew)
Sanskrit	madhu	
Greek	methu	
Dutch	mede	
Old English	mead	

Now let us take the number system. Many are definitel;y derived from a common root.

Eng	Dutch	German	Gothic	Lithurin	Celtic	Latin	Gk	Per	Skt
three	drie	drei	thri	tri	tri	tres	treis	thri	tri
seven	zeven	seiben	sibun	septyni	secht	septemhepta	hepta	sapta	

Now look at the word 'night'

German	Latin	Greek	French	Spanish	talian	Saskrit	English
nacht	notics	nuktos	nuit	noche	notte	nisha	night

The foregoing account shows that there are a large number of languages today which have a common ancestor. The people who spoke the language migrated to different geographic areas for various obvious reasons and gradually lost contact with one another. This accounts for the differences. These differences are not haphazard. Jacob Grimm, Ramus Rask, Carl Verner and several other philologists were able to study and establish the processes through which the changes came about, it is the study of these and similar things that are covered in comparative philology for which.

written records
internal reconstruction
study of loss in languages
lexico statics
borrowings
and such things are used.

STRUCTURAL LINGUISTICS:

Structuralism is a term used in linguistics to an intellectual discipline which gradually gathered momentum in the early part of this century influenced by formalism and the Prague School of Linguistics. It is associated particularly with a group of French scholars/ philosophers/anthropologists/historians like Claude Levi Strauss, Roland Barthesand Michael Foucault.

The term implies concern with structures (forms) of languages and other systems of knowledge and cultural behaviour. It owes great deal to Ferdinand de Saussure in Europe and Sapir, Boas and Bloomfield in America and they are referred to as structuralist linguistics. However, today structuralist linguistics is attributed more to Leonard Bloomfield and post - Bloomfieldians than to others.

Structural Linguistics refers to any approach to the analysis of language that pays explicit attention to the way linguistic features can be described in terms of structures and systems.

STRUCTURE

In this context the term applies to the main abstract characteristic of a semiotic system. A language is a structure (a system of systems) in the sense that it is a network of inter-related units, the meaning of the parts being specificable only with reference to the whole. More specifically the term is used to refer to an isolatable section of this total network, as in the discussion of the structure of particular grammatical area. (e.g. tenses, pronouns), where structure and system are distinguished: we may talk of the 'structure' of a particular system....

However, this application of the term to paradigmatic relationships is not as widespread as the syntagmatic conception of structure. Here a particular sequential pattern of linguistic elements is referred to as a structure, definable with respect to one of the various structural levels recognized in a theory e.g. phonological structure, semantic structure, syntactic structure etc. etc. For instance, clause, structure can be defined in terms of strings of elements such as subject, verb, object or NP and VP; syllable structure can be defined in terms of vowels and consonants (Co3-V.Co-5).

The term 'structuralist linguistics' has a restricted definition referring to the Bloomfieldian emphasis on the process of segmenting and classifying the physical features of utterances (recall I.C analysis) (Noam Chomsky calls them surface structures) with little reference to the abstract underlying structures (Chomsky's deep structures) of language or their meaning. It is this emphasis that Chomsky attacked. Structuralist linguistics is frowned upon by T.G. people because it is just taxonomic).

We shall now attempt a description of what structuralist linguistics can do and does.

It offers a description, analysis and set of definition and formulae based consistently

and firmly on the earliest, and also the most objective, aspect of language - FORM. Linguistics may fight over whether 'butcher's in 'a butcher's knife is nominal or adjectival, whether 'butcher's and 'knife' are one word or two words and so on, but all can see that 'butcher' is spelt with 's' and hear it pronounced 'z' all will agree that the word is sandwiched between 'a' and 'knife'. All can say that important things happen when the phrase is changed to 'a' butcher's 'knifed' 'a' 'butcher' knifing and/or 'a butcher knife', even if they do not know what the words mean and have never heard of such functions as modifier, subject, attributive genitive, connector, auxiliary, participle, head, predicate etc. etc. They may not be able to go any further, though all will agree on the utterances too. But in the absence of satisfactory technical vocabulary, they will not be able to describe them.

When a grammarian looks at English as a scientist does i.e., objectively, he finds that it conveys meanings by two broad devices: the denotations and connotations of words separately considered (lexical meanings) and the significance of word forms, word groups, and arrangements apart from the lexical meanings of the words (structural meanings). Since lexical meaning is the business of the lexicographer, and also the Semanticist. Structural meaning is the business of the structural linguist (or grammarian). Structural meaning is very often ovelooked. Ordinary people think that the meaning of an utterance is the total lexical meanings of the words that make up the utterance. This fallacious notion can be easily demonstrated as follows.

(1) The young man killed the venomous snake.

(2) killed young the snake venemous

(1) is perfectly understood as its structure is well defined i.e., well ordered; (2) is not understood properly as its structure is disorderly. (2) gives only a gague idea while (1) gives a clear idea, thanks to its structural (and formal) features. In short, structure organizes meaning.

The second point that comes to light is it uses four main devices of form to signal structural meaning (recall form classes).

1) Word order-the sequence in which words and word groups are arranged.

2) Function words - words devoid of lexical meaning, which indicate relationships among the meaningful words along with they appear.

3) Inflexions - alterations in the forms of words themselves to signal changes in meaning and relationship.

4) formal contrasts - in the forms of words signalling greater differences in function and meaning. These could also be considered inflexions, but is more conveient for both the lexicographer and the grammarian to consider them separately.

In every utterance several of these are found simultaneously, but they can be separately illustrated using contrasting expressions involving minimum variation.

The importance of word order can be illustrated as follows;

(1) Girl seeks father. (The title of an excellent Russian film)

(2) Father seeks girl.

Though words are identical in form and lexical meaning, the two sentences mean totally different things and the differences are attributed to word order. (In an inflected language like Latin, Sanskrit or Malayalam this word order can be disrupted. Any word order give the same meaning.)

Let us now compare the following sentences:

(1) That cat is a pet of this family.

(2) Any cat is a pet of that family.

In the above the lexical (items carrying full meaning) are cat, is, pet, and family. Their presence in the sentences is in the same form and order. The difference is in the insertion in (2) of "any" for "that" and 'that' for "this". However, these small words which are function (grammatical) words become responsible for the total difference in meaning of the two sentences. At the same time, in isolation the function words have little meaning.

Now let us take another pai

1) The cat is fond of the child.

2) The cats were fond of the children.

In both (1) and (2) the words are the same, the order is the same with the same function words in the same position. What we have done here is to change the "form" of the lexical items:

cat → cats; was → were; child → children

These plural inflexions are responsible for the change in meaning similarly consider

1) The cat's friend arrived

2) The cat's friendly arrival

Here the changes are from "friend" to "friendly" and from "arrived" to "arrival". The changes of form (i.e., formal changes) result in a change of function: subject to modifier and predicate to head - noun in an NP. These changes are like inflexions, but because they produce words of different lexical meanings, classifiable as form classes (something like the part of speech in traditional grammar) it is desirable that we refer to them as formal contrasts. That is to say, it is logical to look upon "friendly, friendship, friendless and befriend" as different words related by formal and semantic similarities. The categories of grammatical description are not sacrosanct. They are for conveience of description.

Besides the above, there is fifth which indicates structural meaning - the suprasegment phonemes coming under juncture, stress and intonation (in Malayalam duration is a supra segmental phonemen in English it is not).

Conside

I. (a) Tom, the dog is dead

(b) Tom, the dog, is dead.

or the most famous examples of Charles Hockett

II. (a) What are we having for dinner, mother?

(b) What are we have for dinner, mother?

The pairs of sentences in I and II are exactly identical in words, word order, function words, inflexions and word forms. Nevertheless they are marked different in meaning - which surface on speaking them aloud with the appropriate, but different intonation patterns.

In I (a) Tom is addressed and informed that the dog is dead; in (b) the name of the dog is Tom.

In II (a) Mother is addressed and asked about what is for dinner in (b) it is cannibalistic: is it mother that they are having for dinner?

To some extent the intonation pattern is indicated with punctuation marks. It is very imperfect, though.

The above gives an approximate picture of the several structural devices in English which signal meaning. However, in a gives sentence two or more of these are found to signal meaning. When there is an insufficient number of such devices the result is ambiguity.

CUP /9716/13/100 - 5

The following example from C.C. Fries is enough to prove the point. Ship sails today.

The sentence is ambiguous because there is nothing in the sentence which tells us what is what. Is ship a noun or a verb? Is sails a noun or a verb?

If it is a telegraphic order to ship sails today? Ship is verb; sails is a noun. If, on the other hand, it is a telegraphic message a declarative sentence informing about the departure of a ship. Ship is a noun and sails is a verb (the singular present tense form of sil", meaning to set sail, to being the voyage. If it ends with a rising intonation on "today", there is further trouble, as it becomes an intonation question on, a kind of enquiry.

If there are no function words in the proper places, the sentence is ambiguous. The full stop indicates the intonation; the capital letter in the begining indicate the start of the sentence, too.

Similarly, other devices too help in disambiguating the sentence

The ship sails today

Ship the sails today

Ship sailed today

Ship to sail today

Ship sail today

Shipping sails today

Ship sailing today

Sail shipment today

In short, a sentence with the required devices is not ambiguous and its structural meaning is clearly understood.

Structural linguistics looks upon the 'phoneme' as the unit of phonology and the 'morpheme' as the unit of grammar; the latter consicts of one or more phonemes in strings in an orderly manner. Language is supposed to be made up of morphemes arranged in sequence and morphemes can have alterants (i.e., allomorphs) e.g. the plural is marked in English by s, z, iz, en, ren, zero, vowel change etc.

book-books: bug-bugs: bench-benches: ox-oxen: child-children: sheep-sheep: mouse-mice etc.

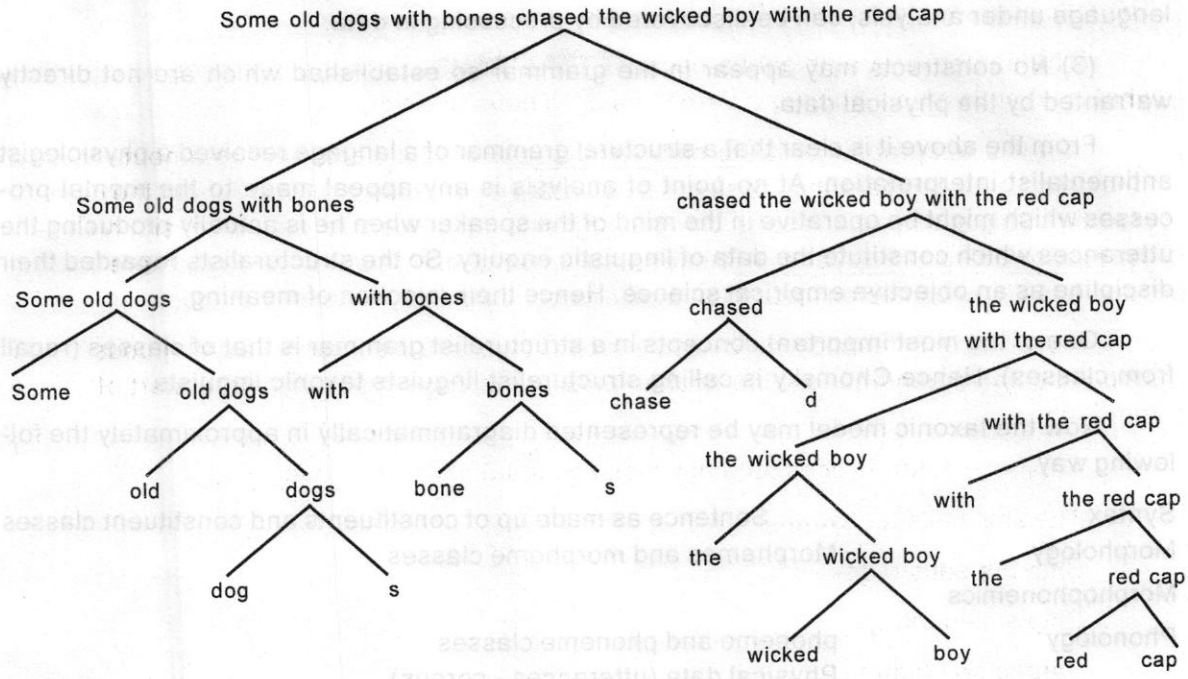
The past tense may be realized, similarly, in various ways.

walk-walked; think-thought; take-took; sing-sang; cut-cut; love-loved

So also the degrees of comparison with 'er' and 'est' as in rich-richer-richest

Morphemes, with or without changes, are ordered in linear sequences. The sequencing is governed by order and selection. It is this arrangement that is brought out in I.C analysis

e.g. Some old dogs with bones chased the wicked boy with the red cap. Make it easier. We are also effecting cuts to the ultimate constituents at the morphemic stage. The branching tree diagram is given below.



But structural linguistics, however ingenious it might be in I.C. analysis fails to explain sentence like the following famous examples.

1) flying planes can be dangerous

2) Visiting relatives may be a nuisance.

3) Everyone loves his mother

4) (a) John is eager to please. And (b) John is easy to please.

5) (a) It is likely that John will leave. And (b) It is probable that John will leave

This is where structural Linguistics fails and T.G. Steps in. The problem gets aggravated when sentences which have identical pronounciation arrive on the scene. In the written form they can be analysed but in the spoken form they remain ambiguous.

1) Take Gray to London 2) Take Greater London.

1) The sons raise meat 2) The sun's rays meet

1) nitrate 2) nye trait 3) night rate

Structural grammar totally ignores meaning because meaning was not objectively verifiable. This was another serious drawback of structural linguistics. Bloomfield thought that present human knowledge was immature to discuss semantics and kept it apart from structural domain. He called it the content side. The structuralists, therefore, gave all attention to the expression/ structure side. How was this done?

In the analysis of the expression side the linguist has at his disposal a corpus of recorded sentences. They could be from texts, telephone conversations, actual interpersonal face-to-face dialogues etc. etc. An utterance is a stretch of speech before and after which there is silence. (from zelling Harris, one of the most important exponents of structualism and the number one student of Leonard Bloomfield and the teacher of Noam Chomsky) in approaching his corpus the structuralist assumes

(1) Utterances are tokens of underlying system

(2) Given a set of carefully defined procedured (formulated in terms of such notions as distribution, environment, equivalence, contrast, substitution, differential meaning, sameness of meaning, difference in meaning and so on) underlying system i.e., in the grammar of the

language under analysis, can be discovered by processing in data.

(3) No constructs may appear in the grammar so established which are not directly warranted by the physical data.

From the above it is clear that a structural grammar of a langage received a physiologist antimentalist interpretation. At no point of analysis is any appeal made to the mental processes which might be operative in the mind of the speaker when he is actually producing the utterances which constitute the data of linguistic enquiry. So the structuralists regarded their discipline as an objective empirical science. Hence their rejection of meaning.

One of the most important concepts in a structuralist grammar is that of classes (recall from classes). Hence Chomsky is calling structuralist linguists taxonic linguists.

Now the taxonic model may be represented diagrammatically in approximately the following way.

Syntax	.....Sentence as made up of constituents and constituent classes
Morphology	Morphemes and morpheme classes
Morphophonemics	
Phonology	phoneme and phoneme classes
	Physical data (utterances - corpus)

The grammar has four majour components (levels of analysis): Phonology, morphology, morphophonemics and syntax. The arrows pointing upwards indicate the important principle of analytical undirectionality away from the primary data. Phonological analysis should precede and be independent or morphological analysis should precede and be independent of syntactic analysis.

The first step in the analysis of a language is to determine the phonological system underlying the physical facts. To accomplish this task the linguist applies a set of discovery procedures (contrastive distribution, complementary distribution, free variation, pattern congruity and principle of economy) to define the phonemes.

The second step is the morphological analysis. The output to this is sequences of phones. By applying to these the appropriate set of procedures, the linguist defines the morphemes i.e., the classes of sequences of morphemes. Morphemes are those units which make contact with the content side: they have meaning.

The phonological and morphological levels of structure are sometimes referred to as the first and second articulations (articulators) of a language. What is meant by this is simply that all languages make use of a very small set of pnonemes to form a much larger set of morphemes; from a small finite set of phonemes of a language millions of morphemes can be made. English has 44 phonemes, but millions of morphemes. The phonemes are, therefore, continually recurring units. In themselves they are meaningless, they have strong associate values which are not analysable. They have differential meaning in the sense that they can distinguish pairs of morphemes of widely different meanings. For example, consider the list of morphemes given below; (ignore the spelling and consider the pronounciation)

peat, pit, pet, pat, put, part, pot, port, pert, put. All these morphemes are different in meaning, though the same phonemes sandwich the nuclear vowels which are different. In other words the differences in meaning is attributable to the difference in vowels.

Similarly Compare

beat, bit, bet, bat, but, bart, boat, boot, bert, bait, bite, bit, bid, bin, big, bill, bitch, biff, pit, bit, kit, tit, fit, hit, sit, wit, lit, shit, chit, knit, writ

In short, the principle of double articulation (quality of patterning guarantee variey with extreme economy.

The morphophenemic component (morphophological or morphonemic component) of the grammar has as its domain the explication of the compositional structure of morphemes in terms of phonemes. In other words, it is concerned with relating the first and the second articulations in a systematic manner.

The input to the syntactic component is sequences of morphemes. By the application of the relevant set of discovery procedures, the linguist establishes the constituents i.e., classes of sequences of morphemes, of which sentences are made up. If we carry out I.C. analysis to the morphemic level the structural organization is revealed.

It will be apparent that a structural grammar is essentially an inventory of units established at the various levels of analysis and suitably classified with respect to a set procedurally defined classificational constructs.

Unit - V

TRANSFORMATIONAL GENERATIVE GRAMMAR

Transformational Generative Grammar takes off from where structural grammar left off. It was in 1957 that the T.G. revolution in linguistics started and Noam Chomsky is the father of this revolution. The following account makes a feeble attempt to introduce the elements of T.G. Grammar to you.

THE CREATIVE/PRODUCTIVE USE OF LANGUAGES

Except for ritualistic sentences which are oft repeated, very few menbers of a corpus are used more than once. This finding leads to the following.

(a) Any corpus of recorded sentences is an imperfect representation of a language's infinite number of potential sentences.

(b) The primary meaning of the utterances 'A speaks', is that the person A has ability to produce and understand new utterances in language L all the time without reflecting at all about what he is doing. This is the same as saying A can use L creatively/productively.

In structural linguistics creativity went unnoticed. In T.G. it is crucial, creativity determines the form a grammar must take and the way in which this grammar is interpreted with respect to the speakers of L.

AN INFINITE SET OF SENTENCES

From (a) above it becomes quite clear that the number of sentences in a language is very very large. Now the question is : is language finite? or is language an infinite set of sentences? As long as the word exists and Lis spoken newer and newer utterances will be produced without any limit. There can obviously be no empirical evidnce which can help answer the questions. Consequently, the claim that L is an infinite set of sentences must be justified by the theoretical considerations. To illustrate this take the following sentences.

(1) This is the cat that chased the rat that ate corn that lay in the house that Jack built on the plot that lay neat the pond that the neighbours used for watering the fields that....

(2) John knows the man who owns the car that lost the wheel which killed the dog that chased the cat that killed the rats that ate the corn that Jack kept in the house that stood at the end of the street that.....

From the above we learn that the length of a sentence and its structural diversity are not synonymous terms. The first part "This is the cat..... and "John knows, the man....." of the sentences is main clause and the remaining are successively added relative clauses. i.e., the MATRIX sentence and the embedded sentences. This is Recursion of the same pattern and can proceed endlessly. In other words, theoretically speaking, there need be no limit to the number of embeded sentences (clauses, if you like). However, in actual situations, there are limits, but the limits are dictated by such grammatically irrelevant factors as restrictions on the capacity of the human memory, facts about life span etc. etc.

A grammar, therefore, of English is theory of the sentence in English and it must amount for sentences like (1) and (2) for which it should include in it the principle of recursion. As recursion enables an indefinitely large number of sentences there can be no limits to the recursive power of the grammar. This is the same as saying: the grammar specifies (1) and (2) as being potentially infinite (and, more generally, each sentence in English). This being the case, the grammar necessarily defines an infinite set of sentences.

THE TERM; GENERATIVE

A generative grammar is a special kind of grammar. A transformational generative grammar is a special type of generative grammar. It follows that a generative grammar need not necessarily incorporate the notion of transformation.

The word 'generative' has been borrowed from mathematics and it means, in linguistics, to predict, to state/define explicitly to specify or to enumerate'.

A generative grammar for L consists of a finite set of symbols and a finite set of rules which, by manupulating the symbols, generate (in the sense defined just above) all and only the sentences in L (whose number is infinite)

ALL AND ONLY

The phrase stands for all the syntactically well-formed' and only the syntactically well formed' sentences. That is, they ought to have been grammatical. Any arbitrary concatenation of morphemes cannot be well-formed.

THE GRAMMAR PREDICTS

This means that the grammar has a predictive power implying that its output includes the set of English sentences which have never been observed or recorded. This means that linguistics has to go far beyond and outside the finite set of sentences called the corpus.

Structural grammar is a corpus contained and data cataloguing device. grammar is not looked upon as rule systems.

THE GRAMMAR IS EXPLICIT

Essentially, this means that each step in the generative process must be incorporated in a precisely formulated casual chain. Nothing must be left to the imagination or intelligence of the user of the grammar.

THE GRAMMAR DEFINES

The grammar does not merely enumerate sequences of words (properly combined). It automatically assigns to each sequence i.e., each sentence a structural description which specifies all relevant information about the sentence.

THE GRAMMAR IS A FINITE SYSTEM

A generative grammar is believed to reflect the mental capacity of the speaker. The speaker uses a finite grammar to produce an infinite number of sentence (e.g. recursion). A grammar generates; a speaker produces. In the book 'Linguistics and English Grammar' Gleason puts it succinctly.

> Generation does not, therefore, mean the physical production of sentence. The latter is accomplished by some other instrumentality a man or a machine - operating with a generative grammar. Generation is the identification of sequence of words as a sentence on a language. A grenerative grammar does not generate one sentence now, and another at another time. Rather it generates all the sentences it is capable of all times. The mere fact that the grammar exists is sufficient for it to generate. A grammar is a special kind of definition, albeit a very complex one, rather than a machine.

We shall demonstrate this using mathematics. If we know the multiplication tables upto and including 9x9-81, then, we can apply that finite knowledge to help us multiply any numbers with any numbers, howsoever large they may be e.g.

6789 x 9876 = 67048164

6789
9876
40734
47523
54312
61101
67048164

The above is exactly like the application of a finite set of rules to produce an infinite set of sentences.

MENTALISM

The predominant characteristics of structuralist linguistics in the United States was antimentalism and physicality (recall why meaning was kept out of linguistic analysis). The characteristics was attributable to behaviourism. (stimulus-response-reinforcement) Behaviourism results in a deterministic philosophy of language. Determinism is opposed to creativity. Every speaker of L is creative and creativity leads to a new conception of the relationship between the speaker and his L. The key word to this is knowledge; a generative grammar is viewed as device which the speaker must be assumed to be in possession in order to be able to produce and understand an indefinitely large number of novel sentences. Furthermore, the use of this knowledge in the actual use of L is held to be independent of any external stimulus in a speech situation. Hence, in the above respect Chomsky's grammar is mentalistic, this generative grammar aims at providing at symbolic representation of the speaker's unconscious linguistic knowledge. This takes the form of a deductive calculus: there is an axion which an infinite set of theorems (sentences) are derived by symbol-manipulating rules (a few of which are recursive) since the goal of grammar is to provide an explicit account of the speaker's internalized lingjuistic knowledge, the most important heuristic available to the linguistic scientist while constructing a grammar is the judgements made by the native speaker (intuition) about such issues as relations between sentences, grammatical versus ungramatical sentences, ambiguity etc., etc. In other words, the question is : What exactly is it that the speaker of a L knows about his language?

We shall try to answer this question as follows. Consider the set of sentences

(1) Peter owns the horse.
(2) Peter owns the horse, doesn't he?
(3) Peter does not own the horse, does he?
(4) Peter does not own the horse?
(5) Does Peter own the horse?
(6) The horse is owned by Peter?
(7) Is the horse owned by Peter?
(8) Who owns the horse?
(9) What does Peter own?
(10) What Peter owns is the horse?
(11) It is Peter who owns the horse?
(12) Peter is the owner of the horse?

The speaker knows that all the twelve sentence are related to one another in a systematic way. Suppose we ask the speaker to produce a similar set of sentence after giving him another sentence of the above kind, he will be able to make the set without any reflection. However, to

describe this knowledge the linguist will have to use technical notions like declarative, negative, interrogative, tag question, passive, clefting, pseudo clefting, etc. Similarly giving the speaker other kinds of sentences and asking him to produce related sentences will result in revealing his intuitive knowledge of various aspects of sentence production. What is most important in this context is that he need not have studied his L in any school or university. Pure and simple introspection lies behind this ability.

COMPETENCE AND PERFORMANCE

In Generative Grammar competence is defined as the 'native speaker's knowledge of his language' and 'performance' as 'the actual use of language in concrete situations' Competence is an underlying mental system: it underlies actual behaviour and is thus not available to direct empirical study. The term 'speaker-hearer' implies that the speaker can put to use his knowledge in two ways: he can use it to produce utterance or he can use it to recognize (or perceive) utterances. The investigation of the relationship between competence and performance therefore, requires a model of speech production and a model of speech recognition. This can be illustrated as follows.

(1) Speech recognition
Linguistic Competence (specified in terms of generative grammar which is neutral with respect to speaker hearer)

(2) Speech production
Utterances (Performance)

Theoretical Linguistics is concerned primarily with developing an adequate theory of linguistic competence. Competence, let me repeat, is knowledge of language, and it is exclusively linguistic and it includes knowledge of the vocabulary (Lexicon), of phonology, syntax and of semantics. Though performance is actual use of language in real life situation, in speaking hearing and understanding it, is dependent in part on one's competence and in pardon. Non-Linguistic knowledge of an encyclopaedia or cultural kind, as well as on extraneous factors such as mood, tiredness the ambient noise, drowsiness, absent-mindedness, memory and the like.

So far I have been using the terms of 'utterances' and sentences inter changebly. Now I must distinguish between the two. Utterances are produced by speakers and belong to the performance domain. Under ideal circumstances they will be the same. But in actual situations on account of extraneous factors listed above there may be wide gaps between them. Any tape-recorded conversation will bear out this point.

GRAMMATICALLY AND ACCEPTABILITY

Grammar belong to the domain and level of competence acceptability to that of performance. We may define a grammatical sentence as an abstract object which is specified by the grammar as being syntactically well-formed. In contrast we may define an acceptable sentence as a sequence of words which, though it may be ungrammatical, provides (relatively) easy access to the underlying grammatical structure. Both grammatically and acceptability are gradable. A casual dialogue or speech is low on the scale of grammaticality and high on the scale of acceptability. This is because perormance is affected by extraneous factors.

LEVELS OF ADEQUACY

Chomsky argues that the minimum level a grammar should aim for is that of observational adequacy which is attained by any grammar that gives a correct account of the primary linguistic data'. Such a one for most speakers of English would record exact information with respect to vocabulary, grammaticality of utterances and meaningfulness of utterances.

DESCRIPTIVE ADEQUACY is a higher level adequacy at which a correct account is given not just that of the primary linguistic data, but also of the native speaker's intrinsic competence that is, his linguistic knowledge. A grammar attaining this level would provide a model of the speaker-hearer's own internalized grammar.

When ther is more than one observationally and descriptively adequate grammar, there

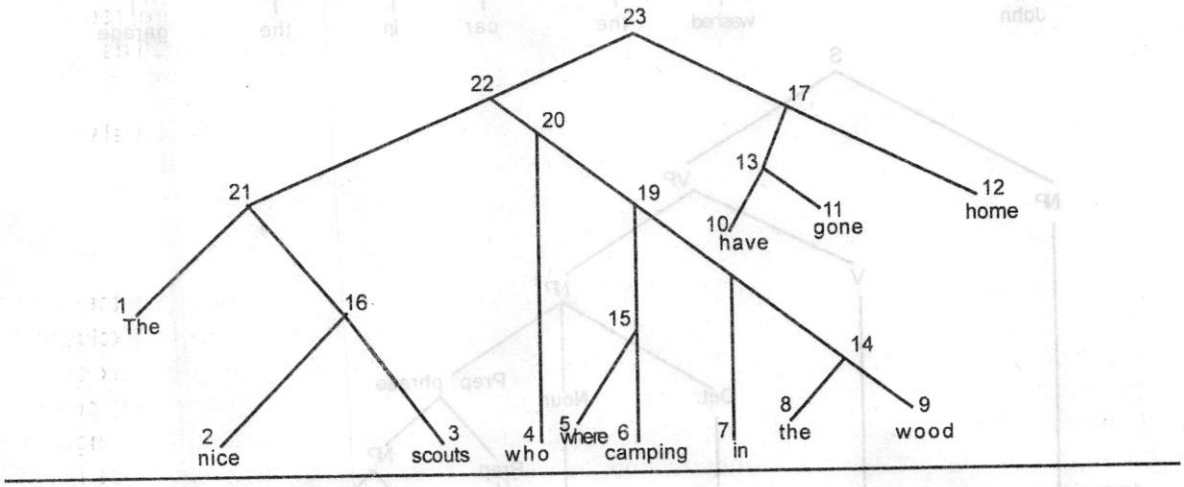
would be a universal theory of language containing an evaluation measure which helps to select the best of the lot. Such a universal linguistic theory containing an evaluation measure is called by Chomsky an explanatorily adequate theory.

PHRASE MARKERS

Recall I.C. analysis. We attempted to give a structural description in the form of a branching tree diagram (Chinese boxex, brackets etc.) A branching tree diagram with labelled nodes is called a phrase marker or simply; a P-marker. For example

The nice scouts who were camping in the wood have gone home (We are using Letters and Numerals for the sake of convenience)

Phrase markers explicitly specify the hierarchial structure of sentence at the various stages of their derivation and analyse them into a linear sequence of morphemes or formatives.



Let us use the following notations:

F1- function of left branching constituent from a given node
F2- function of right branching constituent a given node
C- Class/Construction
23-F1- SUBJECT, F2- Predicate, C-Predication
22-F1- nominal head F2-Postmodifier, C-Noun Phrase
21-F1 Pre-modifier F2-Nominal head C-Noun Phrase
20-F1 Subject F2-predicate, C-Relative clause
19-F1 Predicate head F2-Adverbial modifier, C-Predicate phrase
18-F1 Phrase governor (preposition), F2 Prep....1 object C-Prep Phrase
17-F1 Predicate head F2-Adverbial modifier C-Predicate phrase
16-F1- Premodifier, F2-nominal head, C-Prep....phrase
15-F1- Verbal premodifier, F2 verbal head, C-Verb phrase
14-F1- same as 16&21
13-F1- same as 15
1-12- specification of word classes

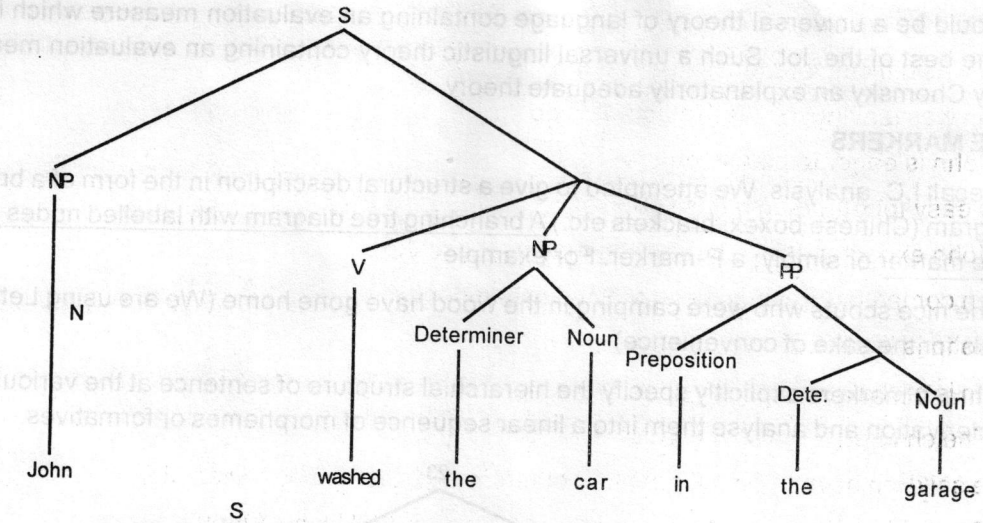
PHRASE STRUCTURE GRAMMARS

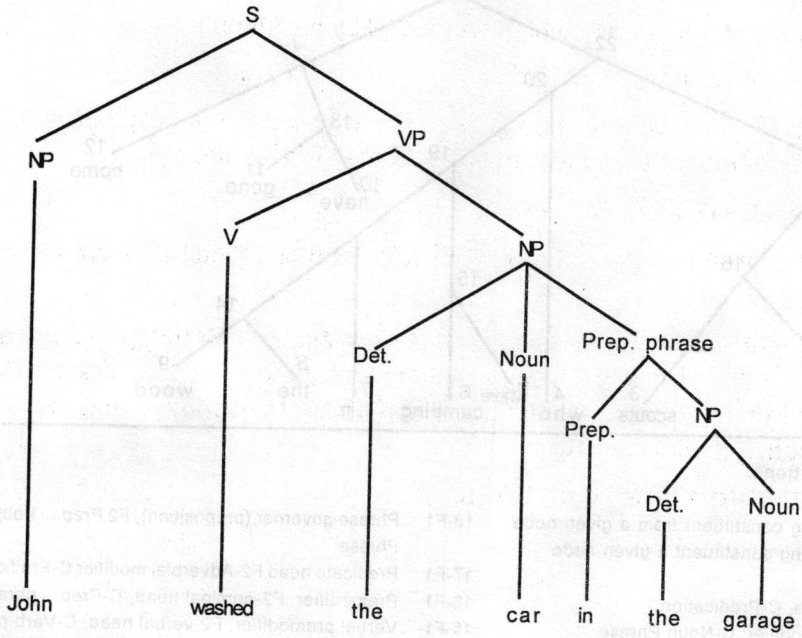
Noam Chomsky discusses in his Syntactic Structures (1957) PS grammar. It is an illustration of a generative device. PS Grammars contains rules which are capable not only of generating strings of linguistic elements but also providing a constituent analysis of the strings. They are not as powerful as Generative Grammars. The Phrase Structure Component of a T.G. specifies the hierarchical structure of sentence, the linear sequence of its components and indirectly, through dominance, some types of syntactic relations.

The main difference between PSG and I.C. Analysis is that the former is formalized as a system of generative rules and aims at avoiding the emphasis on discovery procedures. In their original formulation PSGs took the form of a set of rewrite rules such as given below. We are using the sentence "John washed the car in the garage'.

1. S.....NP + VP
2. VP.....V + NP (PP)
3. NP.....Det + N (PP)
4. PP.....Prep + N
5. V = washed
6. N = John, car, garage
7. Det = the
8. Prep = in

The following branching tree diagrams show the two hierarchical structures (recall that the sentence is structurally ambiguous)





John washed the car in the garage

The inadiquacy of phrase structure rules;

Consider the following very famous utterances:

1. The shooting of the hunters was terrible
2. It is too hot to eat.
3. (a) John was difficult to leave. (b) John was reluctant to leave
4. (a) John is eager to please. (b) John is easy to please
5. (a) John expected the doctor to examine Helan (b) John compelled the doctor to examine Helen
6. (a) It is likely that John will leave. (b) It is probable that John will leave
7. The children are ready to eat.
8. What disturbed John was being disregarded by his friends

No amount of I.C. analysis can disambiguate sentences (1), (2), (7) and (8).

The parts (3), (4), (5) and (6) have exactly identical structures, but on paraphrasing they turn out to be different.

1. Some one shot the hunters. It was terrible.

The hunters shot someone (or something). It was terrible.

2. The weather is so hot that we cannot eat.

Thefood is so hot that we cannot eat.

We are so hot that we cannot eat.

3. It was difficult for them to leave John

John was leaving; he was reluctant to do so

4. John is eager to please others.

It is easy for others to please John

5. John expected Helen to be examined by the doctor

John compelled Helen to be examined by the doctor

6. John is likely to leave.

John is probable to leave.

7. The children are all set to have their food.

The shildren have been got ready for others to eat (them). (Cannibalistic)

8. Something disturbed Hogn; it was being disregarded by his friends

John's friends disregarded him; it disturbed John

The above show that PS rules are not enough to explain why they are ambiguous, why a few 'misbehave' on paraphrasing, etc. etc. It is here that T.G. comes in and helps.

TRANSFORMATIONAL RULES (T-RULES)

Consider (1) Peter is here and (2) Is Peter here? (3) John is difficult to leave (4) John is reluctant to leave.

Rules which can properly relate pairs like (1) and (2) and account for the grammatical relations in (3) and (4) which become it is difficult to leave John and 'John leaves reluctantly' respectively are called T-Rules. In other words, A grammar which aims at descriptive and explanatory adequacy must contain both PS rules and T-rules.

DEEP STRUCTURES AND SURFACE STRUCTURES

A T-rule has a general form which follows:-

$A \rightarrow B$

In the above A and B are P-makers and the double-shafted arrow means 'transformed' into', A T rule converts a P-maker into a new derived P-maker.

The PS-rules generate an infinite set of base markers. A base marker constitutes the deep structure of sentence. This is converted into a final P-marker by the operation of one or more T-rules. The P-marker constitutes the surface structures from its deep structure, there will be a set of intermediate P-makers, Schematically, the derivation of the surface structure is as follows.

DEEP STRUCTURE

Ps Rules

↓

deep Structure Base P- marker

T - Rule - 1

↓

Intermediate P - marker - 1

T - Rule - 2

↓

Intermediate P - marker 2

T - rule - 3

↓

Final P - marker

SURFACE STRUCTURE

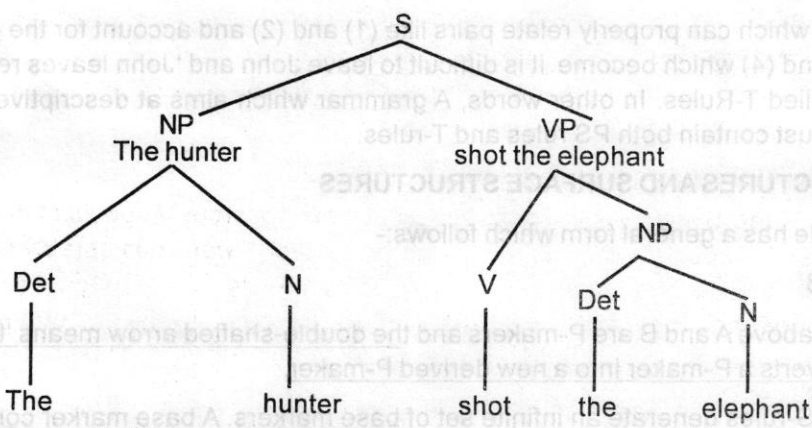
No sentence can be generated without the operation of one T-rule (infact, there are probably no cases in which one rule would suffice)

From the above it must be clear to you now that Deep Structure is the output of the PS rules and the lexicon and the input to the transformations and the semantic component of the "Standard Theory" of T.G. and surface structure is the output of the transformational subcomponent of the syntax and the input to the phonological component. In some versions of T.G. surface structure is also available to rules of semantic interpretation.

WHAT RULES DO

A T.G. provides a two-stage analysis of sentences, as opposed to the one stage analysis of traditional and structural grammars. the first stage is the deep structure analysis which provides part of speech information about the individual words but also shows the way words are related to form more abstract units e.g.

S	=	The hunter shot the elephant	
S	=	.....	NP + VP
VP	=		V + NP
NP			Det + N
			Shot
Det		.....	the
N		.....	hunter elephant



The finished product of the second stage of analysis is called the surface structure. In the above sentence both the deep and surface structures are almost the same. But suppose it is the passive sentence that we hear, then the structure undergoes the passive transformation and emerges as

The elephant was shot by the hunter

For which we may (1) add new elements
(2) delete elements
(3) substitute elements
and/or
rearrange elements

so that the surface structure emerges as different from the deep structure.

e.g. The hunter shot the elephant

1. The elephant was shot by the hunter?
2. Did the hunter shoot the elephant?
3. The hunter shot the elephant, didn't he?
4. Who was the elephant shot by?

By whom was the elephant shot?

5. What was shot by the hunter?

6. The hunter did not shoot the elephant, etc. etc.

Consider the following sentence:

1. The mother gave up the child Æ The mother gave the child up

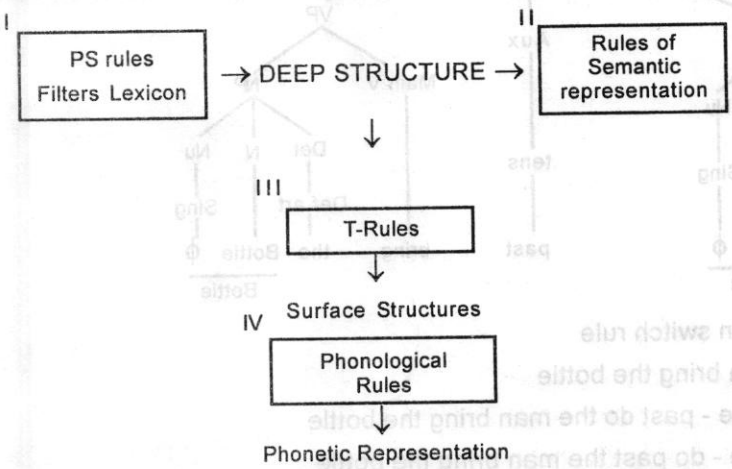
2. Peter looked up the word Æ Peter looked the word up

3. You will shut the door Æ Shut the door or Shut the door, will you?

All the above can be schematically represented using diagrams and step-by-step transformation. But it is not sttempted here, for it takes too much space.

A TRANSFORMATIONAL GENERATIVE GRAMMAR CAN BE REPRESENTED AS

Before we conclude I shall give a few more examples to show how a T.G. grammar works

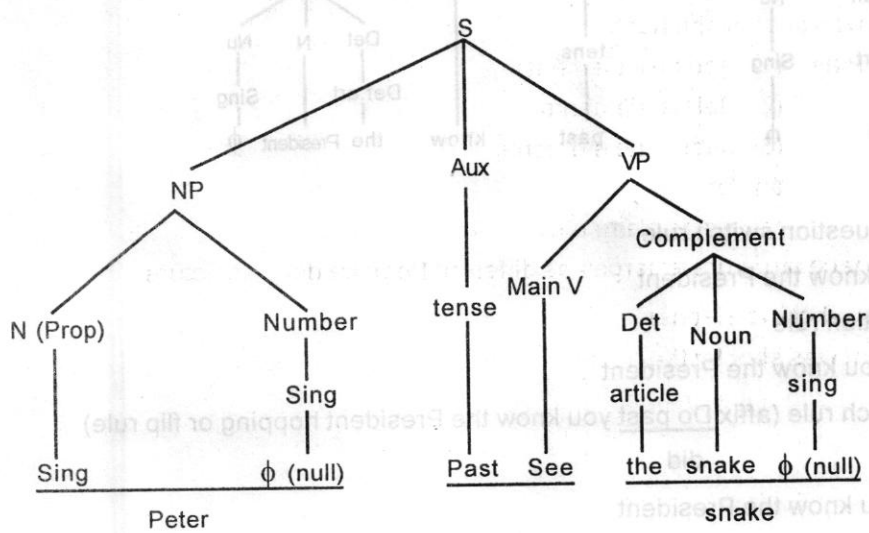


(Note: After "Syntactic Structures" (1957) Chomsky wrote "Aspects of the Theory of Syntax (1965). In 1972 "Aspects" (known as the Standard Theory) was considerably improved upon and published as the 'Extended Standard Theory' (EST). Thereafter it was further modified and released as Revised Extended Standard Theory (Rest). Besides Chomsky several other brilliant linguistics have contributed substantially to the growth of T.G. Grammars. What we have attempted here is ridiculously stupid introduction to T.G. grammars).

PASSIVE TRANSFORMATION

Peter Saw the snake → The snake was seen by Peter

$NP_1 V_{to} NP_2$ NP_2 V_{to} NP_2

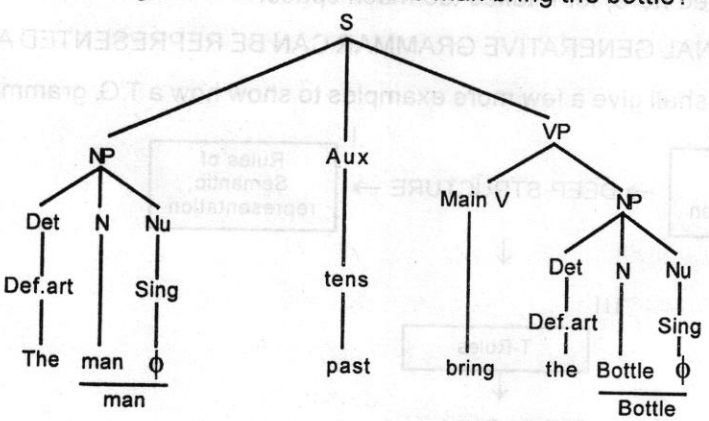


By Passive transformation

1. NP switch rule - a snake past see Peter
2. 'by' insertion rule - a snake past see by Peter
3. be+en-insertion rule - a snake past be on see by Peter
4. Affix hopping (flip-flop) rule - a snake be past see en by Peter was seen
   → A snake was seen by Peter

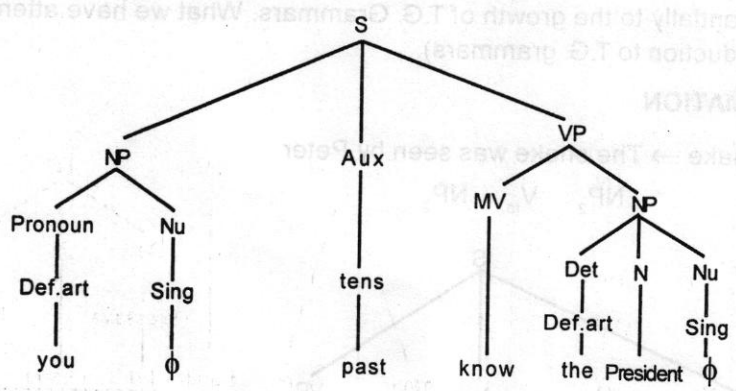
QUESTION TRANSFORMATION

1. The man brought the bottle → Did the man bring the bottle?



1. Yes-No question switch rule
   Past the man bring the bottle
2. Do insertion rule - past do the man bring the bottle
3. Affix switch rule - do past the man bring the bottle
   did
   → Did the man bring the bottle?

2. You knew the President → Did you know the President?

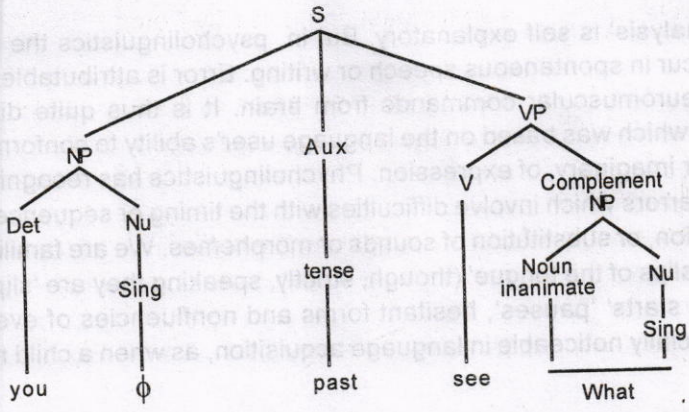


1. By yes-no question switch rule
   Past you know the President
2. By do -insertion rule
   Past do you know the President
3. Particle switch rule (affix Do past you know the President hopping or flip rule)
   did
   → Did you know the President

WH - QUESTION TRANSFORMATION

You saw something → What did you see?

(what)

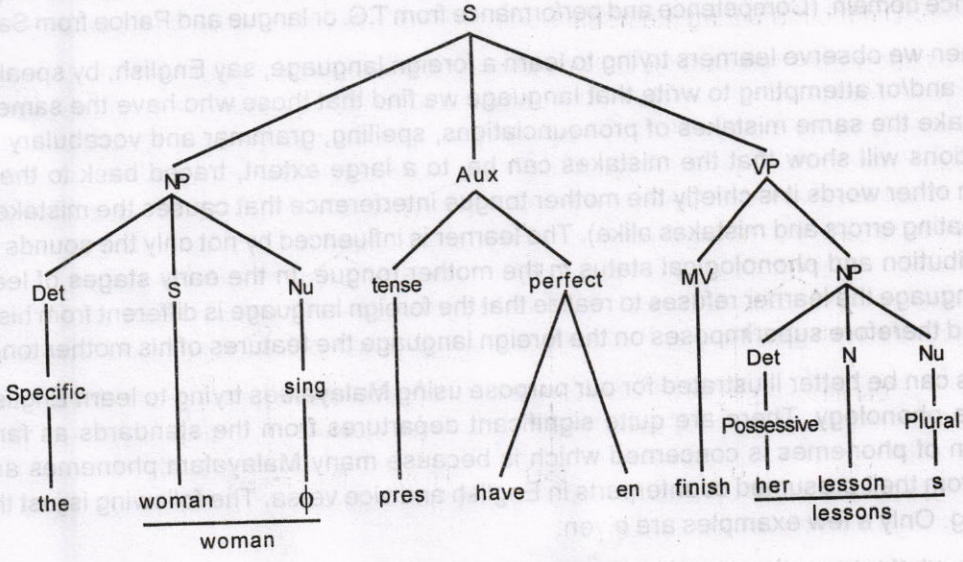


you past see what

1. By yes-no question switch rule — Past you see what
2. By question word switch rule — What past you see
3. By do - insertion rule — What past do you see
4. Affix switch rule — What do past you see
   did
   What did you see

NEGATIVE TRANSFORMATION

The woman has finished her lessons → The woman has not finished her lesson



1. By not-insertion rule
   The woman pres have not en finish her lessons
2. By the affix switch rule:
   The woman have pres not finish en her lessons
   has finished
   → The woman has not finished her lessons

Unit - VI

ERROR ANALYSIS

The term 'error analysis' is self explanatory. But in psycholinguistics the term is used to refer to mistakes that occur in spontaneous speech or writing. Error is attributable to some sort of malfunctioning of the neuromuscular commands from brain. It is thus quite distinct from our traditional notion of error which was based on the language user's ability to conform and adhere to a set of standards, real or imaginary, of expression. Phycholinguistics has recognised quite a few types of error. Speaker's errors which involve difficulties with the timing or sequence of commands, will lead to addition, deletion, or substitution of sounds or morphemes. We are familiar with the kind in the traditional form of 'slips of the tongue' (though, strictly, speaking they are 'slips of the brain') There are also the 'false starts' 'pauses', hesitant forms and nonfluencies of everyday speech. "Hearer's errors are especially noticeable in language acquisition, as when a child misanalyses an adult utterance.

e.g. Adult: She's got her hat on?

Child: Where's her hat on?

In the history of language new forms of expression emerge owing to a reanalysis (metanalysis) of old e.g. A. napron + anapron (Middle English - napron ; Old French - naperon) a nadder = anadder (Old English - naddre)- which are products of errors.

The distinction between errors of production and errors of reception is not easy to make . Error in this sense is very different from the errors we see in pedagogy.

In language learning and teaching error analysis is widely used. It is a technique which helps in identifying, classifying and methodically and systematically interpreting the unacceptable forms produced by someone who is learning a foreign language (second or target language) using linguistic principles and procedures, Errors are assumed to reflect, in a systematic way, the competence acquired by a learner. They are different from mistakes which belong to the performance domain. (Competence and performance from T.G. or langue and Parloe from Saussure).

When we observe learners trying to learn a foreign language, say English, by speaking that language and/or attempting to write that language we find that those who have the same mother tongue make the same mistakes of pronounciations, spelling, grammar and vocabulary. Further investigations will show that the mistakes can be, to a large extent, traced back to the mother tongue. In other words it is chiefly the mother tongue interference that causes the mistakes (Here we are treating errors and mistakes alike). The learner is influenced by not only the sounds but also their distribution and phonological status in the mother tongue. In the early stages of learning a foreign language the learner refuses to realize that the foreign language is different from his mother tongue and therefore superimposes on the foreign language the features of his mother tongue.

This can be better illustrated for our purpose using Malayalees trying to learn English. First let us take phonology. There are quite significant departures from the standards as far as the articulation of phonemes is concerned which is because many Malayalam phonemes are quite different from their presumed counterparts in English and vice versa. The following is just the tip of the icenerg. Only a few examples are given.

Though the long vowel in the English words 'heap', leap, 'seep' etc. is present, Malayalam, the shorter one in 'hip' 'lip' 'sip' etc. is absent in the latter, as the one in Malayalam is qualitatively different from that in English, because the latter is somewhat centralized. So Malayalee speakers substitute their vowel and get it wrong in English.

The vowel in 'cat', 'bat', 'fat', hat, etc. is absent in Malayalam. Many Malayalees substitute the vowel in 'ask' in its place. Thus 'have' and 'capacity' can be heard with the vowel in 'ask'.

The English vowels in 'cut' and 'cart' , 'hut' and 'heart' are both qualitatively and quantitatively..... each other, whereas Malayalee speakers treat the second as if it is just

quantitatively twice as long as the first one. They do not recognize the qualitative difference.

Similarly, the English vowels in 'shot' and 'short', pot, and 'port' and 'spot' and 'sport' are both qualitatively and quantitatively different. For the Malayalee speaker the second is just twice as long. The English vowel in 'foot', 'good', 'could', 'should' etc. is absent in Malayalam. Malayalee speakers of English consider it to be the shorter form of the vowel in 'food', 'goods', 'root', 'shoot' etc. Many of the diphthongs in English are difficult for the Malayalee speaker. For instance, the dipthong in 'pay', 'day', 'say', 'way' etc. Is usually heard amongst Malayalees as the longer form of the vowel in 'pet', 'set', 'met', 'wet' etc. Similarly the English dipthong in 'no', 'so', 'go' etc. Is somewhat the longer form of the one (vowel) in 'pot', 'hot' etc. for the Malayalees.

The affricates in 'church' and 'judge' and 'try' and 'dry', the fricatives in 'thick' and 'this, the last cosonants in 'mirage', alive and 'bottle' the first ones in 'red' and 'wed' are all absent in Malayalam. So the Malayalee speakers use the nearest parallel sounds in their places which results in faulty pronunciations, for example, the Malayalam retroflex sounds of the 't' family are substituted in the place of the alveolar sounds 't' and 'd' which have not retroflex in English.

Since all Malayalam words have vocalic ending, Malayalee speakers tend to end English words with vocalic endings too. This interferes with pronunciations and a large number of English words are getting the central vowel at their ends with Malayalee speakers. For instance, let us take the English words like car, bus, watch, book etc. In Malayalam these words are made disyllabic with the addition of the central vowel represented in Malayalm with the notation of the crescent. The aspiration as we find in pot and spot, kill and skill, car and scar, respectively bewilder Malayalee speakers, for whom the pairs are the same.

In the foregoing account we have just mentioned some common errors in the domain pronunciations. Similarly every area of language activity can be studied and errors noted.

Errors are found in spelling, word order, intonation, accent, in short, everywhere. The following findings were actually made by me in the answer scripts of university examinations during centralised evaluation.

Duck Orsino	for Duke Orsino
taprikard	for tape recorder
solder, solider, soldyer, solger, soljer	for soldier
Banard Shoe	for Bernard Shaw
Olyzes	for Ulysses
micrope	for microscope
suppernatural	for supernatural
first well	for festival
atta bom	for atom bomb
angles	for angels
aminy	for enemy
night in girl	for nightingale
maud Gonne	for mad, ginni, mod, gonneri
fart tail	for fertile
The Rape of Lucrece	for The rope of Lucrece
She was a T.V.patient	for she was a T.B.patient
Miss Gee is a moden badly	for Miss Gees is modemballad
Miss Jee is modem balled	for Miss Gee is modemballad
She lay on her mate	for she lay on her mat.

CUP /9716/13/100 - 6

There are tens of thousands of mistakes and errors of the above kind which result from various causes like faulty pronounciation, lack of visual memory, wrong association, sheer interference, mind wandering etc. Wrong intonation, wrong stress patterns and the like are observable during speech. Where there should be a rising intonation, we hear a fall and vice versa.

Word order plays havoc with Malayalee speakers of English. Sometimes no order is found at all. The following example illustrates an extreme case where the learner is trying to impose Malayalam word order on English sentences; he translates word for word and uses Malayalam word order:

King kirneedam yes. Woman kirneedam no.

(The king has a crown. The woman has no crown)

Perhaps grammar - translation is behind the following sentences:

John Stevenson was first discovered in a steam engine.

Obviously the learner wanted to swrite.

George Stephenson first invented the steam engine.

I guess that the single Malayalam meaning for 'invent' and 'discover' is behind the above. However, this does not explain several other features. In between and amongst the various kinds of errors so many things happen and it is truly mind-boggling. A careful analysis of similar looking errors may throw some light on the causes of errors. Once the causes are known, remedial measures can be initiated. However, many errors defy decoding and remain puzzles. Error analysis helps in second language learning and teaching. It provides some insight into the entry behaviour of learners which helps us in desingning a proper bridge programme to help the learners avoid errors in their language.

Recent studies have shown that juxtaposition of language systems (mother tongue and second/foreign/Target language) could lead to a new supersystem which combined features of both systems or intersystemic interference. It is that has given rise to contrastive analysis.

There is a positive side to error-making. It has been hypothesized that errors should not be viewed as problems to be overcome but rather as normal and inevitable feature of indicating strategies that learners use while trying to learn a new language.

Errors are attributable to causes like language transfer, intralingual interference, sociolinguistic situation, modality of exposure to the target language and that of production, learner's age, succession of approximate systems, learner's personal and natural difficulties, especially those relating to memory, aptitude, motivation, etc. and the length of utterance, sound systems, deprivational complexities embedding and transformation etc. etc. of the second language.

Once errors are identified, they should be accounted for and then remedied. This is where remedial programmes come. This calls for systematic curriculum design to make it as fool proof as possible.

Unit - VII

STYLISTICS

Stylistics - the word suggests an area where language study could be of value: the study of literature. Literary language is generally taken to be the most powerful and complex form of language developed by a community. It is characteristically evocative. The meaning of a work of literature defies definition. The range of its subject matter comprehends and transcends the whole of human experience. The language of literature is an extremely tough thing to examine because of its ambivalent status: on the one hand, the language of a work is central, in that it is the medium of the message and the only means the author has of communicating his/her ideas; on the other, it is not central in that it is but means to the more important end of unserstanding the author's intention. But if it were possible to devise technique of language

study, which, when used sensitively, could illuminate the meaning of a literary work, then it would indeed be a justification. This is where stylistics comes in.

Stylistics is one of the several branches of linguistics. It studies the features of situationally distinctive uses. (i.e. varieties) of languages. It tries to establish principles capable of accounting for the particular choices made by individuals and social groups in their use of language. Stylistics itself has several branches.

1. GENERAL STYLISTICS

This deals with the whole range of (or repertoire of) non-dialectical varieties encountered within a language.

2. LITERARY STYLISTICS

This deals with the variations characteristics of literature as genre and of the style of individual authors

3. STYLOSTASTICS

This is also called stylometry; it deals with the quantification of stylistic patterns- field which usually studies the statistical structure of literary texts.

4. PHONOSTYLISTICS

This studies the expressive or aesthetic function of sounds in a literary composition.

5. SOCIOSTYLISTICS

This studies the language of writers considered as social groups e.g. The University Wits of the Elizabethan period; pamphleteers diaryists or fashions in language:

6. PEDAGOGICAL STYLISTICS

Because of the eclecticism of stylistics, stylistics has increasingly come to be used a teaching tool in language and literature studies for both native and foreign language speakers. This is what pedagogical stylists means.

Apart from the above, style may generally refer to features like formal/informal, literary/ colloquial etc.etc. which we encounter everyday.

The choice which an author makes from among the possibilities available to him in the way of syntactic frame work and lexical elements is the subject matter of stylistics. The style of an author is his finger print, his face, his identity. Stylometry can establish the uniqueness of every writer and every composition. Stylistics tries to investigate how two or more utterances in the same language which can convey approximately the same information differ from each other and explain its findings in bothe quantitative and qualitative terms.

Stylistics in the present century replaces and expands on the earlier stury of ELECUTIO in Rhetoric. Following the publication of a two volume treatise on French Stylistics by Bally (1909), a pupil of the Structural Linguist, Saussure, interest in stylitics gradually spread across Europe via the wotk of Spitzer (1928 and 1948) and a few others. It was in the 1960s that it really began to flourish in Britain and the U.S.A given impetus from post -war development in descriptive liunguistics, grammar in particular, stylistics has gained ground in recent times. However, traditional literary critics were suspicious of an objective approach to literary texts.

In several respects stylistics is close to literary criticism and practical criticism. By far the commonest kind of material studies is literary. Attention is text - centered (especially the Classics, thanks to F.R. Leavis). The aim of stylistics is not simply to describe formal features of texts for their own sake, but to show their functional significance for the interpretation of the text; or relate literary texts to linguistic causes where these are felt to be relevant. Intuitions and interpretative skills are important in stylistics and literary criticism; however stylisticians want to avoid vague and impressionistic judgements about the way formal features are manipulated. As a result, stylistics draws heavily on the models and terminology provided by whatever aspects of linguistics are left to be relevant. Transformational Generative Grammar, Discourse Analysis, Pragmatics, Reader Response and AReception Theories - all have influenced modern stylistics.

Style may be looked upon as a function of the ultimate selection and combination of words

(I must add and sounds) and since words mean, style and meaning are inseparable (like form and content, shape and sense, colours and countours appearance and make-up etc. etc.) an author commits his feelings, thought, idea or experience to writing. The feeling etc. may be common to many, and so common place, but the expressive side of it by different authors will certainly vary as they individually select and combine words and sounds to express that feeling, experience, thought or idea. That is to say, the percdeption of each author is different and so it is different to each reader too. It is these differences that constitute style. The layers may be phonological, syntactical, or semantic or overlapping of these; trans sentence relations could be one of the syntactic features: one and the same thing can be expressed in many ways and the ways become many through style.

To understand what style can do, we shall attempt a few exercises. recall the bedchamber scene where Hamlet and Gertrude (his mother) have their confrontation with each other; Polonius gets killed and Hamlet gives vent to his intense hatred of Claudius (Act. III Sc. iv. Lines 97- 103).

Hamlet: A murderer and villaian

A slave that is not twentieth part of the tithe

Of your precedent lord, a vice of kings,

A cutpurse of the empire and the rule,

That from a shelf the precious diadem stole

And put it in his pocket

Queen: No more

Hamlet: A king of shreds and patches.....

The lines above have a prolification of the aspirated plosives

(the 'p' and 'k' sounds). The fury and hatred of Hamlet explode in the shape of fireworks and his exertion of Claudius is best revealed, through the choice of the aspirated plosive sounds. You will notice the sounds if you read the passage aloud as it should be.

Now I shall take the poem prescribed for your study in American literature by Theodore Roethke titled 'My Papa's Waltz' for a stylistic analysis. The following is the text:

The whisky on your breath
Could make small boy dizzy.
But I hung on like death.
Such waltzing was not easy
We romped until the pans
Slid from the kitchen shelf
My mother's countenance
Could not unfrown itself
The hand that held my wrist
Was battered on one knuckel;
At every step you missed
My right ear scrapped a buckle.
You beat time on my head
With a palm caked hard by dirt,
Then waltzed me off to bed
Still clinging to your shirt

We have reffered to the choices a writer has before him. Naturally, he selects the best, or what he thinks best, out of the several options. We have in the first line the word 'whisky?' If he

had chosen 'brandy' it would have alliterated with 'breath' and the metre would not have been disturbed as both 'whisky' and 'brandy' are disyllabic. That is to say 'brandy' would have been a better choice. Yet, why has he selected 'whisky' and insisted on it? So there must have been a reason, a good reason and good explanation. We have to find out what it is. It is 'whisky on your breath' that marked 'the small boy dizzy' The word 'whisky' strongly reminds us of 'wheeze' which means 'to breathe with a hissing sound; to breathe audibly or with difficulty, the audible breathing or breathing with difficulty could be due also to the 'waltz, (note the consonance with 'Whisky') which means 'a German dance performed by couples with a rapid whirling motion, dance in which couples go round and round.

The word/'whisky' reeks of 'whisk' which means to move quickly and lightly. To sweep rapidly, 'whisk' also happens to be the earlier form of 'whist', a cardgame from which the meaning 'the rapid sweeping action of sweeping cards off the table in a game of cards' originated. At the end of the poem we have 'Waltzed me off to bed still clinging to your shirt' where 'waltzed me off' strongly suggests 'whisked me off the floor.

That the father's breathing is loud and clearly audible ('wheezing') is brought out by the prolification of the fricatives used in the poem, especially the /s, z/ sounds. Out of the twenty-eight fricatives eighteen are /s, z/. If the poet had chosen brandy instead of 'whisky' all the associations would have been lost. I am even tempted to articulate the word as 'wheeze-key' when almost a miracle happens 'key' means in music scale of notes, definitely related to each other and based on a particular note called 'keynote'. His breathing is tuned to the pitch of 'wheezing'. Nevertheless, my temptation is justified, because Roethke does introduce the notion of music in.'

You beat time on my head

With a palm caked hard by dirt....

Where 'time' is realized through the repeated 't and d' sounds, reminding us of the ticking of a clock. And music dance go together. Though the father and the son are Waltzing, the music is at 'wheeze-key' and the beat is kept by 'a palm caked hard by dirt', not the usual well manicured, soft and slender fingers moving over piano keys.

The waltz is unique-which is indicated in the ambiguity of the title: My Papa's Waltz. (1) I am the owner of Papa's waltz (2) Waltz of my papa. If the title had been, say, 'Waltzing with Papa' or 'Waltz with papa', the ambiguity would have been lost.

Now let us take another example. This time from Hopkins, I am taking the lines.

Till a lioness a rose breasting the babble.

A prophetess towered in the tumult, a virginal tongue told.

I presume that you are thoroughly familiar with the poem, why has Hopkins chosen 'lioness'? He could have gone for 'tigress' or simply priestess'. The tali Franciscan nun is indeed a priestness. Besides, the metre would not have been affected at all. This can be explained as follows.

If the lion is the king of the forests, the lioness is the queen of the forests. Christ is the Lord, the king, later referred to in the poem. The nun is the bride of Christ, so she is the queen. 'Tigress' which is in fact better qualified than 'lioness' in several ways lacks this association. Opposing enemies bravely is the bounden duty of the king (or the queen) which is referred to in breasting' (meaning 'confront' face, besides, breast feed). Towers form part of fortresses whose owner occupant is Lord/King/Master etc. Thou mastering me God.....Sway of thee sea..) In short, the word 'lioness' is the most appropriate term in the context. (I have concentrated all my attention on just the word 'lioness'. There is a lot I have left unsaid).

You must be familiar with Frost's 'Stopping by Woods..... Have you noticed that Frost has used the /s.z/ sounds 37 times in just 16 short lines and that these sounds are also seen and heard in words like "ice, snow, frost, freeze, glacier, mist, sleet and eskimo'? All the

listed words have /s/or/z sound and remind us of intense cold. Have you noticed that the lines of the poem are all statements showing only the present and future and no past at all? Also, there are seven possession words and all of them at focal points. Stylistics tells you why it is so.

Stylistics discusses sounds, words, syntax, rhetorical devices, figures of speech, rhyme, metre, rhythm, intersentence links, in short, everything that is relevant. It may make an inventory of such things which on consolidation reveals the style of the author or the work or art. For instance, one can measure the amount of metaphorical content in a text and refer to it as the metaphor quotient. One can measure the % of the various kinds of constructions and quantify them. The studies are quite illuminating, for instance, stylistic studies reveal that whereas Keats uses more of adjectives Shelley uses more of adverb. So we may say that Keats is a poet of description and Shelley is a poet of action. The musical qualities of Tennyson and Swinburne are attributable to their penchant for alliteration, consonance and assonance, Pinter's plays have exploited the stylistic features of everyday speech unlike any other contemporary playwright.

Units VII

CONTRASTIVE ANALYSIS

Contrastive analysis indentifies a general approach to the investigation of language, particularly as carried on in certain areas of applied linguistics, such as foreign language learning and translation. In a contrastive analysis of two languages the points of structural differences are identified and these are then studied as areas of potential difficulty in foreign language iearnings. Contrastive analysis is always synchronic, Analogous contrastive studies of two states in the history and evolution of a language is grouped under historical or comparative linguistics.

The stimulus to contrastive linguistic studies was provided in 1957 by Robert Lado with his book; 'Linguistics Acros Cultures'. In this book Lado was able to bring together a large quantity of evidence to show 'mother tongue interference' in foreign/second language learning. For nearly two decades the book controlled the domain of foreign/second language learning and teaching, the substance is as follows. The errors and difficulties that occur in our learning and use of foreign languages are, to a very great extent, due to our mother tongue. Whenever the structure of the target language differs from that of the mother tongue, difficulty in learning and error in performance can be expected. One trying to learn the target language is in fact learning to overcome such difficulties and to avoid errors. Where the structures of the two languages are the same, no difficulty is anticipated and teaching is not necessary. Exposure to the target language is the needed requirement. Teaching concentrates on those points and areas where structural differences exist. The bigger differences, the greater the difficulties. It follows that the difficulties of various groups of people learning, say, English as a foreign language will vary according to their mother tongues and since teaching is to be directed at differences between languages the teaching itself will vary according to the mother tongue of the learners. If a contrastive analysis of the mother tongue and the target language is carried out the differences between the languages can be discovered and it becomes possible to predict the difficulties that the learners are likely to have. This in turn determines what the learners have to learn and what the teachers have to teach.The results of the contrastive analysis are built into the language teaching materials, syllabuses, tests and research. Different teaching and learning materials will have to be produced for each language group. In short, the purpose of contrastive analysis is to predict the likely errors of a given group of learners and thereby to provide the necessary linguistic input into language teaching/learning course materials

We shall borrow Lado's words from 'Linguistics Across Cultures' and 'Language Teaching' which are pioneer works in error analysis and language teaching.

".....individuals tend to transfer the forms and meanings and the distribution forms and meanings of their native language and culture to the foreign language and culture both productively when attempting to speak the language and act in the culture and receptively when attempting to grasp and understand the language and the culture as practised by natives

(Linguistics Across Cultures).

"Problems are those units and patterns that show structure differences between the first language and the second.....The structurally analogous units between languages need not be taught; mere presentation in meaningful situations will suffice. Different emphases in teaching are required for the different language backgrounds" (Language Teaching).

"A comparison tells us what we should test and what we should not test". (Linguistics Across Cultures).

The word 'transfer' is used by psychologists to refer to the fact that present learning is affected by past learning. Faced with a new learning task, the learner will make use of whatever knowledge and/or skills he already possesses to facilitate and ease the process of acquisition. While learning a foreign language, the learner transfers, or at least shows a strong inclination to transfer, what he possesses from his mother tongue. The transfer, what he possesses from his mother tongue. The transfer is positive when it facilitates learning and negative when it impedes learning and the latter is called interference. We have also nil transfer when, because there is nothing at all in common between the mother tongue and the foreign language, no impact is seen.

Let us try illustrate the point

In Malayalam when the verb is transitive, the word order in sentences is Subject - Object-Verb - Transitive (NP_1 - NP_2- V_{tr}). (I). In English when the verb is mono transitive, the word order is subject - vern transitive - object (NP_1 - V_{tr} - NP_2). (II) A Malayalee learner of English is inclined to transfer word order (1) to English and is likely to adhere to the pattern unless he is taught the "contrast" between the two word orders i.e., (I) and (II). Malayalam has an elaborate system of case endings for nouns - which makes, the syntax very flexible. Since English has 'visible' case endings indicating only the plural and the possessive, the word order is rigid. This aggravates learning difficulty. By pointing out the "contrast", learning can be facilitated.

There is 'near total' correspondance between writing and speech in Malayalam i. e., it is written as it is spoken and spoken as it is written. In English, it is not so, the spelling and the pronounciation do not seem to have the same degree of correspondance as is seen in Malayalam. HIghlighting this contrast can help learners of English.

Error analysis can go a long way in establishing contrasting features in various languages and the results can be used in teaching methodologies.

Unit - VIII

ESSENTIALS OF PANINIAN PHONOLOGY

As we already know a good deal of the speech mechanism, we will confine to only those areas where ancient Sanskrit grammarians and Panini recorded their findings.

Study the picture accompanying this carefully.

Air from the lungs rushing out of the passage called the windpipe causes the vocal cords to vibrate and the vibrarion is heard as a distinct sound called voice or घोष (वगोषु तृतिय - चतु थौ)i.e. the third and the fourth sounds of the consonant groups. When the passage is wide open to keep the vocal cords apart, air from the lungs passes through without any vibration of the vocal cords. But an audible sound is produced owing to some obstruction in the mouth, the second being called अघोष (नरेषु प्रथमद्रिती थौ) i.e. The first and the second of the consonant groups. The obstruction may be total or partial. In the event of total obstruction, breath stops for a short while and on release produces an 'explosion and we get the "plosives" i.e वर्गपरम श्रहा स्पर्ष sounds. When the obstruction is partial, the sir stream from the luings experiences friction on account of the narrowness of the passage between the active and the passive articulators and we get the fricatives (or spirants or sibilants i.e. ऊष्मण

In the case of the स्पर्ष sounds (plosives) the contact may occur in any part of the mouth(the infinite flexibility of the tongue is the reason) and so we can have a large variety of sounds. In

CUP /9716/13/100 - 8

Sanskrit we have five groups: कवर्ग, तवर्ग and पवर्ग are primary classes and चवर्ग and टवर्ग are derivative classes.

In the light of the above we have four varieties of sounds. (1) voiced stops (2) voiceless stops (3) voiced fricatives and (4) voiceless fricatives. The stops may have in Sanskrit another feature called "aspiration" which divides the stops into two. The aspirated महाप्राण and the unaspirated अल्पप्राण. When air escapes though the nasal passage instead of the oral one (due to some oral blockade) at the point of release of contact (plosion) we get the nasals अनुनासिक All nasals are voiced.

CLASSIFICATION OF SPEECH SOUNDS

There are certain speech sounds which have a totally unimpeded passage while the air stream passes through the mouth. These sounds are called sonants (vowels are monophthongs). Those sounds which result through a total obstruction to and then a sudden release of the air stream are the plosive sounds. Those which result from a partial closure are called the fricatives (spirants or sibilants). The sonants can form syllables and can be pronounced all by themselves (स्वरा) while the consonants cannot form syllables by themselves and need the help of the sonants. (The word 'consonant' itself means cons-sonant ie. with sonants /vowels). Similarly, the word ñflVUÊ suggests selfgood (eg स्वयम) and the word व्यशन suggests the idea that they make speech distinct.

There are a few vowels which sound like consonants (or consonants which sound like vowels) and we call them semivowels (like the English sounds /w/ and /j/ie. Y).

There are special conditions under which a consonant could pass as a semivowel 'r' and 'l' are "Liquids's as they often assume the value of vowels. Thus we have in Sanskrit य र ल व But they are consonants which become like vowels on certain occasions. There is a strong tendency to confuse between 'r' and 'l' in Aryan languages as in नारिकेलम and नालिकेरम (रलयेरभेद)

Closely related to 'r' and '/' are 'r' and 'l' (ऋ and ऌ) which are vowels in Sanskrit. We know that unless such consonants can act as the nucleus of a syllable, the syllable cannot be articulated.

Similarly, the nasals 'm', and 'n' too can be like 'sonants' though in Sanskrit they have become 'a'. In Proto-Indo-European this was very common. In Latin the feature is still seen.

CLASSIFICATION OF VOWELS

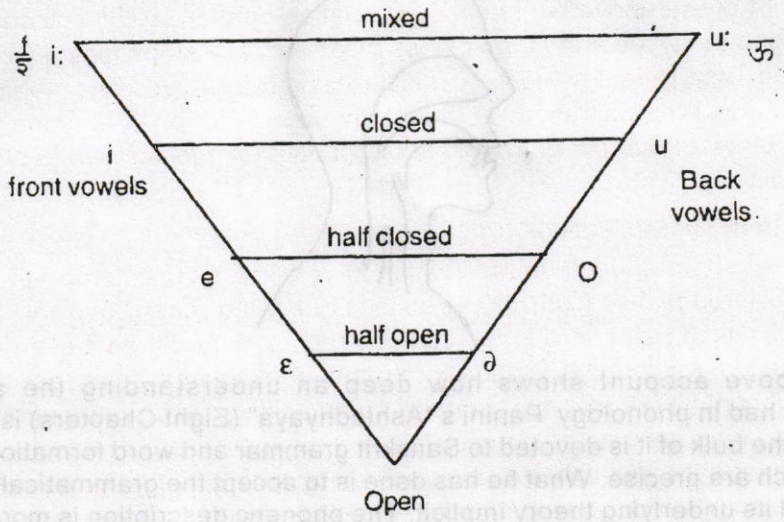
Vowels (sonants) can be classified according to either "quantity" or "quality". The first depends on the time taken for articulation. Time is measured in terms of a 'मात्रा -the time for a short vowel. Consequently we get two kinds- short and long, short taking 'one' 'मात्रा and the long taking 'two'. Paninian theory had also recognised an extralong vowel of three 'मात्रा called 'प्लूत (in modern phonology we have shown ə– which takes just-half a .'मात्रा and we call it 'अर्धमात्रिक.

Quality based classification is more important -which takes into consideration the nature of the vowel. The quality varies as the size and the shape of the mouth's opening does. The fundamental vowel is /a/ə (long) during the articulation of which the mouth is opened the widest and the front of the tongue is at its lowest. As the opening of the mouth gets smaller and smaller and the front of the tongue gets higher and higher, we have, a, e, i, and the semivowel 'y'. Similarly, as the back of the tongue raises higher and higher and the opening of the mouth grows narrower and rounder we get u: and the semi vowel 'w'. Except 'y' and 'w' all are pure vowels.

When the mouth is opened the widest, the vowel is called विवृत when it is opened the narrowest, we call it सवृत, using this idea, we can attempt the following chart.

The vowels represented above are all pure vowels capable of variation in length (quantity), we have combinations of the above in twos and sometimes in threes not in any haphazard or arbitrary way though. We refer to them as diphthongs and triphthongs respectively. They are ofcourse longer in quality, in Sanskrit 'e' and ai' and 'o' and 'au' are diphthongs though 'e' and 'o' have been more monophthong like than diphthong like for centuries.

From the above we get two vowel series the front and the backvowels and each series is associated with a semi vowel and a long diphthong.



Front (or e-series): i i i (e (ai), ai (ai)

Back (or o-series): u, u, u, o (au) (au)

'e' and 'o' are strong गुण in Sanskrit

'i' and 'u' are weak संप्रसारणम in Sanskrit

'ai' and 'au' lengthened - वृध्दि in Sanskrit

वृध्दि and गुण are associated with accent

and संप्रसारणम with lack of accent

CLASSIFICATION OF CONSONANTS

Consonants may be classified on the basis of various criteria.

(1) The kind of articulation- with respect to voice, breath, or aspiration,

(2) The extent of openness of the passage between the articulators at the time of articulation. aspirants, plosives, nasals, liquids

(3) Place of articulation i.e the point - at which stopping, friction etc. take place- soft palate, hard palate, dome of the palate, teeth, lips. The sounds produced at these points are velars (gutturals) palatals, cerebrals, dentals, and labials in Sanskrit कण्ठय, तालव्य, मूर्धन्य, दन्तथ and ओषध्य in that order.

Gutturals (velar Plosives) : k kh g gh- कण्ठय

Dentals: t th d dh दन्तय

Labials: p ph b bh - ओषध्य

The above three are primary

Palatals: c ch j jh - तालवन्य

Cerebrals/Retroflex: t th d dh - मूर्धन्या

Nasals: n n m n n

ङ ञ म ञ ण

and the अनुस्वार m and the अनुनासिक m

Liquids : 'r', 'i'

Semivowels : 'y', 'w'

s / ʃ/ s

श ष स

Aspirate : 'h' and ghe विसर्ग

No attempt is made here to describe the above as the descriptions are exactly similar to those in English phonology.

The above account shows how deep an understanding the ancient Sanskrit grammarians had in phonology. Panini's "Ashtadhyaya" (Eight Chapters) is a classic in every respect. But the bulk of it is devoted to Sanskrit grammar and word formation given in 'aetrua' (threads/ which are precise. What he has done is to accept the grammatical description of the language and its underlying theory implicit. The phonetic description is more or less taken for granted. However, he has ordered the sounds in sequences that are both phonetically and morphologically relevant to his grammatical rules. Actual phonetic statments in Panini are very few.

THE KARAKA THEORY

One of the most important features of the Indo European Family of languages is the case system which has ariseb in two ways: (1) in connection with the verb and (2) through the connection with other nouns. Sanskrit is one of the off shoots of the Indo European Family and in it Sanskrit grammarians speak "karaka". The term 'karaka' should be reserved for only such cases as have connections with the verb in the sentence. Karakas were classified by the different types of relation between the action or process reffered to by the verb and the denotata of the nouns. Agent and 'object were two of them, but karakas are not to be equated with cases, as normally understood. The Sanskrit possessive in its most general use is not considered to express a karaka, as it relates to nouns as its main grammatical function, not nouns to verbs. The verb inflected for person, number and tense was taken as the core of the sentence. Other words stood in specific relation to the verb, and of these the most important were the nound in their different case inflections.In order to understand the idea behind the karaka theory let us study a few modern English sentences.

Consider the sentence "The teacher advises the pupil". In this we have two NPs (noun phrases) and one VG (Verb group). Both the NPs are connected with verb group. though the connections are different in each case, the verb is monotransitive.

The teacher	advises	the pupil
NP1	VG	NP2

NP1 is thje 'actor/doer/; NP2 acted upon/the done to' In English. This difference is indicated with the help of word order i.e. the relative position of the two NPs with respect to the VG. In Sanskrit, word order is secondary. A difference in 'pratyaya' (i.e. case ending) is enough to indicate relationship. That is to say,in the place of the rigid, inflexible, unalterable word order in English, in Sanskrit we have considerable flexibility in syntax. We can say or write the above sentence in six different ways whereas English permits just one:

English : The teacher advises the pupil

Sanskrit: 1 Guruh Sishayam upadessti.

2. Guruh Upadesati sishyam
3. Sishyam Upadesati Guruh
4. Guruh Upadesati Sishyam
5. Upadesati Guruh Sishyam.
6. Upadesati Sishyama Guruh

In other words, the case endings of the noun phrases indicate the relations between them and he verb group and so word order has little role to play except with respect to style, frequency and propriety. Now let us take another example.

The teacher gives the pupil a book

Here we have three NPs. They are 'the teacher', 'the pupil' and 'the book'. The verb 'give' is a ditranstive verb. The connections are, obviously, different here. The NPs 'the pupil' and 'the book' are connected, too. When something is being given, there ought to be a recipient, because the idea is fundamental to the notion of giving. In English this can be better illustrated with the help of preposition.

The teacher gives a book to the pupil. 'To show who the recipient is, though it is absolutely unnecessary the word order of the first is quite enough. In Sanskrit we refer to it as 'sampradana karaka' to show which we have different case ending.

Guruh sishyaya grantham dadati

Here again whatever the word order be, the nature of relation between (and amongst) the constituents is brought out unambiguously with the case ending of the NPs and their relation with the verb. Now we shall take another sentence.

The teacher	gives	the pupil	a book	from	the library
NP1		NP2	NP3		NP4
					Prepositional phrase.

We have here four NPs, the last one being part of a prep. phrase. The fourth one too is related to the verb. The prepositional phrase from the library is translatable as 'pusthakalayat'. It is quite obvious that the prepositional phrase has stronger bonding with the NP 'the book So it is not a karaka in the strictest sense of the term. Hence we have 'library book' in English and parallel to this 'pusthakalaya grantham' in Sanskrit, the latter being quite unusual in good Sanskrit.

We may sum up this by saying that cases (nominative, vocative, genitive, dative, accusative, ablative,, possessive, locative) indicate connections of nouns in a sentence with the verb in the sentence or with other words (mainly nouns) in the sentence, though 'karaka' is always verb centered connection.

Nevertheless even cases by themselves will be inadequate to convey ideas precisely. We will have to make use of other devices for the sake of precision. Consider the following:

Robinhood killed the boar with an arrow,

Robinhood walked the boar with an arrow

Robinhood came out ot the castle with his friend

All the three sentences have a prepositional phrase begining with the preposition 'with'. If we paraphrase them in English itself, we might be able to bring out how they are different from each other. In Sanskrit we can render the above as

Robinhood killed the boar using an arrow

Robinhood walked to the castle in the company of his friend

acconpanied by

and

Robinhood came out of the castle carrying a sack to wheat

The preposition 'with' inicated accompaniment. If this idea is retained in fact in Sanskrit, it willl lead to poor translation and delivery. In short every language uses its own devices to indicate lexical relationships within sentences and 'karaka' is one such in Sanskrit.

Lessons prepared by

Pro. G.S. RamaKrishnan (Rtd.)

Trichur

Unit - IX

DIAMENSIONS OF LANGUAGE CHANGE

Introduction

All of us agree that language is a sophisticated means of human communication. Animals and birds also have their own ways of communicating messages. The barking of the dogs and calls of birds are examples. But the term laguage as used in linguistics, the scientific study of language has a very limited sense. It refers to language like Malayalam, English, Hindi, German, French, Russian, Sanskrit etc. It does not include any other system of communication such as animal communication and communication through gestures or facial expressions. We sometimes use the term natural languages to refer to the human languages mentioned above. Communication systems like the Morse Code and Shorthand invented and developed by us are called artificial language. The term languages has been defined by various linguists emphasizing different features of it. Some of them are given below,

"Language is a purely human and non-instinctive method of communicating ideas motions and desires by means of a system of voluntarily produced symbols."

Edward Spir: Language

"A language (is a) symbol system..... based on pure or arbitrary convention....infinitely extendable and modifiable according to the changing needs and conditions of the speakers.

R.H Robins:
R.H. Robins: general Linguistics:
An Introductory Survey

"Human languages are unlimited.....(an unlimited set of discrete signals).... have great structural complexity...structured on at least two levels.....(the learning tast is considerable)..... are open - ended ..... allow for the transmission of information.

Ronald W. Langacker: Language and its Structure

"A language is a system of arbitrary vocal symbols by means of which a social group co-operates".

Bloch & Trager: Outline of linguistic Analysis

All the above definitions of language seem to stress the function of language as means of communication. language is a powerful means of individual as well as social interaction. Language is essentially a controlled behaviour, shared in various degree by all the people in a given speech community. As David Crystal has pointed out 'language transcend idiosyneracies or peculiaries of an individual in a speech community. Society does not tolerate too much idiosyncracy, too much originality, in language. thus language may be regarded as 'human vocal noise, (or the graphic presentation of this noise in writing) used systematically by a community for purposes of communication. (David Crystal).

Human language has been changing constantly, both in each person's dialect and in the usage of the speech community. Robert A Hall in his book Introductory Linguistics says as follows:

"The structure of language in constantly changing throughout time, in the usage of every individual, some minute change takes place even from day to day, as he learns new word, new forms, new pronounciations and allows older habits to fall into desertification. When taken in the aggregate over the centuries these minute innovations add up to major changes in the habit of entire speech communities". The English language of today is very different from that of King Arthur's or even Chaucer's time. It is natural that living languages never hold still. "Every language is the product of change as long as it is spoken". (Ronald W. Langacker). These changes may escape our attention as they occur since. However over a span of centuries their cumulative effect is felt.

I. BORROWING

a) Lexical Borrowing

One way of language change is by the influence of other languages. We borrow lexical

items from other languages. Here is an example, the English word patio, was not at one time part of the English vocabulary. Today it is the addition of this word to English vocabulary constitutes a change in the linguistic system of that language even though it is a minor one. English speakers did not create that word. It was a Spanish word prior to its use as an English word. The addition of Patio to English vocabulary results from the influence of Spanish.

At first those speakers who were familiar with this Spanish term started using it in English. Its use spread, and in course of time it become a well established word of English language. In short the word 'pato' was borrowed into English.

Borrowing is very common linguistic phenomenon. Speakers of all languages must have had contact with the speaker of some other language. Therefore no language is completely free of borrowed forms. At the same time languages differ radically with respect to the proportion of lexical items in their vocabularies that can be attributed to borrowing.It is said that Albanian has so many borrowed words in its lexicaon that only a few hundred native words remain. Compared to Albanian. English has borrowed much less. Still English is often cited as a language that has borrowed heavily from several other languages. It has been pointed out that over half of English lexicon is of foreign origin.On the other hand American Indian languages of Athabaskan family have borrowed relatively little. The main reasons why languages differ inthis regard are historical and cultural than linguistic. Borrowing cannot be regarded as a linguistic necessity because it is possible to modify the existing lexical items to meet newly arising communicative needs.

Loan translation as a phenomenon is an interesting variant of lexical borrowing. Here are some illustrations. The English expression 'That goes without' saying is a literal transition of the French expression, 'Ca va sans dire'. Here the English speakers have borrowed a pattern and not actual lexical item for combining them figuratively to express a certain notion. The French term, gratteciel and the Spanish 'rascacielos' which mean 'sky scrapes' have been borrowed from English. The metaphor of 'scraping' the sky has been used in English to convey the idea of a very tall building. Langacker points out that the German 'Wolkenkratzer' is different only in that the form for clouds' occurs instead of the one for sky.

(b) Syntactic and phonological Borrowing

Borrowing of lexical items takes place relatively freely. But though not so frequently changes in the syntax or phonology of a language also result form borrowing. It is not easy to say to what extent languages can affect one another with respect to syntax and phonology. But there are examples for the existence of this kind of influence. The languages of the Balkan Peninsula, such as Albanian, Balgarian, Greek and Rumanian are syntactically alike. The infinitival clauses are highly restricted in their use. Some of the Balkan languages lack infinitives entirely. Instead of saving "The children want to leave" They would say something like 'The children want that they leave'.

Many of these languages are related only very indirectly. So it is quite clear that the common syntactic trait is due to mutual borrowing.

Borrowing in the realm of phonology is evident in the American Indian languages of the Pacific Northwest. Many languages in this area have glottalized consonants, the percentage of glottalized consonants in these languages is much higher than that in other languages throughout the world. Yet the languages displaying glottalized consonants are not all related. Glottalization must have spread among the tribes in the area through borrowing. Phonological borrowings can be seen in many of the Indo- European languages of India that have retroflex consonants. They are articulated with the tip of the tongue against the palate. These sounds developed in the Indo-European under the influence of the Dravidian family of languages. The Dravidian languages are spoken in India and they employ retroflex consonants.

Causes of Borrowing

The main cause of lexical borrowing is the need to find words for new objects, concepts and places. Borrowing an existing term from another languages is easier than making up one. Some examples are given below. A number of place names in the North American continent were taken from Indian languages. Mississippi, Michigan, Chicago, Dakota, Oklahoma, Kentucky,

Manhattan and Waukegan are some of them. The words totem, Wampum,Moccasin, toboggan and tomahawk were words borrowed from the language of the American Indians along with the items themselves. The words Kangaroo and Wombat were borrowed from the aboriginal languages of Australia. The word "Gnu', was borrowed from the Bantu languages of Africa.

To a certain extent the paths of borrowing help us to understand the paths of cultural influence. For example, a large number of Arabic words in English were borrowed from the field of science, zero, cipher, zenith, alchemy, algebra, nadir, alcohol, bismuth and alkali are some among them. Arabic influence in science and mathematics during the early medieval periods is well known. These borrowings to English came through Spanish. Similarly the long list of Italian loan words in English was the result of the importance of Italian influence in music and other arts. Opera, tempo, adagio, soprana, piano, sonata, scherzo, virtuoso, sonnet, fresco, miniature, dilettante, balcony, cornice, corridor, colonnada, mezzamine, parapet and niche are words belongoing to that domain.

A large number of French loan words came into English after the Norman conquest of England. Words belonging to such areas a government, the military, law and religion borrowed during that period reflect the fact that the Norman French, as the conquerors exerted major influence in these areas. Crown, power, state, reign, country, peer, court, duke, duchess, prince, realm, sovereign, minister, chancellor, council, authority, parliament, baron and nations are some of the governmental terms that came to English. The borrowed words belonging to auxiliary matters are battle, army, war, peace, lance, banner, ensign, officer, lieutenant, vessel, navy, admiral, soldier, sergeant, troops, arms, armour, assault, siege, enemy, challenge, gallant, march, company, guard, force, and danger. English legal vocabulary has been enriched by such words as jury, judge, plaintiff, accuse, crime, justice, privilege, damage, traitor, felony, summon, defendant, sue, attorney, session, fee,plead, suit and property, several terms of religious and moral significance also have been borrowed from French i.e. mercy, cruel, vice, nature, blame, save, pray, preach, angel, religion, virgin, saint, tempt, grace, pity, trinity, service, savior, relic, abbey, cloister, clergy, parish, baptism, friar, altar, miracle, sermon, sacrifice, virtue, charity, chaste, covet and lechery.

Since the French constituted an upper class, being the conquerors, the use of the French words in English conversations became a common practice because of the air of prestige that accompanied them. On the other hand the French people did not feel that pressure to master English words. The flow of loan words from English to French was very much limited. Afterall, English was only the tongue of the masses in those days. No doubt the prestige, factor was a very common cause of lexical borrrowings. Among the upper classes of Czarist Russia also the prestige of French culture was felt. As a result of this French expression found their way in Russian conversation. Modern Russian contains several expressions borrowed from French. Today the power and importance of American throughout the world has led to the borrowing of American English by different linguistic groups. Thus the number of English loan words in modern French is increasing day by day. As a result of this modern "Anglomania", English expressions such as snackbar, selfservice, parking, check list, deep freeze, pullover, luring,(luring room) expressway, pinup, whisky, sandwitch, weekend and dancing (night club) are commonly used by the French.

During the Middle Ages, latin and Greek had enjoyed prestige in the world of scholarship, Ever since the Renaissance, Greek and Latin have been finding their way into English, often through, French, to other European languages. Such words are sometimes called learned words. Learned words are mostly found in the vocabulary of the sciences and other scholarly disciplines. Even the names of these disciplines are borrowed from the classical languages e.g. sociology, psychology, anthropology, philosophy and biology. Apart from these hundreds of words of everyday use starting with the Latin morpheme 'ex' = 'out of from' can be found in English, e.g. exact exaggerate, exalt, exasperate, excerpt,exclude, excrete, excursion, execute, exempt, exert, exhaust, extend, exterminate, extinct, extort, explain, explicit, explode, explore, export, extend, exterminate, extinct and exude. Sometimes Latin morphemes are prefixed to Germanic forms. Eg. Ex-husband and ex-wife. Similarly the Latin suffixes are also combined with English

roots. In the fooling words the able/ible suffix is confined with native words. Answerable, eatable, berabel, laughable, and saleable.

Effects of borrowing

The borrowing of lexical items can have an important impact on the phonological system of language. Normally when a word is borrowed it is made to fit the phonological system of the borrowing language. To cite an example let us take the English word redezvous.It is borrowed from French but it obeys the phonological principles of English. It is pronounced with the English (r), not the French one. The first vowel is non nasal, although it is nasalized in French

But the loan words are not always assimilated completely to the phonological system of the borrowing language. Sometime the original pronounciation of French words are persuaded by the English speakers who borrow them for the sake of prestige. In such case the loan words may function as a phonological Trojan horse sneaking new sounds into the inventory of sounds used in the borrowing language. Thus the voiced fricatives (v,z) worked their way into English from French e.g. loan words such as very, veal, zeal,and zest.

Another result of heavy borrowing is the partitioning of vocabulary on the basis of the behaviour of the words with respect to phonological rules.

Unit-X

INTERNAL CHANGE

Borrowing, in all its forms brings about changes by the influence of other languages. Since it results from extended liguistic influence, it can be called external change. Changes in the linguistic system that do not happen through borrowing can be called internal change.

Internal change affects individual lexical items as well as general rules. It occurs in the semantics, syntactic and phonological systems of a language. The addition and loss of lexical items is the simplest for of internal change. Words can drop out of common use. Eg. In English there was a time when words such as the English verb cere (wax), maument (idol), congree (agree) and neat (cattle) were current. The word 'neat' mentioned above is different from the modern English word 'neat' which is borrowed from French. A word does not become obsolete all on a sudden. It is a gradual process. Certain words fall into disfavour or disuse and they gradually disappear over a period of decades or centuries. Words such as Lo,behold, verily etc are words which are not used now a days as common words. Similarly we do not use Zounds! or Egad! without humorous intent today. Even proper names are subject to the ebb and flow of linguistic fashion. Today American parents do not name a child Egbert, Bertha or Percival.

There is constant need for new lexical items in a technically, advancing and complex society like ours. Borrowing will not always serve the purpose. So new terms are to be made up from scratch to meet the new need. Sometimes existing items are combined to form more complex ones. They are in some way descriptive or appropriate. A third way to obtain a new term is to extend the use of an old one, making it applicable to the new situations. Generally people tend to readapt existing lexical material, rather than create new material. New images are frequent in giving trade names to nes products. Even here most terms are somehow related to existing lexical items. Most trade names are taken either from proper names (eg. Ford, Edsel, Johnson, etc) or from other already existing morphemes (eg. Rambler Thun derbird etc) Several others are clearly modelled after existing morphemes. The terms such as Vel,Lux, Fab etc., bear strong resemblances to velvet, luxury and fabulous. Slang expression also form a powerful source of linguistic inventions e.g. hip/heo, mooth, fink, moola nd barf.Linguists combined previously existing lexical items into more complex ones for use for use as technical terms. The word hippie for example,is not an entirely new creation. It consists of the diminutive suffix y/ie added to the older morpheme hip. In the same way new words such as beatnik, peacenik, and Vietnik were made by adding the morpheme 'nik'. Thus suffix entered English as part of the Russian loanword Sputnik. The word hamburger was formed from the place name Hamburg. The English language analysed it as ham + burger. The lexical item burger was its result. This

word has been the source of a large number of new creations such as Cheeseburger, pizza burger, chiliburger, tomaburger, mushromburger, tuneburger, beefburger, doubleburger, steal burger and Burger Chef.

Many of the existing lexical items are extended to new situations. This involves both the metaphorical side of the language and Semantic change. Usually metaphorical extensions occur in such areas as scientific terminology (eg. Electromagnetic wave, radiation belt, solar storm); marketing (eg. Plymouth Fury, Spring cigarettes) and slangs (eg. LSD trip, to snow a professor, to squeals to the cops). Some times certain terms are sued to label new products because of their favourable cannotation. For example, True and Lucky Strike are names of cigarettes, the choice of the term Pure Oil is because of propagandist reason. There are also examples for arbitrary choice. (Shell for a particular brand of oil)

Many of the lexical items change their meanings over a period of centuries. For example, the word 'meat' once meant; food. Today its scope has been narrowed up and it designates only one kind of food. In English nice used to mean foolish and silly had the sense 'happy, blessed, innocent. "Bead" once meant prayer. People used to keep track of their prayers on what we call the beads of rosary. All the above examples show that a lexical item undergoes changes with respect to its semantic representation, Similarly though not so common, the syntactic or phonological representations, of certain lexical items also undergo change. In modern English the morpheme friend has under gone a change in its syntactic representation. The expression, I am friends with Suresh' is adaptable today but not I am enemies with Suresh'. This expression is related to Suresh and friends by syntactic rules. When a morpheme is extended to a new syntactic class it acquires a new meaning.

Individual lexical items are also subject to change in their phonological representations, Sometimes if happens under the influences of spelling. For example, the word, often is now pronounced with a (t) by many people. Formerly it was not pronounced. Often, the phonological changes that morphemes undergo are of a morphological nature. To cite an example the plural of brother used to the brethren. Now it is brothers. The plural of ox is not oxen to some speakers. They say Oxes.

III. CHANGES IN RULES

Changes in the rules of a language are more important than the changes in the properties of individual lexical items. Changes occur in the rules of both the syntactic as well as phonological system of languages. Since they apply to the whole classes of lexical items and to unlimited sets of sentence structure, its effects are widespread.

In modern English the negative form not can come directly after some verb words but not others. While sentence like She cannot write She has written, she is not writing and She does not write are grammatical sentences like She writes not or She likes not mutton are ungrammatical Formerly not could follow any verb.

In English there are several mistakes in which change has occurred through the additions or loss of phonological rules. Once English was a highly inflected language. It was characterized by changes in the endings of words to distinguish case, gender, number, person, tense and so on. For example, the word Scip (ship) had various endings depending on the grammatical functions in the sentence. The word is used as much in the nominative and accusative singular form. Scipes was the genitive singular form scipe, the dative singular. The corresponding three forms in the plural were scipeu, scipa and scipum. In modern English nouns have only a plural and a genitive possessive ending, both of which are (z) in most cases. The inflecting of verbs and pronouns has been very much simplified. Similarly the inflection of adjectives had been eliminated except for comparative and superlative degrees.)e.g. bigger, biggest).

In the evolution of Latin into modern French the stress rule had been modified. The rule in modern French is that the last vowel of a word is stressed.

IV. HOW LANGUAGES CHANGE

Human language is always subject to change. It is changing constantly both in each person's

dialect and in the usage of the speech community. The phenomenon of language change brings about increased linguistic diversity in a community of speakers,unless there is enough communication and mutual linguistic influence with in the groups to offset this tendency. Since the bulk of changes that occur within a group gradually spread to all its members, generaly it will remain relatively homogeneous from the linguistic point of view. The dialect of the community in wuestion may change radically over a period of the centuries, but the changes will be uniform within the group itself. When the changes are not coordinated for all speakers of the group they will lead to increase diversity. Then the linguistic system of such subgroups will develop independently. Changes of language system may be regional, temporal and social.

Unit -XI

DIALECTS : REGIONAL TEMPORAL AND SOCIAL

There is not always a clear-cut distinction between language and dialect. Mutual intelligibility is one of the most important characteristics of language. In other words in a particular linguistic community or language group, everyone understands everyone else. AThey speak the same language. In the adjacent community if the speech is so different languages. e.g. France and Germany, the United States and Mexico, Greece or Italy or Korea and china. Sometimes there will be subgroups who speak the common language,but with difference in pronounciation, vocabulary, or other linguistic components, especially when it is large. But as long as the different subgroups can understand each other, their language, variations are called dialects.

The distinction between language and dialect is not so simple. Mutual understanding depends on such factors as intelligence and education. Culturally and emotionally conditioned attitudes towards 'outsiders' result in lack of understanding. The ancient Greeks called non-Greeks 'barbarians'. Intense intertribal hostility contributed to communication barriers. As a result of this and the geographical barriers several dialects of the same language have developed in course of time into mutually unintelligible languages, For Example, there are about a hundred language in New Guinea, as Island of thick forests, mountains and valleys.

A dialect is a language variety in which the use of grammar and vocabulary identifies the regional or social background of the user. The systematic study of dialects is known as dialectology or dialect geography. A regional dialect conveys information about the speaker's geographical origin. Likewise a social dialect gives us information about the speaker's social status, class, occupation, educational background etc. The dialect of those living in the countryside are called rural dialect. Similarly the dialects of the city dwellers are known as urban dialects. Sometimes the term 'dialect' carries sense of belittling. Many people have the feeling that dialect is an inferior brand of speech. This is not true. Any dialect is perfectly honourable and correct so long if serves the purpose of communication.

STANDARD DIALECT

It is observed that one dialect in a speech community of two or more dialects, becomes the dominant dialect or the official speech for that language community. It acquires the status of the standard speech of that community. For example, there were several dialects of English in England during the fourteenth and fifteenth centuries. When London became the centre of power and influence, the centre of trade government and educational institutions the London dialect gradually became the standard speech of Englnad. In the same way the dialect of Ile-de-France gained prominence over Norman, Picard and Champensors French in France. In Italy the Turcan dialect became standard Italian over the dialects of Sicily, Lambracy and Bologna. The dialects spoken in peking, the capital of China to mandarian. It is the official or standard Chinese language. Though the different dialects of the same language will have certain vocabularly difference and certain rhotorical difference, the speakers are able to understand each other, somehow. Sometimes among some of the older people, certain deelings of pride or

class distinction as other social attitudes establish a communication barriers and that the two dialects in effect become two different languages. It is not correct to say that one dialect is more correct than the other.

Even within a dialect it is possible to see several sub dialects. Each will have its own regional accents and, grammatical and vocabulary differences. In many countries linguistic atlases have been made to classify and localize the subordinates. The linguistic experts record the speech items which characterise a particular region. Then they draw lines on a map to indicate where one of speech item ends and another begins. Such lines are known as isoglosses. To cite an example, the southern Dialect Area in the United States is subdivided into the Northern, the Northern Midland, and the Southern Midland dialect areas. In the Northerns dialect most speakers say, "She isn't to home, for" He isn't at the home, and 'dove' for 'dived'. A 'bucket' is a 'pail' in the Northers area. A 'pail' is a'bucket' in the Midland areas as well as in the Southern.

CULTURAL AND SOCIAL DIALECTS

Blending and fusing of regional dialects and sub dialects take place because of several reasons especially in a large nation like the United States. The transfers of employees from one location to another is one reason. Children adjust to the speech habits of the area in which they find themselves. The prevalence of television and movies also contribute towards such blending and fusing of various dialects and subdialects. But there are still certain other forces such as the differences in levels of education, wealth,social position, job or profession or even the speakers home locations which maintain communication barriers. Cultural background and national origin also make an impression on speech pattern. For example, Black English is a cul;tural dialect in America. Though it was once thought of as a 'broken' English developed by illiterate slaves, now dialectologists say that it has got a very formalized grammar and the native speakers of that Negro dialect follow its rules intuitively. Modern researchers hold the view that the greatest difference between Black English and Standard American English lies in pronounciation.

The ability to comprehend a dialect other than that of one's own is heavily dependent upon individual intelligence, emotional attitudes and sophistication. A person with reasonably normal intelligence can understand a strange speech sometimes, than a highly educated person who might try to analyze the structure of the utterance. The substance of the message is more important than structure of the sentence. In the case of educated persons, if they have a wide vocabulary they might be able to make out fairly well the words in other languages which are a kin to their own through a cognate familiarity. To quote an example an American who knows that 'paediatrician' is a doctor who 'treats Children' might recognize the words 'paids' in Greece as meaning 'Child'. The emotional attitude mentioned above is an important factor in comprehending a strange or alien speech. A sympathetic person would strain for the sense of the message more than for grammatical structure. Of course there should be sufficient sophistication. It is evident that, a person with wider contact with other cultures and their speech system will be in a better position to understand an alien speech.

REGIONAL AND SOCIAL DIALECTS

In Britain there are numerous dialects of English; the Laneashire dialect, the Scottish dialect, the Yorkshire dialect and so on. This is true of American English also. All these are mostly regional. Some dialectical variations are determined by the social hierarchy too. The aristocrats in London, for example, use one variety of English and the lower class another. The Cockney dialect is dialect of the lower class. Apart from the regional and social difference the dialectical difference may be phonological, morphological syntactic or lexical. One of the differences between the General American English and the Standard English (Received Pronounciation of England) is that the General American has/ ae/while R.P Has/a:/ e.g. the first vowel in the following words show the differences as shown below.

Word	R.P.	General American
last	/la:st/	/ l ae st/
dance	/da:^s/	/dae ns/
class	/kla:s	/klae s/

DIALECTS AND LANGUAGES

We say that English and French are two different languages. Similarly we know that Hindi and Punjabi are different languages. At the same time we say that Bhojpuri and Malawi are two dialects of Hindi. What helps us to, make these distinctions? The question cannot be answered vdery easily. the concept of mutual intelligibility provides a partial solution. Thus we can say that when dialects become mutually unintelliginle they become different languages. If two speakers can understand each other for the purposes of day to day communication we can say that they are using the same language. If not their languages are different. This criterion is not always dependable because some amount of mutual intelligibility exists among languages which are closely related. Eg. Hindi and Punjabi. Similarly dialects of the same language need not in all cases be mutually intelligible to the speakers. For example Pekingese and Cantenese are two dialects of Chinese. But the speakers of each find those of the other unintelligible to a great extent.

We are discussing language and dialects. We have to acquaint ourselves with one more term in linguistics in this connection.

It is idiolect. It is nothing but the linguistic system of an individual speaker/idiolects are 'personal dialects' arising from the way people have learned slightly, different usuages in pronounciation, grammar, vocabulary and style.

Unit-XII

STYLE AND REGISTER

1. STYLE

Stylistics is the study of any situationally distinctive use of language and of the choices made by individuals and social groups in their use of language. Alternatively it is the study of the aesthetic use of language, in all domains of linguistics. Each of these notions may be referred to as style. Applied stylistics is the study of style, especially when there is an emphasis on the use of stylein literary as well as nonliterary texts. In its literary application, it brings together the insights and methods of linguistics and literary criticism. A contrast is often drawn between literary stylistics and general stylistics. The first one is the study of the linguistic characteristics of literature as a genre and of the style of literary practitioners. The second one is the study of the whole range of nondialectical varieties of a language. Stylastatistics of Stylometry is the qualification of stylistics patterns. Phonostylistics is the study of the espressive or aesthetic function of sound.

A single speaker may employ different styles of speech of different circumstances. The style one uses when being interviewed for a job differs considerably from the style one uses in conversation among close friends.

2. REGISTER

In stylistic sociolinguistics register means a variety of language defined according to its use in social situations.

We can see the same person using different varieties of a language depending upon the situation. Thus the kind of language a lawyer uses in the court of law is not the kind of language that he/she uses in the kitchen. The person uses the register of law in the court and the informal register in the kitchen. Thus we have different registers such as the formal register, the informal register, the register of religion, the register of science, the register of journalism and the like.

Since variations of registers depend on the situations or contacts, it is possible to relate different kinds of register variations to different aspects of the situation in which the language is used. Register variations are mainly conditioned by

1. The field of discourse or the subject matters or topic

2. The mode of discourse or the medium used for the communication. Communication usually takes place either through the spoken or the written medium and

3. The style of discourse. This depensa on the relationships between the participants of

the discourse. the style of a father's letter to his son and that of an employer writing to his subordinate will not be the same. In other words, the register variation is conditioned by the relationship between the speaker and the listerner (s) or the writer ands the readers (s). Very fine example for different registerers can be found in Randolf Quirk's book, Use of English.

II. Bilingualism

Bilingualism is a speech situation where an indivisual or community controls two (or more) languages. Polyglotism is not the term used for such a situation usually even though the term polyglot means someoine who speaks several languages. Very rarely a situation where a speech community or an individual makes use of several languages as in Switzerland or Belgium is called plurilingualism or polyglotism. Sometimes it is known as multilingualism too.

There are two types of bilingualism. The first is known as Simultaneous bilingualism in which two languages are learned at the same time. The second is called Sequential bilingualism. This is a situation in which the second language is acquired after the first has been established. The term bilingual education refers to the use of two languages for instruction at some point in a student's career. This term is also used to mean the use of educational programmes designed to promote bilingual skills among students. today most people in the world are bilinguals. Oxford Advanced Learner's Dictionary defines bilingual as one who is able to speak two languages equally well. Because of historical reasons bilingualism exists in several countries of the world even today.

In India in 1951, it was found that 845 different languages and dialects were spoken. When India became independent the Union government designated Hindi as the official national language. But only less than one-third of the people in India spoke Hindi. So the government designated the fourteen major languages of the country as the official languages of India. Even that did not provide sifficient basis of communicationj, Since a great majority of the educated people spoke English, that language was given the status of Associate Official language along with Hindi. In addition to the tongue or the language of the state, Indian children learn at least one more language.

Ethiopia, the northern province of Eritrea was the ancient seat of government and culture. The natives of that province are the speakers of Tigriniya. The modern capital of Ethiopia is Addis Abbaba in the south central part and the lineage of the King is Amharic. So the official language of the country became Amharic. Under the current bilingual, education programme in the north school children are taught in both dialects.

Robers A Hall Junior points out that biluigualism is, however. rarely (if ever) perfect, any given speaker almost always has a better command of one of his two languages than he does of the other. "This has been observed repeatedly with the bilingualism of successive generations of immigrants to the America. The first generation speaks the new language (English, Spanish, Portuguese) quite imperfectly and with strong accent. The second generation shows only some traces of foreigners and the third and successive generations are completely, native like in the new language.

Of late considerable attention has been given to problems of bilingualism of bilingualism by linguistic analysts, psychologists and educationalists, with attention especially to the relation of bilingualism to intelligence. Some hold the view that bilingualism is beneficial and others consider it harmful especially to a growing child who has to learn more than one language and the regular school subjects along with them. It is apparently a help to intelligent persons to have more than one way of symbolizing what they know and learn. But people of less intelligence and more economic and other troubles will have their own difficulties in mastering more than one language. Devaluation of a person's mother tongue is very harmful. Every person's ego is ultimately bound up with his or her native speech.

III Pidgin

Pidgin is not the native language of any person. It emerges when two mutually unintelligible speech communities attempt to communicate. It is often called reduced grammatical structure, lexicon and stylistic range. Usually it emerges in the context of the espansionist period of

colonial economics. A large number of Pidgins are based on European languages. they reflect the history of colonialism. But there are many unstudied pidgins in the many situations of language contact in Africa, South-east Asia and South America. Some pidgins have become so useful that they have developed a role as auxiliary languages and been given official status by the community. these cases are called expanded pidgins because of the way they have added extra forms to cope with the need of the users. Bislama is an English based pidgin with local language influence widely used in vanuatu, Fiji and surrounding areas as lingua- franca. In Cameroon the most important lingual franca is Cameroonian Pidgins used by about half the population. This is an English based variety. Pidgins are the most dramatic examples of new languages arising out of contact situations. In Liberia though the official language in English an English based pidgin called Liberian English is used by about seventy percent of the population.

The children of the Island in Hawai coming from mixed back grounds spoke Hawaian Pidgin, a nonstandard dialect of English until recently. They were often scolded and punished by teachers for speaking pidgin instead of Standard English. In Hawai the modern youngster is frequently trilingual. If his ancestry is Japanese to his grandparents, Standard English in schools and Hawaian Pidgin among his fellow students. the word "pidgin" itself is a corruption of the word 'business'. In the setting of Hawai the newcomers Chinese, Japanese, Filipino, Spanish, English, Danish and others in order to communicate with each other and the native Hawaians developed a mixed, structurally simplified language drawn from several of their languages. Such pidgins have developed all over the world.

Pidgin languages have arisen repeatedly in the course of centuries. Probably there were pidgnized varieties of Greek and Latin in the Mediterranean in ancient times. It is said that in the Middle Ages, the original lingua franca was a pidginized variety of the Romance spoken along the Rivers from Genoa to Marseilles, which was used by West Europeans in the North East (Palestine, Egypt, the Byzantine Empire) in their contacts with the Levantiness in trade and other activities. "(Robers A Hall Jr) The expansion of Europe since the fifteenth century has been accompanied by a continual growth of Pidgins, based on the languages of European conquerors and colonisers. Perhaps Portuguese has been the most extensively used of all as a base for pidgins. Then comes English. English based Pidgins exist in America, China, West Africa, Newzealand, Australia and the South Pacific.

A Pidgin arises normally out of relatively casual, short term contacts between groups which do not have a language in common. These contacts may be of various types, involving all kinds of social relationships. It may be between equals, between sight seer and guide, between master and servant or between owner and slave as in Africa on the American plantations. A pidgin may emerge in the space of only a few hours if an emergency situation calls for communication on a minimum level of comprehension. So Jesperson rightly termed Pidgins minimal language. Considering their basically improvisatory character they are also called 'makeshift' languages. All Pidgin speakers will have their own full fledged 'normal' languages which they use in their everyday relationship with the members of their speech communicates. So pidgin is a socially marginal language.

A Pidgin formed by a series of successive approximations, in each side imitates the other's attempts at speaking. In the formation of a pidgin normally two 'ancestral' languages are involved. They are the source languages on which the Pidgi is fundamentally based (E.g. English, Portuguese etc) and the local language.

IV Creole

Pidgin is a reduced language, and not really the native language of any who originate its use, although it may become the first language for the succeeding generations. Then it should be called creole. In the setting of Hawai, the newcomers say, Chinese, Japanese, Filipino, Spanish, English, Danish and others, developed a mixed; structurally simplified language drawn from several of their languasges. It is an example for Pidgin. Some pidgins like this have developed into almost full fledged languages. For example, Black English, spoken by large proportion of black Americans has been traced to a creolixed form of English based upon a pidgin spoken by slaves along the West Coast of Africa. in the American and the Caribbean Island.

A Pidgin becomes creolized when a generation of speakers learn it from their earliest childhood and grow up using the pidgin as their first language. Normally this happens when the parents are of different linguistic backgrounds, and have only the pidgin as a common language in which to carry on their everyday family converstion.

Creole is a pidgin language which has become the mother tongue of a pseech community. Creolization is the process of expanding the structural and stylistic ranges of the pidgin. When the standard language begins to exert influence on the creole, and a whole range of varieties emerges to form a continum between the standard and the creole a process of decreolization takes place. Among the varieties which have been recognized are called acrolect. They are characterized by prestige of standardization. The basilect is the term given to one wich is most remote from the prestige variety. The mesolect is in between a creolect and basilect.

When a pidgin becomes creolized, ther is a considerable re-expansion of its sources, both from within and by borrowing from an outside source. Thus, Neo-Melanesian is nonexpanding its syntactic sources. For Example, the use of subordinate clauses introduced by such conjuctions as 'because' is the latest development in that creole. In Surinam, in an English based creole of Dutch Guiana, most of the recent borrowings have been from Dutch, the official language of the colony. In Jamaica the local creole is not a sharply defined unitary linguistic system contrasting with standard English today. In Haitain Creole, the morphology and syntax of the languages still show a drastic restructuring.

Since the beginning of the early seventeenth century the need for a single international languages was felt by the philosophers and scientists. Such a language would be an artificial one with signified surface grammar and free from the emotionalism of a national language. It is said that approximately seven hundred such artificial languages have been tried since the end of the Renaissance. Of these one developed by L.L. Zamenhof in 1887 was the most successful. It is known by the name Esperanto. It is used for the purpose of advertisements by some airlines and tourists bureaus. It is also taught in six hundred schools internationally.

BIBLIOGRAPHY

1. Bolinger. D : Aspects of Language
2. Crystal,David (Penguin Books) : An Encyclopedic dictionary of Language and Languages
3. Crystal,David : Linguists (Penguin Book)
4. Lyons (Ed) : New Horizons in Linguistics
5. Fries, C.C : Advances in linguistics in Readings in Applied linguistics
6. Hall.R.A : Introductory Linguistics (Chilka Books)
7. Hall Jr. Robert A : Introductory Linguistics (Motilal Banarsidas, Delhi)
8. Halliday M.A. Kand M.C. Intosh : The Linguistic Sciences and Linguistic Teaching (Lognman Green and Co. Ltd.
9. Hockett C.F : A course in modern linguistics
10. Langacker, Ronal @ : Languages and its structure (thatcourt, Brace & World, Inc.)
11. Lyons, John : Introduction to Theoretical Linguistics (O.U.)
12. Robins R.H : General Linguistics (Longman)
13. Verman & Krishnaswami : Modern Linguistics
14. West Fred : The way of language

(Harcourt, Brace Javonnovich in, Newyork)