# Linguistics

## Definition, Nature and Scope of Linguistics

Linguistics is a growing and interesting area of study, having a direct hearing on fields as diverse as education, anthropology, sociology, language teaching, cognitive psychology and philosophy. What is linguistics? Fundamentally, it is concerned with the nature of language and communication.

Some of the definitions of linguistics are as under:

1. "Linguistics observes language in action as a means for determining how language has developed, how it functions today, and how it is currently evolving." (G. Duffy)
2. "Linguistics is concerned with the nature of human language, how it is learned and what part it plays in the life of the individual and the community." (S. Pit Corder)
3. "Linguistics tries to answer two basic questions:
    a. What is language?
    b. How does language work." (Jean Aitchison)
4. "The scientific study of human language is called linguistics". (Victoria A. Fromkin)

Linguistics is the scientific study of language. By this we mean language in general, not a particular language. If we were concerned with studying an individual language, we would say 'I'm studying French... or English,' or whichever language we happen to be studying. But linguistics does not study an individual language, it studies 'language' in general. That is, linguistics, according to Robins (1985):

> is concerned with human language as a universal and recognizable part of the human behaviour and of the human faculties, perhaps one of the most essential to human life as we know it, and one of the most far-reaching of human capabilities in relation to the whole span of mankind's achievements.

Does this not sound a little abstract? It is, because there is no way of studying 'language' without referring to and taking examples from particular languages. However, even while doing so, the emphasis of linguistics is different. Linguistics does not emphasise practical knowledge or mastery of a particular language. Linguists may know only one language, or may know several, or may even study a language they do not know at all. What they are trying to study are the ways in which language is organised to fulfil human needs, as a system of communication. There is a difference between a person who knows many languages (called a **polyglot),** and a **linguist,**who studies general principles of language organisation and language behaviour, often with reference to some actual language or languages. Any language can be taken up to illustrate the principles of language organisation, because all languages reveal something of the nature of language in general. (Of course, it may he of help to a linguist to know more languages

so that differences and contrasts as well as similarities between the languages can also be studied in a better way.) We can say that linguistics is learning about language rather than learning a language. This distinction is often explained as the difference between learning how a car works and learning how to drive a car. When we learn how to drive a car, we learn a set of habits and do some practice—this is similar to learning how to speak a language. When we learn how the car works, we open up its mechanism, study it and investigate the relationship of its parts to one another. This is similar to what we do in a scientific study of language, or linguistics: we investigate the mechanism of language, its parts and how all these parts fit together to perform particular functions, and why they are arranged or organised in a certain manner. Just as while driving a car, we are using its various components, while speaking a language we are using the sounds, words, etc. of that language; behind these uses is the mechanism which enables us to do so. We study language because it is important for us to understand this mechanism.

Linguistics As A Science

Linguistics can he understood as a science in both general and specific terms. Generally, we use the term 'science' for any knowledge that is based on clear, systematic and rational understanding. Thus we often speak of the 'science of politics' or statecraft, or 'the science of cooking'. However, we also use the term 'science' for the systematic study of phenomena enabling us to state some principles or theories regarding the phenomena; this study proceeds by examination of publicly verifiable data obtained through observation of phenomena, and experimentation; in other words, it is **empirical and objective.**Science must also provide explanation after adequate observation of data, which should be **consistent,** i.e. there should be no contradictions between different parts of the explanation or statement;
and **economical,**i.e. a precise and non-redundant manner of statement is to be preferred.

Let us apply these criteria of science to linguistics. Linguistics studies language: language is a phenomenon which is both objective and variable. Like natural phenomena in the physical world, it has a concrete shape and occurrence. In the same way as a physicist or chemist takes materials and measures their weights, densities etc. to determine their nature, the linguist studies the components of language, e.g. observing the occurrence of speech-sounds, or the way in which words begin or end. Language, like other phenomena, is objective because it is observable with the senses, i.e., it can be heard with the ear, it can be seen when the vocal organs are in movement, or when reading words on a page.

Observation leads to processes of classification and definition. In science, each observable phenomenon is to be given a precise explanation. Its nature has to be described completely. Thus, for example, the chemist classifies elements into metals and non-metals; a biologist classifies living things into plants and animals. In the same way, linguistics observes the features of language, classifies these features as being sound features of particular types, or words belonging to particular classes on the basis of similarity or difference with other sounds and words.

But while linguistics shares some of characteristics of empirical science, it is also a social science because it studies language which is a form of social behaviour and exists in interaction between human beings in society. Language is also linked to human mental processes. For these reasons, it cannot be treated always as objective phenomena.

In empirical sciences, the methods of observation and experimentation are known as inductive procedures. This means that phenomena are observed and data is collected without any preconceived idea or theory, and after the data is studied, some theory is formulated. This has been the main tradition in the history of western science. But there is an opposing tradition the tradition of rationalism, which holds that the mind forms certain concepts or ideas beforehand in terms of which it interprets the data of observation and experience. According to this tradition, the deductive procedure is employed in which we have a preliminary hypothesis or theory in our minds which we then try to prove by applying it to the data. This procedure was considered to be unscientific according to the empirical scientists because they felt that pre-existent ideas can influence the kind of data we obtain i.e. we search only for those pieces of data that fit our theory and disregard others and therefore it is not an objective method. On the other hand, it has been observed by some thinkers (such as Popper) that no observation can be free of some theory; it cannot be totally neutral.

We can, however, reconcile these two procedures. There are aspects of language which we can observe quite easily and which offer concrete instances of objective and verifiable data. At the same time, we need to create hypothesis to explain this data, so we may create tentative or working hypothesis to explain this data, which we may accept, reject or modify as we proceed further. With such an open attitude, we may collect more data. This alternation of inductive and deductive procedures may help us to arrive at explanations which meet all the requirements of science, i.e. they are exhaustive, consistent and concise.

Thus, linguistics is both an empirical science and a social science. In fact, it is a human discipline since it is concerned with human language; so it is part of the study of humanities as well. This includes the study of literature, and appreciation of the beauty and music of poetry. In understanding language, humankind can understand itself. Moreover, since every branch of knowledge uses language, linguistics is central to all areas of knowledge. In regard to linguistics, the traditional distinctions of science, art and humanities are not relevant. As Lyonsputs it, linguistics has natural links with a wide range of academic disciplines. To say that linguistics is a science is not to deny that, by virtue of its subject matter, it is closely related to such eminently human disciplines as philosophy and literary criticism.

Scope of Linguistics

Linguistics today is a subject of study, independent of other disciplines. Before the twentieth century, the study of language was not regarded as a separate area of study in its own right. It was considered to he a part of studying the history of language or the philosophy of language, and this was known not as linguistics but as philosophy. So ‘Linguistics’ is a modern name which defines a specific discipline, in which we study language not in relation to some other area such as history or philosophy, but language as itself, as a self enclosed and autonomous system, worthy of study in its own right. It was necessary at the beginning of the growth of modern linguistics to define this autonomy of the subject, otherwise it would not have been possible to study the language system with the depth and exhaustiveness which it requires. However, now we acknowledge that while linguistics is a distinct area of study, it is also linked to other disciplines and there are overlapping areas of concern.

The main concern of modern linguistics is to describe language, to study its nature and to establish a theory of language. That is, it aims at studying the components of the language system and to ultimately arrive at an explanatory statement on how the system works. In modern linguistics, the activity of describing the language system is the most important and so

modern linguistics is generally known as descriptive. But linguistics has other concerns as well, which fall within its scope and these include historical and comparative study of language. These differ from the descriptive approach in their emphasis; otherwise, these approaches also involve description of language.

Levels of Linguistic Analysis

In studying language which is the subject-matter of linguistics, we mark or sub-divide the area in order to study it in an analytical and systematic way. Language has a hierarchical structure. This means that it is made up of units which are themselves made up of smaller units which are made of still smaller units till we have the smallest indivisible unit, i.e. a single distinguishable sound, called a phoneme. Or we can put it the other way round, and say that single sounds or phonemes combine together to make larger units of sounds, these combine into a larger meaningful unit called a morpheme; morphemes combine to form larger units of words, and words combine to form a large unit or sentence and several sentences combine or interconnect to make a unified piece of speech or writing, which we call a text or discourse. At each stage (or level), there are certain rules that operate which permit the occurrence and combination of smaller units. So we can say that rule of phonology determine the occurrence and combination of particular phoneme, rules of word-formation cover the behaviour of particular morphemes; rules of sentence-formation determine the combination and positioning of words in a sentence. Each level is a system in its own right. It is important to remember that, because of the existence of rules at each level, we can analyse each level**independently** of the other. This means that if we study one level, e.g. phonology or the sound-system, we need not necessarily study another level, say that of sentence-formation. We can study phonology on its own, and syntax on its own. Although these levels are linked in that one is lower in the hierarchy and another is higher in the hierarchy, and the higher level includes the lower, still each level is independent because it has its own rules of operation that can be described, analysed and understood.

We can represent these levels in the following manner, with each level of analysis corresponding to each level of the structure of the language:

| *Levels of Analysis* | *Levels of Structure* |
|---|---|
| Phonetics and Phonology | SOUND |
| | Letters (Graphology) |
| Morphology | WORD FORMATION |
| Syntax | SENTENCE-FORMATION |
| Semantics | MEANINGS |
| Discourse | CONNECTED SENTENCES |

A careful look at the above diagram will show that the levels of language structure are not completely separate from one another. In fact, there are important and vital linkages between the levels. In earlier studies, it was supposed that phonology, the level of sound structure, had no link whatsoever with semantics or the level of meaning structure. Now we know that links between these levels are far more complex than we had earlier accepted. With regard to discourse, we can see that it is made up of all the levels of language working together, while

semantics incorporates analysis of meaning at the level of both words (word-meaning) and of sentence-meaning.

However, we can study these links only after we describe and analyse structure at each level separately. Thus Phonetics studies language at the level of sounds: How sounds are articulated by the human speech mechanism and received by the auditory mechanism, how sounds can be distinguished and characterised by the manner in which they are produced.**Phonology** studies the combination of sounds into organised units of speech, the formation of syllables and larger units. It describes the sound system of a particular language and the combination and distribution of sounds which occur in that language. Classification is made on the basis of the concept of the phoneme, i.e. a distinctive, contrasted sound unit, e.g. /m/, / /, /p/. These distinct sounds enter into combination with others. The rules of combination are different for different languages.

Though phonology is considered to be the surface or superficial level of language (as it is concrete and not abstract like meaning), there are some aspects of it such as tone which contribute to the meaning of an utterance.

Morphology studies the patterns of formation of words by the combination of sounds into minimal distinctive units of meaning called morphemes. A morpheme cannot be broken up because if it is, it will no longer make sense, e.g. a morpheme 'bat' is made up of three sounds: /b/ /æ/ and /t/. This combination makes up the single morpheme 'bat' and if broken up, it will no longer carry the meaning of 'bat'. Words can be made up of single morphemes such as 'bat' or combinations of morphemes, e.g. 'bats' is made up of two morphemes: 'bat' + 's'. Morphology deals with the rules of combination of morphemes to form words, as suffixes or prefixes are attached to single morphemes to form words. It studies the changes that take place in the structure of words, e.g. the morpheme 'take' changes to 'took' and 'taken'––these changes signify a change in tense.

The level of morphology is linked to phonology on the one hand and to semantics on the other. It is clear in the above example of 'take' that the change to 'took' involves a change in one of the sounds in this morpheme. It also involves a change in meaning: 'take' means the action 'take' + time present and 'took' means the action 'take' + time past. So morphological changes often involve changes at the levels of both sound and meaning.

**Syntax** is the level at which we study how words combine to form phrases, phrases combine to form clauses and clauses join to make sentences. The study of syntax also involves the description of the rules of positioning of elements in the sentence such as the nouns/noun syntax phrases, verbs/verb phrases, adverbial phrases, etc. A sentence must be composed of these elements arranged in a particular order. Syntax also attempts to describe how these elements function in the sentence, i.e. what is their role in the sentence. For example, the word 'boy' is a noun. However, in each of the following sentences, it functions in different roles:

(a) The boy likes cricket

(b) The old man loved the boy.

In sentence (a), it functions as the subject of the sentence

In sentence (b), it functions as the object.

A sentence should be both grammatical and meaningful. For example, a sentence like 'Colourless green ideas sleep furiously' is grammatically correct but it is not meaningful. Thus, rules of syntax should be comprehensive enough to explain how sentences are constructed which are both grammatical and meaningful.

**Semantics** deals with the level of meaning in language. It attempts to analyse the structure of meaning in a language, e.g. how words similar or different are related; it attempts to show these inter-relationships through forming 'categories'. Semantics tries to give an account of both word and sentence meaning, and attempts to analyse and define that which is considered to be abstract. It may be easy to define the meanings of words such as 'tree' but not so easy to define the meanings of words such as 'love' or similar abstract things. This is why semantics is one of the less clearly definable areas of language study.

An extension of the study of meaning or semantics is **pragmatics.** Pragmatics deals with the contextual aspects of meaning in particular situations. As distinct from the study of sentences, pragmatics considers**utterances,** i.e. those sentences which are actually uttered by speakers of a language.

**Discourse** is the study of chunks of language which are bigger than a single sentence. At this level, we analyse inter-sentential links that form a connected or **cohesive** text. Cohesion is the relation established in a sentence between it and the sentences preceding and following it, by the use of connectives such as 'and', 'though', 'also', 'but' etc. and by the manner in which reference is made to other parts of the text by devices such as repetition or by use of pronouns, definite articles, etc. By studying the elements of cohesion we can understand how a piece of connected language can have greater meaning that is more than the sum of the individual sentences it contains.

In addition to these levels of linguistic analysis, we also study **Graphology** which is the study of the writing system of a language and the conventions used in representing speech in writing, e.g. the formation of letters **Lexicology** studies the manner in which lexical items (words) are grouped together as in the compilation of dictionaries.

Linguists differ according to what they consider as included in the **scope** of linguistic studies. Some consider the proper area of linguistics to be confined to the levels of phonology, morphology and syntax. This can be called a **Micro-linguistic** perspective. However, some take a broader, or **macro-linguistic** view which includes the other levels of analysis mentioned above, as well as other aspects of language and its relationship with many areas of human activity.

Branches of Linguistics

The core of linguistic studies is the study of language structure at different levels as discussed above. In the growth of modern linguistics as an autonomous field of knowledge, it has been necessary to emphasize this aspect of linguistics, since no other field of study describes language structure systematically and completely.

However, there are many areas of human activity and knowledge in which language plays a part and linguistics is useful in these areas. The study of language in relation to the many areas of knowledge where it is relevant, has led to the growth of many branches of linguistics. Thus the scope of linguistics has grown to include these branches.

Like other sciences, linguistics has a 'pure' or 'theoretical' aspect which is concerned with the building of theories about language and with description and analysis of particular levels of language such as phonology and syntax without regard to any particular applications that these may have. It also has an 'applied' aspect which is concerned with the application of that knowledge in areas such as the learning and teaching of languages, or correction and improvement of speech disorders, or in helping us to appreciate the use of language in literature. Thus, 'applied linguistics' covers many of the branches of linguistics that explore the practical application of the theories, concepts and analyses provided by linguists. All the applications are first and foremost based on a thorough description of languages. As Pit Corder writes:

> Whether it is speech therapy, psychiatry, literary criticism, translation,... what all these fields of application have in common is the necessity for descriptions of the various languages involved.

Various branches of linguistics have grown because language is intimately related both to the **inner**, world of man's mind and to the**outer** world of society and social relationships. Each of these aspects has led to the study of **psycho-linguistics** and**sociolinguistics** respectively.

(a) Psycholinguistics

Since language is a mental phenomenon, it is mental processes which are articulated in language behaviour. Psycholinguistics studies these mental processes, processes of thought and concept formation and their articulation in language, which reveal a great deal about the structures of human psychology as well as of language. 'Cognitive' psychology is the area which explores how meanings are understood by the human brain, how syntax and memory are linked, how messages are 'decoded' and stored. Psycholinguistics also studies the influence of psychological factors such as intelligence, motivation, anxiety etc. on the kind of language that is understood and produced. For instance, in the case of errors made by a speaker, there may be psychological reasons which influence comprehension or production that are responsible for the occurrence of an error. Our perception of speech sounds or graphic symbols (in writing) is influenced by the state of our mind. One kind of mental disability, for example, results in the mistakes made by children in reading when they mistake one letter for another (Dyslexia). Psycholinguistics can offer some insights and corrective measures for this condition.

Psycholinguistics is concerned with the learning of language at various stages: the early acquisition of a first language by children and later stages in acquisition of first and other languages. Psycholinguists attempt to answer questions such as whether the human brain has an inborn language ability structured in such a way that certain grammatical and semantic patterns are embedded in it, which can explain how all human beings are capable of learning a language. This exploration may lead us to determining whether all the languages in the world have some 'universal' grammar that lies in the mind of every human being and is transformed in particular situations to produce different languages. Psycholinguistic studies in language acquisition are very useful in the area of language teaching because they help teachers to understand error production and individual differences among learners and thus devise appropriate syllabi and materials for them.

One specialized area within psycholinguistics is neurolinguistics that studies the physiological basis of language and language disorders such as aphasia, loss of memory, etc.

Another relation of language with mind is that of logic. It was held by some ancient philosophers that the human mind is rational and capable of thinking logically and, therefore, language too is logically ordered and rational. Others held that, just as irrationality is present in the mind, irregularity or anomaly is present in human language. Since then there has been a debate about the nature of language and the relation between language and logic. One of the problems discussed by **philosophers of language** is whether language can be an adequate medium for philosophical inquiry. Since all our thoughts are known to us through language, we must examine the kind of language we use when we approach philosophical issues and analysis.

(b) Sociolinguistics

The branch of linguistics that deals with the exploration of the relation between language and society is known as**sociolinguistics,** and the sociology of language. Sociolinguistics is based on the fact that language is not a single homogeneous entity, but has different forms in different situations. The changes in language occur because of changes in social conditions, for example, social class, gender, regional and cultural groups. A particular social group may speak a different variety of a language from the rest of the community. This group becomes a speech community.

Variation in language may occur because the speakers belong to a different geographical region. Taking the example of English, we find that it is not a single language but exists in the form of several varieties. One kind of English is called R.P. (or Received Pronunciation). This kind of English is used in the south west of England and particularly associated with the universities of Oxford and Cambridge and the BBC. It is an educated and formal kind of English. But there are other varieties of English, such as the English that is spoken in the north ofEngland, in Yorkshire and Lancashire; inScotland (Scottish English); Wales (Welsh English), etc. A less educated variety of English is that spoken by working class people in London often called Cockney English. Then there are the varieties of English spoken by people of different countries around the world, e.g. American English,  and Australian English.

Sociolinguistics is the study of language variation and change––how varieties of language are formed when the speakers belong to a geographical region, social class, social situation and occupation, etc. Varieties of a language that are formed in various geographical regions involve a change in the pronunciation as well as vocabulary. Such changes result in the formation of a distinctly different variety of the language or a **dialect.** Sometimes these changes may be present within the same geographical region due to the social differences between different economic sections, e.g. working class and aristocracy. These changes result in**class-dialects**.

In sociolinguistic studies, we consider the linguistic features of these dialects, e.g. syntax variations such as 'I've **gotten** it' or 'I ain't seen nothing' and lexical variations such as 'lift' (British English) to 'elevator' (American English). The study of the demarcation of dialect boundaries across a region and of specific features of each dialect is called **dialectology.** One dialect may be demarcated from another by listing a bundle of features which occur in a particular region. The point at which a certain feature (of pronunciation or vocabulary) ceases to be prevalent and gives way to another feature is a dialect boundary or 'isogloss'. Dialects may acquire some importance and prestige and evolve into distinct languages. This usually happens when they are codified, e.g. in written and literary forms, and their grammar and lexicon is standardized. Usually this happens when the dialect is given political and social importance. That is why it is said 'A language is a dialect with an army, and navy'. Sociolinguists chart the evolution of such changes.

Variation in language may also be due to the specific area of human activity in which language is used. Again taking the example of English, this language is used in different fields—of law, religion, science, sports etc. In each of these areas there is a specific vocabulary and manner of use of English, which defines the legal language, the scientific language etc. This variety of language according to its **use**, is called**register**. Sociolinguists examine the particular characteristics of different registers, i.e. legal register, scientific register, etc., to see how these differ. This kind of study is useful because it enables us to understand how language-use is tied to a social context. The notion of register is important in showing that language use in communication is not arbitrary or uncontrolled, but is governed by rules of situational and contextual appropriateness.

The sociology of language includes the study of attitudes to language held by social groups, for instance, they may consider some languages or dialects as more (or less) important. It includes the planning of language education, e.g. which languages should he the medium of instruction, which language should be taught as second language; and language policy, i.e. which languages are legally and constitutionally recognised and what status they are given. The sociology of language is thus linked with other aspects of our social world, the political, economic, educational, etc.

(c) Anthropological Linguistics

The evolution of language in human society and its role in the formation of culture; is another aspect of language society and culture, this is studied in **anthropological linguistics**. The structure of language has a social and cultural basis in the same way as other customs, conventions and codes such as those related to dress, food, etc. Each culture organises its world its own way, giving names to objects, identifying areas of significance or value and suppressing other areas. Language becomes a way of embodying the world view and beliefs of a culture, and the things that culture holds sacred; for example, a culture in which family relationships occupy the most significant position will have many kinship terms in their language, with each relationship specified by a particular term. If you compare the kinship terms in English such as grandfather, grandmother, uncle, aunt, etc. with kinship terms in Urdu**,** you will find that there are many more such terms in Urdu specifying particular relationships such as a paternal / maternal grand-father.

Similarly, terms specifying colours, emotions, natural phenomena, and so on are differently organised in every culture, and reveal a great deal about that culture. The study of these specific cultural elements is called the ethnography of a culture. A specific way of communication in a culture is thus studied as the ethnography of communication.

Anthropological studies have explored the relation between language and culture. Language is invented to communicate and express a culture. It also happens that this language then begins to determine the way we think and see the world. Since this language is the means by which we understand and think about the world, we cannot go beyond it and understand the world in any other way. This is the view expressed by the linguist **Whorf** whose hypothesis is that we dissect nature along the lines laid by our native language. There is still a debate about this, but it is true that to some extent we are hound to see the world according to the terms specified by our own language. These aspects of language and culture are still being discussed by anthropological linguists, philosophers of language and ethnographers.

(d) Literary Stylistics

The study of variation in language and the use of language in communication has also led to new ways of studying literary texts and the nature of literary communication. If you consider again the notion of register discussed above, you may realise that register is in fact a kind of language that is considered appropriate for a particular subject matter, e.g. the style of a religious sermon, the style of sports commentary. Similarly we may use this notion to describe the style of a literary work. That is, we may describe its features at the levels of phonology, syntax, lexis, etc. to distinguish it from other texts and to appreciate how it achieves some unique effects through the use of language. This kind of study is called**literary stylistics.**

Literary writers use the system of language in their own way, i.e. they create a style. This is done by deliberate **choice** (e.g. out of a whole range of words available, they choose one which would be particularly effective), sometimes by **deviation** from or violation of the rules of grammar (e.g. 'he danced his did' in Cummings' poem). Poets and even prose writers may invert the normal order of items in a sentence (e.g. 'Home is the sailor…') or create a pattern by **repetition** of some items (e.g. the sound /f/ in 'the furrow followed free'). By these and other devices, they arc able to manipulate language so that it conveys some theme or meaning with great force and effectiveness.

In literary stylistics, we read the text closely with attention to the features of language used in it, identifying and listing the particular features under the heading of 'lexis', 'grammar', 'phonology' or 'sound patterns'. When we have obtained a detailed account of all these features, we co-relate them or bring them together in an interpretation of the text. That is, we try to link **'what** is being said' with **'how** it is being said,' since it is through the latter that writers can fully express the many complex ideas and feelings that they want to convey. Stylistic analysis also helps in a better understanding of how metaphor, irony, paradox, ambiguity etc. operate in a literary text as these are all effects achieved through language and through the building up of a coherent linguistic structure.

Nature of Linguistics

Linguistics is not a difficult subject. There are several points which at times put the beginners into trouble. These troubles are nothing, but the terminology. The beginners have to do with the difference between the lay attitude towards language and the orientation of the specialist.

When the linguist distinguishes between language and writing, the beginner at the elementary stage confuses the two. He feels that the "spoken language" and the "written language" are nothing, but two different manifestations of something fundamentally the same.

He also thinks that writing is more important than speech, when the reverse is true. Man has been speaking for millions of years but writing is a recent invention. Even today there are a, large number of people who are illiterate. But there is perhaps no human community without language.

We know from our experience that a child learns to speak his language at an earlier stage than he learns to read and write. He gradually develops his vocabulary for saying things.

The relationship between writing and language is close. A child is to transfer the vocabulary fitted to writing. Spoken words can be heard, but not seen. When they are composed of letters, they can be seen, but not heard. The teacher helps the child to develop those abilities.

In teaching English much of the time is taken for the problem of "correctness." The linguist is not particularly interested in such questions. In using language, he may be a purist or not, but his 'special concern is analyzing language. As an analyst of language, he is bound to observe and record 'incorrect' forms as correct ones if the language with which he is working makes such distinction.

The bond between language and literature is very close. The literary artist works in the medium of language "just as the painter works in the medium of colours and the composer in that of sounds." Therefore the study of the language must not be confused.

There is a false notion of the relationship between language or grammar and logic. According to this any usage which is not "logical" is wrong. For example "he don't" is; illogical and "he does not" is logical. From this point of view grammar and logic are close.

So far as linguistic is concerned the "logical" approach to languages is quite narrow. We do not use language only to know the facts. We use it for lies as well as truth, for non-sense as well as for sense, for persuasion a well as for instruction, for entertainment as well as for business, for making war as well as for making love. "Language is as broad and deep as the whole fabric of human existence." Therefore, our approach to language should be comparably Catholic.

The following are some important natures of linguistics:

(i) Like human body, language is a complex system. A human body functions because of different organs like the heart, lungs, brain etc.

Similarly the language system functions because of words, structures, sound etc.

These are the most important parts of a language. We cannot express ourselves by the help of only one of the elements of language, i.e., sounds, words of structures. All these are inter-linked.

(ii) In language learning speech is the fundamental thing. Reading and writing are secondary.

(iii) Language works through symbols, which are the words. For example, the word "pen" is not a "pen," it stands for a "pen." Therefore the symbols used in a language must be known to both the speaker, the listener, the reader and the writer.

(iv) Language is not an inherent biological function of man. It is acquired through learning.

(v) Language is learnt through practice and habit formation. Rules and definition of grammar cannot help for the development of language of a child.

(vi) According to Ben Jonson, "speech is the instrument of society." A society cannot b thought of without language. Hence the important purpose of language is communication.

(vii) Language does not remain in a vaccum. It exists in the speakers. It is related to the culture of a particular society.

(viii) Language is flexible, changes from time to time go on in respect of speech sounds, grammatical features, vocabulary etc. Therefore, in language teaching, we should not be rigid.

## Principles and Major Concepts of Linguistics

Before dealing with the details of phonetics, it is important that we consider some major concepts in linguistics. An idea of them helps us come to grips with more complex issues. One must get a sound footing in these concepts and have a clear understanding. Mostly they are described in pairs of terms denoting sets of distinctions, such as synchrony and diachrony; form and substance; description and prescription; competence and performance, and so on.

Synchrony and Diachrony

The distinction *synchrony* and *diachrony*refers to the difference in treating language from different points of view. When we take a synchronic point of view, we are looking at a language as we find it at a given period in time. The *diachronic* point of view, on the other hand, gives us the historical angle; we look at a language over a period of time along with changes that occurred in it. The principles that introduce this dichotomy enable us to obtain 'particularly accurate information about a language in its current usage' (Wilkins). The synchronic linguistics studies how a language works at a given time, regardless of its past history or future blueprint. This has also been called *descriptive linguistics*.

Though the historical character of a language cannot be ignored, its present form being the result of definite historical processes, changes and transformations, it is necessary for a complete understanding of it to concentrate on the units of its structure at the present moment. Some scholars donot see the two approaches apart : "It is a mistake to think of descriptive and historical linguistics as two separate compartments, each bit of information belonging exclusively in the one or in the other".

However, on the whole the two areas are kept apart and one is studied to the exclusion of the other. Synchronic statements make no reference to the previous stages in the language.

Linguistic studies in the nineteenth century were historical in character; they originated as part of the general historical investigations into the origins and development of cultures and communities, especially West Asia, Egypt, etc. Such philological researches viewed language at different stages of its progress and attempted to understand relations among different languages. Language families were discovered and genetic affinities identified. Diachronic linguistics was a great discovery of the 19th century, 'which developed so powerfully and fruitfully from the 1820s to the 1880s. This discovery enabled linguists to explain modern languages as a result of law-governed historical development. (Zhirmunsky)

On a closer look one realises that without a good synchronic (descriptive) work, valid historical (diachronic) postulations are not possible; in other words, a good historical linguist needs to be thorough descriptive scholar too.

Figure 2 shows that diachronic axis (x-y) has been considered as moving and the synchronic axis (A-B) as static. It was the Swiss linguist Ferdinand de Sassure who first coined these terms and established the distinctions. As the Russian linguist V.M. Zhirmunsky observes, 'In de Saussure's conception, synchrony is language considered as a system of static oppositions resting on a single temporal plane, a static two dimensional cross-section".

The discoveries and theories of the synchronic studies offer particularly accurate information about a language in its current usage. 'The first of these principles distinguishes clearly between

descriptions of the language in its contemporary form and descriptions of its historical development' (Wilkins)

Form and Substance

This destinction refers to the system, on the one hand, that is devised, arid the actual data which is used or worked upon. The system explains the data, it is a theoretical construct. Phonemes /b/, /d/, /g/ exemplify this. The actual sounds produced in certain distinctive manner that differentiates each from the other comprise the substance. These are accounted for by the concept of phoneme.

Sounds produced by the human speech organs can be said to comprise the *substance*(phonic substance) or content. Its shaping into different functional configurations can be called *forms* or *expressions*. Thus the same substance is realized in different forms. Drink (content) is used as both noun and verb. Form can be analysed without taking into account the meaning. But*semantics, a* branch of linguistics, deals only with the content or the substance. Form can be studied from different angles : phonological, morphological, grammatical, syntactical, etc.

Saussure had used the terms *'Significant'* for the external form of a linguistic element, and *signific* for the meaning or content aspect of it. This duality is an essential attribute of any human activity and highly relevant to linguistic study as well.

Competence and Performance

The famous American linguist Noam Chomsky first used these terms to specifically refer to a person's intuitive knowledge of the rules and structure of his language as a native speaker (he called it*competence),* and his actual use of these (which he termed *performance)*. Scholars of the earlier period were aware of this basic distinction but Chomsky precisely pointed out the inherent ability or knowledge in a native speaker of the structure of his language. It refers to the ability of the native speaker to 'understand and produce utterances which he may never find the opportunity either to understand or to produce'. Competence is the tacit knowledge of the language, performance the use of the language in concrete situations. 'Sentence' is a concept that belongs to the theory of competence, while 'utterance' belongs to performance.

The native speaker of a language possesses an 'internalised set of rules' which is at the base of his ability to understand and speak. The actual utterances are only evidence of this competence. While reading a new book he comes across right from the start new expressions and sentences which he had never read before; but he doesnot find any difficulty in understanding them. Each sentence is a new construction but since he had mastered the rules of the language any number of new constructions is easily understood. As Ronald Wardaugh says, 'The ability the reader has to understand novel sentences derives from his competence in English'. His competence also makes him reject the ungrammatical constructions, consider the sentence *'flying planes can be dangerous'* as ambiguous, and utterances like *I, well, have seen the captain, well, but it was raining, and ah, I had no raincoat, what a bad memory I have ...,as* indicating that the speaker has wandered off. Competence also makes him recognise an expression as command, request, politeness, rough order and so on.

Performance is what actually a speaker says. It is the *substance,* the actual manifestation of his competence. One can understand a speaker's competence by studying his performance. In

learning a new language also it is wiser to develop the basic competence rather than memorise pieces of sentences and phrases, as the latter activity is not a true language behaviour.

Chomsky characterised generative grammar of a language as an explicit description of the 'ideal speaker-hearer's intrinsic competence'.

The competence-performance distinction also helps us understand that there is no limit to the actual production of sentence, it is possible to produce an infinitely long sentence, but underlying the performance is the ability of the native speakers which is limited and can be described in terms of a set of principles.

Langue and Parole

The major contribution of Ferdinand de Saussure to linguistics can be summed up as providing the basic groundwork of fundamental concepts; his definition of the 'linguistic sign'; his explanation of the distinction between concrete and abstract linguistic units; distinction between descriptive (synchronic) and historical (diachronic), study of language, and so on. He was under the influence of the new scientific temperament and followed the principles of Durkheim who said that 'we have social facts that can be studied scientifically when we consider them from an aspect that is independent of their individual manifestations'. This attitude helped the shaping of the structuralist approach.

De Saussure put forward the concepts of *La langue, La Parole and Le Language.*

*Le langage* denotes a host of heterogenous traits that a speaker possesses, such as his ability to produce speech acquired through heredity, his inherent ability to speak and the external factors that trigger and stimulate speech. It encompasses such factors as physical, physiological and psychological. Most significantly, it belongs to both the individual and society. Speech occupies a less important place in *Le Langage*. The latter' is, therefore, of greater interest to the anthropologist and the biologist.

*La langue* is more directly indicative of ability to produce speech, a kind of 'institutionalized element' of the community's collective consciousness. Every member of the community shares it, and because of this they are in a position to understand each other. Through *langue* they share the common properties of speech. 'If one took away what was idiosyncratic or innovational, *langue would* remain. *Langue,*by definition, is stable and systematic, society conveys the regularities of *langue* to the child so that he becomes able to function as a member of the speech community (Wilkins).

*La langue* is a collective pattern which exists as 'a sum of impressions deposited in the brain of each individual.., like a dictionary of which identical copies have been distributed to each individual... it exists in each individual, yet it is common to all'.

*La langue* is a repository of signs which each speaker has received from the other speakers of the community. It is passive. It is a set of conventions received by us all, ready-made from the community.

*La Parole :* By contrast *la parole* is active and denotes the actual speech act of the individual. We can better understand it by considering each act of speaking as a unique event. It is unique because it reflects the unstable, changeable relationship between the language, the precise contextual elements triggering particular utterances, and personal factors. Thus each particular speech act is characterised by the personality, nature and several other external forces governing

both the production and reception of a speech act. There is a great deal that is particular, individual, personal and idiosyncratic about*la parole* as opposed to *la langue* which emphasizes speech as the common act of behaviour, 'given that there is a good deal that is idiosyncratic or not fully institutionalised, parole cannot be stable and systematic' (Wilkins : 34). *Parole* gives the data from which statements about langue are made; *parole* is not collective but individual, momentary and heterogenous.

As Francis P. Dinneen points out "when we hear *la parole of* another community, we perceive the noises made, but not the social fact of language. We cannot connect the sounds produced and the social facts with which the other speech associates the sounds. When we hear *la parole* within our own community we perceive the sounds as associated with social facts, according to a set of rules. These rules, which can be called the convention, or grammar, of the language are habits that education has imposed on us. They have the property of being general throughout the community. That is why all the speakers can understand each other.

The main points of distinction between La Langue and La Parole can be summed up as follows.

| | *La Langue* | *La Parole* |
|---|---|---|
| 1. | It is stable and institutionalised. | It is mobile and personal. |
| 2. | It is passive. | It is active. |
| 3. | It is a social fact and general for the community. | It is individual and idiosyncratic. |
| 4. | It contains the negative limits on what a speaker must say. | It doesnot put any such limits. |
| 5. | It is sum of properties shared by all speakers of a community. | It contains infinite number of individual properties. |
| 6. | A scientific study can only be based on *La langue* | It is not amenable to scientific study. |
| 7. | It is an abstraction. | It is concrete manifestat-ion. |
| 8. | It is a collective instrument. | It is not a collective instrument. |
| 9. | It is a set of conventions and habits handed down to next generation readymade. | It is diverse and variegated. |

| | | |
|---|---|---|
| 10. | It is language as a speaker is expected to use. | It is language in actual use. |
| 11. | It is not subject to social and individual pressure. | It is susceptible to social and other pressure. |
| 12. | It is fixed. | It is free. |
| 13. | It is a potential form of language. | It is an actualised form of language. |

Syntagmatic and Paradigmatic

Ferdinand de Saussure saw the linguistic sign at once as static and dynamic or developing. The pairing of terms, synchrony-diachrony; form-substance; *langue-parole* as sets of contrasting relations amply demostrates this concept. The idea is to highlight and demonstrate two dominant properties of a linguistic sign, one linear and the other arbitrary. *La langue* is thus more stable and predictably organised than *laparole* which displays freedom and dynamism which is not rule-governed, therefore unpredictable.

Similarly, de Saussure put forward the concepts of *syntagmatic* and what he at that time called 'associative relations'.

In *Syntagmatic relations* the *syntagme* is seen as any 'combination of discrete successive units of which there arc at least two, with no limit on the possible number'. These segments range from the smallest construction units, i.e. phonemes, to phrases, and so on. The relations binding the successive units are called relation *in praesentia*. Thus the word *read* is a succession of phonemes /r/, /i:/, /d/; *re-read* asuccession of bound morpheme and a free morphemes.

For Saussure sentence is the most obvious example of a syntagme. It is a combination of other linguistic units. They demonstrate chain relationship. The unit acquires its significance by its position of occurrence vis-a-vis other elements preceding and following it. We shall take an example.

*She will come tomorrow*. We see elements occurring in a linear order in this sentence : the pronoun + auxiliary + main verb + adverb. This ordering of the words cannot be charged. Syntagmatic relations function on the horizontal emphasizing the relational criteria a identifying or defining lingusitic categories or units. The concept of syntagmatic relations underlines the structural potential of any item, under examination.

Paradigmatic

The paradigmatic relationships are contrastive or choice relationships. Words that have something in common, are; associated in the memory, resulting in groups marked by diverse relations. For example, the English word **learning** will unconsciously call to mind a host of other words––**study, knowledge, discipline,** etc. All these words are related in some way. This kind of relationship is called associative or paradigmatic relationship. Here the co-ordinations are outside discourse and are not supported by linearity. They are relations in

absentia, and are vertical type relations. Their seat is in the brain; they are a part of the inner storehouse that makes up language of each speaker." (Saussure)

We can visualize a word as the centre of a constellation around which spring other words. These relations are unpredictable. Associations that are called up in one person may not occur in the mind of another. Since it is psychological, it is also subject to individual vagaries and governed by the specific factors governing the individual's speech behaviour, Paradigmatic relations are unpredictable, free, dynamic and idiosyncratic, comparable to *la parole*.

It was the Danish linguist Lois Hjelmslev who suggested the term 'paradigmatic' for de Saussure's' 'assocative relations'.

## The Nature of Language and Linguistics

Language is God's special gift to mankind. Without language human civilization, as we now know it, would have remained an impossibility. Language is ubiquitous. It is present everywhere––in our thoughts and dreams, prayers and meditations, relations and communication. Besides being a means of communication, and storehouse of knowledge, it is an instrument of thinking as well as a source of delight (e.g. singing).

It transfers knowledge from one person to another and from one generation to another. Language is also the maker or unmaker of human relationships. It is the use of language that 'Italics a life bitter or sweet. Without language man would have remained only a dumb animal. It is our ability to communicate through words that makes us different from animals. Because of its omnipresence, language is often taken for granted.

Definition of Language

Since linguistics is the study of language, it is imperative for linguist to know what language is. Language is a very complex human phenomenon; all attempts to define it have proved inadequate. In a nut-shell, language is an 'organised noise' used in actual social situations. That is why it has also been defined as 'contextualised systematic sound'.

In order to understand a term like life, one has to talk of the properties or characteristics of living beings (e.g. motion, reproduction, respiration, growth, power of self-healing, excretion, nutrition, mortality, etc. etc.). Similarly, the term **language** can be understood better in terms of its properties or characteristics. Some linguists, however, have been trying to define language in their own ways even though all these definitions have been far from satisfactory. Here are some of these definitions:

1. **Language** is a symbol system based on pure or arbitrary conventions... infinitely extendable and modifiable according to the changing needs and conditions of the speakers.

*(Robins)*

According to this definition, language is a symbol system. Every languages selects some symbols for its selected sounds. The English sound /k/ for example has the symbol k for it. These symbols form the alphabet of the language and join in different combinations to form meaningful words.

The system talked of here is purely arbitrary in the sense that there is no one to one correspondence between the structure of a word and the thing it stands for. The combination **p.e.n.**, for example stands, in English, for an instrument used for writing. Why could it not be **e.p.n.** or **n.e.p.**? Well, it could also be **e.p.n.** or **n.e.p.** and there is nothing sacrosanct about the combination **p.e.n.** except that it has now become a convention—a convention that cannot be easily changed.

As stated here, language conventions are not easily changed, yet it is not impossible to do so. Language is infinitely modifiable and extendable. Words go on changing meanings and new words continue to be added to language with the changing needs of the community using it.

2. Language is a purely human and non-instinctive method of communicating ideas, emotions and desires by means of a system of voluntarily produced symbols.

*(Sapir)*

There are two terms in this definition that call for discussion: **human** and **non-instinctive**. Language, as Sapir rightly said, is human. Only humans possess language and all normal humans uniformly possess it. Animals do have a communication system but it is not a developed system. That is why language is said to be **species-specific** and**species-uniform**.

Also, language does not pass from a parent to a child. In this sense it is non-instinctive. A child has to learn language and he/she learns the language of the society he/she is placed in.

3. Language is the institution whereby humans communicate and interact with each other by means of habitually used oral-auditory arbitrary symbols.

(*Hall)*

This definition rightly gives more prominence to the fact that language is primarily speech produced by oral-auditory symbols. A speaker produces some string of oral sounds that get conveyed through the air to the speaker who, through his hearing organs, receives the sound waves and conveys these to the brain that interprets these symbols to arrive at a meaning.

4. A language is a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements.

*(Noam Chomsky)*

Chomsky meant to convey that each sentence has a structure. Human brain is competent enough to construct different sentences from out of the limited set of sounds/symbols belonging to a particular language. Human brain is so productive that a child can at any time produce a sentence that has never been said or heard earlier.

5. A language is a system of arbitrary vocal symbols used for human communication.

(*Wardaugh)*

6. A language is a system of arbitrary vocal symbols by means of which a social group cooperates.

*(Bloch and Trager)*

Both the definitions 5 and 6 above prominently point out that language is a**system**. Sounds join to form words according to a system. The letters k, n, i, t join to form a meaningful 'word **knit,**whereas combinations like n-k-i-t, t.k.n.i. or i.n.k.t. do not form any meaningful or sensible combinations. Although initially the formation of words, as said earlier, is only arbitrary, convention makes them parts of a system. Words too join to form sentences according to some system. A sentence like:**Cricket is a game of glorious uncertainties**is acceptable but one cannot accept a string of words like: *a game is of cricket uncertainties glorious*. It is in this sense that language is said to be a **system of systems.**

7. Language is undoubtedly a kind of means of communication among human beings. It consists primarily of vocal sounds. It is articulatory, systematic, symbolic and arbitrary.

*(Derbyshire)*

Derbyshire, while accepting that language is the property of human beings and that it is primarily speech, brings out the point that it is an important means of communication amongst humans. Before the start of civilization, man might have used the language of signs but it must have had a very limited scope. Language is a fully developed means of communication with the civilized man who can convey and receive millions of messages across the universe. An entire civilization depends on language only. Think of a world without language—man would only continue to be a denizen of the forest and the caves. Language has changed the entire gamut of human relations and made it possible for human beings to grow into a human community on this planet.

Some More Definitions

8. Language is a system of conventional spoken or written symbols by means of which human beings, as members of a social group and participants in its culture, communicate.

*(Encyclopaedia Britannica)*

9. Languages are the principal systems of communication used by particular groups of human beings within the particular society (linguistic community) of which they are members.

*(Lyons)*

Anthropologists regard language as a form of cultural behaviour, sociologists as an interaction between members of social, city, students of literature as an artistic medium, philosophers as a means of interpreting human experience, language teachers as a set of skills. Truly, language is such a complex phenomenon that to define it in terms of a single level as knowledge, behaviour, skill, habit, an event or an object, solve the problem of its definition. None of the above definitions are perfect. Each of them just hints at certain characteristics of language. Hence instead of defining language, it would he worthwhile to stand its Major characteristics.

## Characteristics of Language

1) Language is a Means of Communication:

Language is a very important means of communication between humans. **A** can communicate his or her ideas, emotions, beliefs or feelings to **B** as they share a common code that makes up

the language. No doubt, there are many other means of communication used by humans e.g. gestures, nods, winks, flags, smiles, horns, short-hand, Braille alphabet, mathematical symbols, Morse code, sirens, sketches, maps, acting, miming, dancing etc. But all these systems of communication are extremely limited or they too, in turn, depend upon language only. They are not so flexible, comprehensive, perfect and extensive as language is. Language is so important a form of communication between humans that it is difficult to think of a society withoutlanguage. It gives shape to people's thoughts and guides and controls their entire activity. It is a carrier of civilization and culture as human thoughts and philosophy are conveyed from one generation to the other through the medium of language. Language is ubiquitous in the sense that it is present everywhere in all activities. It is as important as the air we breathe and is the most valuable possession of man.

Animals too have their system of communication but their communication is limited to a very small number of messages, e.g. hunger, fear, and anger. In the case of humans, the situation is entirely different. Human beings can send an infinite number of messages to their fellow beings. It is through language that they store knowledge, transfer it to the next generation and yoke the present, past and the future together.

2) Language is Arbitrary:

Language is arbitrary in the sense that there is no inherent relation between the words of a language and their meanings or the ideas conveyed by them (except in the case of hieroglyphics where a picture of an object may represent the object). There is no reason why a female adult human being be called a **woman** in English, **aurat** in Urdu,**Zen** in Persian and **Femine** in French. Selection of these words in the languages mentioned here is purely arbitrary, an accident of history. It is just like christening a new born baby who may be christened John or James. But once a child is given some name in a purely arbitrary manner; this name gets associated with the child for his entire life and it becomes an important, established convention. The situation in the case of the language is a similar one. The choice of a word selected to mean a particular thing or idea is purely arbitrary but once a word is selected for a particular referent, it comes to stay as such.

It may be noted that had language not been arbitrary, there would have been only one language in the world.

3) Language is a System of Systems:

Language is not an amorphous, a disorganised or a chaotic combination of sounds. Any brick may be used anywhere in a building, but it is not so with sounds or graphic symbols standing for the sounds of a language. Sounds are arranged in certain fixed or established, systematic order to form meaningful units or words. Similarly, words are also arranged in a particular system to frame acceptable meaningful sentences. These systems operate at two levels: phonological and syntactical.

At the phonological level, for example, sounds of a language appear only in some fixed combinations. There is no word, for example, that starts with bz–, lr– or zl– combination. There is no word that begins with a /ŋ/ sound or ends in a /h/ sound. Similarly words too combine to form sentences according to certain conventions (i.e. grammatical or structural rules) of the language. The sentence "The hunter shot the tiger with a gun" is acceptable but the sentence

“the tiger shot a gun with hunter the” is not acceptable as the word order in the latter sentence does not conform to the established language conventions.

Language is thus called a system of systems as it operates at the two levels discussed above. This property of language is also termed **duality** by some linguists. This makes language a very complex phenomenon. Every human child has to master the conventions of the language he or she learns before being able to successfully communicate with other members of the social group in which he or she is placed.

4) Language is Primarily Vocal:

Language is primarily made up of vocal sounds only produced by a physiological articulatory mechanism in the human body. In the beginning, it must have appeared as vocal sounds only. Writing must have come much later, as an intelligent attempt to represent vocal sounds. Writing is only the graphic representation of the sounds of the language. There are a number of languages which continue to exist, even today, in the spoken form only. They do not have a written form. A child learns to speak first; writing comes much later. Also, during his life time, a man speaks much more than he writes. The total quantum of speech is much larger than the total quantum of written materials.

It is because of these reasons that some linguists say that speech is primary, writing is secondary. Writing did have one advantage over speech—it could be preserved in books or records. But, with the invention of magnetic tapes or audio-cassettes, it has lost that advantage too. The age-old proverb ‘pen is mightier than the sword’ does not hold much ground when one finds that the spoken words, at the beck and call of a really good orator, can do much more than a pen. Just think of Mark Antony’s speech in ‘Julius Caesar’ that inspired the whole mob into action and spurred them on to a mood of frenzy to burn and kill the enemies of Julius Caesar. A number of modern gadgets like the telephone, the tape recorder, the Dictaphone, etc. only go to prove the primacy of speech over writing.

5) Language is a Social Phenomenon:

Language is a set of conventional communicative signals used by humans for communication in a community. Language in this sense is a possession of a social group, comprising an indispensable set of rules which permits its members to relate to each other, to interact with each other, to co-operate with each other; it is a social institution. Language exists in society; it is a means of nourishing and developing culture and establishing human relations. It is as a member of society that a human being acquires a language. We are not born with an instinct to learn a particular language––English, Russian, Chinese or French. We learn a language as member of the society using that language, or because we want to understand that society, or to be understood by that speech-community. If a language is not used in any society, it dies out.

Language is thus a social event. It can fully be described only if we know all about the people who are involved in it, their personalities, their beliefs, attitudes, knowledge of the world, relationship to each other, their social status, what activity they are engaged in, what they are talking about, what has gone before linguistically and non-linguistically, what happens after, what they are and a host of other facts about them and the situation they are placed in.

6) Language is Non-instinctive, Conventional:

No language was created in a day out of a mutually agreed upon formula by a group of humans. Language is the outcome of evolution and convention. Each generation transmits this convention on to the next. Like all human institutions languages also change and die, grow and expand. Every language then is a convention in a community. It is non-instinctive because it is acquired by human beings. No body gets a language in heritage; he acquires it, and everybody has been provided with an innate ability to acquire language. Animals inherit their system of communication by heredity, humans do not.

7) Language is Systematic:

Although language is symbolic, yet its symbols are arranged in a particular system. All languages have their system of arrangements. Though symbols in each human language are finite, they can be arranged infinitely; that is to say, we can produce an infinite set of sentence by a finite set of symbols.

Every language is a system of systems. All languages have phonological and grammatical systems, and within a system there are several sub-systems. For example, within the grammatical system we have morphological and syntactic systems, and within these two sub-systems we have several other systems such as those of plural, of mood, of aspect, of tense, etc.

8) Language is unique, creative, complex and modifiable:

Language is a unique phenomenon of the earth. Other planets do not seem to have any language, although this fact may be invalidated if we happen to discover a talking generation on any other planet. But so far there is no evidence of the presence of language on the moon. Each language is unique in its own sense. By this we do not mean that languages do not have any similarities or universals. Despite their common features and language, universals, each language has its peculiarities and distinct features.

Language has creativity and productivity. The structural elements of human language can be combined to produce new utterances, which neither the speaker nor his hearers may ever have made or heard before any, listener, yet which both sides understand without difficulty. Language changes according to the needs of society. Old English is different from modern English; so is old Urdu different form modern Urdu.

9) Duality:

The language that human beings use consists of two sub-systems - sound and meaning. A finite set of sound *units can* be grouped and re-gourd into units of meaning. These can be grouped and re-grouped to generate furtherfunctional constituents of the higher hierarchical order. We can produce sentences through this process of combining units of a different order. Animal calls donot show such duality, they are unitary.

10) Productivity:

A speaker may say something that he has never said before and be understood without difficulty. Man uses the limited linguistic, resources in order to produce completely novel ideas and utterances. Fairy tales, animal fables, narratives about alien unheard of happenings in distant galaxies or nonexistent worlds are perfectly understood by the listeners.

11) Displacement:

One can talk about situations, places and objects far removed from one's present surroundings and time. We often talk about events that happened long time ago and at a distant place ; bombing incident in Ireland'sLondonderry twelve years' back, for instance; or the sinking of the Spanish Armada in the sixteenth century. Bees, of course, perform dances about the source of nectar that is also removed from the place of dance (beehive). But they cannot convey what happened in the previous season through their dance features. Human beings, however, can narrate events in which they were not involved.

12) Language is Both Linguistic and Communicative Competence:

A language is an abstract set of psychological principles and sociological consideration that constitute a person's competence as a speaker in a given situation. "These psychological principles make available to him an unlimited number of sentences he can draw upon in concrete; situations and provide him with the ability to understand and create entirely new sentences. Hence language is not just a verbal behaviour; it is a system of rules establishing correlations between meanings and sound sequences. It is a set of principles that a speaker masters; it is not anything that he does. In brief, a language is a code which is different from the act of encoding; it is a speaker's linguistic competence rather than his linguistic performance. But mere linguistic or communicative competence is not enough for communication; it has to be coupled with communicative competence. This is the view of the sociolinguists who stress the use of language according to the occasion and context, the speaker and the listener, the profession and the social status of the speaker and the listener. That language is the result of social interaction established truth.

13) Language is Human and Structurally Complex:

No species other than humans has been endowed with language. Animals cannot acquire human language because of its complex structure and their physical inadequacies. Animals do not have the type of brain which the human beings possess and their articulatory organs are also very much different from those of the human beings. Furthermore any system of animals communication does not make use of the quality of features, that is, of concurrent systems of sound and meaning. Human language is open-ended, extendable and modifiable whereas the animal language is not. The difference between human and animal system of communication is explained below.

## Human and Animal Communication

Language is primarily human. It is humans alone that possess language and use it for communication. Language is, in that sense,**species-specific**––it is specific only to one set of species. Also, all human beings uniformly possess language. It is only a few deaf (and therefore dumb) persons who cannot speak. Thus language is **species-uniform** to that extent. Animals also have their own system of communication but communication between them is extremely limited. It is limited to a very small number of messages. Animal communication differs from human communication in the following ways:

(a) Language can convey a large number, rather an infinite set, of messages whereas the number of messages conveyed through the communication system of animals is very limited. Animals, for example, are able to convey to their fellow animals if they are hungry or afraid. A bee, by its dance, is able to convey the distance or the direction of the source of nectar but it cannot convey

how good or had this honey is. Similarly a bee cannot tell another bee that the source of honey is ten metres to the left of a point fifteen metres to the right. Language can thus convey messages along several directions whereas, in the case of bees, messages are differentiated along two dimensions only, i.e., direction and distance. Some monkeys, it is known, can produce a number of (not more than 9 to 10) sounds to express fear, aggression, anger, love etc. but these messages too are extremely limited in number.

(b) Language makes use of clearly distinguishable discrete, separately identifiable symbols while animal communication systems are often continuous or non-discrete.

One can clearly distinguish between /k/, /æ/ and /t/ in the word **cat** but one cannot identify different discrete symbols in the long humming sound that a bee produces or the caw-caw of a crow.

(c) Animal communication systems are closed systems that permit of no change, modification or addition. A bee's dance or a cock's crow is today the same that it was two hundred years ago. It is not so in the case of language. Language is changing, growing every day and new words continue to be added to it in the course of time. Words like sputnik, laser, video, software etc. did not, for example, exist anywhere in English language three hundred years ago. Language is thus open ended, modifiable and extendable.

(d) Human language is far more structurally complex than animal communication. English (RP Variety), for example, has 44 sounds that join in different groups to form thousands of words. These words can be arranged into millions of sets to frame different sentences. Each sentence has its own internal structure. There is no such structural complexity in a lamb's bleating or a monkey's cry.

(e) Human language is non-instinctive in the sense that every human child has to **learn**language from his elders or peers in society. This process of **learning** plays an important part in the acquisition of language. On the other hand, bees acquire their skill in dancing as humans acquire the skill to walk. Bees are sometimes seen to make hexagonal hives. They do not learn any geometry. Their knowledge is inherited, inbuilt. It is not so in the case of human beings who have to **learn**a language.

(f) Another important property possessed by human language is called **Displacement.**A human being, for example, can talk about the past, the present or the future, of an event that happened nearby or thousands of miles away. An animal cannot do that. When a dog produces a certain sound, it generally refers to the present. A dog cannot tell his master that a thief had visited his premises the previous night or the previous Sunday. It cannot tell him that a piece of meat is lying 200 metres away on the left bank of a river flowing by the village. When a cat mews at the arrival of its master, it is expressing its present feeling only. It cannot refer to an event that took place two hours ago in the park. It is this property of displacement which enables humans to create fiction and describe the past as well as the possible future events.

Why Study Language?

Having outlined the various characteristics of language, one may like to ask: why study or learn language at all? An answer to this question can be easily derived from a consideration of the situation this world was in before language came into being. One can easily imagine that man must then have been a denizen of the forest very much like anyone of the other animals, viz. horse, cow, tiger, elephant, and dog. The entire human progress, in fact everything that

distinguishes humans from animals, depends on language only. Language is, today, a medium of literature, science and technology, computers and cultural exchanges between social groups, and the most powerful, convenient and permanent means of communication in the world. It is ubiquitous, present everywhere in all human activities, thoughts, dreams, prayers, meditations and relations. It is only through language that knowledge and culture are stored and passed on from generation to generation. Thus all human civilization and knowledge is only possible through language.

## Some Misconception about Language

Having discussed the major characteristics of language, it would be proper to hint at some major misconceptions which ate cherished by otherwise well-informed people. These misconceptions arise because of improper and inadequate reflection on the nature and structure of language. For some people, language is so familiar an object that it is not worthy of reflection and investigation. For others, reflection about language would only mean the vaguely understood statements made in a grammar class which they attended sometime in their schools or colleges. For the linguist, however, both these views are unacceptable. He regards the study of language as essential and exciting. He wants to study language to find out what it is like, what its parts or units or elements or components are like, and bow they are combined together. He is interested in discovering its structure. He speculates about language then he analyzes and describes it. If need be he compares it with other languages, and discovers its core grammar.

More than this the linguist raises very many pertinent and valid questions to be answered by researchers in the future. He raise the questions such as those listed here. Does every linguist analyse a language into the same number and kind of parts? What is the relationship of one analysis to another when there is mole than one way of analyzing a language? Out of the existing analysis and descriptions which is the better one? How is a language learnt? What is the difference between the first language acquisition and the second language learning? Why is second language learning difficult? Can the knowledge of one language help a person in acquiring the knowledge of the other language? How, why and to what extent does the learner's knowledge of the mother tongue interfere with the learning of a second language? Are there sonic people who do not know even a single language? What happens to a child when he is brought up in isolation? Is there a particular age at which children start the process of learning a language and another by which they complete it? Why can't animals imitate human language? Winn is the difference between human language and animal system of communication? What are the similarities and dis-similarities between one language and another? Are there some language universals among the languages of the world? By which they complete it? Why can't animals imitate human language? What is the difference between human language and animal system of communication? What are the similarities and dis-similarities between one language and another? Are there some language universals among the languages of the world?

A linguist tries to ask these and similar other questions. It is not incumbent upon him to find out satisfactory answers to all the questions. It is a contribution of no little value to raise questions that arc valid and important. In all sciences, raising questions is more important then sun-plying answers to the questions previously raised. This is how scientific inquiry progresses. If a question is raised today, some future linguist will find out not only its answer but also the ways and means to analyse and study languages scientifically, ask valid questions and raise new controversies.

There are misconceptions of yet graver magnitude than those mentioned in the preceding paragraphs. The common ones are, that written form is more prestigious than the spoken form; that literary language is the only language; that one language is superior to another; that traditional alphabet is adequate; that the job of a linguist is not to describe hut. to prescribe the grammatical rules to preserve the purity of a language that children learn language merely by imitation; that language is an instinctive and inherited property of man; that there is little in common between the languages of the world; that there are no language universals at all; that no two languages have any similarities; that the purity of a language should somehow be preserved and that historical forms of usage are to be preferred and remembered whereas contemporary usage should be ignored as unworthy of attention. Even wore is the misconception that only a historical treatment of languag**e** is the right treatment and that a language should riot be studied isolating it as it were, at a particular stage or point of time, and that what one school of linguists se the absolute and the only truth and what the other says is a falsehood and heresy. Some other misconceptions are that all languages can he analyzed as one would analyze European languages such as Latin and French; that Greek and Latin are ideal languages; that sounds a particular language are in themselves easy or difficult; and that languages are static. The earlier a student of language removes such misconception, the easier it is for him to acquire wholesome and scientific attitude towards language.

## Phonetics - The Study of Speech Sounds

Phonetics has been defined as the science of speech sounds. It is a branch of linguistics and deals with the sounds produced by human beings in their speech behaviour. In speaking trial listening a complex of activities is involved : there is the production of speech which is the result of simultaneous activities of several body organs.

These activities are aimed at creating disturbances in the air. The inhaled air acts as source of energy setting the outside air vibrating so that the sound thus generated is carried along to the ears of the listener. The auditory process is set in motion which is again a complicated process involving auditory organs; perception of speech segments which involves discarding the non-significant features from the significant or distinctive features and perceiving only those that *are* meaningful. 'Even a single speech sound combines a large number of*distinctive features* which provide the information on which an auditor bases recognition of the sound' (Tiffany-Carrell). It is like retrieving a small visual image from a crowd of intricate details. But the brain can quickly decode the incoming signals that have been encoded by the speakers. 'Physical energy in the form of sensory nerve impulses reaches the brain', the brain circuitry is understood to organise them *into percepts* which are the basis of recognition. Obviously, a complex of multiple factors in the form of the listeners' interest, his social background, intellectual level, pas! experience and other parameters play an active and significant role in the perception level, and the interpretation is made accordingly.

We thus observe that speech act encompasses intricate movements and activities that occur on different planes, some of them simultaneously and at incredible speed. We ate so used to speaking in a natural effortless manner, that we hardly give attention to the complex nature of speech production and speech perception.

Branches of Linguistics

Phonetics has three major branches:

1) Articulatory Phonetics

2) Auditory Phonetics

3) Acoustic Phonetics

Articulatory phonetics is also known as physiological phonetics; and auditory phonetics is known by the name perceptual phonetics.

Articulatory Phonetics

This branch of phonetics recognises that there is speech producing mechanism in human beings. 'The 'apparatus' that produces speech sounds is situated within the human body. However, it must be clear that there is no separate 'apparatus' exclusively used for generating speech sounds. Speech is, infact, an *overlaid function*in that human beings utilize in a special way organs which are part of the respiratory and digestive system. Man uses those organs for speaking which already serve other biological needs. Thus lips, teeth, tongue, hard palate, soft palate, trachea, lungs - all these organs used in speech production have different basic biological functions. In the process of cultural evolution, man devised ways of utilizing these organs and parts thereof (such as the tip, blade, front, centre, back of the tongue alongwith the corresponding areas or points in the roof of mouth or hard palate) for verbal communication.

Besides( these the airstream that goes in and out of the lungs forms the basis of speech; that is, speech is based **e**n the outgoing airstream. Articulatory phonetics studies how the outgoing airstream is regulated along the vocal tract to form various speech sounds.

Auditory Phonetics

This branch of phonetics studies how speech sounds are heard and perceived. This galls for a close study of the psychology of perception on the one hand, and the mechanism of the neuro-muscular circuitry on the other.

Hearing is a very intricate process; it implies 'interpreting the physical description of actual or proposed signals in terms of the auditory sensations which the signals would create if impressed upon the ear' (French). Acoustic signals generate a 'complex chain of physical disturbances within the auditory system'. The brain receives signal about these physical disturbances; in the brain are caused other disturbances - physical counterparts of the sensations. It is necessary to establish correlation between the auditory signals and their interpretation in terms of the disturbances in the brain. It is a challenging task, one can say that not much headway has been made in unravelling the complex pattern of the course charted by the speech signals through the auditory system into the neuro-muscular processes. However, we can divide the whole process into three stages:

i) the physical aspect of die auditory system

ii) recognition of the essential characteristics of hearing.

iii) interpreting auditory sensations, their attributes and their relation to the signals.

The physical aspect of die auditory system involves a detailed description of the external, middle and inner ear (also known as *Cochlea),* and the auditory receptive centres of tic bran, the neural network. This also takes into account 'translating acoustic signals into auditory sensations' which begins with the transfer of pressure variation of sound waves to the fluids in the inner

ear. The inner ear analyses these vibrations and encodes them into 'neural pulses of elctrochemical activity'. The inner ear is connected to the auditory receptive centres by the auditory nerve which carries these pulses. The auditory centres are correspondingly stimulated. But there is a difference between the liaises and the actual sensations in the neural centres that ate thus generated.

The basic characteristics of healing include such features as loudness, absolute sensitivity, frequency tones, 'masking' or the elimination of the subjective traces of one of the two or more sounds; that the ear is exposed to, pitch etc. Interpreting, the auditory sensations into their physical signals poses serious problems. The auditory sensations do lint offer a featly, palpable pattern that can satisfactorily be described Sound signals may be composed of a variety of components - horn bits of 'transients' to sounds of longer duration; from single unit tones to multiple segment complexes; Bonn ones having a constant pattern to continually changing frequencies. It is not necessary that the auditory sensation would reflect the identical occurrences of these sound signals. In the complex sound patterns, their 'separate components may retain the identity in the resulting sensation' or may produce an entirely new sensation. Signals of varying frequencies may produce a study pattern of sensations or separate sensations. Composition of the human brain plays a crucial role in this regard. It poses difficulties in the way of interpretation. Many signals are highly complex and can only be described in mathematical terms. However, such descriptions do not have any relevance to phonetics and must, therefore, be ignored.

Acoustic Phonetics

Acoustic phonetics is the study of the physical properties of speech sounds such as frequency and amplitude in their transmission. Acoustic phoneticians analyse the speech waves with the help of instruments, attempt to describe the physical properties of the stream of sound issues forth from the mouth of a speaker.

It is in the field of acoustic phonetics that the most sulking developments have taken place since the Second World War. Complex sound waves produced in speech can be analysed into their component frequencies and relative amplitudes. Considerable progress has also been made in *speech-synthesis*. Acoustic analysis has confirmed (if confirmation was needed) that speech is not made up of a sequence of discrete sounds. The articulatory features of rounding of voice, of nasality, of obstruction and of friction can also be identified acoustically. Acoustic phonetics achieved a good deal of success in matters of the study of the n vowels, but regarding consonants it has not reached final conclusions.

Articulators

We shall now consider the organs which are used in articulation. All speech organs are known as *articulators*. They are broadly divided into two categories :

a) Mobile or active articulators

b) Fixed or passive articulators

We have already noted that there is perceptibly significant mobility in the laryngeal and pharyngeal regions. In fact, the whole of sub-laryngeal area is active in speech production. However, there are more noticeable movements in the larynx and areas immediately above it. The throat forms a crucial factor in determining resonance. The length of the pharyngeal

resonator can be changed by muscular actions which raise and lower the larynx. Among the mobile or active articulators the centrally important one is the tongue. It is extremely flexible and mobile. The other two mobile articulators are *the lower jaw (mandible)* which can move both vertically and horizontally to change the phonetic qualities of sounds, and the lips; they can be rounded or spread, brought closer to the upper teeth or simply held neutrally.

The *fixed* or *passive articulators* are include the roof of the mouth. This is dome-shaped, hard and bony. It is known as the *hard palate*. The hard palate and the teeth play a necessary, although passive role in articulation. The bony palate forms the anterior part of the roof of mouth, separating the oral cavity from the nasal passage. The hard palate terminates in the soft palate which is muscular. This is also called *velum* or *velum palatinum* whichforms the posterior section of the roof of the mouth, separating the mouth cavity from nasopharynx. The velum can be lowered or raised for opening or closing the*nasopharyngeal passage*. We shall see this in detail in the section dealing with nasal sounds.

The upper teeth also participate in articulatory process, with the active articulators coming into contact with them to form various constrictions, thus modifying the airstream and producing different speech sounds.

We shall now separately consider in detail each one of these articulators. First let us look at the active articulators.

Active Articulators

The main role of the active articulators is to actively interfere with the outgoing airstream and modify it to produce various types of speech sounds. This is done either by approximating (forming a constriction) or coming into full contact with the passive articulators (forming complete stoppage). We have seen the functioning of the larynx, glottis and vocal cords in earlier sections. Now we shall take a look at the oropharyngeal articulators that are situated in the mouth.

Tongue

The most active of articulators is the tongue. It shows an amazing range of adjustments and movements mainly because it is made of two groups of muscles, *intrinsic* ones are fibres of the *longitudinal, transverse* and*verticalis lingual* musceles. These muscles are within the tongue and mainly responsible for changes in its shape. They blend with the *extrinsic muscles* which originate outside of the tongue. Their function determines the position and movement of the tongue. 'The tongue is an organ of taste, and used for chewing and swallowing activities... On the basis of its great flexibility and motility, the secondary function of articulation has been super-imposed'. (G.E. Arnold)

It has been divided into the following major parts on the surface along its length.

i) apex or tip

ii) blade

iii) front

iv) back or dorsum

v) root

The sides of the tongue can also be used in speech, these are known as margin. For lateral sounds the sides are raised enough for the airstream to create turbulence and escape continuously. The tip can be raised and curled backwards letting the passing airstream to vibrate it. This produces retroflex sounds of various types.

*Lower lip:* The lower lip is a mobile articulator which can be used for many oral configurations. With the upper lip it can form various degrees of rounding that produce different vowels. It can bring about complete oral occlusion with the upper lip which produces bilabial sounds, plosives and in many languages fricatives also. When the lower lip comes into contact with upper teeth, we hear fricative sounds (labio-dental).

Passive Articulators

Passive or immobile articulators cannot be moved about, but perform a v cry crucial role in speech production. The mobile organs approximate them, i.e. come close enough to affect the shape of the outgoing column of air, or form a complete closure by coming into full contact with them.

These organs are mostly located in the upper part of the mouth, beginning in front with the upper lip, upper teeth, the gum ridge or*alveolum,* hard palate, the soft palate, just behind the hard palate and the back wall of the throat (pharynx).

*Upper lip :* Though upper lip is not a rigid organ and can be moved, in speech production it is not used as a mobile articulator; rather the lower lip reaches up to create various constrictions with it. Therefore, it has been classified as a passive articulator.

*Upper teeth:* The row of upper teeth functions as the passive articulator. Tongue-tip and blade as well as the lower lip form constriction with them. The active organs can do so either with the edges of the teeth or the back of them. Dental class of sounds is produced in this manner. Upper teeth are also involved in the production of the fricative sounds, called labio-dentals in which the lower lip approximates them to form a slit through which the air escapes creating friction noise.

*Gum ridge:* Just behind the upper teeth is located alveolar or gum ridge. The mobile speech organs - various parts of the tongue reach it to form either a narrow stricture or a complete closure. Hindi /d/ and /t/ and their aspirated counterparts are dental stops. But English /ɒ/ in *thin* and /ð/ *in this*are fricatives.

*Hard Palate:* Behind the alveolum or gum ridge begins the hard palate which forms the major part of the oral arch or roof of the mouth. We already possess an idea of its formation. It is made of the horizontal plates of bone which terminate in the soft palate. 'Some part of both the hard and the soft palates serves as a point of contact or near-contact for the tongue in the production of a number of speech sounds'. It can be divided into parts or areas where the tongue makes contact. Phonetic quality is changed according to the point at which the hard palate is approximated by the tongue. These sounds are recognised as *palatal.* These are further classified according to which part of the tongue comes into contact with the precise palatal area. For example, we can produce palato-alveolar sounds by bringing the tip of the tongue to touch the extreme front of the hard palate or the place lying between the gum-ridge and the palate.*Alveo-palatal* area lies further back of the region just mentioned; *palatal* the slope of the hard palate and *domal* is the dome of it. Classification is largely a matter of convenience and

practical need of the particular language. Not all the languages or dialects make use of all the classification criteria. What is suggested here is that precise classifications are possible.

*Soft Palate:* This is recognised as the fixed articulator though it can he moved, being a soft and flexible organ. The principal action of soft place consists of opening the *naso-pharyngeal* cavity by lowering itself. When it is lowered, the oral passage is closed off and the outgoing airstream passes through the nose, sounds produced in this manner are identified as *nasals*. /m/, /n/, /h/ and the nasalised vowels are of this type. For opening the *oral* passage and allowing the air a free passage through it, the soft palate is raised. Soft palate thus acts as a valve. The back of the tongue or *derssum* makes contact with the velum to produce either frictional sounds or stops. These stops are known as velar stops /k/, /g/. Retroflex sounds can also be produced by bringing the underside of the tongue tip to touch the velum.

Uvula

The soft palate terminates into a piece of flesh which dangles over the pharyngeal passage. This is called *uvula*. It is a 'small flexible appendage hanging down from the posterior edge of the velum, (Gleason). It can be vibrated by the outgoing breath-stream, to produce *uvular sound,* particularly *uvular trills*. Some languages use these sounds as phonemes.

*Pharynx:* The posterior wall of the pharynx is used for producing speech. In the front are the base of the tongue, the palate, and the two openings leading to the nasal and oral passages. This area can be divided into three parts : the *hypopharynx* behind the tongue; the *mesopharynx,* behind the velum, and*nasopharynx* behind the nose. In the*mesopharynx* area are to be found the crossing of the alimentary and respiratory canals. The pharynx serves as a resonator for the voice. Widening of the pharynx promotes resonance and makes the tones full, dark, strong and resonant; narrowing tends to make them thin, sharp, dampened, and throaty' (Arnold). Besides, the root of the tongue can also be made to come into contact with the pharyngeal wall and produce certain types of fricatives and stops. Below are discussed certain processes of speech production. These are generally used by languages all over the world.

Labiabialization

This is a process in which the lips play an active part in various ways. They come together to form various stages or degrees of rounding which is a crucial factor inproducing back vowels /u/, /o/, /  /, *as in shoe, shore, and* .a. The two lips are joined together for the pronunciation of the plosive sounds /p/, /b/; and the voiced nasal continuant /m/. The lower lip is raised approximate the edge of the upper teeth for the fricatives /f/, /v/. For the semi-vowel /w/ again there is a noticeable lip-rounding. Bilabial fricatives are not uncommon. In the African language Tshiluba this is used. Even a bilabial trill is heard in some languages.

*Polatalization:* In *palatalization* the tongue approximates the hard palate leaving only a narrow space through which the airstream passes producing friction noise; or the tongue may form complete occlusion and then gradually withdraw, creating a turbulence of air due to the breath-stream escaping through the space slowly being allowed to form. This is how the sound in *jar*/dɜa:/ and *chair* /tòeə/ is pronounced.

*Velarization:* Velar sounds are produced by this process. The back of the tongue either approximates or forms total occlusion for articulating certain types of stop and fricative sounds.

The velar sounds are /k/ and /g/ in English. /h/ is a velar nasal heard in such words as king, sing, *inquest* and*conquer*.

*Glottalization:* The space between the vocal cords is called *glottis*. If the vocal cords are brought together taut and released with a 'popping' action, the resultant sound will be heard as a 'glottal stop', symbolised as /?/. We
create a glottal closure when we have to lift something heavy. In this act adequate pressure of air is, built up in sub- laryngeal region to provide enough strength. Immediately after doing the work a heavy amount of breath is forcefully released, accompanied by a glottal sound. In rapid conversation often this is used in the form of 'catch' in the throat. The Cockney speech of London contains quite a generous share of this sound takes place of certain dropped sounds, for example, in *butter* pronounced*bu'er* /b^?/ or *letter* /le?ə/. Glottal stops are phonemic in some languages. Glottal fricatives are used in Scottish language and its regional dialects. These are symbolised as [h] and [h]. In English /h/ as used in *house, he, her, horse* is a glottal fricative. The Scottish word *loch*'lake' contains the glottal fricative.

*Nasalisation :* This is a process whereby we produce nasal sounds or nasalised vowels. In articulating these sounds, the soft palate is lowered to close off the oral passage and direct the airstream through nasal cavity. In another case, the air is allowed to go into both the oral and the nasal cavities, but the active articulators check it in the mouth. For /m/ two lips come together to form a closure, and channelise the air flow, through the nose. Similarly, for /n/ the tip of the tongue comes into contact with the back of the upper teeth and forms a closure. 'Although the vocal tract is blocked at one point, the breath-stream flows outward through what has been called a *secondary aperture*consisting of the nasal airway. Acoustically, the physical conditions which impart the perceived nasal quality to these sounds are sometimes referred to as *cul de sac*resonance, where a relatively small cavity, the nasal resonator, is coupled to a large cavity, the oropharyngeal cavity (Tiffany-Carrell). Nasals are also classed
as *resonants*or continuants.

*Voicing :* It is an articulatory process in which the vocal flaps are set in vibration by the outgoing column of air. During voicing, the vocal cords are brought close enough to hold them taut and the airstream vibrates them in rapid succession. There is as a result, quick opening and closing of these vocal cords several times a second. Sounds can be produced without the vibration of the vocal cords. Such sounds are called *unvoiced*or *voiceless* sounds; sounds produced with the cords in vibration are called *voiced sounds.* How can one ascertain whether a sound is voiced or not? There are simple methods to do so. If we cup our ears and pronounce a voiced sound we can hear a 'buzzing' noise, from the time we actually get ready for it. /z/ in *zoo* and /dʒ/ in *judge* or*jam* are voiced sounds. Another simple method is to put a finger on the front of the voice box or 'adams apple' and say these sounds - a distinct sensation of noise can be felt which is missing when we pronounce an unvoiced sound. In English we produce /g/, /b/, /d/, /dʒ/, /v/, /z/, /ʒ/, /ð/, /m/, /n/, /h/, /l/, /w/, /r/ and all the vowels with voicing. These are voiced sounds. The voiceless sounds are /k/, /p/, /t/, /tò/, /f/, /s/, /ò/, /q/.

Frequency of the vocal cords vibration is also related to the low and high tones, pitch level and voice amplitude, but we shall consider this in a later section. We must bear in mind at this stage that voicing or vibration of the vocal cords has a crucial function in speech production. It forms a basic factor in the fundamental classification of speech sounds into two functional categories, the voiced and the voiceless ones.

Manner of Articulation

The manner or way in which the outgoing air-stream is interfered with determines the*manner of articulation*. A sound can be described in this light. The airstream may completely be stopped and released with force producing a plosive or stop sound. The occlusion may occur anywhere between larynx and the two lips; or the passage of air may be constricted enough for it to produce audible friction. The sound thus produced is called *fricative*. According to the manner of articulation sounds are classified into smaller classes as stops, fricatives, affricates, nasals, laterals, trills or flaps and semivowels. These constitute the larger class of consonants. For the complete description both the point/place and manner of articulation are taken into consideration.

Fortis and Lenis

In producing speech sounds a great deal of muscular energy is involved. Some of the sounds need greater energy than others. Voiceless sounds are the examples of sound pronounced with greater energy. The dichotomy signifies grouping of sounds according to the degree of muscular tension. 'The former tend to be voiceless, the latter voiced, but considerable contextual modification of these qualities are possible, especially as a result of accentual features' (L.F. Brasnalian). English /p/, /t/, and /k/ are the examples of sounds pronounced with greater effort and breath. 'In German *fortis*articulation such as t, k, f are distinctly voiceless, in American English, on the other hand, especially between vowels, these sounds are commonly voiced throughout their duration'.

In *lenis,* the muscular, energy is markedly decreased and so also breath. Mostly voiced sounds are lenis such as /b/, /d/, /z/, /v/, /ʒ/, etc.

Voiced and Voiceless Sounds

We have already noted the voicing mechanism. The division of speech sounds into the voiced and the voiceless ones is of great importance in phonetics. The beginners should familiarise themselves with the vibrations felt during the production of voiced sounds.

Description of Speech Sounds

Speech Sounds are divided into two main groups: (1) consonants, and (2) vowels.

Consonants:

A description of consonants, according to A.C. Gimson, must provide answers to the following questions:

(i) Is the air-stream set in motion by the lungs or by some other means? (pulmonic or non-pulmonic).

(ii) Is the air-stream forced outwards or sucked inwards? (egressive or ingressive)

(iii) Do the vocal cords vibrate or not? (voiced or voiceless).

(iv) Is the soft palate raised or lowered? Or, does the air pass through the oral cavity (mouth) or the nasal cavity (nose)?

(v) At what point or points and between what organs does the closure or narrowing take place? (Place of articulation).

(vi) What is the type of closure or narrowing at the point of articulation? (Manner of articulation).

Thus the description of a consonant will include five kinds of information : (1) the nature of the air-stream mechanism; (2) the state of the glottis; (3) the position of soft palate (velum); (4) the articulators involved; and (5) the nature of the 'stricture'.

**The Nature of the Air-stream Mechanism.**Most speech sounds and all normal English sounds are made with an egressive pulmonic air-stream, e.g., the air pushed out of the lungs.

**The State of Glottis.** A consonant may be voiced or voice-less, depending upon whether the vocal cords remain wide apart (voice-less) or in a state of vibration (voiced).

**The Position of the Soft Palate.** While describing consonants we have to mention whether they are oral sounds (produced with soft palate raised, thus blocking the nasal passage of air) or nasal sounds (produced with the soft palate lowered).

**The Articulators Involved.** In the description of consonants, we have also to discuss the various articulators involved. The articulators are active (the lower lip and the tongue) and passive (the upper lip, the upper teeth, the roof of the mouth divided into the teeth-ridge, the hard palate, and the soft palate, and the back wall of the throat pharynx). In the production of a consonant the active articulator is moved towards the passive articulator. The chief points of articulation are bilabial, labiodental, dental, alveolar, post-alveolar, palato-alveolar, retroflex, palatal, velar, uvular, and glottal. In the case of some consonantal sounds, there can be a secondary place of articulation in addition to the primary. Thus, in the so-called **dark** /l/, in addition to the partial alveolar contact, there is an essential raising of the back of the tongue towards the velum (velarization); or, again some post-alveolar articulator of 'r' (r) as in red are accompanied by slight lip-rounding (labialization). We can classify consonants according to the place of articulation.

**The Nature of Stricture.** By the nature of stricture we mean the manner of articulation. This stricture of obstruction made by the organs may be total, intermittent, partial, or may merely constitute a narrowing sufficient to cause friction.

When the stricture is that of a complete closure, the active and passive articulators make a firm contact with each other, and prevent the passage of air between them. For instance, in the production of /p/ as in**pin** and /b/ as in **bin,** the lips make a total closure.

The stricture may be such that air passes between the active and passive articulators intermittently. Such a stricture is called intermittent closure, and involves the vibration of the active articulator against the passive. The Scottish /r/ as in **rat** is an example. The intermittent closure may be of such a short duration that the active articulator strikes against the passive articulator once only. The English /r/ in the word very is an example; the tip of the tongue (active articulator) makes one tap against the teeth-ridge (passive articulator).

In the partial stricture, the air passes between the active and passive articulators continuously, but with some difficulty. The sounds thus produced are clear /1/ and dark /1/ in **late,** and **hill,** the clear and the **dark '1'** respectively.

And lastly, the stricture may be such that the air, while passing between the active and passive articulators, produces audible friction. /f, v, q, ð, s, z, f, ɜ, h/ in English are examples of this kind of stricture. Or the air may pass without friction. Examples are /w/ in **wet,** /j/ in **yes** and flap

/r/ as in **butter.** A stricture which involves audible friction, can be called a stricture of close approximation, whereas one which involves no such friction can be called a stricture of open approximation.

If we are to describe some of the consonant sounds in terms of the points discussed in the preceding paragraphs, we shall do that in the following manner (we shall not make any reference to the air-stream mechanism since we have already mentioned that all English sounds are made with a pulmonic egressive air-stream):

1. /p/ in the English word **pack.**
   (i) The vocal cords are held apart and the sound is voiceless:
   (ii) The soft palate is raised and the nasal passage is closed.
   (iii) The active articulator is the lower lip.
   (iv) The passive articulator is the upper lip.
   (v) There is a stricture of complete closure.
2. /b/ in the English word **back.**
   (i) The vocal cords vibrate, and the sound produced is voiced.
   (ii) The soft palate is raised and the nasal passage is closed.
   (iii) The active articulator is the lower lip.
   (iv) The passive articulator is the upper lip.
   (v) There is a stricture of complete closure.
3. /g/ in the English word **god.**
   (i) The vocal cords vibrate, and the sound produced is voiced.
   (ii) The soft palate is raised and the nasal passive is closed.
   (iii) The active articulator is the back of the tongue.
   (iv) The passive articulator is the soft palate.
   (v) There is a stricture of complete closure; the back of the tongue makes a complete closure with the soft palate.
4. /t/ in the English words **cat**.
   (i) The vocal cords are wide apart, and the sound is voiceless.
   (ii) The soft palate is raised and the nasal passage is closed.
   (iii) The active articulator is the tip of the tongue.
   (iv) The passive articulator is the teeth ridge.
   (v) There is a stricture of complete closure. The tip of the tongue makes a firm contact with the teeth ridge.

5. /m/ in the English word **man.**
   (i) The vocal cords vibrate and the sound is voiced.
   (ii) The soft palate is lowered and the air passes through the nose.
   (iii) The active articulator is the lower lip.
   (iv) The passive articulator is the upper lip.
   (v) There is a stricture of complete oral closure.
6. /v/ in the English word **van.**
   (i) The vocal cords vibrate and the sound is voiced.
   (ii) The soft palate is raised and the nasal passage is closed.
   (iii) The active articulator is the lower lip.
   (iv) The passive articulators are the upper front teeth.
   (v) The stricture is one of close approximation. (The lower lip is brought very near the upper front teeth. The air passes between them with audible friction.)
7. /j/ in the English word **yet.**
   (i) The vocal cords vibrate and the sound is voiced.
   (ii) The soft palate is raised.
   (iii) The active articulator is the front of the tongue.
   (iv) The passive articulator is the hard palate.
   (v) There is a stricture of open approximation. The front of the tongue is brought near the hard palate but the space between them is sufficient for the air to pass without any audible friction.

Hence the kind of stricture involved in the articulation of various sounds is as follows :

a) plosive : complete closure,
b) affricate : complete closure and slow release,
c) nasal : complete oral closure,
d) fricate : close approximation,
e) lateral : complete closure in the centre of the vocal tract and the air passes along the side(s) of the tongue,
f) vowel : open approximation,
g) semi-vowel : open approximation,
h) frictionless continuant : open approximation.

Classification of Consonants

Consonantal sounds are classified on the basis of (i) voicing, (ii) place of articulation, and (iii) manner of articulation.

**(i) Voicing.** On the basis of voicing, sound can be classified into voiced and voiceless sounds. The voiced sounds in English are /b, d, g, v. ð, z, dɜ, m, n, ŋ, l, r, w, j/.

All the vocoids and semi-vowels are voiced sounds, whereas among the consonants some are voiced and some voiceless. If the vocal cards vibrate when a sound is produced, it is said to be voiceless.

**(ii) The Place of Articulation.** Consonants are divided as given in the following table on the basis of the articulatory points at which the articulators actually touch, or are at their closest.

The Classification of English Consonants according to the place of Articulation.

| **Classification** | **Articulators** | **Examples** |
|---|---|---|
| **Bilabial** | Upper lip and lower lip | /p b m w/ |
| **Dental** | Teeth and tip of tongue | /q ð/ |
| **Labio-dentel** | Lower lip and upper teeth | /f v/ |
| **Alveolar** | alveolar (teeth) ridge and tip and blade of tongue | /t d s z r k b/ |
| **Post-alveolar** | Hard palate and tip of tongue | /r/ |
| **Palato-aveloar** | Hard palate—alveolar and tip, blade and front of tongue | /f/z/ò/dɜ/ |
| **Palatal** | Hard palate and front of tongue | /j/ |
| **Velar** | Soft palate and back of tongue | /k g ŋ/ |
| **Glottal** | Glottis (vocal cords) | /h/ |

The Manner of Articulation

According to the manner of articulation, which describes the type of obstruction caused by the narrowing or closure of the articulators, the consonants can be divided into stops. affricates, fricatives, nasals, rolls, laterals, and semi-vowels or frictionless continuants. We shall discuss these one by one.

**(1) Stop.** In the production of a stop, the oral and nasal passages arc closed simultaneously. The active and passive articulators come in contact with each other forming a stricture of complete closure and preventing the air from escaping through the mouth. The soft palate is raised and thus the nasal passage is also blocked. (This is also known as velic closure). The air behind the oral closure is compressed, and when the active articulator is removed from contact

with passive one, the air escapes with an explosion. Stops are also known as mutes. explosives. plosives or occlusives. /p/ in **pat**and /b/ in **hat** are the examples of stops.

**(2) Affricate.** If the stop is not held for any appreciable time and released slowly, we get an affricate rather than a plosive, e.g. /tò/ in**chair** and /dʒ/ in **jail**.

**(3) Nasal.** In a nasal contoid, the breath stream is interrupted at some point in the oral cavity or at the lips, while being allowed to enter the nose and create resonance there. Thus a nasal is produced by a stricture of complete oral closure. The soft palate is lowered and the air passes through the nose. All nasal sounds are voiced. Examples /m, n, v/ in English.

**(4) Trill (or Rolled Consonants).** In theproduction of a trill, the active articulator taps several times against the passive articulator. The stricture involved can be called a stricture of intermittent closure. Scottish /r/, for example in red, in which the tip of the tongue strikes against the teeth ridge a number of times, is called a trilled consonant.

**(5) Flap.** For a flap the active articulator strikes the passive articulation once only. For example the /r/ in the English word **very,** in which the tip of the tongue strikes against teeth ridge only once.

**(6) Lateral.** Laterals are produced by a stricture of complete closure in the centre of the vocal tract, but the air passes out every one or both side of the tongue. For example, /I/ in late.

**(7) Fricative.** In the production of a fricative consonant the stricture is one of close approximation. The active articulator and the passive articulator are so close to each other that passage between them is very narrow and the air passes through it with audible friction. Examples are /f/ in **face,** /v/ in **vain /q/** in **think,** /ð/ in **them**, /s/ in **sail**, /z/in **zero,** /ò/ in **ship,** /ʒ/ in **measure,** /h/ in**hat.**

**(8) Frictionless Continuant.** In the production of a frictionless continuant the stricture is that of open approximation. For example in the production of /r/ in **red, read, real, ready,** the active articulator (tip of the tongue) is brought just behind the passive articulator (alveolar ridge) so that there is plenty of space between the two articulators, and the air passes between them without friction; and hence the term "frictionless continuant."

Gimson includes the English /r/ in words like red and read among the frictionless continuants, but the English (r) also occurs as a fricative as in **try, cry, ray, pray, grow, very, sorry**. Jones includes it in the list of fricatives and Gimson in the list of frictionless continuants.

**(9) Semi-vowel.** A semi-vowel is a vowel glide functioning as a consonant i.e., as the C element in syllable structure. In terms of articulation semi-vowels are like vowels, but they don't behave like vowels. Semi-vowels are never stable; they can never be pronounced by themselves. They are sounds in transition. Examples are /j/ in yet and /w/ in wet. These are also called semiconsonants too.

**(10) Fortis and Lenis.** When we have voiceless/voiced pair, the two sounds are also distinguished by the degree of breath force and muscular effort involved in the articulations. e.g., is comparatively strong or**fortis**, and z is comparatively weaker lenis.

We summarize the classification of the consonants in English on the basis of the manner of articulation in the following table.

| Name of the Class | Structure Involved | Examples |
|---|---|---|
| **Stop** | Complete closure | /p b t d k g/ |
| **Affricate** | Closure, then slow separation | /t ò dʒ/ |
| **frication** | Narrowing, resulting audible friction | /f v q ð s z ò ʒ/ |
| **Nasal** | Complete clsoure in mouth, air escapes through nose | /m n ŋ/ |
| **Rolled** | Rapid intermittent closure | /r/ |
| **Lateral** | Closure in the centre of mouth, air escapes over the sides of tongue | /l/ |
| **Frictionless Continuant** | Slight narrowing, not enough to cause friction | /r/ |
| **Semi-vowels/ Semi-consonants** | Slight narrowing, not enough to cause friction. | /w j/ |

Vowels

Vowels may be defined with an open approximation without any obstruction, partial or complete, in the air passage. They are referred to as vocoids in phonetics. They can be described in terms of three variables:

(1) height of tongue

(2) part of the tongue which *is raised or*lowered

(3) lip-rounding.

In order to describe the vowels, we usually draw three points in the **horizontal-axes:**front, central and back, referring to the part of the tongue which is **the highest.** So we have

i) **front vowels,** during the production of which the front of the tongue is raised towards the hard palate. For example, /i, i:, e. æ/ in English as in **sit, seat, set**, and **sat** respectively.

ii) **back vowels,** during the production of which the back of the tongue is raised towards the soft palate. For example /a:, , :, u, u:/ in English as in **cart, cot, caught, book** and **tool**respectively.

iii) **central vowels,** during the production of which the central part of the tongue (the part between the front and the back) is raised. For example, /ə, ə:, ʌ/ in English as in**about, earth** and **but** respectively.

To describe the vowel sound we mention whether it is open or close, half-close or half-open, front or back or central, long or short, whether the tongue is tense or lax while the vowel is being pronounced, and whether lips are spread, neutral, open rounded, or close rounded. All English vowels are voiced. So, for every vowel, we must state that it is voiced:

Diphthongs

From the point of view of their quality, vowel sounds are of two types : monophthong and diphthong. Monophthongs are pure vowels and diphthongs are gliding vowels. 'A vowel that does not change in quality' may be called a monophthong; and a vowel sound with a continually changing quality may be called a diphthong.

A pure vowel is one for which the organs of speech remain in a given position for an appreciable period of time. A diphthong is a vowel sound consisting of a **deliberate**, i.e.**intentional** glide, the organs of speech starting in the position of one vowel and immediately moving in the direction of another vowel. A diphthong, moreover, consists of a single syllabic––that is, the vowel-glide most be performed **with a single impulse of the breath;** if there is more than one impulse of breath, the ear perceives two separate syllables…

––Peter MacCarthy, ***English Pronunciation.***

A diphthong, thus, always occupies one syllabic. If two adjacent vowels form the nuclei of two successive syllables, they are not a diphthong. For example the vowels in bay, boy, and buy are diphthongs, but the vowels in doing are two different vowels since they belong to two different syllables.

One end of the diphthong is generally more prominent than the other. Diphthongs are termed 'decrescendo' of FALLING if the first element is louder or more prominent than the second, and 'crescendo' or RISING if the second element is louder or more prominent than the first. All the English diphthongs are falling diphthongs, because in them the first clement is louder or more prominent than the second clement.

Diphthongs are represented in phonetic transcription by a sequence of two letters, the first showing the position of the organs of speech at the beginning of the glide, the second their position at the end. In the case of the 'closing' diphthongs the second letter indicates the point **toward which** glide (movement) is made.

Phonetic Transcription

Phonetic transcription is a device in which we use several symbols in such a way that one symbol always represents one sound. It is also known as phonetic notation, it is an 'attempt on paper, a record of the sounds that speakers make.' By looking at an English word in its written form one cannot be sure of its pronunciation, whereas by looking at it in phonetic transcription one can be. Most of our phonetic transcriptions are **phonemic**transcriptions, that is, each symbol represents a phoneme, a distinct sound unit in language. A pair of square brackets [ ] indicates a phonetic transcription: Phonemic transcriptions are enclosed within slant bars / /.

The Usefulness of the International Phonetic Alphabet (IPA)

The IPA gives us a uniform international medium of studying and transcribing the sounds of all the languages of the world. Many languages in the world have no orthographic (written) form at all. It has been made possible to study such languages with this alphabet. In other words, the IPA is 'a precise and universal' means (i.e. valid for all languages) of writing down the spoken forms of utterances as they are spoken without reference to their orthographic representation, grammatical status, or meaning.

As regards English, the IPA helps us in establishing and maintaining international intelligibility and uniformity in the pronunciation of English. With the help of the IPA we can easily teach the pronunciation of English or of any other language. The IPA has contributed a lot in the teaching and description of language. The teachers and learners of English can improve, and standardize their pronunciation and can overcome the confusion created by the spellings with the help of the international phonetic alphabet.

## Phonology - The Pronunciation of English

"Phonology is essentially the description of the systems and patterns of speech sounds in a language". *(George Yule)*

> "Phonology is the subfield of linguistics that studies the structure and systematic patterning of sounds in human language". *Adrain Akmajian)*

According to Bloomfield, phonology is the organizantion of sounds patterns. In order to fulfil the communicative functions, languages their material, the vocal noises, into recurrent bits and pieces arranged in patterns. It is the study of this formal organisation language which known as phonology.

What is sound? How and where is it produced from? How is it received by the ears? How and why is one sound different from the other? ––questions like these are the subject-matter of Phonology

Difference between Phonetics and Phonology

The difference between phonetics and phonology is that of generality and particularity. Whereas phonetics is the science of speech sounds, their production, transmission and reception and the signs to represent them in general with no particular reference to any one phonology is the study of vocal sounds and sound changes, phonemes and their variants, in a particular language. If phonetics can be likened to a world, phonology this is a country. Phonetics is one and the same for all the languages of the world, but the phonology of one language will differ from the phonology of another.

According to John Lyons, "Phonetics differs from phonology... in that it considers speech sounds independently of their paradinmatic opposition and syntagmatic combinations in particular languages," and that phonology is the level at which the linguist describes the sounds of a particular language *(NewHorizons in Linguistics)*.

The subject-matter of phonology is the selected phonetic material from the total resources available to human beings from phonetics. The human vocal system can produce a very large number of different speech sounds. Members of a particular speech community speaking that particular language, however, use only a limited number of these sounds. Every language makes

its own selection of sounds and organizes them into characteristics patterns. This selection of sounds and their arrangement into patterns phonology of the language.

To quote Robins, “Phonetics and phonology are both concerned with the same subject-matter or aspect of language, speech sounds, as the audible result of articulation, but they are concerned with them from different points of view. Phonetics is general (that is, concerned with speech sounds as such without reference to their function in a particular languages), descriptive and classificatory, phonology is particular (having a particular language or languages in view) and functional (concerned with working or functioning of speech in a language or languages). Phonology has in fact been called functional phonetics”.*(General linguistics)*

English Vowels

Vowels are continuous sounds: what distinguishes one sound from the ether is the shape of the oral cavity changing to form resonance chamber. The airstream expelled from the lungs acquires a distinct quality, but at no point does it meet any obstruction. Mostly tongue is the crucial factor in creating resonance chambers. It can move from a state of total passivity to the highest point in the mouth close to its roof. This highly flexible organ is capable of positioning itself to various degrees of height.

Three major criteria for the articulatory description of vowels are identified, namely,

i) Tongue-height (the relative height of the tongue in the mouth). Tongue-advancement (the relative position of the tongue in the mouth).

ii) Tongue-advancement (the relative position of the tongue in the mouth).

iii) Lip-rounding (the relative shape of the lips).

As has been mentioned, the tongue can position itself at degrees of height and change the vowel sounds. In pronouncing /i:/ the front of the tongue assumes the maximum high position, being raised toward the hard palate to make the closest approximation to it. For /u:/ the back of the tongue is raised toward the back of the mouth or the soft palate. It also moves forward in the front for *front vowels* and is withdrawn for the *back vowels*.

In English, we can recognise twelve pure vowels and eight diphthongs or vowel glides. They are contrasted below to emphasize their phonemic nature.

*Pure vowels*

i – i: as in bit – beat

e – æ as in tell – tap

æ – as in bash – box

o – u as in toll – tool

u – u: as in full - fool

ə – ^ as in hurt – hut

*Diphthongs*

ei as in eight

al as in fight

i as in toy

əu as in so

au as in foul

iə as in fear

uə as in poor

eə as in fare

Since vowel-length in English is phonemic, that is, they contrast, the long and short vowels have been treated as different phonemes. Examples of the long and short vowel contrasts are

| | | | |
|---|---|---|---|
| full | fool | /ful/ | /fu:l/ |
| fill | feel | /fil/ | /fi:l/ |
| fell | fail | /fel/ | /feil/ |

Vowel-length is also determined by phonetic environment : voicing or its absence in the consonants coming in immediate proximity is responsible for making a vowel long or short. The long vowel /i:/ varies in length in such words as *bit* and *bid,* the latter showing a greater length than the former due to Id/ phoneme which is a devoiced consonant. In a word like *bee* /bi:/ it is longer than in /bid/. These variations are allophonic.

Front Vowels

Four pure front vowels in English can be identified /i:/, /i/, /e/ and /æ/. Since the front of the tongue assumes various degrees of height inside the mouth these vowels are termed *front vowels*. However, what we can broadly establish are four ranges and not precice points, as it is difficult to give exact description of the vowels in terms of articulation process. A look at the *cardinal vowel quadrilateral* will *clarify this point*. The range of /i:/ for example, stretches from the highest extreme to the point close to /e/. Allophonic variations of this sort are not taken serious note of. This is true of all the other vowels too. A detailed description of the vowels is given below.

/i:/

For articulating this vowel the front of the tongue rises to the hard palate, sometimes close enough to be heard as a fricative sound. It is pronounced with the lips spread and pulled back, the lower jaw is raised a little. The muscles of the tongue are tensed, so it is also called a tense vowel. It is syllabic and shows a high level of sonority. It occurs in all the three positions in a word as shown below :

| Initial | Medial | Final |
|---|---|---|
| even | people | tea |
| eat | measle | flee |

Variations in its pronunciation can be perceived as changes in length and diphthongizations.

/i/

The back of the front of the tongue is raised toward the hard palate to assume the height between /i/ and /e/ positions. The lips are spread and drawn back as in /i:/ but they are lax. It is non-diphthongal and short, and contrasts with the long vowel /i:/ as in *sit - seat* /sit-si:t/. Words like *busy, women* and*hear* contain this vowel. It is seen to occur in all the three word positions.

| Initial | Medial | Final |
|---|---|---|
| it | bit | city |
| ill | mist | dirty |

Notable among its variations is the relative level of muscle tenseness before a velar nasal like /n/ which is seen in *sing* /sih/. We can compare the word with *sin* to see the point. Prof. Gimson observes; 'A. trend towards /ə/ in unaccented syllables traditionally with /i/ is becoming increasingly noticeable among RP speakers of the middle and younger generation', as in

| | |
|---|---|
| easily | /-əli/ |
| useless | /-ləs/ |
| preface | /-əs/ |

/e/

For pronouncing this vowel the front of the tongue is raised in the direction of the hard palate between high-mid and low-mid positions, The lips are drawn back, and the lower jaw is somewhat dropped. /el is described *as high-mid-unrounded vowel.*

| Initial | Medial | Final |
|---|---|---|
| elm | let | they |
| enter | get | stay |

/e/

During the articulation of this vowel the tongue position is lower than it is for /e/. The root of the tongue is drawnback a little. The lips are spread and the lower jaw dropped. It is described as *front lower-mid unroundedvowel.* We hear it in words *get, set, tell, fell.*

/æ/

It is a low front vowel. The lips open to become unrounded. The font of the tongue is at a position lower than for /e/ and somewhat retracted too. Of all the front vowels it is the most open. We can hear it *in band, lank, rag* and *tap*. It is described as *low front unrounded vowel.*

| Initial | Medial | Final |
|---|---|---|
| at | fat | –– |
| ass | man | –– |

Back Vowels

All English back vowels are articulated with the back of the tongue drawn back and raised by degrees. Lip-rounding varies according to the position of the tongue. There are five back vowels in English : /u:/; /u/; / :/; / /; /a/.

/u:/

In pronouncing it, the part at the front of the centre /of the tongue is retracted slightly and raised to a place that corresponds to the position for the high front /i:/. It is a long vowel, and there is a noticeable tension of muscles in the tongue. The lips are pursed up and pushed forward a bit. The opening gives this sound resonance. There is also to be noted a slight protrusion of the lower jaw. We can describe it as *high back rounded vowel*. We can identify it in these words :*rouge, root, tool, shoe, food, do,* etc.

The most noticeable allophonic variation of this vowel is in the form of centralized vowel. So *room* could become [ru:əm] and*coo* [kuə] accompanied by less prominent lip-rounding.

/u/

In terms of tongue movement, this sound is similar to /u:/. It shows a symmetrical correspondence with the high-mid front /i/. The lips *are* rounded, and the lower jawsomewhat raised. Its position is above high-mid. It has not been found in the initial position. It is called *back above highmid-rounded vowel*. We hear it in could, would, look, *push, put, etc.*

/ :/

For articulating it, the back of the tongue is raised towards; soft palate, between high-mid and low-mid positions. he lips are less rounded than for /u/. We can describe it as*back between low-mid and high-mid vowel.*Examples of its occurrence are *cord, fault,*half. R.P. speakers tend to round /C:/ approaching /o/ in quality.

| Initial | Medial | Final |
|---|---|---|
| ought | nought | law |
| oggle | bought | saw |

/ /

The back of the tongue is raised above the low back position. One can notice a fair degree of lip-rounding and Ole lower jaw lax and dropped. It doesnot occur finally. American pronunciation makes it more open, and unrounded; so *pot* /pCt/ tends to sound like /pat/.

| Initial | Medial | Final |
|---|---|---|
| ox | box | –– |
| all | fox | –– |

/a/

It is a *low back vowel,* the lowest of the back vowels. The tongue leaves a fairly open oral cavity. This is the only back vowel that is completely unrounded, and occurs in such words as *laugh, car, march, calm, alarm*.

In some regional variant forms, hardly any distinction is made between /a/ and /æ/. In*plastic, transfer, elastic, Atlantic, gymnastic,*both /a/ and /æ/ are used.

Central Vowels : /^/, /ə/, /ə:/.

In the cardinal vowel system three cent: al vowels have been identified; /^/, /∂/ and /∂:/. In articulating these vowels, the central part of the tongue is raised towards a point in the roof of the mouth that lies between the hard palate and the soft palate or velum. These are unrounded vowels, but sometimes slight roundedness of the lips may occur. The lower jaw is dropped noticeably.

/^/

In pronouncing this vowel, the centre of the tongue rises toward hard palate halfway between low and low-arid positions. It is described as the *central unrounded vowel between open* and *half open position*. We hear it in the following words, up, sup,*submit, done, come, flood.*

/∂/

For pronouncing /∂/, the centre of the tongue rises in the direction of the hard palate to a point between hard and soft palates. The lips remain neutral and the lower jaw is dropped. The symbol for it is called 'schwa', pronounced /òwa:/. We can hear it *in these words - about, the, sir, her, fir,* etc.

/ə/

In pronouncing this sound the tongue is raised toward the hard palate to a position between half-close and half-open positions. The lips are neutral. It is called a *central unrounded vowel between high-mid* and *low-mid position*. We can hear it in *bird, church, earth, journey, courage.*

| Initial | Medial | Final |
|---|---|---|
| earn | bird | sir |
| earth | birth | her |

When it is followed by a voiced consonant, it is longer than when followed by a voiceless one.

Diphthongs

Diphthongs (consisting of two vowels) are also called *vowel-gides* suggesting the manner in which the tongue assumes position for the pronunciation of one vowel, and glides towards another, producing vowel clusters. Diphthongs are syllabic like vowels. They 'donot have a single position of articulation and cannot be *retained for long'*(Krishnaswainy). These sequences of vowels are composed of two vocalic elements, the first vowel being called the *first element,* and the second vowel the *second element*. The first element is usually longer and carries the stress. In RP the following diphthongs are identified :

/ei/, /ail/, / i/, /∂u/, /au/

/iə/, /uə/, /eə/, /iu/, / ə/

/ei/

In pronouncing it the front of the tongue assumes the position for the articulation of /e/, just .below the *front high-mid position*and glides in the direction of *front high position* about the high-mid point as shown in the figure. But the tongue height is not as high as for [i] when position for the second element is taken. This diphthong occurs initially, medially and finally as shown below.

| Initial | Medial | Final |
|---|---|---|
| eight | late | say |
| aim | rail | day |

It is longer when in a word final position and before a voiced consonant. Thus it is longer in *aid* than in *ace*. When the first element is lengthened it is called *falling diphthong*.

/ai/

The tongue assumes position at a point low front, and glides toward the high front position /i:/, something like a: i:. The oral cavity is open and the lower jaw dropped. The lips change their position from the neutral to the spread position. The resonance shifts quickly to [i]. We hear it in*sight, fight, island, fine*.

| Initial | Medial | Final |
|---|---|---|
| either | height | lie |
| ice | mind | by |

/ i/

In pronouncing this diphthong the tongue moves from the back high-mid position to a high front point. The second clement is, however, lower than the high front vowel /i/. Initially the lower jaw is dropped but is raised for articulating the second element.

| Initial | Medial | Final |
|---|---|---|
| oil | boil | toy |
| oyster | foil | ploy |

Some American phoneticians report that a central [ə] is substituted for the first element, followed by an [r] in Southern Indiana region. In New York and New Orleans it becomes [əi].

/əu/

The tongue assumes the position for pronouncing the first element /ə/ which is a central vowel. From this point it glides back to a high point. But the second element is not as high as the back high vowel /u/. The lips are perceptibly rounded for it. We hear it in all the three positions in a word.

| Initial | Medial | Final |
|---|---|---|
| own | fold | so |

oar wrote go

Variations observed in its articulation may range from a fronted [^] to rounded [o]. Among the Indian speakers the back high-mid [o] is generally substituted for the vowel-glide with full stress and lengthening of the vowel.

/au/

Here the tongue is placed at low back vowel position and moved towards the high back region. The second element is placed not as high as /u/ but below that point. The lips are neutral for the first element, but become rounded for the second. Examples of its occurrence in all the three positions are given below.

Initial Medial Final

out sound cow

oust bout how

In some varieties a perceptible weakening of the second element is found. So, the weakening of [u] in *now* and *how* leads to such variant forms as [na :]; [haə:] or [na:], [ha: ].

/iə/

The tongue takes the position of high front vowel /i/ and glides for the central vowel position /ə/. It is notable here that the second element in this diphthong is stronger. We hear it in such words as *near*, *period, serious*.It occurs in all the three positions in a word as shown below.

Initial Medial Final

ear weird fear

Ian period steer

/uə/

In pronouncing this diphthong the tongue assumes the position of high back rounded vowel and moves in the direction of the central vowel. There is some lip-rounding, but the lips become neutral for the second element. In the weakly accented syllables the second element may be prominent, We hear it in such words as *valuable, cure,* etc. It doesnot occur in the initial position.

Medial Final

during poor

fluent tour

Sometimes /uə/ is preceded by /j/. The normal tongue glide in such case is from /j/ to a high back rounded /u/ and then to the central /ə/. But this is shortened to /ρ:/ *pure*and *sure* sound like /pj :/ and /òρ/.

/eə/

During the pronunciation of this diphthong the tongue assumes the position for the high-mid front vowel and moves towards the position of central unrounded vowel. The lips are neutral. Examples are air, *their,mare, dare, hare, etc.*

| Initial | Medial | Final |
|---|---|---|
| heir | scarce | chair |
| aeon | chaired | pair |

/iu/

For the articulation of this diphthong the tongue moves from high position to high back one. It is a *rising diphthong*, with the second element showing greater syllabic prominence. According to sonic conventions the first element is symbolised [j].

Examples are *yew, cure, new, due,* etc.

| Initial | Medial | Final |
|---|---|---|
| yule | mule | you |
| use | beauty | Hugh |

English Consonants

On the basis of the articulatory process, consonant phonemes in English are divided according to i) the manner of articulation into plosive/stops; nasals, fricatives, laterals, and approximants; and according to ii) the points/ places of articulation into bilabials, labio-dentals, dentals, alveolars, post-alveolars, palato-alveolars, palatals, velars and glottals. Points of articulation are situated along the upper margin of the oral cavity, and manner of articulation indicates different ways of interfering with the passing air-stream.

Stops

| | | | | | |
|---|---|---|---|---|---|
| /p/ | pay | poor | pebble | apt | ape |
| /b/ | bog | buy | able | abbot | rub |
| /t/ | take | tie | attack | settle | set |
| /d/ | date | die | addition | meddle | made |
| /k/ | cog | kite | ankle | tinkle | arc |
| /g/ | gay | guy | angle | mingle | log |

Fricatives

| | | | | | |
|---|---|---|---|---|---|
| /f/ | fast | few | after | shift | sniff |
| /v/ | vast | view | aver | average | halve |
| /q/ | thin | through | athwart | Athertn | myth |
| /ð/ | then | that | within | without | bathe |

| | | | | | |
|---|---|---|---|---|---|
| /s/ | sigh | sight | hissing | message | kiss |
| /z/ | zoo | zeal | resist | muzzle | buzz |
| /ò/ | shoe | shy | fishing | bashful | brash |
| /ʒ/ | | | measure | leisure | rouge |
| /h/ | hay | hose | | | blah! ah! |

Affricates

| | | | | | |
|---|---|---|---|---|---|
| /tò/ | chin | chew | itching | latches | hatch |
| /dʒ/ | jar | gym | | judges | badge |

Nasals

| | | | | | |
|---|---|---|---|---|---|
| /m/ | man | muse | lump | ample | sharn |
| /n/ | nose | news | ant | land | tan |
| /h/ | | | single | angle | king |

Lateral

| | | | | | |
|---|---|---|---|---|---|
| /l/ | lip | lamp | alter | malt | mall |

Approximants

| | | | | | |
|---|---|---|---|---|---|
| /w/ | way | whose | | | cow |
| /y/ | yule | yew | | | |
| /r/ | ray | raw | merrily | rarely | borrows |

Stops

This class of consonant phonemes is marked by the complete closure (or occlusion) of the vocal tract, creating the air pressure behind the closure and sudden release of the air. The sudden release of air results in the phonetic effect of *plosion*.

We can locate three stages in the articulation of the stops.

1) creation of the occlusion or closure (described as *fore glide)*.

2) a brief hold in this position.

3) release of the hold (described as *off-glide* or *after glide)*.

During the third stage litany active articulators may make movements, depending on the sound immediately following the stop. Features that may accompany these sounds are as follows
a)*Voicing,* which occurs during stage 2 of the plosive articulation producing a voiced consonant
b) *Aspiration* in. which voiceless stops are accompanied by a strong breath when these sounds occur initially, or they are stressed and occur medially. Voiceless stop sounds are *fortis,* articulated with greater energy. Its opposite *lenis* are those sounds that carry weak muscular energy. Normally, voiced sounds are lenis.

STOP, bilabial /p/, /b/

The two lips come into firm contact to create an oral closure, behind which the air-stream is stopped, the closure is released to produce the effect of bilabial stop phonemes. Vocal cords are set in vibration for /b/, but for /pi they are not vibrated. /p/ is aspirated when it occurs initially and is *fortis*. Examples of its occurrence in all the throe positions arc as follows.

| | *Initial* | *Medial* | *Final* |
|---|---|---|---|
| /p/ | pat | apple | lap |
| | possible | apply | sip |

/p/ is described as *voiceless bilabial plosive/stop consonant*. /b/ is described as a voiced bilabial plosive/stop consonant. We hear /b/ in the following words in all the three positions.

| | *Initial* | *Medial* | *Final* |
|---|---|---|---|
| /b/ | bleat | rabbit | lamb |
| | bask | absent | tub |

In the final position it is devoiced as in *cub*and *nib*. It is in this position unreleased in words like *absent* and *obtain*.

Alveolar

/t/, /d/

During the pronunciation of these sounds the tip or the blade of the tongue establishes firm contact with the alveolar ridge and the air pressure is built up behind the closure formed in this way. For /d/, the vocal cords continue to vibrate as long as the contact is maintained. The period of contact is known as 'consonant occlusion'. For /t/ the vocal cords donot vibrate. /d/ is voiced and /t/ a voiceless consonant which makes the reamer *lenis* and the latter *frotis*. We can now describe /d/ as *voiced alveolar stop* and/t/ as *voiceless alveolar stop*.

| | *Initial* | *Medial* | *Final* |
|---|---|---|---|
| /d/ | done | addition | sad |
| | describe | meddle | lid |
| /t/ | tap | retain | hut |
| | table | metal | fat |

/t/ is palatalized when followed by /j/ or an affricate as can be seen in such sequences as*bet you; didn't you* /bet òju:/; /didntòju:/.

/d/ tends to become post-alveolar when it is followed by /r/. This phoneme also occurs as the past tense formation. Its voicing is affected by the sound preceding it. When it follows a voiced sound it remains voiced but when a voiceless sound precedes it, its voice quality is considerably weakened, as the following examples illustrate.

robbed /r bd/ asked /a:skt/

Velar /k/, /g/

In pronouncing these sounds, the back or dorsum of the tongue is raised and brought in contact with the velum (hence 'velar'). Thus a complete *velopharyngeal* closure is made. Sudden release of the dorsum produces these sounds. Both /k/ and /g/ are described as dorso-velar *plosive or stop*. /g/ is voiced and /k/ voiceless. Following are the examples of these sounds occurring in all the three positions.

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /k/ | cab | fact | back |
| | cup | pact | sack |
| /g/ | gap | baggage | big |
| | grill | luggage | lag |

**Table**

| Lips | Alveolar Ridge | Velum | |
|---|---|---|---|
| p | t | k | voiceless |
| b | d | g | vocied |

System of plosives

Fricatives

Fricatives are articulated by narrowing the passage of air so as to create audible friction. The active articulator comes so close to the passive articulator that a, constriction is created narrow enough for the air to force through. Complete stoppage is not made.

Four pairs of phonemes in this category have been identified, each a voiceless or voiced sound; /f-v; q-ð; s-z; ò- ɜ/, and a glottal voiceless fricative /h/. As we have noted in an earlier section, fricatives are grouped with some other sounds to be commonly called *continuants,* because the friction noise created can be prolonged. Strindency is strongly marked in some fricatives, in others it is weak.

Table

| Teeth + lip | Teeth + tongue | Alveolar ridge | Palato Alveolar | Glottal | |
|---|---|---|---|---|---|
| feel /f/ | thigh /q/ | seal /s/ | shell /s/ | hall/h/ | voiceless |
| veal /v/ | thy /ð/ | zeal /z/ | leasure /ɜ/ | | voiced |

## Articulatory Position for Fricatives

Labio-dental fricatives /f/, /v/

For pronouncing this sound the lower lip is raised in close approximation to lower edge of the upper teeth. The nasal passage is closed off by raising the velum. The air is allowed to pass through the slit left open between the lower lip and the upper teeth. Therefore, these sounds are called *labiodental fricatives*. In articulating /f/ the vocal cords donot vibrate, making it voiceless, while in pronouncing /v/ they do, making /v/ a voiced fricative.

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /f/ | form | often | sniff |
| | frail | laughter | brief |
| /v/ | vale | evening | dove |
| | visit | evade | give |

Dental /q/, /ð/

For articulating these sounds the tip of the tongue is placed on or near the edge of the upper teeth. The air squeezes through the gap thus formed. /q/ is voiceless and /ð/ voiced. /q/ is described as *voiceless dental fricative,* /ð/ as *voiced dental fricative* /q/ isfortis and /ð/ is lenis.

| | Initial | Medial | Final |
|---|---|---|---|
| /q/ | three | *lethal* | bath |
| | thrice | Gothic | *cloth* |
| /ð/ | then | leather | seethe |
| | though | father | clothe |

Alveolar /s/, /z/

During the pronunciation of these phonemes, the oral passage is opened by lifting the soft palate and closing off thenasal cavity. The tip of the tongue and the blade is raised to approximate the alveolar ridge. While the sides of the tongue make contact with the upper teeth, a narrow channel is formed in the mid line of the tongue. Because of the size of the channel, /s/ phoneme is called *a narrow channel fricative,* and /z/ is called *broad channel fricative*. The groove-shaped channel allows the air to pass between the tongue front and the anterior alveoli in, producing the audible friction. /s/ is a voiceless *fricative* and fortis, /z/ is voiced and lenis. These are also called sibilant and spirants. Lip position is determined by the vowel adjacent to these.*Seal* is pronounced with the lips, spread, while *soup has* noticeable lip-rounding. So also with *zeal* and *zoo*.

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /s/ | sell | task | less |
| | soul | listen | loss |
| /z/ | zeal | bosom | maze |

zest hesitate haze

Palato-alveolar /ò/, /ʒ/

Both /ò/ and /ʒ/ are identified as *palato-alveolar fricatives* (or sibilants or spirants). The nasal passage is shut off by raising the soft palate. The tongue-tip and blade are brought into contact with the teeth ridge. At the same time the front of the tongue comes closer to the 'hard palate'. The passing breath-stream squeezes out through the gap between the tip and blade of the tongue and the teeth ridge, on the one hand, and between the tongue and the hard palate on the other. /ò/ is a *voiceless palato-alveolar fricative* and /ʒ/ is a *voiced palato-alveolar fricative*.

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /ò/ | sham | admission | lush |
| | shop | nation | mash |
| /ʒ/ | genre | decision | rouge |
| | gigolo | measure | garage |

In certain cases pronunciation of [ò] varies from [s] to [ò] in the medial and final positions :

*sexual, appreciate, assume, issue, tissue*

Similarly, pronunciation of /ʒ/ also varies from [z] to [ʒ] as in *gymnasium, axiom, version, rouge, barage, garage,* etc.

Glottal /h/

For articulating this phoneme the glottis is constricted. The outgoing air sets the vocal cords in vibration. The friction noise is greater in the vocal tract than in the glottis. How prominent is this fricative depends on the 'articulatory position for the following speech sounds' (Tiffany-Carrell). This is also viewed as the voiceless onset of a vowel. We can describe it as a *voiceless glottal fricative*.It is heard in these words, *hat, behind, hall, heel,* etc.

/h/ is essentially voiceless, but it may become voiced in some words as *behind, greyhound, anyhow,* and so on. The voiced sound is symbolised /h/.

Affricates /tò/, /dʒ/

These phonemes are also-classified as stop sounds by some phoneticians. These are combinations of the articulatory processes for stop and fricative. The front of the tongue is raised to make full contact against the rear part of the gum ridge. The sides of the tongue are raised to touch the side upper teeth. The air stream is stopped behind the occlusion formed in this manner. However, the affrication quality is produced by the manner in which the closure is released : the front of the tongue is withdrawn in the direction of the hard palate. Air pressure is released through the gap between the withdrawing tongue front and the hard palate, and the sides of the tongue and the upper teeth. This friction is of shorter duration than the one we hear in fricatives.

/tò/ is described as *voiceless palato-alveolar affricate*, and /dʒ/ as *voiced palato-alveolar affricate*. We hear these in 'church and judge. The following examples show their occurrence in all the three positions.

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /tò/ | chill | matchless | snatch |
| | choice | kitchen | ditch |
| /dʒ/ | jail | majority | hedge |
| | jar | majesty | judge |

Individual pronunciation varies in such words as *educate, guardian, grandeur, verdure, obituary, christian,* etc. In these instances [d] and [t] alternate with [dʒ] and [tò].

Nasals /m/, /n/, /h/

These sounds are not strictly placed in the consonant category, but rather on the boundary between contoid and vocoid (Hockett). They are produced exactly like stops, except that the nasal passage is open. For producing these sounds the air stream is directed through the nasal passage, which is opened by lowering the soft palate. In the mouth also stoppage is formed by bringing the tongue in contact with the passive articulator. Nasal consonants are described in terms of the place or point of articulation.

Bilabial /m/

Both the lips join to form oral closure while the soft palate is lowered to open the nasal passage. Resonance of the nasal passage is increased by adding the oral resonator also in this manner. The vocal cords are set in vibration leading to the voicing of the sound. It can be continued without interruption by allowing the air to flow through the nasal passage while the mouth is still closed. It is both syllabic and non-syllabic. /m/ is described as the bilabial voiced nasal.

| | ***Initial*** | ***Medical*** | ***Final*** |
|---|---|---|---|
| /m/ | male | Humpty | slim |
| | mother | attempt | time |

/m/ is symbolic in such words as *rhythm and. Gandfais,n.*

Alveolar /n/

During the pronunciation of this phoneme, the tongue is raised, its blade and apex making occlusion against the alveolar ridge. The sides are in contact with the upper teeth and gum ridge (alveolum). Vocal cords are in vibration and the outgoing breath resonates simultaneously the nasal cavity as well as the *phalyngo-oral passage*. Lip-position is determined by the vowels that follow. In*noose* the lips are rounded, but for need they are spread and neutral. It is described as*voiced alveolar nasal consonant*.

Examples of its occurrence in all the three positions are given below

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /n/ | news | and | open |
| | nip | send | on |

The syllabic function of this nasal can be seen in these *words, cotton, mutton, sudden, fasten,* In such sequences as *spick* and *span*and *Jack* and *Jill,* [spikn spaæn] and [dɜækn dɜil], /n/ tends to become syllabic due to the assimilatory changes occurring. Velars /k/ and /g/ affect its phonetic quality, making it velarised as in *inquest* and *conquer*.

Velar /h/

This nasal shares with other two nasal phonemes part of the articulatory movements in that the nasal passage is opened by lowering the velum and allowing the air to enter it. The dorsum or the back of tongue joins the velum (soft palate) to form a stoppage. The lip position depends on the preceding vowel. It is a voiced sound, the vocal cords are vibrated by the outgoing breath stream. It is described as the *voiced velar nasal.* /h/ doesnot occur initially but is heard in the medial and final positions as shown below:

| | ***Medial*** | ***Final*** |
|---|---|---|
| /h/ | singer | king |
| | longest | hang |

Lateral /l/

This sound is produced by holding the tip of the tongue against the central, part of the alveolar ridge. The sides are kept open either on one side or both. This is called the*secondary oral aperture,* though which the air-stream escapes without friction. Vocal cords are set in vibration and the nasal passage is shut off by raising the soft palate. /l/ is described as the *voiced alveolar lateral.*

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /l/ | leaf | below | fool |
| | load | hold | till |

The prominent *allophone* of this phoneme, the dark [l] occurs in such words as *little, tiddle, mettle, bottle.* This phonetically variant form is produced by retracting and raising the back of the tongue towards the soft palate, while the tip is held against the alveolum. Dental phonemes /q/, /ð/ following the lateral makes it dental, as in *healthy, stealthy*. Although it is voiced, a voiceless plosive /p/ and /k/ make it voiceless, as in*clear, plain.* /I/ is palatalized when it comes before *a semi vowel* /j/ or a vowel as in*contemplation, William. In words like battle, brittle, settle* it is syllabic.

Approximants /r/, /w/, /j/

In terms of articulatory description, these are vowel-like sounds. The passage of the air is constricted by the active articulators in the oral cavity. It occupies a consonantal position in a syllabic structure. /r/ is a*frictionless continuant* and /j/ and /w/ semi-vowels.

Frictionless continuant /r/

Also identified as a *flap,* its articulation requires the apex or the tip of the tongue to be raised towards the alveolar ridge curling backwards in the direction of the palate. The central part of the tongue bunches up somewhat and the air is allowed to pass over the body of the tongue, producing a frictionless sound. A single tap is made by the tongue.

A variety of this sound is alveolar *trill* in which the tongue is held amid the passing air-stream with just the right tension to allow the air to set it into rapid vibration. In RP it is not found hut in some dialects of English and certain European languages /r/ is found. /r/ is a voiced consonant.

| | ***Initial*** | ***Medial*** | ***Final*** |
|---|---|---|---|
| /r/ | rapid | marry | –– |
| | rain | very | –– |

Palatal /j/

Commonly it is recognised as a semi-vowel. The tongue moves from the position of /i/. The lips are spread. The tongue th**e**n moves away in the direction of the next vowel following it. For you the tongue moves to high back position; for *yeast* it moves to high front position. It is described as *voiced palatal approximant*.

Labio-velar /w/

In pronouncing this phoneme the tongue is retracted and then raised towards the velum in high-mid to high back region. Lip-rounding is prominently noticeable. However, it depends on the vowel following. /w/ is a voiced sound and is described as*voiced labio-velar approximant or semi-vowel*. It is not observed to occur in the final position.

| | ***Initial*** | ***Medial*** |
|---|---|---|
| /w/ | waist | swing |
| | wonder | sweet |

In some varieties words with *wh* spelling are pronounced as sequence of *h+w* as in *whale, whom, white, while*. This is symbolised as [M].

Consonant Clusters

Sequences of two or more consonants are called ‘consonant clusters’. In a word like*cash* /kæò/ there occurs single consonant in initial position; but *in crash* /kræò/ we observe a sequence of two consonants /kr/. Occurrence of such combinations is quite common, and can be seen in words like*flame* (fl), *dress* (dr), *slow* (sl), *emblem* (bl),*apron* (pr), fifth (fq), and *against* (nst). Clusters can have more than two consonants. They are articulated simultaneously. Consonant-clusters can form the onset and coda of syllable as in *frame*/freim/ and *sand* /sænd/.

Consonants can cluster together to form a syllable, without a vowel. For example in *tasks* /tasks/ with /-sks/ forming the final syllable. Some phoneticians hold that the name 'cluster' can be given only to those consonant sequences which comprise part of a syllable and are not *abutting consonants*.In *bundle* /b^ndl/, the consonants /n/ and /d/ are parts of two different syllabic peaks - /n/ belonging to the first and /d/ to the second. According to this criterion, these sequences cannot strictly be considered as consonant clusters.

Regarding possibilities of consonant combinations Ronald Wardaugh observes, 'There are restrictions in the combinatorial possibilities of consonants, and the maximal lengths of possible consonant sequences'.

According to the number of consonants that can be clustered in words the following three classes can be identified.

1) Two-segmental clusters
2) Three-segmental clusters
3) Four-segmental clusters

Consonant cluster may occur initially in syllable (ccv-structure) and finally only (-vcc).

Some examples of the possible consonant clusters distribution are presented below:

A. *Two segmental initial consonant clusters*

| | | | |
|---|---|---|---|
| /p/ | p+l | /pl / | ploy, play |
| | p+r | /pr/ | present, pressure |
| | p+j | /pj/ | pure, puma |
| /b/ | b+l | /bl/ | bless, blast |
| | b+r | /br/ | broom, brash |
| /t/ | t+r | /tr/ | tree, train |
| | t+w | /tw/ | twist, twinkle |
| | t+j | /tj/ | tunic, tune |
| /d/ | d+r | /dr/ | draw, dragon |
| | d+j | /dj/ | dew, due |
| | d+w | /dw/ | dwindle, dwell |
| /k/ | k+l | /kl/ | class, clique |
| | k+r | /kr/ | cringe, crack |
| | k+w | /kw/ | queen, quest |
| /g/ | g+l | /gl/ | glass, glow |
| | g+r | /gr/ | grease, grass |

/f/ f+r /fr/ frown, frighten

f+l /fl/ flame, fling

f+j /fj/ fume, fusion

/v/ v+j /vj/ view

/q/ q+r /qr/ three, throng

/s/ s+l /sl/ sleep, slow

s+t /st/ stay, sting

s+k /sk/ school, sky

s+m /sm/ smile, smoke

s+n /sn/ snail, snake

s+p /sp/ spill, speed

s+w /sw/ swallow, swell

B. *Three-segmental initial consonant clusters*

/s/ s+p+l /spl/ splinter, spleen

s+p+r /spr/ spread, spring

s+t+r /str/ street, strong

s+t+j /stj/ stew

s+k+r /skr/ scrub, screech

C. *Two-segmental final consonant clusters*

final /p/ /s+p/ /spl/ wasp, gasp

/l+p/ /lp/ help, gulp

/m+p/ /mp/ bump, ramp

final /b/ /l+b/ /lb/ bulb

/r+b/ /rb/ barb, garb

final /t/ /p+t/ /pt/ kept, slept

/k+t/ /kt/ pact, attract

/tò+t/ /tòt/ snatched, attached

/f+t/ /ft/ cleft, deft

/s+t/ /st/ blast, mast

/n+t/ /nt/ dent, spent

| | | | |
|---|---|---|---|
| final /d/ | /b+d/ | /bd/ | stabbed, barbed |
| | /g+d/ | /gd/ | begged, bugged |
| | /dʒ+d/ | / dʒd/ | judged, pledged |
| | /ð+d/ | /ðd/ | clothed, mouthed |
| | /l+d/ | /ld/ | held, weld |
| | /n+d/ | /nd/ | grand, find |
| final /k/ | /s+k/ | /sk/ | flask, task |
| | /l+k/ | /lk/ | milk, bulk |
| final /tò/ | /n+tò/ | /ntò/ | bunch, crunch |
| final /dʒ/ | /n+dʒ/ | /ndʒ/ | range, strange |
| final /v/ | /l+v/ | /lv/ | resolve, delve |
| | /r+v/ | /rv/ | swerve, carve |
| final /q/ | /d+q/ | /dq/ | bredth, width |
| | /f+q/ | /fq/ | fifth |
| | /p+q/ | /pq/ | depth |
| | /h+q/ | /hq/ | strength |
| | /n+q/ | /nq/ | tenth, eighteenth |
| final /s/ | /p+s/ | /ps/ | grips, slips |
| | /q+s/ | /qs/ | depth |
| | /l+s/ | /ls/ | tools, mills |
| | /n+s/ | /ns/ | hens, minee |
| | /f+s/ | /fs/ | cuffs, puffs |
| final /z/ | /b+z/ | /bz/ | sobs |
| | /m+z/ | /mz/ | bombs |
| | /ð+z/ | /ðz/ | bathes |
| | /v+z/ | /vz/ | valves |
| | /h+z/ | /hz/ | hangs |

D. *Three-segmental final consonant clusters*

| | | | |
|---|---|---|---|
| final /t/ | /d+s+t/ | /dst/ | amidst |
| | /s+k+t/ | /skt/ | masked |

| | | | |
|---|---|---|---|
| | /m+p+t/ | /mpt/ | unkempt |
| | /n+s+t/ | /nst/ | against |
| | /l+p+t/ | /lpt/ | helped |
| | /l+s+t/ | /lst/ | whilst |
| final /d/ | /n+ʤ+d/ | /dst/ | deranged |
| | /l+v+d/ | /lvd/ | resolved |
| final /s/ | /p+t+s/ | /pts/ | adopts |
| | /p+q+s/ | /pqs/ | depths |
| | /s+k+s/ | /sks/ | asks |
| | /n+t+s/ | /nts/ | fasts |
| | /m+p+s/ | /mps/ | lamps |
| final /z/ | /l+d+z/ | /ldz/ | folds |
| | /l+v+z/ | /lvz/ | wolves |
| | /n+d+z/ | /ndz/ | sends |

E. *Four-segmental final consonant clusters*

| | | | |
|---|---|---|---|
| final /s/ | /k+s+t+s/ | /ksts/ | texts |
| | /l+f+q+s/ | /lfqs/ | twelfths |
| | /k+s+q+s/ | /ksqs/ | sixths |

Some Major Concepts of Phonology

**Phoneme:** Most linguists, until recently at least, have regarded the phoneme as one of the basic units of language. But they have not all defined the phonemes in the same way. Some linguists like Bloomfied and Daniel Jones have described phonemes in purely physical terms. Others like Sapir have preferred psychological definitions. Some regard the phoneme only as abstractional fictitions unity and argue that in a language it is not phonemes but allophones that exist in reality. Furthermore, linguists of theCopenhagen School treat the phonemes as glassemes and regard them as algebaical units.

The term phoneme was first used in the late 1870's notably by Kruszewski. Saussure too worked on the phonemes. But the most notable work in this field was done by Sapir in 1927. Most phoneticians such as Louis Jhelmsley, Bloomfield, Trubetzkoy, Daniel Jones, Roman Jakobson, and Pike have thrown light on the phoneme.

The phoneme, according to Bloomfield, is the minimal unit of distinctive sound-feature. In Webster's *Third New International,* the phoneme is defined as the smallest unit of speech distinguishing one unit from another, in all the variations it displays in the speech of one person or in one dialect as a result of modifying influences, such as neighbouring sounds or stress. In Dorfman's oinion a phoneme is a single speech sound or group of similar or related speech

sounds functioning analogously in a language, and usually represented in writing by the same letter, with or without diacritic marks.

According to most contemporary linguists, however, the phoneme is the minimal bundle of relevant sound features. A phoneme is not a sound; it can be realized only through one of its allophones: it is a class of sounds, actualized or realized in a different way in any given position by its representative, the allophone: it is an ideal towards which the speaker strives, while the allophone is the performance he achieves; it occupies an area within which the various allophones move and operate; its outer limits may approach but not overlap those of other phonemes, and it cannot invade the territory of another phoneme without loss of phonemic distinction.

Thus the precise definition of a phoneme has been the subject of much discussion among linguists and there are two major points of view. The first is the 'classification' theory developed by Daniel Jones which considers the phoneme to be a group or family of related sounds, e.g. /p/ in English consisting of [p], [$p^h$], etc. or /u/ consisting of (u:), (u) etc. The second or 'distinctive feature' theory developed by N.S. Turbetzkoy and thePrague School considers a phoneme to be a bundle of distinctive features, e.g. /p/ in English is considered to be made up of bilabial + stop + voiceless (aspiration is therefore not distinctive and thus the allophones ($p^h$) and (p) above are allowed for.

Depending on the point of view taken, a phoneme can be defined as "a unit, a rubric, a bundle of sound-features", or "the smallest contrastive linguistic unit which may bring about a change of meaning". Hence it is a minimum distinct functional unit. Phonemes of a language may be discovered by forming minimal pairs, i.e. pairs of words are different in respect of only one sound segment. The series of words **pat, bat, cat, hat, sat, that, mat,** supplies us with seven words which are distinguished simply by a change in the first (consonantal) element of the sound sequence. These elements of contrastive significance are phonemes and be symbolized as /p, b, k, h, s, ð, m/. Similarly, in the series of words **hat, hit, heat, hot, heart**, the elements of contrastive significance are æ, I, i:, o, a:/

Phone:

Any objective speech sound, considered as a physical event, and without regard as to how it fits into the structure of any given language, is a phone. Hence a phone in phonology is 'the smallest possible segment of sound abstracted from the continuum of speech'.

Allophone:

Some sounds, the native speaker thinks are the same, while others are different. The linguist has to figure out what sounds are grouped together as the same, what it is that they all have in common among themselves and how dissimialar are they to other groups of sound in the informant's speech and what criteria the native speaker uses to tell sounds apart. We said earlier that by substituting other segments, the linguist can arrive at a list of these significant, contrastive classes of sounds called 'phonemes'. But we do not always find minimal pairs to help us figure out the list of phonemes. There must be other criteria too, which we will have to incorporate into the definition of a phoneme. The k-sound in**keel, calm** and **cool** differs. In **keel** it is at the front in the mouth, in **calm** it is a little in the centre and in **cool** further back in the mouth. The absence of the above mentioned features do not distort the message for the native speaker. He does not differentiate these sounds in every day speech in the sense that he is

not aware of the physical differences. He thinks these sounds are members of the k-class or are all k. In other words for the phonemic /k/, central-k, retracted-k, fronted-k are all allophones.

Hence an allophone is a speech sound which is one of a number of variants of a phoneme. Such a variant can, either in complementary variation or in free variation. The occurrence of a particular allophone ma be determined by its environment, or it may be in free variation. Allophones deter- mined by environment, for example, are front or clear [l] as in lamp or light occurring before vowels and the so-called 'back' or 'dark' [l] as in **Old** and **table** occurring before consonants and at the end of words. They are in complementary distribution, that is where the dark [l] appears in English, there cannot occur the clear [l]. An example of allophones occurring in free variation in the Southern British English (RR) is the /r/ between vowels, as in very, which can occur either as a flap, or as a fricative. Thus allophones phonetic variants; they are positional or contextual, or conditional variants, (alternants) of phoneme.

According to Trager and Smith *(An Outline ofEnglish Structure),* a linguist identifies these allophones in the following way :

1. The sounds should be phonetically similar.
2. They should be in complementary distribution.
3. They should exhibit pattern congruity with other groups of sounds.

Diaphone

Sometimes a sound is used by a particular speaker or group) of speakers of a language, but is substituted by another sound by sonic other speaker or group of speakers of the same language. For example, the sound of the diphthong /ou/, as in the word 'loan' may be substituted by the vowel sound /ə/ :/, or the sound of the consonants dark 'l' as in 'little' may he substituted the sound of clear 'l' by some speaker. The bilabial plosive consomnant-sounds /p/ and /b/ may often be replaced by the aspirated sound /$p^h$/ and /$b^h$/.

Both the sounds that is originally used by the speakers of a language as well as that which is used by other speakers of that language, are said to constitute a diaphone. Daniel Jones has defined a diaphone in the following manner: "The term diaplione is suggested to denote a sound used by one group of speakers together with other sounds which replace it consistently in the pronunciation of other speakers" (An Outline of Phonetics).

Assimilation

Sounds are influenced by the *phonetic environment* in which they occur. Since speech is a continuum, and not a stringing together of phonemes (or sounds), what precedes and, follows a sound has a direct bearing on it. Phonetic environment thus determines the phonetic quality of a sound that is different environments tend to produce different phonetic qualities Let us see how does this take place.

1. A consonant's proximity affects the vowel length. In two words *beat* /bi:t/ and bead /bi:d/ we find the same vowel, the high-front long /i:/. But the voiceless phoneme that follows it in /bi:t/ makes it shorter than the one that occurs in /bi:d/. The voiced stop /d/ occurring in this word lengthens it. They differ in the precise phonetic quality. In these two words, voicing and the absence of it in the consonant affect the length of the vowel. But the vowel

occurring in *beat* is not as short as the vowel in *bit* or *pit*. Its length is*half-long*, which is halfway between long and short.

We can now say that due to the proximity of certain phonemes having specific phonetic qualities the vowel length has been affected. This process is called *assimilation*.

2. In a word like *inquest* [ihkwest], the nasal consonant is affected by the voiceless velar /k/ and shows velarization resulting in /h/ which is velar nasal phoneme. The same is the case in *income* and *incongruous*. Another common example of assimilation by the sound following is presented by the word*triumph* /traimf/. Here the bilabial nasal /m/ is 'changed into labiodcntal sound due to the contiguous labia-dental fricative /f/. Another word triumvirate also exemplifies the same process.

3. The physiological factor that is operative in this is that of co-articulation. The above examples reveal that the bilabial nasal phoneme is concurrently articulated with the labio-dental fricative : /m/ + /f/. Even before the articulation of /m/ is fully gone through, the articulators assume the position for the pronunciation of the following sound.
In *triumph* and *triumvirate* /f/ and /v/ can be described as prenasalised.

There are three types of assimilatory process based on various types of relationships existing between assimilated sounds and the sounds that bring about assimilation. The two sounds are usually immediately close to each other in the stream of speech.

We identify the three types of assimilation as 1) Progressive, 2) Regressive, 3) Reciprocal.

1) In progressive assimilation the assimilated sound follows the conditioning sound. The phonetic form of the plural morpheme {z}, /-s/ changes into the voiced sibilant due to the voiced sound [g] in the word dogs [d dz]. In other words, the plural morpheme is realised as the voiced 'fricative because the base ends in a voiced sound.

2) A reverse mechanism operates in the*regressive* assimilation where the*conditioning* sound, one that assimilates, follows the *conditioned or* affected sound. In the word *imlperfect we can* identify root /pə:fikt/ and a prefix whose base form is {in-}. /n/, an alveolar nasal, changes to a bilabial nasal /m/ by the proximity of /p/ which is itself a bilabial stop. The assimilation of /n/ is said to be conditioned by /p/.

3) *Reciprocal* assimilation shows the two contiguous sounds affecting each other equally and producing a new sound. In word-sequences like *would you* the normal rapid articulation produces the result /wudʒju:/, and *what you* sounds like /w tòju:/. These two examples show us assimilation occurring across the word or what is widely known as morphemic boundaries. The important role of this process can be understood by observing, carefully a rapid conversation. Quick changes occur in the phonetic shapes of individual phonemes. Sounds are quickly lost, reduced and altered in. morphemes, words and phrases spoken in *one breath group* after another in connected speech through a concurrent process of co-articulatory movements. In a sequence like*young ones* the final velar nasal is spoken with lip-rounding which is co-articulated with the next phoneme of the following word. Similarly, partial loss of voicing is seen in /l/ in at *least* due to /t/ of the preceding word. In *good night* and *good girl* the final /d/ is almost completely assimilated by the voiced sounds of the next word, so that these sound like /guaait/ and /gu?gə:l/ or /gugə:l/.

In truth, assimilation operates as a great force in day-to-day speech situations where rapid pace of conversation shows this in full operation. It shows level of mastery over language. Speakers of $L_2$ (or second language) on the other hand, tend to become conscious. To that degree their pronunciation reflects a lower level of assimilation.

Elision

The above discussion highlights assimilation as a process whereby certain sound features are either partially or totally lost. In the word *ask* when pronounced singly we can hear the final velar stop. But in its past tense*asked* [a:st], there is a loss of the velar stop accompanied by a change of [d] to [t]. While change of [d] into [t] is due to assimilation, the disappearance of [k] is the result of*elision,* This process indicates loss *of* certain elements in rapid speech which are present in isolated utterance or very conscious speech. In normal conversation we hear such utterances as *'cause* (for because);*prob'ly* (for probably); *costly* (for costly); pos (for posts). These are very common, and one has only to keep one's eyes open in order to see the mechanism. The unavoidable fusion of segments in such combinations as *forced choices, group behaviour and bunched children* points to not only assimilatory factors at work, but the resultant *elisions* as well. In the first example [d] is dropped, in the second we donot hear [p], and the third*example shows* [d] being elided.

Contracted forms in poetry, plays and fiction such as *ne'er*, *'tis, don't, can't, mayn't for never, it is, do not, cannot* and *maynot* are quite common.

Elided elements are often weak syllables or voiceless consonants. So about and along change into 'bout and 'long. The finest example of what happens in elision are presented by such expressions as *Jack and*
*Jill*, *black* and *white*, *high* and *low*, *wind* and*rain* and *bread* and *butter*. These sound like [dnɜæk n dɜtil]; [blæk n wait] [hainlðu]; [windnrein] and [brednb^tð].

**Table 1**

| Phoneme | Assimilating Sound | Changes into | Examples |
|---|---|---|---|
| k | i: | pre-velar | keen, keel |
| | : | post-velar | caw caught |
| d | r | post-alveolar | dry, drawl |
| t | q | dental | eighth |
| t | r | post-alveolar | training |
| m | f | labio-dental | comfort |
| n | q | dental | tenth |
| h | q | dental | length |
| i: | l | retracted | kneel, feel |
| u: | j | forward | due, muse |

**Table 2**

| Phoneme | Conditioning Sound | Changes into | Examples |
|---|---|---|---|
| t | ð | dental | at the meeting |
| t | ð | post-alveolar | that road |
| d | ð | dental | add them |
| m | f | labio-dental | come for |
| n | ð | dental | in the river |
| s | r | post-alveolar | that's right |
| l | ð | dental | tell them |
| l | r | post-alveolar | tall reed |

## Theories of Phonological Analysis

The analysis of an utterance into segmental and suprasegmental features is known as phonemic or phonological analysis. There are several different theories of phonological analysis. Some of these major theories are discussed below,

(a) Structure and System:

One approach is in terms of what are called structure and system. The phonological units (Phonemes or sounds) of a language are grouped together to form the various systems and the arrangements of these units in larger units such as syllables, feet, tone-group, sentence that form the structure of that language. The units that form a system, can be replaced by other units to produce different utterances, while the relations between the different units present in an utterance consitute a structure. For instance, the English word *sack/*sack has one syllable, which is made up of sequence of three phonemes /s/, /ae/ and /k/. The phoneme /s/ can be replaced by other phonemes /b/,/p/, /t/dɜ/. /h/, /l/ to give us different words **back, pack, tack, jack, hack, lack**. All these items that can be replaced by another at a particular place in a structure are in**paradigmatic** relationship and form a system. Similarly, /ae/ forms a system with other phonemes /i/, /i:/, /e/, /ei/ that can be used as substitutes to give us other words**sick, seek, seek, sake,** /k/ also forms a system with the /t/, /d/, /p/, /m/ /ŋ/ that give us the words **sat, sad, sap, sam, sang.**

The units of phonological analysis have a hierarchy, so that a unit of higher ranks consists of a sequence of one or more occurrences of the next lower rank. For example, in English one or more phonemes make up a syllable; one or more syllables make up a foot (which is the unit of rhythm); one or more feet make up a tone group (which is the unit of intonation); one or more tone groups make up a sentence. Examples of these phonological units arc given here :

**i) Phoneme :** /k/, /b/, /t/, /d/, /i/, /e/, etc.

**ii) syllable : back/**bæk**/ago/**əigou**/button**b^-tn,/ etc.

iii) **foot:** The cur/few tolls/the knell/of part/ing day/. Here we have five feet. (/A slanting bar/ represents a foot boundary)

iv) **tone group :** // If the 'bride a, grees // the 'marriage is in' January.//. (// represents tone group boundary; 'represents rising tone, and 'falling tone,' accent (strong or stressed syllable.)

v) **Sentence :** For example, the sentence given above has two tone groups.

(b) Prosodic Analysis:

Prosodic analysis is another aspect of phonology. It is concerned with phonological features 'that extend beyond a phonematic unit in a structure'. Features like aspiration, nasalization, labialization, retroflexion and palatalisation often relate to sequences of more than one phonematic unit. The study of supra-segmental features like stress, rhythm, intonation, etc. also forms a part of prosodic analysis. Examples of a few prosodic features are given below :

i) **aspiration:** The English word **clay**/klei/ has an aspirated /k/ in the form of [kh], but the aspiration affects the following /l/ also and devoices it to [ˡo]. It can therefore be described as /h/ prosody.

ii) **nasalization:** The English word **sing**/siŋ/ has incidental nasalization of the vowel /i/ under the influence of the nasal consonant after it. Nasalization can therefore be described as a prosody in this kind of syllable.

iii) **lip-rounding:** The English word**quiet** /kwait/ has lip-rounding for /k/ also under the influence of the following /w/. We have here an example of /w/––prosody.

iv) **retroflexion:** The **Hindi** word ===== has retroflexion extending to both the nasal and the following plosive sounds. We can call it an example of the prosody of retroflexion.

v) **palatalization:** The English word **key**/ki:/ has a palatal instead of a velar /k/ under the influence of the following /i:/. This can be described as /i/––prosody.

vi) **accent:** Accent on a particular syllable in a word can be taken as a prosody. For example, the English word ago/ə ' gou/ has the accent on the second syllable.

vii) **sentence stress, rhythm and intonation** are also prosodic features.

Phonemics

Another approach to phonology is based on phonemics, according to which the discovery of the phonemes (the minimal distinctive sound-units) of a language is done by forming minimal pairs (by replacement of one phoneme by another which can bring about a change of meaning). Each phoneme, however, may have slightly different phonetic realizations, called allophones, in different environments. Most phonological theories are based on phonemics.

Some linguists restrict the use of the term 'phoneme' to segments of human sounds only, and analyse what are called suprasegmental or **prosodic** features separately. The most important of the suprasegmental features are : (1) **length**(syllables and feet), stress, and **pitch.** (These are discussed in the next section of this chapter). Other linguists extend the use of the term 'pho-

neme' to cover all distinctive sound features including levels of stress, levels of pitch, and types of juncture.

(d) Distinctive Features Theory

In the phoneme theory, the phoneme (segment) is the smallest unit of phonology, but in the **Distinct Features Theory** the phonetic feature is the smallest unit of phonology. Segment theory is linguistically inconvenient. There are no rules in any language which apply to all the sounds. There are a fixed number of features or components which form a basic stockpile from which every language selects phonetic features and combines them in different ways. It is these features which keep a segment distinct or separate from others. That is why they are called the distinctive features.

In distinctive features theory (as different from the notation transcription), the phonetic transcription is simplified and systematized by regarding each sound a set of components, exactly parallel to semantic component. As proposed by Roman Jakobson, Morris Halle, Chomsky, etc., acoustics and / or articulatory variables can be reduced to a small number of parameters or phonetic features (twenty-seven with multi-values). A distinctive features component, for example for the sounds /t/ and /k/ as in the English word **take**according to this theory, may be as follows :

| **t** | **k** |
|---|---|
| + consonantal | + consonantal |
| - vocalic | - vocalic |
| - voice | - voice |
| + plosive | - aspirate |
| + Alveolar | + plosive |
| + Aspirate | . |
| + Tense | . |
| . | . |
| . | . |
| . | . |

**Note :** Dots [.] mean that the list is**inexhaustive.**

In English, for example, the following phonetic features are distinct :

i) **State of Glottis :** voiceless/voiced.

ii) **Position of Soft Palate:** oral/nasal.

iii) **Place of Articulation:** (a) bilabial/alveolar/velar; (b) labiodental/ dental/ alveolar / palato-alveolar.

iv) **Manner of Articulation:** (a) plosive / fricative/ nasal; (b) nasal/lateral; (c) affricate/fricative.

v) **Part of Tongue Raised:** front/back.

vi) **Height of Tongue:** Close/between half-close and half-open/between half-open and open/open.

vii) **lip-position:** unrounded/rounded.

viii) stressed/unstressed.

ix) reduced vowel/unreduced vowel.

x) tonic/non-tonic.

xi) **Tone:** falling/rising; low fall/high fall/low rise/high rise/fall rise: or primary/secondary/tertiary/fall-rise.

In more recent work on generative phonology, particularly by Noam Chomsky and Morris Halle, these features have been extensively modified and placed into categories such as

i) **Major class features** as sonorant [making a deep impression] vs. non-sonorant; vocalic vs. non-vocalic.

ii) Cavity features relating to the shape of the oral cavity and the point of articulation with such features as coronal vs. non-coronal, anterior vs. non-anterior.

iii) Manner of Articulation features such as continuant vs. noncontivant, tense vs. lax.

vi) Source Features as voiced vs. voiceless; strident vs. mellow.

v) Prosodic Features as stress, pitch, etc.

Received Pronunciation (R.P.)

Linguistic differences marking particular geographical areas are a reality. These deviations correspond to the geographical distance, or other features of the area like river, mountain and a vast intervening desert zone. However, when these distinctions stand in the way of societal or communal cohesion, the urge to use language as a binding clement is very strong. Search for standard language or speech is often motivated by this need of the community. The larger the country and more heterogenous its demographic composition, the more divergent may be its linguistic/dialectal forms. India presents an ideal picture in this respect.

Although England is geographically far smaller and different from India, there are markedly distinct varieties of language in that country too. What strikes one is the distinct cultural character that Ireland,Wales and Scotland possess and have all along the history been asserting. Their Celtic heritage is quite different from the Anglo-Saxon character that came from the overseas and imposed itself *on* all. Even within strictly English speaking population can be noticed such dialectal varieties as the speech of Yorkshire and Nottinghamshire,Midlands (east and west Midlands forming distinct varieties) and so on. Perhaps one of the ways of bringing about social unity and cohesion was through creating *a standard form of pronunciation*. A.J. Ellis gave it the name of *Received Pronunciation.* Of course,in historical sense this is seen as a means of furthering political domination of the English speaking rulers over the Celtic areas, 'the minority languages of the British Isles have been undermined by English political and economic power... The opprobrium cast on the regional dialects of England has been visited on

the speech of regions diverse in language and culture and situated far away from the metropolitan south-east' (Dick Leith).

'RP' or Received Pronunciation carries a strong class sense about it. The birth and spread of RP is a manifestation of the notions of correct pronunciation' against 'a background of what to avoid'; and it becomes quite clear that it is ! Lower class pronunciation that must be avoided' (Leith). In London itselt which is the seat of the 'socially correct' variety of speech, Cockney is used with all its colourful deviations of pronunciation and lexical differences, 'the differences are purely social, rooted in class conscious society. In the public schools, the predominantly east midland basis of the upper class London pronunciation gradually lost its regional colour. It became a class accent, and was accordingly evaluated in ways which reflect the attitude of the most powerful social group'.

RP represents the 'best' accent, but is not attached to any dialect or city, 'Every town, and almost every village contains speakers of R.P. whose families have lived there for generations...Those who speak RP are set apart from other educated people by the fact that when they talk one cannot tell where they come from'. (David Abercrombie). It is said to have originated in south-easternEngland, but has now 'a genuinely regionless accent within Britain, i.e., if speakers have an R.P. accent, you cannot tell which area ofBritain they come from. This means that this accent is likely to be encountered and understood throughout Britain'. (Trudgill and Hannah).

The spread and acceptance of the RP in those areas where English was taken and prevailed for considerable length of time was facilitated by the B.B.C. broadcasting policy. With the coming of the radio, the official policy of the B.B.C. was to strictly follow RP and recommend it for its speakers, the main reason being that it was widely understood, and provoked little regional prejudice. BBC became the model for all English speakers, mainly those foreigners who were learning it. How far this universal acceptance of RP in the broadcasting media and educational institutions has helped dilute the class boundaries and bias and bind all English speakers into one cohesive whole may continue to be debated sharply, but as Prof. Gimson says, 'it cannot be said that R.P. is any longer the exclusive property of a particular social stratum. This change is due partly to the influence of radio in consistently bringing the accent to the ears of the whole national but also, in considerable measure, to the modifications which are taking place in the structure of English society'.

An interesting aspect of the R.P. is that thought it was created as a standard form of English pronunciation, it is itself subject to changes like other languages and dialects. Two varieties of R.P. have been identified: a 'conservative' and an 'advanced'. Conservative accent is found in the older speakers, and advanced pronunciation typical of the younger speakers.

In the commonwealth countries English still holds an important position, particularly in the official, administrative. Educational and a few other areas.

We can see the example of Indo-Pakistan where, in spite of Urdu being the official language and several regional languages enjoying greater prestige and wider currency, English plays a crucial role. British English serves as a model for all the users of English. Pakistani English is emerging as a distinct variety with its phonetic and characteristic grammatical features offering an interesting area of research to the students. Nevertheless, British English and, particularly, the Received Pronunciation is what everyone is trained to aim at.

Yet we must be clear about one thing; it would be wrong to say that in countries like India, Pakistan, Sri Lanka, Australia, New Zealand, South Africa and other places anyone really uses R.P. Received pronunciation is a standard for the British English, it is not used by the speakers in these countries where English is $L_2$, a second language, and is likely to be affected by $L_1$, the first language of the speaker. This $L_1 \times L_2$interaction has produced some highly interesting phenomena. There have emerged different 'international varieties' of English, an Indian English, Australia-New Zealand English, Suth African English and Canadian English; in each case the language is carried further away from the standard British English. This is manifested in the emergence of characteristic forms of pronunciation, vocabulary, word-formation and sentence construction. A curious aspect of these varieties is that a 'standard' has emerged because of the sense of what is 'acceptable' socially.

## Supra-segmental Phonemes and Phonetics

Phonemic particles that we have so far been considering such as vowels, consonants, diphthongs, etc. are called *segmental phonemes*. They contribute to the meaning of a speech segment. Apart from this class of segmental phonemes, there is another class of particles that' play equally important role. These are *supra-segmental phonemes.*

Features of stress, pitch, intonation and juncture comprise this class, and are said to be 'overlaid' on the segmental units. It is difficult to imagine human communication without these features. They invariably accompany our speech and lend the additional dimension which is mote immediately and directly understood. These features convey the speaker's identity, attitudes, emotional states and his/her evaluation of how he/she is being received. Often, in the totality of communicational situation, a listener doesnot pay so much attention to the wards as he does to the rise and fall of pitch, volume of voice, stress and pauses, and so on. He understands the meaning by simply responding to these extra-linguistic indices.

We will now look at these features or phonemes a little more closely.

Stress

Physiologically, stress means greater articulatory effort. By putting stress on particular segments we give it greater prominence. Various types of meaning are conveyed by distributing stress pattern over speech segments in a controlled manner.

Two types of stress can he established

1. Word stress (or accent)
2. Phrasal (or sentence stress)

Word Stress

In words made up of more than one syllable, some syllable stands out from others. In a word like *fable* it is the first syllable that receives 'stress' or more articulatory energy which results in its' sounding louder and longer than the other syllable' the second syllable here. The distribution of stress over the word *fable* can be shown in this manner – *fa-ble.*

In monosyllabic words – these words may contain more than one phoneme, but that doesnot matter-stress falls on the only syllable they contain:

| | | |
|---|---|---|
| *I* | /ai/ | (single phoneme word) |
| *see* | /si:/ | (two-phoneme word) |
| *cat* | /kaet/ | (three-phoneme word) |
| *flame* | /fleim/ | (four-phoneme word) |
| *tract* | /traekt/ | (five-phoneme word) |

In words made of more than one syllable, the stress is distributed over the syllables; one of the syllables is pronounced with greater syllabic energy or prominence. In words like *sector* and *enable,* the first syllable is prominent in *sector* and the second syllable in *enable*.

The syllable that is strongly stressed is called a *strong* syllable and weakly stressed syllable is called *weak syllable*. In *sector, sec*is strong syllable and-*tor* weak syllable. In*enable, en* is weak syallable and no srong syllable followed a weak –bl. In polysyllabic words the stressed syllable may be more than one, for example these words –*understand, appetizing examination*. Syllabic division is shown as follows:

Un-der-stand; ap-pe-ti-zing; e-xa-mi-na-tion.

A polysyllabic word is graded in terms of the release of syllabic energy. It can be seen that from the strongest to the less strong to the weak, we can easily perceive different parts carrying these stresses. For example, in a word like *consolidation,* the strongest stress falls on the fourth syllable /-dei-/, the next prominent syllable is the second one, the other syllables carry weak stresses.

One reason why the fourth syllable is the strongest is that the pitch of the voice changes on this syllable. Therefore, this is also called *primary stress* or *tonic stress*. A strong stress accompanied by a pitch-change or pitch movement is known as *primary stress*. Roger Kingdon says that 'the prominence of a syllable is also affected by its pitch; high-pitched syllables sound more prominent than low-pitched ones'.

Stress features are thus divided into the following levels:

1. Primary stress
2. Secondary stress
3. Tertiary stress
4. Weak stress

The strongest release of syllabic energy accompanied by a potential change of pitch direction marks the primary stress. The next strong stress is called secondary stress. Primary stress is represented by the half straight bar ['], and the secondary stress by the bar placed at the bottom before the syllable that is stressed. Thus in *apple* the primary stress is on the first syllable '*apple*; so with *'father*; but in *ga'rage* it is on the second syllable. The word *understand* carries a primary and a secondary stress indicated as */unders'tand*. Tertiary stress is weaker than the secondary stress and close to weak or unmarked stress. It is somewhat difficult to define and describe it. The two identically pronounced words *nightrate* and *nitrate*, show that the second example has a tertiary stress while in *night rate* rate carries the secondary stress. A weak stress is always left unmarked. Here the pitch is low and the vowel lax as in *to'bacco*.

Stress pattern in English has to be learned; there is nothing in a syllable itself which indicates that it may receive stress or not. In some disyllabic words the first syllable is stressed, for example '*writer, 'bellow, 'coral, 'glimmer, 'ginger,* while other disyllabic words have the second syllable sressed:*re'cord, be'low, con'sort* (vb), *di'sable*.Compared to the unstressed syllable, the vowel in a stressed syllable is longer. Similarly, a long vowel becomes reduced in length when it occurs in an unaccented syllable.

Stress Shift

It has been observed that stress shifts in derivative words. The following table shows how different derivative words take stress on different syllables.

Table

| ***1st syllable*** | ***2nd syllable*** | ***3rdsyllable*** |
|---|---|---|
| 'fraternise | fra'ternity | |
| 'fragility | fra'gile | |
| 'fragment | frag'ment | fragmen'tation |
| | Or'thographer | ortho'graphic |
| 'syllable | sy'llabify | syllabifi'cation |
| 'product | pro'duce | produc'tivity |
| 'excavate | | exca'vation |
| 'excellence | ex'cel | |
| 'photograph | pho'tographer | photo'graphic |

Shift of Primary Stress in Syllables

In derived words also there is no predictability about the placement of stress. However, an interesting aspect of the stress distribution is that for noun/adjective, stress is on the first syllable and for verb it is on the second syllable.

| Noun/Adjective | Verb |
|---|---|
| 'produce | pro'duce |
| 'import | imp'ort |
| 'subject | sub'ject |
| 'perfect | per'fect |
| 'record | re'cord |
| 'contract | con'tract |

Compound Word Stress

Compound word consists of two words, which are written as one word. Mostly the nuclear, tonic or primary stress falls on the first syllable of the first word as in '*postman, 'batsman, 'chairman,* etc. Distribution of stress varies greatly according to the syllabic composition of the compound words.

*Primary stress on the first syllable*

'Honeymoon, 'honey suckle, 'market day, 'main spring, 'long shore, 'live stock, 'liveryman.

*Primary stress on the first, secondary on the third syllable*

'borderline, firebrigade, copyright

*Primary stress on the first, secondary on the fourth syllable*

National issue, labour exchange, cabinet maker

*Primary stress on the third, secondary on the first syllable*

Secondhand, country farm, easygoing, seargent major

Phrasal Stress

Although words have more or less fixed stress in connected speech, the intonational and contextual imperatives guide a speaker's choice of stress. Longer utterances, clauses and segments can show changes in stress pattern. This is accompanied by the rise and fall in the pitch level. For example in a sentence like

Bring those chairs closer

different words can be stressed in the manner shown below:

| | | | |
|---|---|---|---|
| *bring* | those | chairs | closer |
| bring | *those* | chairs | closer |
| bring | those | *chairs* | closer |
| bring | those | chairs | *closer* |

Each of the above examples conveys a different meaning. Normally, content words receive the primary stress, grammatical words donot As T. Balasubramanian says, 'The choice of the syllable receiving primary accent depends on the meaning the speaker wants to convey'.

Speech Rhythm

In connected speech certain words receive the primary stress and other words are unstressed. A pattern of alternations between the stressed and unstressed words is formed. If we consider the sentence, *see the cat on the roof* we will find that the second, the fourth and the fifth syllable are unstressed; the third and the sixth words are stressed. It is the tendency among the English speakers to crowd together the unstressed syllables between the two stressed syllables. The effect is a rhythm which makes English a stress-timed language.

There is another process that produces the characteristic English rhythm, that of weakening of the accent on certain words. In connected speech stress tends to be re-arranged due to elision and assimilation. Syllables that in isolated expressions appear stressed may be unstressed in such instances. Form-words, like articles, prepositions, auxiliary verbs, conjunctions and other elements may show this, where consonant and vowel quality of the weak form is affected. Let us look at these sentences.

a. *I shall let you have it* transcribed as

/ai òl let ju: hæv it/; the verb *shall* has become weak and is represented as /òi/ instead of /òæl/.

b. *Lend me the book, I'd read it* transcribed as

/lend me buk, aid ri:d it/; *would*becomes simply /d/ here.

a. *There was a book on the table* transcribed as

/ðəwəzə buk nðə teibl/; note the weakening of vowels in *there* /ðeə/ ® /ðə/ and *was* /w z/ ® /wəz/.

We can, therefore, say that such words have two forms; a strong form (in isolation) and a weak form (in raid speech). Below are listed a few words with the two forms.

| Strong form | Weak form |
|---|---|
| æt | ət /t |
| bai | bə |
| in tu: | intə |
| tu: | tə, tu |
| iz | z,s |
| kæn | kən, kn |
| will l, | əl, l |
| kud | kud, kd |
| jə: 'selvz | jə'selvz |
| maiself | məself |
| tu him | tuim |
| hæd | həd, əd, d |
| m^st | məst, ms |
| aend | ənd, ən, d |
| aez | əz |
| eni | ni |

| | |
|---|---|
| s^m | sm |
| səu | sə |
| frəm | frðm |
| fə: | fə |

Intonation

Another significant suprasegmental feature of English language is intonation or variation of pitch from one segment of an utterance to another. A lot of emotional meaning is conveyed by consciously varying intonation level.

Pitch is closely associated with vibration of the vocal cords. In males the vocal cords vibrate at a rate of 70-125 times per second, and in adult females it is between 150-200 times. Increase in the vibration of the vocal cords results in the rise of pitch. In normal conversation, pitch variations are quite an integral part and cannot be completely ignored.

A combination of stress on a syllable and change in pitch-range produces *tone*, a significant element of intonation. Two types of tone have been identified i) *static tone*and ii) *kinetic tone*. A syllable pronounced on a level tone of unvarying pitch is said to have *static tone*. The *kinetic tones* show different kinds of change in pitch contour. Physiologically, this is explained by variation in the tension of the vocal cords.

Different levels of kinetic tone have been postulated by different phoneticians, some grade it into fie, some into four. This shows that precise location of a tone contour is not possible – gradations are made only as identification of a range, where correspondence with modulations in the emotional level can also be identified.

In rapid speech pitch contours rapidly alternate but it must be remembered that all pitch movements are not discriminating, and therefore, significant. Only those variations that serve as significant units, discriminating between meanings are phonemic.

Below are presented the signs that are used for indicating itch contours

Rising Tone is symbolized as [‘]

Falling Tone is symbolized as [`]

Falling - Rising Tone is symbolized as [v]

Rising - Falling Tone is symbolized as [^]

Intonation pattern in English can be understood by dividing an utterance into*breath-groups*. *Each* breath-group *forms a tone* group.

In a sentence like *She will ‘not ` go* we can identify the whole utterance as a breath group, a sense group and an information unit. Under normal conditions it is the final syllable /gəu/ that shows the pitch variation. This syllable, therefore, contains *tonic prominence*. It is known as *tonic syllable*.Tonic prominence is a stress on the syllable, plus change in pitch level. A speaker can vary the *tonic syllable* to correspond to the meaning, sense and emphasis he wishes to convey. That means that tonic prominence can shift from final syllable to any other in a sentence.

Thus in the example cited above, *she will not go,* shifts in tonic prominence can be demonstrated alongwitht he corresponding meaning changes:

i) *She* will not go = it is she who will not go.

ii) She will *not* go = come what may, she won't go.

iii) She will not *go* = she will do anything but go.

We shall now consider below some examples of all the four tones.

*1. Rising Tone:*

'Are you coming? (stress on *are*)

Is, he at home?

'Wait, , keep it in place (gentle command)

'Come, ,here (encouraging, inviting)

'Really? (surprise)

*2. Falling Tone:*

When this tone is used, special implication is conveyed which is not verbally expressed, like sympathetic attitude, surprise, disbelief, sarcasm, boredom, routine greeting, detached attitude, and so on.

'Put it on the stool (neutrality)

'Good ,morning (routine greeting)

'How ,nice (routine, bored)

,Sit down ,please (polite command)

,Such a ,waste (mildly sarcastic)

*3. Falling-Risging Tone:*

The pitch registers a fall from about mid to low and then from high to mid.

We are ᵛwaiting (= better make haste)

ᵛCarefully ! (soothing, encouraging)

The ᵛfood was nice (=but the hotel awful)

ᵛWell done (appreciating)

You may ᵛre lax (you really need it)

ᵛCan she do it? (=are you sure?)

*4. Rising-Falling Tone:*

The pitch changes from low to close to mid and low again. Normally, sarcasm, surprise, interest, enthusiasm are expressed.

Is he^alright? (surprise)

She looked^beautiful (enthusiastic)

Yes, it is^nasty (full agreement)

But,^will that do? (doubt)

Juncture:

In connected speech it is necessary to distinguish within one macrosegment such phonems whose function is to keep utterances apart. We must, for example, convey to the listener whether we mean *a part* (a+part) or *apart* when we use these segments, however rapid our speech may be. The accent feature of course plays a significant part in it; but we must also give a brief pause that would separate *a* from *part*when we wish to say *a part,* and remove that pause when we wish to say *apart*. As Hockett says, 'Any difference of sound which functions to keep utterances apart is by definition part of the phonological system of the language'. Such transition from one segmental phoneme to another is called*juncture* and represented by [+] mark. Juncture is thus a type 'of *boundary* between two phonemes. Often, juncture helps the listener to distinguish between pairs such as*see* Mill and *seem ill* in *Did he see Mill?* And*Did he seem ill*?' (Richards, Platt, Weber).*Terminal juncture* is represented by the [+] sign as in the following examples.

a + name

an + aim

that + stuff

that's + tough

Ice + cream

I + scream

Two vowels in close proximity both bearing the primary stress must receive a terminal juncture.

## Morphology and Linguistics

Morphology is the study of morphemes, which are the smallest significant units of grammar.

According to Bloomfield, it is the study of the constructions in which sound forms appear among the constituents. Dorfman defines morphology as the study of the ways and methods of grouping sounds into sound-complexes or words.

Morphology is a level of structure between the phonological and the syntactic. It is complementary to syntax. Morphology is the grammar of words; syntax is the grammar of sentences. One accounts for the internal structure or form of words; the other describes how these words are put together in sentences.

The English word **unkind** is made up of two smaller units: **un** and **kind**. These are minimal units that cannot be further sub-divided into meaningful units. Such minimal, meaningful units

of grammatical description are generally referred to as morphemes. A morpheme is a short segment of language that meets three criteria:

1. It is a word or a part of a word that has meaning.
2. It cannot be divided into smaller meaningful parts without violation of its meaning or without meaningless remainders.
3. It recurs in differing verbal environments with a relatively stable meaning.

The word **unlikely** has 3 morphemes while the word **carpet** is a single morpheme. The words **car** and **pet** are independent morphemes in themselves. The word **carpet**has nothing to do with the meaning of **car** and **pet**. **Carpet** is a minimal meaningful unit by itself. Again, the word **garbage** is a single morpheme while the words **garb** and age are independent morphemes by themselves. A systematic study of morphemes or how morphemes join to form words is known as **morphology.**

The definition of the morpheme may not be completely unassailable as will be evident from the discussion that follows, but it is certainly a very satisfying definition applicable to a majority of words in any language. The English word **unassailable** is made up of three morphemes, **un, assail,able,** each one of which has a particular meaning distribution and a particular phonological form or shape.

## Some Basic Concepts of Morphology

Morpheme

We can easily recognise such constructions as *mats, artists, artistic. national, childishness, unmoved, denationalization, horseride, highway, footpath* as words. Difficulty arises when we try to define these constructions - but all the same they can be recognised. They have meaning which is independent of the meaning of other words. They convey the meaning in the same way as the following words :

*Sky, water, hill, cousin, mango, walk, sew, autumn* and *tap.*

But the crucial difference between the first set of examples and the next is that while we can break the items of the first set and still obtain smaller meaningful units we cannot break the items occurring in the second set. If we do so we would be destroying their meaning. Let us see how the items in the first group of examples can be split.

i. mat + s

ii. art + ist

iii. art + ist + ic

iv. nation + al

v. child + ish + ness

vi. un + move +d

vii. de + nation + al + ize + ation

viii. high + way

ix. foot + path

After having broken these words we are left with more particles with different meanings. Attempts to break these ten words have not destroyed their meaning. We rather discover that the words are composed of smaller particles. We also see that two types of meaning in such constructions can be identified :

a. some particles refer to the external reality.

   (sky, dog, table, nation, child)

b. others donot do so, but are to be understood in terms of their function within the language.

Words of the former type are known as*content words* and their meaning as *lexical meaning;* while words that are meaningful in terms of their structural significance are called *form words* having *structural, formal*or *grammatical meaning*. Thus we can see that the word *child* is content word whose meaning is referable to the external world and is bound to be destroyed if we try to split it further :

*ch - ild, chi-Id, chil-d*

But after breaking *childishness* into *childish*and *ness we* get two segments whose meanings are independently contained in them. We cannot break *-ness;* but childish can be split into *child and -ish*. Again we obtain such particles each one of which possesses meaning. Further attempts to break them will, however, destroy their meaning. We will not get more particles that can either be referred to the external reality or can be construed as having any grammatical function. They are the *minimal meaningful units*. Such a particle is called *a morpheme*. 'Since a morpheme is a unit of language, it will have *a* differential function; that is, it has some conventional and recurrent connection with nonlinguistic circumstances in which it occurs' (Dinnech). In the above examples, the particles that we have been able to obtain after breaking the various sequences, are all minimal meaningful parts of the English language. They are minimal since they cannot be broken down further on the basis of meaning. They are meaningful because we can specify the kind of connection they have with the nonlinguistic circumstances in which they are used.

Morpheme is, therefore, the minimal recurring unit of grammatical structure, possessing a distinctive phonemic form, having a grammatical function and may differ in its phonological manifestations.

Morpheme and Syllable

A single morpheme may be made up of one syllable, more than one syllable, or no syllable at all. Monosyllabic morphemes (those consisting of one syllable) are *tin, train, gold, pen, man, cat, dog*. But words like*station* and *teacher* are composed of two syllables - *sta-tion, tea-cher, Hyperion* and*introduction* contain four syllables; and*chloromycetin* contain five syllables. These are all single morphemes, though their syllabic composition varies. On the other hand, there are morphemes that can be marked to contain no syllable at all - the plural morpheme /-s/, the past tense morpheme /-d/ are example of this type. Though they are not syllabic, they are morphemes. In this context, the case of zero allomorph is still more interesting.

Morph :

The concept of *morph* recognises that a morpheme has a phonetic shape. This phonetic representation is called its morph. The word *writer* has two morphemes, *write*and *-er*. These are realizable in the phonetic shapes as /rait/ and/-ə:/. These are two morphs of the morpheme (or word in this case).

Allomorph :

In our discussion of morpheme we have noted that it sometimes manifests itself in various phonetic shapes or forms. The plural morpheme can be realized as /-s/ or /-z/ or /-iz/ and so on. Similarly, the past tense morpheme can appear as /-d/, /-t/, /-id/, and /-q/. Each of these morphs belongs to the same morpheme. These are called *allomorphs*.

The plural morpheme in English (which combines with a noun morpheme to form a plural) is represented by three allomorphs /s/, /z/ and /iz/ in different environments (which are phonologically conditioned).

Plural Morpheme

Allomorphs

{e(s)}

/iz/ in the case of words ending in /s/, /z/, /ò/, /ʒ/, /tò/, /dʒ/

e.g. buses /ru : bΛsɪz/, vases /va: zɪz/, bushes / b ò f ɪz/,

rouges /ru : ɜɪz/, churches /tòɜ tòɪz/ judges/, /dɜnΛdɜɪz/

/s/ in the case of words ending in a voiceless consonant (other than ò, s, tò): cats /kæts/, caps /kæps/

/z/ in the case of words ending in voiced sounds (other than /z, ɜ, dʒ/): boys: b]ɪz/, bags /bægz/

Similarly, the present tense morpheme {-e(s)} has three allomorphs /s/, /z/ &. /ɪz/, e.g. packs /pæks/, digs /digz/, washes /woòɪz/. The past tense morpheme of English, {-e(d} has also three different (phonologically conditioned) allomorphs /t/, /d/ and /ɪd/. The rule that governs these allomorphs is as follows:

Past Morpheme

{e(d)}

/t/ after morphs ending in voiceless sounds (except /t/)

booked /b• kt/, pushed /p• òt/

/d/ after morphs ending in voiced sounds (except /d/).

loved /lžvd/, bagged /bægd/

/ɪd/ after morphs ending in /t/ and /d/ wanted /wantɪd/ wedded /wedɪd/

The relationship between the terms **morph, allomorph** and **morpheme** is similar to that between **phone, allophone** and **phoneme.**The term 'morph' means shape. Any minimal phonetic form that has meaning is a morph. Thus /bžs/, /ɪz/ /b• ò/, /ɪz/, /kæp/, /s/, /b]ɪ/, /z/ are all morphs. Those morphs which belong to the same **morpheme** are called**allomorphs** of **that morpheme.** Thus /s/, /z/ and /ɪz/ are allomorphs of the plural morpheme {e(s)}. Similarly, a phoneme is a minimal, distinctive unit in the sound system of a language. A phoneme may sometimes occur in more than one phonetic form called allophones. These phonetic forms have considerable phonetic similarity between them and their phonological function is the same. They, however, never occur in the same phonetic environment and are said to be in complimentary distribution. Allomorphs, like allophones, are also in complimentary distribution. The phonemes /p/, /t/ and /k/ for example, have two phonetic forms each i.e. [p] and [ph], [t] and [$t^h$], [k] and [$k^h$]. Here [p] and [ph] arc the allophones of the phoneme /p/. All the speech sounds (phonemes as well as allophones) arc called phones.

It may be noted that in some languages words can generally he segmented into parts (morphs) while it is not so in others. Similarly there are languages in which the morph tends to represent a single minimal tirammatical unit (a morpheme) while

Allomorphs of a morpheme may change their phonemic shapes due to two types of conditioning:

a) phonological or phonemic conditioning

b) morphological conditioning

Phonological Conditioning

We shall first examine the following sets of words :

| ***A*** | | ***B*** | |
|---|---|---|---|
| set | /sets/ | beds | /bedz/ |
| bits | /bits/ | lads | /lædz/ |
| bats | /bæts/ | cabs | /kæbz/ |
| caps | /kæps/ | clubs | /kl^bz/ |
| clips | /klips/ | beads | /bi:dz/ |

The pluralising suffix in set A appears as /s/; in set 13 it appears as /z/. This can be explained as due to the occurrence of final sound of the stem which is voiced, or voiceless. In set A words end in the voiceless sounds /t/ and /p/ affecting the plural morpheme which also appears as a voiceless phoneme /-s/. But in set B the stems end in voiced sound and affect the plural morpheme, which becomes /-z/. The phonetic quality of one sound affects the phonetic quality of another occurring in close proximity. The affected sound is*phonetically conditioned.* Both /-s/ and /-z/ are the *allomorphs* of the plural morpheme. Their positions cannot be interchanged, i.e., we cannot have /z/ placed in set A and /s/ in set B. These sounds are thus in complementary distribution. In the same way words *rose, pose, advise, horse, judge*take the plural morpheme which is phonemically realized as /iz/ so we have*roses* /rəuziz/; poses /pəuziz/; horses /h]:siz/, etc. These words also show phonological conditioning.

We thus obtain three phonologically conditioned allomorphs of the plural morpheme /s/ ~ /z/ ~ /iz/. Phonological conditioning is predictable.

(Plural Morpheme z[1]}

{Past Tense Morpheme}

Morphological Conditioning

The regularity of phonological conditioning is restricted. There are several irregular forms that donut show the predictable direction of morphophonemic changes. We can always explain reasonably why such variant forms as the /t/~/d/~/id/ occur for past tense and /s/~/z/~/iz/ for plural morpheme.

But such explanation is not possible in the case of the plural form of *child* - children, and sheep - sheep. These forms are not phonologically conditioned, i.e. the proximity of a sound doesnot affect these forms. *en is* peculiar to *children, oxen* and*brethren*. Such changes are said to be due to*morphological conditioning*.

We shall consider below some major types of morphological conditioning.

Zero Suffix

Certain words in English do not show any change of form when inflected either for pluralizing or making into past tense form. These singular - plural and present and past tense forms are alike.

| | | |
|---|---|---|
| *Set A* | *(Singular)* | *Set B (Plural)* |
| | Sheep | sheep |
| | deer | deer |
| | cattle | cattle |
| *Set A* | *(Present Tense)* | *Set B (Past Tense)* |
| | cut | cut |
| | put | put |
| | hit | hit |
| | beat | beat |

But we know that set A words are in present tense and that set B words are in the past tense. With this understanding we use the words.

There is a sheep

There are sheep

He cuts

He has cut

We can say that a zero suffix of plural and a zero suffix of the past tense has been added to these forms. The change is not one of overt alteration in the phonemic shape of the morpheme (allomorph). They are said to undergo *a zero modification*. This is shown by {q} symbol which is called *zero allomorph*.

Thus, *sheep* is written as /òi:p + q/.

*cut* is written as /kžt + q/

Vowel Mutation

Let us take another example; the plural form of *man* is *men* that
of *woman* is *women,* and*louse* is *lice*. In making them plural we see that nothing has been added, but a change in the vowel and diphthong has been made.

/a/ > /e/

/au/ > /ai/

Similarly, for making past tense, we can change the vowels as shown below :

find - found /ail > /au/

swim - swam /i/ > /æ/

bring - brought /i/ > /]/

seek - sought /i:/ > /]:/

catch - caught /æ/ > /]:/

feed - fed /i:/ > /e/

These changes too cannot be explained by the process of phonetic change. These are irregular changes and are known as *vowel-mutation*.

A few more examples are to be seen below :

fly - flew /ail > /u:/

slay - slew /ei/ > /u:/

get - got /e/ > /]/

meet - met /i:/ > /e/

take - took lei /ei/ > /u/

Vowel mutation can also be seen in verb-making, adjectivising, noun-making, and so on.

Consonant Change

Apart from vowel changes, pluralizing is effected by changes in consonants also. Some English words ending in /f/ - *leaf life, wife, knife, shelf loaf* make their plural by converting /f/ into /v/ and adding /z/. Examples are given below.

shelf /òelf/ > shelves /òelvz/

sheaf /òi:f/ > sheaves /òi:vz/

knife /naif/ > knives /naivz/

wolf /wulf/ > wolves /wulvz/

wife /waif/ > wives /waivz/

But here too we observe irregularity. Not all words ending in /f/ undergo such changes *-proof, roof* and *reef,* to name only three, take /s/ for changing to plural form; while *hoof* is pluralized both by simply adding /s/ - *hoofs*and through the process of consonant change - *hoo**v**es*.

In the case of past tense formation also we observe consonant replacement -

send - sent

bend - bent /d/ > /t/

lend - lent

spend - spent

The list of different kinds of changes signalling pluralization and past tense formation is fairly long. What is important here is to understand the mechanism of different types of vowel and consonant mutation that operates in such processes.

Suppletion

In *suppletion* instead of a partial change in the root (either vowel change or consonant change or addition of s), we see the whole form of the root being replaced by a new -form. So, we see the past tense of *go* is *went,*and the comparative of *bad is worse, good*has *better as* comparative, the adjective of*moon* is *lunar,* and *sea* ,has *marine as* its adjective; *tooth* is adjectivised as *dental* and*mouth* as *oral*. What we see in these examples is the complete change in the phonemic shape of the stem, for changing their form classes.

Free Morphemes and Bound Morphemes

Two types of morphemes have been identified on the basis of their occurrence in larger constructions : *free form* and *bound form*. A morpheme that occurs alone, or can stand alone is *a free form*. It doesnot require the presence of another morpheme; in other words, such a morpheme doesnot need the support of any other element. All content words are free forms : *house, church, girl, cat, walk, see, red, short, book, water*. Some form words are also free forms, *always, though, but, never, and, or,* if. The meaning of such words is 'contained in their ability to refer to some point in the world outside'.

A second class of morphemes called *bound form,* contain elements that must always be attached to some other elements. They cannot occur or stand alone. In words like*watery, invisible, reader, possibility, madness, cats,* and *manly*. We can identify such morphemic particles as *-y, in, -He, - cr, -ty, -ness,* -s, and -ly. Their meaning is in their grammatical functions such as noun-making, verb-forming, pluralizing, adjectivising, and so on. They can be attached to any other free forms of the same form class to construct similar segments. Isolated they donot stand by themselves.

Two types of hound form that are widely used are *prefix* and *suffix*. As a class they are known as *affixes*.

A prefix precedes *a free form, a stem* or a*root. We* see these in the following words :*uncommon,* decentralise, *disappoint, recycle. Un-, de-, dis-, re-* are all prefixes. There are many other prefixes. All these are word-formative elements.

A suffix is also a word-formative clement - it follows a free form. Examples are sleeveless, temptation, govern*m*ent*,* activ*a*te, dark*n*ess, read*e*r.

By adding a suffix we can either negativise a word, i.e. *hat less, merciless,* or change its form class; dark is an adjective, by adding *-ness* we can change it into noun.

*-ate* and *-ide* are verb-making particles. They are, therefore, known as grammatical morphemes.

Inflection and Derivation

Affixes are classified on the basis of their function into two categories - *derivation* and*inflection*. Affixes that cannot take another affix is generally identified as *inflectional affixes*. If we add *-s or -ed* to *present* we will get derivative words *presents* and *presented*.We cannot add another suffix to it. Inflectional suffixes of this type may create a set of forms of a morpheme within the same form class, usually known as *paradigm*. Such words are said to be 'inflected'. We can in this way pluralise a noun, *speeches, judges*and *tops,* etc.

These words are said to be inflected for pluralising. Similarly nouns can be inflected for making them genitive - *teacher's, doctor's, men's,* etc. Verbs are inflected for third person singular. Generally, in English, inflectional affixes are suffixes. They define a part of speech, but donot change it - *ugly, uglier, ugliest* - all the three forms belong to the adjective form class.

Both prefixes and suffixes can be derivational. The form-class of the morphemes may be changed by additing a derivational affix. *Globe* (N) may become*global* (Adj), *globalize* (vb), *globalization* (N);and so also *child* (N), *childish* (Adj), *childishly*(Adv)*, childishness* (N). Each time a derivational affix is added in the above examples, we see the form-class changing.

A significant feature of the derivational affix is that other suffixes can be added to it. One of the functions of derivational affixes has been recognised as that of 'formation of new words' (Richards, Platt, Weber). This is one of its functions,

Another function is that they maintain the form-class, that is, the grammatical category is not changed, as is seen below :

If we add the prefix *un-to certain* (Adj.)*,* we donot find the prefix changing the root to another form-class. Uncertain remains as much an adjective as certain is. Similarly, possess (vb) can take a negativising prefix dis- to make an antonym *dispossess* while retaining its form-class association.

Structure of Words

Considered from the point of view of their morpheme constituents, there are mainly three types of words:

**(i) Simple Words:** They consist of a single free morpheme followed, or not, by an inflectional suffix, e.g. play, plays, stronger.

**(ii) Complex words:** They consist of a base and a derivational affix, e.g. goodness, enable, boyhood, determination.

**(iii) Compound words:** They consist of two (or more) free stems which are independent words by themselves, e.g. over-ripe, happy-go-lucky, elevator-operator.

A morphological analysis of a few more words will further clarify the position:

(i)

(ii)

Various Ways of Word Formation

The users of a language have to be conversant with the myriad ways in which words are formed. A simple word like**happiness** for example, is formed by adding the suffix **-ness** to the base word **happy.**While the word **happy** is an adjective, the word **happiness** is a noun. The word**happiness** has thus been derived from the word **happy.** This most important method of word formation is known as **affixation,** i.e. by adding a **prefix** or a suffix to a base. The base is different from the stem. The stem is that part of the word that remains after every affix has been removed. A base can also be stem but every base is not a stem (see Examples (a) and (b) below). Every stem can, however, be a base. The stem cannot be further broken up into two separate morphemes. Here are two examples:

(i)

(ii)

A Wonderful World

Apart from affixation, there are several other ways in which new words are formed. Also, words are used in different ways for different meanings or connotations. The world of words in any language is a wonderful world. A user of a language who masters the art of using words or manipulating words becomes a wizard with the language and proves to be a master in the skill of communication. It would be quite pertinent, therefore, to briefly list some of the different ways in which words are formed or skilfully used.

Use of prefixes

Prefixes arc used to coin new words of various types:

(a) Negative prefixes

| **Prefix** | **Base word** | **New word** |
|---|---|---|
| im- | possible/mortal | impossible/immortal |
| in- | evitable | inevitable |
| | sensitive | insensitive |
| un- | stable | unstable |

| | like | unlike |
|---|---|---|
| a- | theist | atheist |
| | moral | amoral |
| non- | entity | non-entity |
| | violence | non-violence |
| dis- | passionate | dispassionate |
| | service | disservice |
| il- | logical | illogical |
| | limitable | illimitable |
| ir- | rational | irrational |
| | relevant | irrelevant |
| de- | frost | defrost |
| | forestation | deforestation |
| mis- | interpret | misinterpret |
| | represent | misrepresent |
| pseudo- | secular | pseudosecular |
| | religious | pseudosecular |

(b) Prefixes of Number

| | | |
|---|---|---|
| mono- | syllabic | monosyllabic |
| | logue | monologue |
| uni- | lateral | unilateral |
| | cellular | unicellular |
| bi- | lingual | bilingual |
| | lateral | bilateral |
| di- | pole | dipole |
| | ode (electrode) | diode |
| | urnal | diurnal |
| tri- | weekly | triweekly |
| | angle | triangle |
| tetra- | cyclic | tetracyclic |

| | | |
|---|---|---|
| multi/poly- | syllabic | polysyllabic |
| | racial | multiracial |
| | pronged | multipronged |
| | lingual | multilingual |

(c) Prefixes of Time and Order

| | | |
|---|---|---|
| re- | evaluate | re-evaluate |
| | examine | re-examine |
| ante- | chamber | antechamber |
| fore- | knowledge | fore-knowledge |
| | tell | foretell |
| pre- | natal | prenatal |
| | mature | premature |
| post- | war | post-war |
| | dated | post-dated |
| ex- | M.N.A. | ex-M.N.A. |
| | principal | ex-principal |
| super- | structure | superstructure |
| | fine | superfine |

(d) Prefixes of Location

| | | |
|---|---|---|
| sub- | way | subway |
| | terranean | subterranean |
| Inter-/intra- | national | international |
| | class | interclass |
| | group | intragroup |
| | departmental | intra-departmental |
| trans- | plant | transplant |
| | migration | transmigration |

(e) Prefixes of Degree or Size

| | | |
|---|---|---|
| super- | man | superman |
| | natural | supernatural |

| | | |
|---|---|---|
| out- | run | outran |
| | live | outlive |
| under- | state | understate |
| | cooked | undercooked |
| hyper- | active | hyperactive |
| | critical | hypercritical |
| ultra- | modern | ultramodern |
| | simple | ultrasimple |
| mini- | bus | minibus |
| (midi-/maxi-) | | |
| | skirt | miniskirt |
| over- | active | overactive |
| | smart | oversmart |
| sub- | human | subhuman |
| | zero | subzero |
| | standard | substandard |
| arch- | bishop | archbishop |
| | angel | archangel |

(f) Prefixes of Attitude

| | | |
|---|---|---|
| pro- | congress | pro-congress |
| | democracy | pro-democracy |
| anti- | hindu | anti-hindu |
| | social | anti-social |
| co- | operate | cooperate |
| | sponsor | cosponsor |
| counter- | act | counteract |
| | proposal | counterproposal |

(g) Other Prefixes

| | | |
|---|---|---|
| auto- | biography | autobiography |
| | start | autostart |

| | | |
|---|---|---|
| neo- | rich | neorich |
| | classical | neoclassical |
| semi- | circle | semicircle |
| | nude | seminude |
| pan- | Indian | pan-Indian |

(h) Class-changing Prefixes

Here are examples of some prefixes that change the class to which a word belongs:

| **Prefix** | **Word** | **Class** | **New word** | **Class** |
|---|---|---|---|---|
| be- | head | noun | behead | verb |
| | friend | noun | befriend | verb |
| en- | able | adjective | enable | verb |
| | trust | noun | entrust | verb |
| a- | float | verb | afloat | adjective |
| | head | noun | ahead | adjective |

Use of suffixes

The suffixes may be broadly divided into two categories: class maintaining and class-changing. Here are a few examples:

(a) Class-maintaining Suffixes

| Suffix | Word | Class | New word | Class |
|---|---|---|---|---|
| -ship | friend | noun | friendship | noun |
| -hood | boy | noun | boyhood | noun |
| ite | hindu | adjective | hinduite | adjective |
| -er | London | noun | Londoner | noun |
| ess- | tiger | noun | tigress | noun |
| -dom | king | noun | kingdom | noun |
| -ery | machine | noun | machinery | noun |

(b) Class-changing Suffixes

(i) Noun to adjective

| | | | | |
|---|---|---|---|---|
| -ian | India | noun | Indian | adjective |
| -ese | China | noun | Chinese | adjective |

| | | | | |
|---|---|---|---|---|
| -ful | beauty | noun | beautiful | adjective |
| -less | harm | noun | harmless | adjective |
| -ly | friend | noun | friendly | adjective |
| -like | child | noun | childlike | adjective |
| -ish | child | noun | childish | adjective |
| -al | accident | noun | accidental | adjective |
| -ous | virtue | noun | virtuous | adjective |

(ii) Adjectives to Noun

| | | | | |
|---|---|---|---|---|
| -ity | able | adjective | ability | noun |
| -ness | happy | adjective | happiness | noun |
| -ry | brave | adjective | bravery | noun |

(iii) Nouns to Verbs

| | | | | |
|---|---|---|---|---|
| -ify | fort | noun | fortify | verb |
| -en | length | noun | lengthen | verb |
| -le | top | noun | topple | verb |

(iv) Verbs to Nouns

| | | | | |
|---|---|---|---|---|
| -er | drive | verb | driver | noun |
| -ment | govern | verb | government | noun |
| -age | drain | verb | drainage | noun |
| -ant | pollute | verb | pollutant | noun |
| -ee | pay | verb | payee | noun |
| -ation | condemn | verb | condemnation | noun |
| -al | withdraw | verb | withdrawal | noun |
| -or | act | verb | actor | noun |

(v) Verbs to Adverb

| | | | | |
|---|---|---|---|---|
| -fly | sleep | verb | sleepily | adverb |
| -fully | play | verb | playfully | adverb |

(vi) Adjectives to Adverbs

| | | | | |
|---|---|---|---|---|
| -ly | nice | adjective | nicely | adverb |

-wards back adjective backwards adverb

Conversions

Some words can be used as nouns, verbs, adverbs or adjectives without any change in the form of the word, without the addition of an affix or prefix. This process of derivation is called **conversion.** Here are some examples:

**Light:** Switch on the **light** (noun).

**Light** the lamp (verb).

The luggage is **light** (adjective).

Travel **light** if you must (adverb)

**Round:** The earth is **round** like a ball (adjective).

The principal went on a **round**(noun).

You must **round** all the sharp corners (verb).

**Fast:** He is observing a **fast** today (noun).

He ran **fast** to catch the bus (adverb).

This is a **fast** colour (adjective).

I am **fasting** these days (verb).

(A lexicographer may enter all these four different uses of the word fast as four different lexical items).

**Back:** He is carrying a bag on his **back**(noun).

You must **back** me up (verb).

The plane flew **back** in no time (adverb).

He left by the **back** door (adjective).

*(b) Other types of conversion*

i) Please give me two **coffees**.

(An uncountable noun used as a countable noun)

ii) This instrument is a **must** for you.

(A closed system word being used as a noun)

iii) I do not like this **touch-me-not** policy.

(A phrase being used as an adjective)

iv) I do not believe in any **ism** bothering the society today.

(A suffix being used as a noun)

v) He is only **being** nice.

(Stative verb used as a dynamic verb)

***(c)*** In some words of two syllables, change of accent from the first to the second syllable changes a noun/adjective to a verb:

| **Noun/Adjective** | **Verb** |
|---|---|
| ‘conduct | con’duct |
| ‘subject | sub’ject |
| ‘object | ob’ject |
| ‘present | pre’sent |
| ‘contrast | con’trast |

***(d)*** There are some words, in which there is a change in the meanings of words if the final consonant is voiced (either by a change in spellings or without it); for example:

| ***Word*** | ***Final sound*** | ***Word*** | ***Final sound*** |
|---|---|---|---|
| advice (n.) | /s/ | advise (v.) | /z/ |
| thief (n.) | /f/ | thieve (v.) | /v/ |
| house (n.) | /s/ | house (v.) | /z/ |

Compound Formation

Compounds are formed by joining two or more bases. These bases are, in some cases, separated by a hyphen, while in other cases, the hyphen appears to have disappeared with the passage of time. There is no rule governing the presence or absence of the hyphen. Here are some examples of compound words:

(a) Noun + Noun

| | |
|---|---|
| Motor cycle | hair breadth |
| teargas | goldfish |
| girl-friend | television fan |
| bread-piece | block-head |
| fire-engine | pot-belley |
| paper-back | |

(b) Noun + Adjective

trustworthy beauty conscious

home sick brickred

duty free sea-green

(c) Adjective + Noun

paleface yellow press

red light

fathead greenhorn

(d) Compounds with verbs/adverbials/verbal nouns

sight-seeing man-eating

birth-control heart-breaking

record-player easy-going

brain-washing baby-sitting

walking-stick lip-read

Blends

Two words are sometimes clipped and the clippings joined to forma new word.

Examples

brunch from breakfast and lunch

smog from smoke and fog

telecast from television and broadcast

motel from motorists and hotel

Borrowings

English (or any other language) generally borrows words from other languages with which it comes into contact. English continues to enrich its store of words by such borrowings.

Examples

Guru (from Hindi)

bazaar (from Persian)

Sheikh (from Arabic)

tycoon (from Japanese)

Dame (from French)

Inventions

New words have to be given to new inventions. Such words (as other words of the language) are arbitrary but in course of time, they come to stay as a part of the language.

Examples

X-rays, laser, sputnik, astronaut

Echoism

Some words are formed by the sounds that suggest their meaning.

Examples

clang, whisper, thunder, click, tick, lisp, murmur

Language, as everybody knows, is dynamic. It continues to acquire new words with the passage of time. Some words also go on disappearing, as the time passes, due to several reasons. Language is open-ended and modifiable.

## Syntax and Modern Linguistics

With syntax we enter into a level of linguistic analysis that is higher than morphology, although at places the distinction between the two becomes blurred. Morphology, it is often claimed, has no 'autonomous' existence, as syntactical analysis includes morphological processes. Ferdinand de Saussure himself considers morphology as part of syntax. This perception has come to dominate recent post-Bloomfieldian linguistic thinking once again.

It is, however, better to view the two domains separately, morphology being the level that includes segmental morphemes and the way words are built out of them, and syntax being the level that includes the ways in which words and morphemic elements are arranged and organised into larger constructions. Syntax has been defined by Richards, Platt and Weber as 'the study of how words combine to form sentences and the rules which govern the formation of sentences. In *generative transformational grammar,* the syntactic component is one of the three main parts of the grammar. This component contains the rules for forming syntactic structures and rules for changing these structures'*(Longman Dictionary of Applied Linguistics)*.

Grammar and grammatical analysis include both morphology and syntax. 'Grammar may be divided into two portions : morphology and syntax. *Syntax* may be roughly defined as the principles of arrangement of the constructions formed by the process of derivation and inflection (words) into larger constructions of various kinds. The distinction between morphology and syntax is not always sharp' (Gleason).

This should not lead us to any confusion regarding the area of syntax, which is seeking to understand units larger than words, phrases and clauses, and such functions as selectional restrictions of concord and government. The fact that *Max sees John* is different from *John sees Max* is a matter of syntax.

Syntactic Relations

Let us see this sentence.

'The cat who sat on the mat has gone away'. There are ten words in this sentence. Each of these words has a definite relationship with the other words. If we are somehow able to state and describe these relationships, we will have described the syntax of the sentence.

To take a more simple sentence.

Raheel pushed Zahid.

The three words in the above sentence are not simply strung together, though they are linearly arranged, but appear to fit together in a manner governed by certain syntactical rules. We cannot arrange these words in any of the following ways.

* Raheel Zahid pushed.
* pushed Raheel Zahid
* Zahid Raheel pushed, and so on

These constructions are unacceptable.

Similarly, in English we always say *the fish, an apple, a building, not *fish the, *apple an, *building a*, unless, of course, these words are part of - the sentences like He was amused to see in fish the colours of .....; *He is building a big dam*. These are obviously part of the longer sequences and have no meaning apart from them. As independent segments the fish, an apple, a building are more acceptable.

Secondly, these two segments are also more closely linked to each other than a verb following them and the preceding noun. We can diagram this in the following manner.

"That the determiner *the* goes with *fish* is obvious enough. Their relation can better be understood by dividing the construction in the manner shown below

The division made above shows that syntactical units are hierarchically ordered. Each downward motion splits the segment into further patterns that show them immediately related on that level. The word*unpleasantness* can he shown to have the following constituents.

The vertical lines here point to the words or elements (appearing at the bottom of the vertical lines) that are related to each other on that level. These words or elements are called *constituents*. When the constituents are joined by the horizontal line they are called to be in *construction* with each other. A construction is thus a relationship between the constituents.

Thus the constituents, *the* and *fish* are in construction with each other, *the fish* and swam are constituents in construction with each other. *The fish swam* is an idependent constituent forming an utterance. An utterance is not a 'collection of randomly assembled bits and pieces' (Noel Burton-Roberts) but a complex of interpenetrating relationships. Further these are not just arranged in a linear fashion, but show that they consist of parts which themselves in turn consist of further parts. They, in other words, show a *hierarchical structure*.

Hierarchies of construction suggest that utterances have an additional dimension besides the linear dimension.

The above manner of showing relations among the constituents and diagramming them is called 'inverted tree' diagramming in which the branches spread downwards.

Immediate Constituent Analysis

One of the established methods of analysing sentence is the *Immediate Constituent Analysis*. It highlights the fact that sense is conveyed not only by the dictionary meanings of words but also by their arrangement in patterns. 'A sentence is not just a linear string of words; it is a sequence grouped in a particular way. The groupings are important for understanding the sense, (N.R., Cattell).

In IC analysis sentences are broken down into successive components. Each component has some grammatical relevance. Here the aim is to arrive at the*ultimate constituent* by identifying and establishing the *immediate constituents* (or ICs, as they are called for short). Relations between the segments of an utterance are established at different hierarchical levels.

If we take a simple sentence like *'students travel,* we can identify the two constituents*students* and *travel*. It is possible to substitute a two-word sequence for the constituent *students* without changing the basic structure - *old men*.

<table>
<tr><td>students</td><td rowspan="2">travel</td></tr>
<tr><td>old men</td></tr>
</table>

The immediate constituents of the first sentence is *students* and *travel* and of the second sentence *old men* and *travel*. But at the next lower level *old* and *men* are the immediate constituents.

Similarly, we can have substitution for *travel*also, something *like walk regularly*. We may show this in the following manner,

<table>
<tr><td colspan="2">students</td><td colspan="2">travel</td></tr>
<tr><td>old</td><td>men</td><td>walk</td><td>regularly</td></tr>
</table>

Thus we have now *old men* as immediate constituents on the one hand, and *walk regularly* on the other.

We can further expand it by substituting other segments like *His elder brother walks regularly every day*.

<table>
<tr><td colspan="3">students</td><td colspan="3">travel</td></tr>
<tr><td colspan="2">old</td><td>men</td><td colspan="2">walk</td><td>regularly</td></tr>
<tr><td>His</td><td>elder</td><td>brother</td><td>walks</td><td>regularly</td><td>everyday</td></tr>
</table>

The process of substituting elements can be continued *ad infinitum*. What is demonstrated in this manner is that constituents entering into constructions are governed by mutual grammatical relations. The above diagram only illustrates that 'an immediate constituent is one of the two, or a few constituents of which any given construction is directly formed... the process of analysing syntax is largely of finding successive layers of ICs and of immediate constructions,

the description of the relationships which exist between ICs and the description of those relationships which are not efficiently described in terms of ICs' (Gleason).

The relationships between the constituents can also be shown by means of tree diagram as below :

What we find here is not just a process 'never allowing more than two elements in a bracket' (Halliday), but the recognition of a functional relationship between the elements. The immediate constituents in the first branching *Dear friend and went away*show a relationship of *subject* and *predicate*.They are the immediate constituents of the sentence marked x in a functional relationship that can be identified as that of modifier and the noun. Similarly, with the next 'node' *went* and *away* we identify the relation as that of main verb and adverb. These two elements are the ICs at that level. The whole pattern of grammatical classes can be shown as below :

We thus see that a sentence is composed of layers of constituents. At each 'node' (node is that point at a particular level where constituents branch off downward into the next construction level) can be identified and labelled functional classes.

There is another way of marking the ICs, that of bracketting. We can show this in the following manner.

(((the) ((poor) (boy)) (ate) (the) (stale) (bread)))

However, the inverted tree diagramming has come to be widely accepted and used, and this has been followed in the present book also.

Immediate constituent analysis is essentially a process of pure segmentation dividing a sentence into its constituents. One of the weaknesses of this analysis is that it doesnot indicate the role or function of the constituent elements. For example if we segment the above sentence by using the tree diagram method, it will appear as follows:

There is little in this to tell us about the grammatical function and nature of the elements.

Labelling

The concept of labelling was, therefore, introduced to remove this inadequacy. As MAK Halliday observes, these divisions tell us very little about the functional importance of the constituents, and explain the grammatical structure. It will be necessary to say something about the particular function that each part has with respect to the structure of the whole. If we are using bracketting method, then the brackets are labelled; if on the other hand, we use tree diagram method then nodes are labelled. Labelling gives us an insight into the syntactic function of the constituents. Let us see how this is done.

The structure is indicated by S, (sentence),*NP,* (Noun phrase), and VP (Verb phrase). At the next level of branching NP and VP are further split into their ICs.' Thus in the sentence *dear friend went away we* can identify the ICs and class them into the relevant grammatical forms in the manner shown above. Hierarchical syntactic structure with the proper function classes can at a glance be seen in this type of diagramming.

Or

Or

To quote M.A.K. Halliday once again, 'Bracketing is a way of showing what goes with what : in what logical (as opposed to sequential) order the elements of a linguistic structure are combined. It says nothing about either the nature or the function of the elements themselves'.

Labelling means putting name on things and so it is a way of specifying what these elements are. The label provides some kind of a definition of the units that have been identified as parts of some larger whole.

There are in principle two significant ways of labelling a linguistic unit. One is to assign it to a class; the other is to assign a function to it. Hence there are two principles according to which we can label the constituents of a grammatical structure : i. by class, and ii. by function.

In the particularly significant stage in the development of linguistics this way of establishing the structure of different types of sentences was given great importance and considered the chief aim. Leonard Bloomfield developed the notion of constituent structure. His notions were further developed and clarified by such scholars as Eugine Nida, Ruelon Wells, Zellig Harris and others. They evolved rigorous systems to analyse the sentences. Noam Chomsky took this further ahead by developing mathematically precise methods and built up a system known as *Phrase Structure Grammar*.

Phrase Structure Grammar or PSG

Phrase Structure Rules, or Grammar considers sentence as linear sequence of elements. The aim is to identify these elements for their functions and class them appropriately. This is, therefore, better viewed as an alternative system to the IC analysis.

Chomsky presented three models of grammar in his revolutionizing book*Syntactic Structures:* finite state grammar, phrase structure grammar, and transformational grammar. The first, the finite state grammar is the most basic and elementary and is full of inadequacies. The Phrase Structure Grammar takes us a long way in removing these shortcomings. The Transformational model is an extension of the PSG with addition of more complex type of rules.

The PS grammar consists of phrase structure rules as shown below :

i. S ¾® NP VP

ii. VP ¾® V NP

iii. NP ¾® Det N

iv. N ¾® NP Plur

v. V ¾® VS Past

vi. Det ¾® the

vii. NS ¾® cat

viii. NS ¾® mouse

ix. VS ¾® catch

On the left of the arrow is the instruction to*rewrite* the symbol into a string of one or more symbols on the right. Syntactic categories which occur on the left are known as *non-terminal* symbols and those occurring on the right are called *terminal* symbols representing

morphemes. Syntactic categories that are represented by the symbols are sentence (S); noun phrase (NP); verb phrase (VP); verb (V); determiner (Det); noun stem (NS); verb stem (VS).

NP can also include an article. The constituents of VP may include an NP, within V is tense realisable by the symbol T. The*terminal string* is a representation of morphemes.

Further down an NP could be a proper noun, a personal noun, a pronoun, demonstrative pronoun, and all that can function grammatically in this position. So we can have here, I, we, he, she, you, they, her, it, and so on, and everyone, anyone, no one, none, some, etc. A noun can take a determiner the, a, an, many, old, new, etc. Similarly with the verb phrase which can be classified into a verb stem (VS), an auxiliary (aux) and NP. Further sub-classification of the verb is also possible into transitive, intransitive, be, have, look, etc. We can also describe the tense and aspect and the sub-classification of the adverbial which may contain a prepositional phrase or simply an adverb.

Such a description will turn out to be too lengthy and exhaustive.

Rather than resorting to descriptions of this kind, a set of phrase-structure rules in the form of *re-write rules* can be given.

According to the *rewrite rules,* each symbol on the left hand can be replaced by a symbol on the right hand. Not ‘only are the various constituents recognised and determined, it is also indicated how one constituent dominates the other as their placement is organised hierarchically. Let us consider the following sentence;

*Old Sam sunbathed beside a stream*

According to the PS model, the constituents of this sentence can be shown in the following manner.

1. S (sentence ¾® NP (Noun Phrase) + VP (Verb Phrase)
2. NP ¾® Mod (Adj) + N (Noun)
3. VP ¾® Verb (MV) + PP (Prep. Phrase)
4. VP ¾® Verb
5. PP ¾® Prep. + NP
6. NP ¾® Art.
7. NP ¾® N

This can be written in a linear manner like this : S [old + Sam + past + sunbathe + beside + a + stream] S; or shown in a tree-diagram.

In the PS rewrite system each next step of expansion is seen as ‘derived’ from the preceding one.

i. S

ii. NP VP

iii. NP V NP

This is also, therefore, known as *PS derivation*. *All such* descriptions begin with S as the symbol for sentence. This is rewritten as NP VP symbolising Noun Phrase and Verb Phrase and can be said to derive from i) by application of rule ii, iii is like-wise derived from ii) symbolised as NP v NP.

'The sentences that can be constructed by following the rules of a given grammar are said to be *generated* by that grammar' (Rodney Huddleston).

Each sentence thus generated can be assigned a structure by the grammar.

The tree-diagram method is also known as*phrase-marker* (PM for short). Phrase markers arc critical in Chomsky's theory.

However, this doesnot exhaust all the possibilities of describing the sentences. There are many complex areas that are governed by optional selection of items, and need to be indicated. The main verbs are often preceded by the auxiliary verbs. Symbolically this may be shown as

VP ¾® Aux+MV

This can be described as a verb phrase to be rewritten as *auxiliary* plus a *main verb*. In a branching tree diagram it is shown as:

NP + Aux + MV

Phrase-structure rules are mostly *context free*. They follow the x ® y form, x being a single element and y a string of one or more elements. But what is the context in which x is to be re-written as y? If the same rule is further elaborated as x ® y / w ® v, we make explicit that x occurs in the context w and it is to be rewritten as y in the context of v. Contextual constraints can be indicated in various ways. Such a rule (x ® y / w ® v) is called *context sensitive* rule, without it we have a context-free rule which is what PSG deals with. Concord between the subject and the verb can be explained only in terms of context-sensitive rule - the *bird flies* but *the birds fly*. Context-free grammar can be viewed as part or sub-class of context-sensitive grammar.

Domination Notion

According to the notion of *domination* we can say that Aux and MV are immediately dominated by VP, and S immediately dominates NP and VP. Remotely, Aux and MV are simply dominated by S. This notion also emphasises the 'layered' composition of a syntactic structure where each lower segment is governed by the rule of 'mutual dependency'.

Inadequacies

Phrase structure grammar is itself hemmed in with limitations. It is efficient in explaining 'intra-sentence constituent elements', but cannot show inter-sentence relations such as declarative-interrogative, active-passive and so on. It runs into difficulties when seeking to account for ambiguous sentences, ambiguity being more than a matter of immediate constituency as we can see in this ambiguous sentence.

*Flying planes can be dangerous*

Similarly, PS rules cannot explain such*discontinuous* sentences as, *He called me up,*when the object is a pronoun and the discontinuous construction is obligatory.

Complex sentences are described through cumbersome PS marker diagrams. If we want to derive the following sentence.

*The clear, lovely, blue sky,*

we will have to present it in the following manner.

The Transformational Generative Grammar

We have noted that in Phrase Structure Grammar, PS rules convert a grammatical category into a more explicit representation, VP ® V + NP, for example; or a symbol into a class for which it stands, Vs ® come. We have also seen some of the limitations of PSG. It cannot account for transformational relationships. *Sohan sees a kite* and *A kite is seen by Sohan* cannot be considered two different sentences. The second sentence is only a transformation of the first obtained through a re-arrangement, and morphemic changes in the terminal string, 'transformation being a method of stating how the structures of many sentences in languages can be generated or explained formally as the result of specific transformations applied to certain basic sentence structures' (RH Robins).

A major development in linguistics took place with the publication of *Syntactic Structures* in 1957 by Noam Chomsky. This book forms the basis of the Transformational Generative Grammar that has come to replace the old grammatical systems and, provide a more precise and efficient tool of analysing a language.

The shortcomings of the PSG were sought to be removed by TG grammar. 'He did not reject the whole notion of using immediate constituents; he merely showed that this method was not powerful enough by itself to account for the whole of sentence structure. It must be used in conjunction with some other method'. (N.R. Cattell). Therefore, while TG grammar uses the phrase structure re-write rules, it offers a set of transformational rules. 'A phrase structure grammar consists exclusively of PS rules and assigns to each sentence a syntactic structure in the form of a single phrase marker... whereas a TG consists of a set and assigns to each sentence a series of PMs varying in the level of abstraction involved'.

What is Generative Grammar?

One of the two prominent features of the transformational generative grammar which its very name throws up is the potential of the grammar to 'generate' sentences. As N. Krishnaswamy observes, 'We acquire information about a language and using that knowledge about the language, *we create* or*generate* sentences. In this sense, the grammar is *generative*. The grammar of a language is not just an analytical procedure; it should generate description of all the grammatical sentences in the language and only these'. Generative is the key term here.

A particular grammar makes use of rules that are definite and limited, to produce an infinite number of sentences. These rules govern operations that are limited too, but produce infinite set of sentences. Such a grammar does not literally create sentences, but it is so designed 'that by following its rules and conventions we could produce all or any of the possible sentences of the language' (John Lyons). The grammar is thus concerned with the possible set of sentences. Whenever we select any text or corpus of a language for analysis, what we have is the actual manifest sentences which are finite. It would be a mistake to consider these as the limit, for there is always possibility of having more sentences or forms. When we say that a grammar can

produce infinite number of sentences, we donot mean its rules are infinite. On the other hand, the grammar is finite, its rules are finite, but they can produce infinite number of sentences.

It is like producing a mind-boggling set of numbers like 8639261387534169 out of a set of finite numbers 0-1. Chomsky defined language as a 'set (finite or infinite) of sentences, each finite in length and constructed out of finite set of elements'. He discovered a brilliant expression in W. Von Humboldt *(Uber die Verschiedenheit de's meschlichen Sprachbans* Oarmastadt, 1949) to elucidate his own notion, 'language makes infinite use of finite means'.

A finite grammer can be represented diagrammatically as follows:

It moves from one state to another by producing a word. However, from this only two sentences can be produced. It is therefore, *a finite state grammar.*

However, by changing the diagram a bit, this can be changed into a device capable of producing an indefinite number of sentences.

Now we can have 'sequences like *the old man comes, he old man comes, the old men come, the old, old men come,* and so on. It meets both criteria of being a finite grammar and producing an infinite number of sentences. Famous linguist John Lyons represents the finite state grammar in this manner.

According to Lyons the grammar can be seen as a machine or device... 'which moves through a finite number of internal 'states' as it passes from the *initial state* (start) to the*final state* (stop) in the generation of sentences. When it has produced (let us say 'printed out' or 'emitted') a word (from the set of words given as possible for that 'state') the grammar then 'switches' to a new state as determined by the arrows. Any sequence of words that can be generated in this way is thereby defined to be grammatical (in terms of the grammar represented by the diagram), (John Lyons).

On a fundamental level Chomsky projected the simplest grammar (finite state grammar) through employing the finite number of*recursive rules*. At the base is the notion that sentences are generated by making choices 'from left to right'. If we take a sentence like*This young boy bought a new bicycle yesterday,* we can proceed at the left - most element, *This* and put *that* in its place, or any other element possible in that position. Choice for the subsequent elements will depend on the preceding element. From all the words possible in the position in which*This* occurs, selection of the appropriate element can be made. Similarly, from a list of words capable of occurring in the position in which *young* occurs, we can select a suitable element, and so on. Diagrammatically this can be shown as follows.

When we base our understanding of the language on the generative principle, we believe that the grammar is *explicit,* the fact of the *possible* sentences is indicated by this grammar. Palmer feels that for this to happen, it should make everything clear, all rules and principles, conventions and modes must be made explicit and nothing should be left to chance or the reader's imagination. This would eliminate the possibility of generating grammatically wrong sentences.

Competence and Performance

The main point at which the T-G grammarian diverges from his predecessors is the- belief that he is not interested in the actual sentences, the given corpus of observed data, but the 'possible' utterances, the fact of what a speaker 'can' produce. His capacity to produce utterances is directly related to his 'competence'. Performance, on the other hand, is reflected in what he

really does at the time of producing sentences. Simply, competence means in Chomsky's sense of the meaning, the speaker's knowledge of the language, and his performance is his actual use of the language in concrete situations'. In his opinion, a native speaker has an inherent ability to use his language. This ability is independent of his conscious efforts at speech. It is this intuitive/inherent power to use the rules of grammar and patterns of sentences that can be seen in child who is ready at a surprisingly early age to use his language in a way that makes living for him and expansion of relations easy. Unless this occurs, it is difficult for a child to learn a particular language. 'A theory of linguistic structure that arises for explanatory adequacy incorporates an account of linguistic universals, and it attributes to the knowledge of these universals to the child, (Chomsky, *Aspects of the Theory of Syntax')*.

In other words, 'A Person's *linguistic competence is his* tacit knowledge of his language. We attribute knowledge of a language to account for his ability to use the language, to produce and understand utterances in it'. (Huddleston).

It thus rules out the necessity for a speaker to formally learn the rules in order to be successfully understood. This naturally reminds us of Charles F. Hockett's description of the salient features of language. One of these features, he points out, is *Productivity*. This means that 'a speaker of a language may say something, that he has never said nor heard before'. What Chomsky tries to emphasize through his theory of competence is this ability of the native speaker to generate new sentences that a speaker may not have heard before.

*Linguistic performance* is the use of language in concrete situation, manifestations of the speaker's ability to form potential utterances. At this point it is necessary to point out that Chomsky distinguishes between the concepts of 'sentence' and 'utterance'. 'Sentence' is a well-formed sequence.

But in day-to-day situations we donot always use well formed utterances. Rather, 'we change the sentence halfway through, or we donot complete it, or we add bits that couldnot be justified on a careful grammatical description. It has, in fact, been estimated that a large portion of spoken utterances are in this sense not grammatical at all' (Palmer).

*Performance* thus encompasses those utterances (an utterance can he a sentence in its well-formed representation of sequences), that are found in concrete situations and that the linguists must base their observations on. As Owen Thomas says, 'a generative grammar is one that contains a list of symbols, including, for example, English words, and a list of rules for combining these symbols in various ways to produce every English sentence. Such a grammar is said to 'generate' or to 'enumerate' all the possible sentences in a language... all speakers have some method of*understanding* completely novel sentences never spoken before, which means that they must have a way of 'determining, all the infinite number of sentences. In other words, rules that generate or determine are actually generalizations about language which permit a native speaker, among other things, to evaluate the grammaticality of any novel sentence'.

What is Transformational Grammar?

The shortcomings and inadequacies of the phrase-structure grammar, particularly its inability to account for transformational relationships led Chomsky to devise a grammatical system that would 'cover the entire language directly... by repeated application of a rather simple set of transformations to the strings given by the phrase structure grammar'. Transformation is an act of transforming one sentence into another, from the deep structure into the surface structure.

Chomsky's theory claims that sentences have a *surface structure* and a*deep structure*. Surface structure is more complicated, 'being an elaboration of one or more underlying simple structures' (NR Cattell).

If we take a sentence like *He saw her* which is an active sentence we can transform it into *she was seen by him* by rules of passivization which can be shown as below.

$NP_1 + V + NP_2$ (Active)

$NP_2 + IS + Ven + by + NP_1$ (Passive)

The two sentences are not considered different, the second one only a transformation of the first one.

In the same way *Has she seen me?* is only a transform of *she has seen me* obtained through a process of 'permutation'. We shall take this up a little later.

Broadly, there are three basic components of a transformational model.

i) The *phrase-structure component*which consists of a sequence of rules, of the form x ® y. 'It begins with the initial symbol sentence (S) and constructs derivation through the application of the rules of F'.

ii) The *transformational component*which introduces changes in the morphemes of the terminal strings produced by the P.S. component. Transformations are either *obligatory*(i.e. putting S after an N in NP of a c), or *optional* (such as passivization of an active sentence). A basic distinction between the *kernel sentences* and the*transforms* is made here. (The former has been discussed separately). These are, in brief, core sentences the most primary having the S ® NP + VP structure. All other structures, having relative or subordinate clause, interrogative, passives, etc. are said to derive, or are derived forms or transformations of the kernel sentences (or k-terminals, for short). For example, we can see one k-terminal string.

a) He saw a bird

Its various derivations would be

b) He did not see a bird

c) Did he see a bird ?

d) Didn't he see a bird ?

e) A bird was seen by him

f) A bird was not seen by him

g) Was a bird seen by him ?

h) Wasn't a bird seen by him ?

The different forms that we see from (b) to (h) are the derivations of the basic k-string (a) : they have been obtained or generated by applying the optional transformational rules.

The notion of *kernel sentence* was abandoned by Chomsky later on. But this notion still remains a very convenient step to understanding the essential transformational process. Chomsky later on added *a semantic* component too to understand and explain the role of meaning. He also changed the PS component and renamed it as *base component* which generates the basic sentence patterns of, a language. 'The base component consists of a set of rules and a vocabulary list (Lexicon) which contains morphemes and idioms. The main rules are called phrase structure rules or rewrite rules' (Richards, Platt, Weber).

iii) *The morphophonemic component*transcribes the transformational output by 'rewriting the morphemic representation into a proper string of phonemes' (Dinneen) *Syntactic Structures cites these* examples.

a) Walk ¾® /w]k/

b) take + past ¾® /tuk/

c) hit + past ¾® /hit/

d) /...D/ + past ¾® /...D/+/-id/ (where D=/t/ or /d/)

The morphophonemic component would rewrite the sentence *He saw a bird as* /hi s ] əbə:d./

What is Kernel Sentence ?

Chomsky distinguished between two types of sentences: *Kernel Sentences* and *Transforms*.The kernel sentences are the basic constructions, from these the rest of the complex constructions are made. The rest of the sentences are transformations of the*kernel sentences.*

Essentially, a kernel sentence is made of a noun phrase (NP) followed by verb phrase (VP).

S ¾® NP+VP

For example if we have the kernel sentence

a) Riaz sat on the chair

We can have its transforms in the constructions as follows:

b) Riaz didn't sit on the chair

c) Did Riaz sit on the chair ?

d) Didn't Riaz sit on the chair ?

e) The chair was sat upon by Riaz.

f) The chair was not sat upon by Riaz.

g) Was the chair sat upon by Riaz ?

h) Wasn't the chair sat upon by Riaz ?

We observe here how different derivations of the kernel sentence a) are obtained by means of *optional* transformations. These transformations may be called b) negative c) interrogative d) negative and interrogative e) passive, f) passive and negative g) passive and interrogative, etc.

‘Complex sentences are built up by elaborations of the simple structures that belong to these kernel sentences’.

Deep and Surface Structures

While in the earlier work (1957) Chomsky focussed his attention on the distinction between the kernel and complex sentences - the simple, active, affirmative, declarative kernel sentences ‘being directly produced by PS rules, and the rest being produced on transformation and combination with kernel sentences’, all this was changed in his 1965 version which revised the notion of complex sentences being derived from the basic kernel sentences. Now focus was on the notion that a sentence has *a deep structure*and *a surface structure*. There was no need now for considering the difference between obligatory and optional transformations. We rather see that transformations map the deep structures on the surface structures. Syntax is thus seen as the creative aspect of language, and has two broad pans - ‘the rules of the base and the transformations. The deep structure, which is concerned with meaning is produced by the base ‘component; while the transformational component converts it into surface structures.

Let us consider it in a more simplified manner. There are two kinds of structure of a sentence. One structure is the actual realization of the sentence in the way it is pronounced; its pronunciation. At this level are also manifest the units and their relationships that are necessary for interpreting the meaning of the sentence. A sentence like *The Lion attacked the deer* isthe realization of the units that make it possible to be pronounced and written in the way it is done.

Secondly, at a different level there is a more abstract structure to it that enables a user of the language to understand that the sentence means:

i) The lion attacked the deer

ii) The lion is a ferocious animal

iii) The deer is a weaker animal

iv) The deer has no chance before the lion

These different semantic features are buried under the surface and an stored at depths in an abstract form - it is a level ‘where there are no *nouns verbs, adjectives, adverbs,* etc. At this level there are only features semantic features and phonological features... they are the universals’ (N Krishnaswamy). These features are stored in the brain in a finite form and are available to speakers of any language. Some languages may not have nouns, others adjectives, others adverbs - but the features that make u interprete the meaning of the realised sentences in more than one way are there. Different languages have different ways of realising them on the surface.

The following two sentences

Ramzan kicks the ball.

The ball is kicked by Ramzan.

are closely related at the deep structure level. They have similarly meanings. The actually realized structures are different, but the abstract (deep) structures are similar. ‘So, the actually produced structure which have been encoded into phonemic form while speaking and certain symbol] characters while writing, indicates the sentences’ *surface structure* and the abstract structure constitutes the deep structure. At the deep structure level we work with the semantic

component which enables us to arrive at the semantic interpretation of sentences. At the surface structure level, we de with the phonological component whichenables us to arrive at the phonological interpretation of the sentence. As Roger Fowler observes *in the following two sentences*

He took off his hat

He took his hat off

We see the same meaning, but they are different arrangements of word 'Since the difference... is immediately apparent at first glance *on the surface*... they exhibit surface structures... they have the same *Jet structure.'* Deep structure relates to meaning, surface structure relates 1 order of elements, and hence to sound, for in effect the surface structure determines the sequence of sounds which occurs in a phonetic realization *on* a sentence. Surface structure is a dimension with physical associations since it is the point at which a sentence impinges on space and time. Deestructure, however, is an abstraction, a complex of meanings which is 'unpronounceable' unless it is rendered as a surface structure'.

T. Grammar is an advancement on PSG in that it considers deep structure essential and doesnot believe in 'eliminating the distinction between linguistic form and the use of language. By including the semantic level, the notion of formal structure has only been enriched.

The relationship and all steps in the relationships between the deep and surface structures have been stated by the term 'transformational'.

Let us look at the following diagrams.

In these examples there can be seen a likeness between the two sentences – they are derived from the same deep structure. The difference is due to the 'effect of a transformation which we shall call passivisation, that applies in the second derivation and not the first'.

VP ¾® (passive + Vt + NP

Similarly, let us take another sentence

The old car broke down.

Deep structure [the car [the car was old] broke down]

–

Relative transformation

–

[the car[which was old] broke down]

–

Be-deletion transformation

–

[the car[old] broke down]

–

Adjective movement transformation

–

Surface structure The old car broke down.

*The old car broke down* can be put through the *which transformation* to obtain the following surface structure *The car which was old broke down.*

The transformational process can be described as follows:

'if an NP + S sequence occurs dominated by an NP, and if that S dominates an NP whose referent is the same as the NP in the NP + S sequence, then the dominated NP ultimately becomes either *who* or *which.'* This is known as relative transformation.

The car which was old broke down.

Syntactic Processes

Syntax is the core of the grammar. It is necessary to understand i) the patterns that underlie the sentences, and ii) the ways and means of linking the constituents and the rules of transforming one kind of structure into another. We shall discuss here some of the major syntactic processes whereby we obtain various syntactic patterns.

Conjoining

Conjoining is also identified by other terms like 'co-ordination' and 'conjunction'. In this process certain parts of two or more sentences are similar in structure. The co-ordinators join the sentences. 'This process is possible only when there is a similar relation of constituency' between the segments thus conjoined and the sentences.

*Syntactic Structures* gives us this example:

the scene – of the movie – was in Chicago.

the scene – of the play – was in Chicago.

Conjoining process seeks 'to obtain the proper relation of constituency', to produce this new sentence.

*The scene of the movie and he play was in Chicago*

Embedding

In it one sentence is included within the other. Embedding transformation process embeds the *constituent sentence* into the*matrix* (or basic) sentence.

$\{S_1 [S_2] S_1\}$

Instead of joining the two sequences of equal status, one sentence becomes part of the larger sentence.

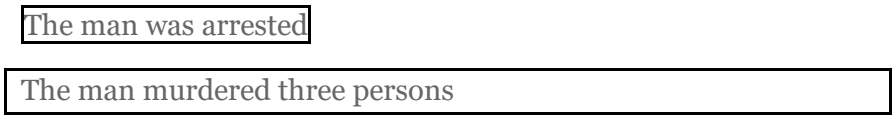
| | |
|---|---|
| (1) The news | surprised his friends. |
| | (2) (that) he had got married |

Sentence (2) is embedded in sentence (1) and is, therefore, an embedded sentence.

Let us consider another example:

$S_1$ $S_2$

The man was arrested The man murdered three persons




This diagram shows that $S_2$ is subordinate to $S_1$ and, therefore, embedded in it.

There are two major types of embedding:

a) nesting and b) self-embedding

In a nesting construction the *nested* segment is totally enclosed within a matrix. We take another example.

The girl who bought the cosmetics gave money which was borrowed.

In the above example *who bought the cosmetics is* nested. *Which was borrowed is*not nested as no part of the matrix occurs to right of it.

A *self-embedded* construction is totally enclosed within a construction *of the same type* (Fowler).

Recursion

Through this process the same rules may be re-applied 'indefinitely many times within a single derivation'. As has been pointed out earlier, transformationalist believe that a language user has at his disposal an infinite number of sentences. This is chiefly because he can use the 'recursive' process, using the same linguistic device over and over again. This enables us to add any constituent (adjective, for example) repeatedly,

The old man, the little old man, the little poor old man, the clever little poor old man, and so on. 'To prove to anyone who doesnot believe in the infinity of the number of sentences in a language, we have merely to ask him to give us the largest sentence he can produce and then add another adjective or relative clause to it' (Palmer).

The example cited above is the realization of the NP NP + (S) rule.

The example cited earlier, 'the old man'... can be also be accounted for by a set of rewrite rules.

NP ¾® Det + Adj + N

Adj + Adj + N

Adj + Adj + Adj + N

Adj + Adj + Adj + Adj + N

This type of sentence can be expanded without apparent limit, and thus rules can go on being multiplied. As Roger Fowler says, 'we donot need a new rule to extend the sentence each time,

just one complex sentence forming rule can be applied over and over again… recursiveness is a property of complex sentences', and 'a transformational grammar with recursive rules represents a substantial gain in economy over other alternatives'.

Discontinous Constituent

Scholars of *structural* linguistics usually worked with cutting, classifying and labeling elements of language which is the process of IC analysis. Among the difficulties theyencountered in following this method was that it was simply not possible to cut into neat segments certain sequences, as the elements that belong together are separated by some other element/s. There is thus a discontinuity in the sequence. Such constituents are known as 'discontinuous constituents'.

A very simple example is the sequence, *the finest orator in the world.* He sequence *the finest* naturally goes with *in the world.*Orator forms the other IC, but it interferes with the former to create 'discontinuity'.

Phrasal verbs produce the most familiar types of discontinous constructions. We can use in sentences such phrasal verbs as put down, push away, brush off, make up, look up, etc to see how discontinous constructions are created by them.

He brushed her explanation off

He brushed the dust off his coat.

The mob pushed him away.

The general soon put the uprising down

She made the whole story up

In such constructions the adverbs often follow the object, though they belong with the verb. In interrogative sentences the 'discontinuity' process is quite obvious:

Is she coming?

This can be shown by using 'boxes'.

Discontinuity in the sentence *He brushed the dust off* can be shown in the following manner.

Form-classes

The constituents of a sentence have the inherent lexical meaning as well as the *class meaning*. An important type of class meaning assigns a particular component occurring in the sentence structure a function meaning. These places or *spots* are structurally meaningful places in the sentence. What kinds of form can be filled in these places depends on their position.

| Ducks | swim |
|---|---|
| Noun Phrase | Verb Phrase |

The most basic dichotomy is between *a Noun Phrase* and a *Verb Phrase*. An utterance or a sentence must have these two components. These are also known at another place as *the topic* and *the comment*. These are the most common form classes. Any other sequence or sequences that can replace *Ducks will play*the same structural role as that single word. For example, we can use *Two ducks. The two ducks; The two old ducks;* or *birds; the migratory bird; boys, the boys; the young boys,* etc. Similarly, sequences that can replace *swim,* keeping the same structural relationship to the *Noun phrase,* are called*Verb phrase*. Thus we can replace *swim* with such possible sequences as *eat, eat slowly, walk fast, speak,* speak loudly, and so on.

Such structural positions are called *form classes,* and are also referred to as *primary grammatical categories*. In traditional grammar 'the major parts of speech were associated with certain typical syntactic function. The basic primary grammatical categories we have just identified in the sentence *Ducks Swim* can be shown diagrammatically as follows.

A constituent in English has two types of meaning - *a lexical meaning,* that can be known by its ability to refer to things outside the language. A dictionary gives us the lexical meaning of words; and *a structural* or*formclass-meaning,* whose meaning derives from their membership of a form class. Certain words clearly show lexical meaning,*chair, table, man, girl, hair, eyes,* so on. In certain words form-class meanings are more dominant, *the, of, from, by, since,* etc. But there is no word which doesnot possess form class meaning.

We have already noted that an utterance or sentence can be divided into a Noun Phrase (NP) and a Verb Phrase (VP) by virtue of their having different basic syntactic functions.

Noun Phrase

What we see in a Noun Phrase is that sequences occurring in this *slot* are all centred on the same category of word *noun*.However complex a sequence may be that occurs in this position, if it can be replaced by a single noun, or pronoun, it is called an NP. 'Any Phrase that can function as subject is a noun phrase' (Noel Burton-Roberts). These identifiable actual words that can be isolated by gradually peeling off other words without damaging the sentence structure is a noun in NP. Such words are called *Head words*. They may be a noun of any type or a pronoun.

| | A | B |
|---|---|---|
| 1. | She | resumed her seat |
| 2. | My friend | wasted his time |
| 3. | The new car | runs smoothly |
| 4. | The car that | created problems |
| | you bought yesterday | |

The sequences occurring in section A are all NP. In the first sentence *She* is a pronoun, Head of NP which is a single word constituent (NP). In the second sentence *my friend, friend* can be identified as noun, *my* a possessive pronoun *modifies* it. Similarly, *the new car* shows *car a* noun, which is the *head*.So also in the last sentence. In sentences 2, 3 and 4 if we remove the determiners and modifiers, we will be finally left with a noun that will still be functioning as syntactically relevant function word.

But if we remove the noun *car,* or *friend,* the structure of the sentence will suffer and we shall be creating impossible sentences like,*my wasted his time, the new runs smoothly*.As Noel Burton-Roberts defines it, 'In a phrase containing a modified form the essential centre of the phrase is said to be the Head of the phrase'.

Head words are recognised as constituting an open class. This is a place, or spot, or slot where any word that can function as noun can become the Head word. We may have a sentence like *There are too many ifs and buts in your argument. Ifs* and *buts* function here as nouns, therefore as head words.

Head words can function as subject and can occur as complement.

They follow *determiners* which are closed class words. They show morphological changes for form and class. A single noun can be the Head as well as the NP in a sentence. In *Ali reserved his seat,* Ali is a noun, a headword and an NP.

Determiners

Noun head words pattern with a wide range of adjuncts. These adjuncts are labelled*determiners* and *modifiers*. The class of determiners is fairly large with many sub-classes. However, we shall here take into account three major sub-classes.

i. regular determiners.

ii. pre-determiners.

iii. post-determiners

i. Within this class we can identify*articles, demonstratives* and*possessives* (also called genitives). The basic determiner is *the,* the definite article. It precedes a noun or NP1 and demonstrates the nounness of it. It has a particularising role, *I know the man; the tree has grown tall; The boys are rowdy,* where its meaning is 'before mentioned' and 'already known'. Articles and demonstratives are divided according to the number of the nominal.

| Art | Demon. | Possessives |
|---|---|---|
| a, an | this | my |
| q | that | our |
| the | these | your |
| any | those | her |
| every | | its |
| each | | their |
| some | | nom + $z_3$ |

($Z_3$ is the symbol for the genitive form N + 's)

Two regular determiners donot occur before a noun. Only one determiner preceds it, showing a relation of mutual exclusiveness. This principle distinguishes determiner from an adjective.

*ii. Pre-determiners* co-occur with determiners, normally preceding them:

all the boys

both these umbrellas

half Rita's time

If we say *all boys* the position is occupied by the zero article. Many of the determiners and pre-determiners function like pronouns.

In the above example, *both* predetermines the determiner *these* which in turn determines *umbrellas*.

*iii. Post-determiners* follow the determiners and precede the adjectives. While adjectives can 'occur in any order, post-determiners have fixed positions. The following three classes of post-determiners can be recognised.

| Ordinals | Cardinals | Superlative/comparative |
|---|---|---|
| first | one | more |
| second | two | most |
| third | three | fewer |
| next | many | fewest |
| lost | few | less |
| final | several | least |

In the examples, the last few days; the first four girls

we find that *first* and *last* which arc pre-determiners occur with *few* and *far*. But their order cannot be changed.

Finer distinctions are made and sub-classes recognised within the *large* group.

Absence of an article is marked by q symbol. Such an absence cannot totally be ignored. Its absence gives an information of the kind that can *be* compared to the information given by the determiners. The information could be about indefiniteness. We can thus have

q + tables, the table

q + chair, chair

Determiners, then, give information about*definiteness* and *indefiniteness, quantity* and*proportion*. Their function is not to modify but to determine a nominal.

Modification

The term modification suggests the syntactic relation between a headword and the element that is dependent on it. This dependent element may occur either before or after it. When it precedes the H (head) it*premodifies;* when it follows the H, it is said to *post-modify*. It is a one-way dependency/function.

Let us look at the following construction,

*his rather curious look ,* phrase a

The Head word is preceded by *curious, rather* and *his*. We see here the following relationships.

his + phrase b

phrase c + looks

rather + curious

Such structure is called the structure of modification. 'It has the same distributional characteristics as the head constituent (H)'.*The boy ran, the young boy ran,* He stood *tall and straight*.

In (A) example the headword (N) is modified by *young* (Adj.). In (B) the VP has a VS *-ran*which is the head word of the VP modified by *slowly*.

In the earlier example *curious* is modified by*rather, a* word which shows the extent of curiousness; *rather* is dependent on *curious* -it cannot occur all by itself. At the next higher level *rather curious* specifies *look* and are, therefore, dependent upon the latter. We can omit the whole phrase *rather curious*and still have a meaningful sequence *his looks* as it is the *headword* and the whole sequence preceding it is dependent upon it.

Most adjectives act as pre-modifiers of nouns.

1. A pretty girl met me.
2. Good people are honest.
3. A *tall* chimney came down.

Adjectives can be modified by other adjective - *a good tall* chimney, a *small pretty girl*.

They can also be modified by degree adverbs like *very, rather,* quite, *too, much.*

Nouns as Modifiers

In a sequence in which two nouns occur, one of them can act as attributive or pre-modifier :

*football match;* *Cricket*

(Mod) (N) (Mod)

*commentary; film industry; munition factory*.

(N) (Mod) (N) (Mod) (N)

The modifier noun can also be proper noun -*Delhi conference, Geneva convention, cardinal numerals* (one, two, three), the *ordinal numerals,* (first, second, third…) and *general ordinals* (next, last, other) can also function as pre-modifiers.

Let us now look at the following examples.

| | | | |
|---|---|---|---|
| | the faded scene | | the crumbling cake |
| A | a forgotten valley | B | the flying bird |
| | remembered moments | | the moving train |

The phrases in set A have perfect participle forms *faded, forgotten, remembered,* they appeal to meaning by referring to valley that has been forgotten, the scene that faded and the moments that are remembered. They modify the noun-head. Similarly, the examples in set B show *progressive participle*as modifying element for *cake, bird, and train*. *Obviously* these in turn can be pre-modified in different ways.

*Post-modification :* In this type of modification the modifiers follow the item they modify.

The men injured were flown to Karachi.

The houses built recently have shown cracks.

The words *injured* and *built* are post-modifiers following the noun heads *men* and*houses*. In fact, we can see that these modifiers can be regarded as 'reduced relative clauses' so we can expand them in the manner shown below.

The men (Who were) injured were flown toKarachi.

The houses (that were) built recently have shown cracks.

There are some phrases that show adjectives with special meaning -
Secretary *General,*president *elect,* court *martial,* attorney*general,* heir *apparent,* etc.

Verb Phrase

In the example cited earlier, *Ducks swim,* we have labelled *swim* as verb phrase. It is the second of the two immediate constituents. These are called predicates and embody 'comment' on the 'topic'. Predicates contain a verb which optionally may be modified or complemented. These verbs are the Headword of the VP.

In the above example *the boy* is a noun phrase with a noun as its centre (Head) and*are moving away* is *a verb phrase* with*moving* as its centre.

A verb phrase contains a *verb group* (Vgp) which consists of *a main verb* that may be optionally modified by other verbs known as*auxiliary verbs*.

The simplest kind of VP is one-word construction with only a Head which is also a verb group (Vgp).

In the sentence

He is NP and is *waking* is VP which consists of Vgp made up of an auxiliary verb and the main verb *walking*.

Main verbs show morphological possibilities - they can be inflected in the following manner.

Walks Walking Walked

Swims Swimming Swam

Complementation

A verb phrase may or may not contain a noun phrase.

The occurrence of an NP is one of complementation. A relation of mutual dependency exists between a Vgp and an NP in which Vgp acts as governor. Thus we can see in this example,

We cannot omit the NP from the VP. Similarly, we cannot do without *caught***.** Both

* He caught and

and * He those flies are unacceptable

Such verbs are called *monotransitive* or simply *transitive*. *We* shall discuss this process later on. It is not necessary that all verb groups should be followed by an NP. In our example above, if we replace *caught*with *slept,* we must drop the NP to have such a grammatically acceptable construction as

He slept

We cannot construct a sentence in this case which has a Vgp followed by an NP. We shall have an incorrect sentence if we do so such as

* He slept those flies or

or

* He looked those flies

Verbs that are followed by an NP are called*transitive* verbs; without such an NP they are known as *intransitive* verbs.

*Appear, disappear, look, feel, go, come,* etc.

are some examples of intransitive verbs. However, these verbs can be followed by adverbs of various types. *He appeared suddenly, He appeared on the scene;* or they may occur without them.

But this is not part of the complementation as the sense of the sentence is complete without it. Rather, it is a *modifier* in VP. VPs can include PP *(on the scene, for instance)* as optional modification.

Verb Group Classified

Verb group can be sub-classified into six types according to what occurs after it.

i) Monotransitive verb group (or Vgp)

ii) Ditransitive

iii) Intransitive

iv) Intensive

v) Complex transitive

vi) Prepositional

Monotransitive

As we have already seen, a monotransitive Vgp needs one NP as its complement. This NP functions as its direct object, for example :

*deer* is the NP in the VP which complements the transitive verb saw. Pronouns functioning in this place assume specific forms which are called *objective case*(accusative). The NP complementing a Vgp is called the, *direct object*.

Ditransitive

This type of Vgp takes two NP complementations. Example,

1 2

a. She sent *me* a *message*

1 2

b. John gave *Jill* a *car*

1 2

c. Jill bought *John* a *candy*

Words marked I are *indirect object* and those marked 2 are *direct object*. Both the NPs are governed by the Vgp *sent,* in a. *gave* in b. and*bought* in c. We can also write these sentences in the following manner.

a. She sent a message *to* me.

b. John gave a car *to* Jill.

c. Jill bought a candy for John.

The indirect object, in these examples appears as prepositional phrase following a direct object. Such PPs are introduced by *to*or *for*.

PPs of this type are part of the complementation of the intransitive verb.

Intensive

Either a single Adj. Phrase or an NP or a PP can complement an intensive verb group.

She became a doctor (NP

John is being rather generous (AP)

Jill must be in the class room (AP)

We must note here that in the above examples no second person is mentioned. It is different from monotransitive Vgp. complementation where something apart from the subject is mentioned (i.e. *she saw me)*. The NP, AP and the PP can be said to be 'predicative', and also 'complement' which' distinguish it from 'object'. The following examples make it clear.

i. Ramzan turned pale.

ii. Ramzan turned the doorknobs.

iii. She felt sad.

iv. She felt spider on her hand.

Examples i and ii show intensifying Vgp taking *a subject predication,* an AP, since they characterise the subject. In ii) and iv) VP has a complementation which gives information about something other than subject.

Complex Transitive

Here we see a combination of the monotransitive with intensive complementation : complex transitives are followed by an NP (Dir. obj.) and an NP, an AP, or a PP (predicative).

i. They will make me their representative (NP)

ii. I found his joke extremely unpleasant (AP)

iii. Jill is putting the basket under the table (PP)

While in an intensive Vgp construction; the predicative characterises the subject (i.e. he became a doctor), in the complex transitive constructions the predicative refers to the direct object : *She will be his wife*. *Such*complementation is called object predicate.

Prepositional

He glanced at the elephant

Jack *referred to* the o1d book.

In the above sentences a VP contains a PP which complements the Vgp. Such complements are known as prepositional complements.

Adverbials

Also known as *adjunct adverbials,* this is a large class expressing a wide range of ideas like manner, means, purpose, reason, place, time.

Adverb, or Adverb Phrase denotes a category; Adverbial denotes function.

a. So apart from functioning as adverbial, adverb has other functions too like modifying an adjective as in this example.

She is extremely beautiful

b. It is not just adverbs that function as adverbials, other categories can also function as adverbials, i.e., PPs and NPs.

| Adverbial | Adverbs |
|---|---|
| Function | Prepositional Phrases |
| | Noun Phrases |

Adjuncts appearing in the VP modify the segment Vgp + NP, not just the Vgp alone. Let us look at the following examples :

The PP adjunct *in the garage* characterises the verb group (Vgp) *put hi car* as a whole not just the NP (his car).

Pre-verbs

It is a sub-class of adverbs, which occurs after 'the first auxiliary Vb *almost, ever, always, seldom, hardly, rarely,* etc.

Ramzan is *always* in a hurry

Rina has *never* read a novel

I can *hardly* understand it

*Time adverbs:* We can note various notions of time expressed by these adverbials, in the following examples:

i. He came to see me *again*

ii. We saw him in Karachi *last year*

iii. Ramzan will leave at *8 o'clock*

The adverbials in these examples indicate a point or period of time. So also *now, then,*etc. Other adverbials indicate the point of time from which the period can be measured.

*Recently* I saw an old film.

*Once* I saw an old film

*Time duration is* indicated in the following manner :

He studied all night long

We had been moving *since last Sunday*

Frequency is suggested by adverbials like*regularly, everyday, often, seldom, usually, twice, never, soon.*

He *regularly* visits the library

Take the tablet *twice a day*

I sometimes feel giddy

The following examples show PP functioning as adverbials.

She has spoken about it *on several occasions*

He has not seen me *in recent times*

*Degree Adverbs :* Effect can be underscored by putting a degree adverbial in the VP of a sentence. The result is lowering or hightening of effect.

He will *certainly* agree

We *nearly* fell off the ladder

*I much* prefer to stay alone

Among others we can note definitely, thoroughly, all but, rather, really, entirely, scarcely, hardly, simply as degree adverbs.

*Place adverbs :* As is obvious, these adverbs indicate the place.

He stood on the hill

Roberts fell in the bathroom

He studies in the college

Mobility of the Adverbials

A high level of mobility is observed in the adverbials. They can be moved around somewhat freely, and donot necessarily occur only in a position after the Vgp and its complement. In fact we can shift a PP around in a sentence to see if it functions as an adverbial or as a complement.

He arranged everything *cleverly*

He *cleverly* arranged everything

*Cleverly* he arranged everything

He arranged *cleverly* everything

We can experiment with other adverbs in this manner.

*Phrasal verbs :*

Phrasal verbs consist of the elements that also comprise some PPs. Apparently they look alike.

1. a. He *took down* the dictation.

   b. He *took* me *down* the stairs.

2. a. I *called up* the man.

   b. I called up the balcony.

In the set 1, and 2, a. shows a phrasal verb, while b. shows a verb plus an adverb.

In *a. down the dictation* doesnot make sense;*took down* form a unit, a *phrasal verb*. In *b. down the stairs* makes sense. Similarly, in set 2 *up the man fails* to carry sense, but *up the balcony* does. Though these segments, *call up*and *take down* look alike, they belong to different categories and have different functions. We can distinguish them from *call off put down, hand over, give up, give in* and a whole multitude of other phrasal verbs.

Phrasal verbs may consist of more than one element, but all the units function together as one-word verb group. It consists of Vb + particle.

An important feature of it is that it can appear as discontinous form -

*NP as adverbial*

Certain noun phrases function as adverbials.

He arrived *last week*

She left *day before yesterday*

We had seen it *three years ago*

*Non-finite clause as adverbial*

All the three types of non-finite clauses.

1. an infinitive
2. a progressive participle *(-ing* type)
3. a perfect participle *(-ed* type)

can function as adverbials

1. An infinitive functioning as adverbial is shown below :

   He works *to earn his bread*

   Ramzan came *to meet his friend*

   We went there *to spend the vacation*

2. A progressive participle functioning as adverbial is shown below :

   He felt satisfied, *having talked to us*

   *Entering the room*, he collapsed

3. We can see the perfect participle functioning as adverbials in the following examples.

   *The work done,* he left the place.

   *Not satisfied,* we quit the office.

   *Forgotten,* the book lay there for years.

Sentence Adverbials

This is a class of adverbial formation that is not strictly integrated in the structure of the sentence. Also known as *Disjuncts,* these constituents represent some sort of comment from the speaker and so are peripheral to the structure of the sentence. Let us look at these examples :

a. i) She upsets everything *between you and me*

   ii) She upsets everything, *between you and me*

b. i) He admitted everything *frankly*

ii) He admitted everything, *frankly*

In the i) sentence of both the sets the sequence *between you and me* and *frankly*are *adjuncts*. In ii) sentences, on the other hand, these same sequences function as*disjuncts,* denoting what the speaker has to say, and not how *she upsets* or *he admitted,*or the manner of these actions. These are expressed in sentence i. of both the sets.

Disjuncts are loosely attached to the sentence structure and can also be placed in the initial, middle or final positions.

In writing disjuncts are shown by a comma, while in speaking a distinct intonation movement marks them. Structurally, like other adjuncts, disjuncts or sentence adverbials can appear as

i. a prepositional phrase in all honesty

ii. an infinite clause to be honest

iii. a progressive participle honestly speaking

iv. a perfect participle put honestly

v. a finite verb clause if I can speak honestly

Auxiliary Verb Group

We must keep in mind that the verb group (Vgp) which is a constituent of the VP has*main verb* (lexical verb) as its head. This optionally takes the verb modifier *auxiliary verb*. The function of the auxiliary verb is *to*modify the lexical (maim) verb, while the number of the lexical verbs is very large, infinitely large, the auxiliary verbs are a restricted set of morphemes forming a closed system. These are placed before the main verb, when an auxiliary verb combines with the main verb to form a verb group, we get a *complex verb group*. But when a single verb forms the *verb group, we have simple verb group*. Such simple Vgps consist of main verbs only.

He talks rapidly

I met some guests

She went there

They cracked soon enough

*Finite Verbs* are those that are tensed. A sentence must contain a finite Vgp.

Work Worked Working

leave left leaving

eat ate eating

Non-finite verbs are not tensed; *participles, gerunds,-infinitives* are types of non-finite Vgps.

Finite verb also changes its forms according to the number and person of the subject NP.

She goes

They go

It cracks

These crack

This kind of relationship is known as *subject-verb agreement* or *concord*.

Auxiliary verbs are classified into Primary auxiliary and the modal auxiliary. In the former we find the verbs *do, have, be,* with their variant forms - have*, has, had, having, do, doing, done, be, been, being, is, are, was, were,* etc.

In modal auxiliaries we find can, could, may, might, must, shall, should, *will,* would, need, dare, used to, ought to.

Auxiliary verbs also function as main verbs, i.e. they constitute the single-verb Vgp.

Modals are not tensed, nor do they show subject-verb agreement; their form is always that of the present tense.

I can go; She must read; They will win, and so on.

Even the verb that follows the modal shows the *basic stem form*.

An auxiliary verb having the perfect aspect modifies the main verb following it.

has MV + perfect

have

had

The changed form of the MVb is called*perfect participle*. For progressive aspect we require auxiliary verb *be,* followed by a main verb that takes *-ing*.

He is running; They *were eating*; He was writing.

Passivisation

Auxiliary verbs play a very important role in a kind of transformation process known as*passivisation*. This affects the whole sentence. For this we must switch the positions of subject and object. Subject becomes a PP and passive Vgp is introduced.

The Vgp that creates passive voice sentences must contain *be* verb or their different forms.

| ***Active*** | ***Passive*** |
|---|---|
| build/built | is/was built |
| is/was building | is/was being built |
| has built | has been built |
| will build | will be built |

The forms taken by the main verb after the passive auxiliary verb is the *passive participle* form. Its form and that of the perfect participle is the same (built).

## Modern Grammar and Structuralism

The average educated person is no stranger to the word *grammar*. We all have an idea of what it means, though the concept is shrouded in vagueness, wrong-headed notions and ill-founded associations. Not only this, we use the word rather in a generalised sense in such expressions as the 'grammar of music', 'the grammar of art', and so on. This underscores the core notion that 'grammar' invariably refers to a set of rules that governs any system and arrangement of components.

But the notion belongs to language and its analysis, for it has always been believed that a language can not be correctly learned without mastering its grammar, and by language is meant only the written language; spoken languages donot have grammar ! It is something sacred and ideal; it provides the model of 'correct usage', and the learner must strictly follow its rules and precepts. Grammars are intolerant of deviations, even the slightest diversion is held in scorn ! Grammar is either good or bad, correct or incorrect, for example, to use end-prepositions is objectionable and to say 'It's me' is wrong and bad ! A plethora of ideas and myths have arisen to surround what we commonly understand by the word 'grammar'.

It was evolved in ancient Greece by *sophists*of the 5th century B.C. who attempted to subject everything to measurement - music, geometry, astronomy, and even language study. In their teaching of rhetoric, for example, they recommended the use of rounded sentences, in which phrases and clauses of successive sentences would be of equal length, right down to the last syllable' (Dinneen).

Philosophers from older clays have always been interested in language as a powerful medium of attaining knowledge about nature, and were, therefore, very much concerned with maintaining 'the purity of speech'. Development of the art of rhetoric has largely been dependent upon proper understanding of the mechanisms of language, and, more importantly, upon designing a system of rules which would serve as a model for its users. This preoccupation with what is correct and incorrect continued for several centuries, right down to the time when a 'scientific descriptive' outlook towards language began to develop and the normative and prescriptive tone began to weaken.

However, grammar that has continued to be taught in schools and colleges for generations, the strict classical system of rules imposed on the speakers by scholastic authorities has much deeper roots in old tradition of ancient Greek and Roman time.

Defining Grammar

The sense of bewilderment and confusion that has resulted from the multiple view points, approaches and applications of 'grammar' over centuries has made the task of finding a clear-cut definition of it rather formidable. Rhetoric and art of oratory created the word *grammatkia* or*granimatika techne* in Greek from which derives our word grammar - 'these Greek words meant the art of writing' which was a branch of philosophy. Towards the middle ages, Priscian and then Peter Helias dominated the current thinking on language with exclusive attention paid to evolving rules for talking about the nature of thing as an end in itself' (Dinneen).

Hellas defined grammar as 'the science that shows us how to write and speak correctly. It is the task of this art to order the combination of letters into syllables, syllables into words, and words

into sentences… avoiding solecisms and barbarisms'. Later on in the 13th century Petras Hispanus sought to discuss language in his *Summulae Logicales* as the communication of the major stages of knowledge and went on to define his discipline as 'science of sciences and art of arts'.

The 16th and the 17th century grammarians were rigorously prescriptive as they were acutely aware of 'how barbarously we yet write and speak and were desirous if it were possible, that we might all write with the same certainty of words, and purity of phrase, to which the tartars first arrived and after them the French' (Dryden).

Grammar thus describes 'what people do when they speak their language'. Grammar doesnot exist between the covers of the book, written down and to be learnt by' heart. A native speaker uses his language with an intuition about its grammar. According to some scholars a grammar must be capable of explaining this intuition. Grammar is a theory according to Noam Chomsky 'that deals with the mechanisms of sentence construction, which establish a sound-meaning relation'. And according to Nelson Francis 'grammar is the study of organisation of words into various combinations often representing many layers of structure such as phrases, sentences, and complete utterances' (Structure of American English).

Background to Structural Grammar

The beginning of the twentieth century was marked by a new approach to grammar suggested by linguists like Ferdinand de Saussure and American linguists like Franz Boas, Edward Sapir and Bloomfield. This school of linguistics is called **structuralism.**This school arose as a reaction against the approach of the traditional grammarians of the 17th, 18th and 19th centuries.

The traditional grammarians had looked upon Latin as their model. Since English is a member of the Indo-European family of languages, to which Latin and Greek also belong, it did have many grammatical elements in common with them. But many of these had been obscured or wholly lost as a result of extensive changes that had taken place in English. Early grammarians considered these changes as a sort of degeneration in language and felt duty bound to resist these changes. They, therefore, came out with a group of prescriptive rules for English on the basis of Latin. They ignored the fact that every 'language is unique in its own way and has to be described as autonomous in itself. They did not realise that the only standard which is to be applied to a language is the language itself, its USAGE. Also, they attached more importance to the written part of language than to speech. Even the definitions of the parts of speech given by them, as has been discussed earlier, were inadequate and confusing. Instead of describing the actually**spoken** language, they found faults with it on trivial considerations. The following sentences, though in common use, were condemned by them for reasons shown in brackets:

1. I do not know nothing. (double negative)
2. I will ask you to quickly do it.

   (use of 'will' with I and use of split infinitive)
3. He is taller than me.

   (comparison is between he and I and not me)

The real authority, in judgement concerning the correctness of sentences in a language, is the native speaker who uses the language, not the grammarian. The approach of the traditional

grammarians was thus not scientific or logical; it was rather an illogical presumptive approach, **prescribing** certain rules of do's and don'ts as to how people should speak or write in conformity with the standards they held dear. They did not first observe as to how people use the language and then **describe** it depending upon the usage.

The traditional grammarians gave a classicist's model of grammar based on the authority of masters of classical literature and rhetoric, while later on, after this authority was challenged (a process which began from the Renaissance onwards), models of grammar began to be made on the basis of scientific observation and analysis i.e. empirical approach or model was adopted.

The structural linguists began to study language in terms of observable and verifiable data and describe it after the behaviour of the language as it was being used. These descriptive linguists emphasized the following points:

(i) *Spoken language is primary and writing is secondary*. Writing is only a means of representing speech in another medium. Speech comes earlier than writing in the life of an individual or in the development of a language.

(ii) *The synchronic study of language should take precedence over its diachronic study*.Historical considerations are not very relevant to the investigation of a particular temporal state of a language. In the game of chess, for example, the situation on the board is constantly changing. But at any one time, the state of the game can be fully described in terms of the positions occupied by several pieces on the hoard. It does not matter by what route the players have arrived at the particular state of the game.

(iii) *Language is a system of systems.* It has a structure of its own. Each language is regarded by the structuralists as a system of relations the elements of which sounds, words, etc. have no validity independently of the relations of equivalence and contrast which hold between them.

The structural linguists attempted to describe language in terms of its structure, as it is used, and tried to look for 'regularities' and 'patterns' or 'rules' in language structure. Bloomfield envisaged that language structure was associated with phoneme as the unit of phonology and morpheme as the unit of grammar. Phonemes are the minimal distinctive sound units of language. The word tap, for example, consists of three phonemes: /t/, /æ/, and /p/. Morphemes are larger than phonemes as they consist of one or more phonemes. The word **playing** consists of two morphemes **play** and **ing** whereas it consists of the phonemes /p/, /l/, /eɪ/, /ɪ/ and /ŋ/. So in order to study the structure of a sentence, a linguist must be aware of the string of phonemes or morphemes that make up the sentence. Here is a sentence:

The unlucky player played himself out.

As a string of phonemes, it is:

/ðɪ vnlvkɪ pleɪ ð hɪmself a t/

As a string of morphemes, the structure is:

The-un-luck-y-play-er-play-ed – him-self – out.

The type of approach in respect of the structure of language was based on a desire to be completely precise, empirical, logical and scientific as against the unscientific, illogical and prescriptive approach of the traditional grammarians.

Immediate Constituent Analysis

In order to study the structure of a sentence, the structural linguists thought of dividing a sentence into its immediate constituents' (or ICs). The principle involved was that of cutting a sentence into two, further cutting these two parts into another two, and continue the segmentation till the smallest unit, the morpheme was arrived at. This can be shown by taking a simple example of a sentence like:

A young girl with an umbrella chased the boy.

This sentence is made up of some natural groups. From one's intuitive knowledge of the language, the only way one may divide it into 2 groups is as follows:

**A young girl with an umbrella chased the boy.**

1 2

The two parts of the sentence as shown above are called **constituents** of the sentence.

Now 1 and 2 can be further divided into natural groups as follows:

**A young girl with an umbrella chased the boy.**

1-A 1-B 2-A 2-B

1-A and 1-B are the **constituents** of 1 while 2-A and 2-B are the constituents of 2. The above information can be displayed in the form of a **tree diagram** as follows:

Now, 1-A, 1-B, 2-A and 2-B can be further sub-divided into smaller constituents as follows:

This type of analysis of a sentence is called**Immediate Constituent Analysis.** Every constituent is a part of a higher natural word group and every constituent is further divided into lower constituents. This process goes on till one arrives at the smallest constituent, a morpheme that can no longer be further divided. The full IC analysis of the above sentence is given below:

These constituents can also be labelled as belonging to different grammatical constituents like Noun phrase, Verb phrase, Adverbial, and Prep. phrase, which can be further divided into categories such as Noun, Adjective, Verb, and Tense Morpheme. Different methods are used for showing the immediate constituents. Some of these are given below:

*a) Segmentation using vertical lines*

A | | young | | | girl | | with | | | an | | | | umbrella | chase | | | d | | the | | | boy

*b) Segmentation using brackets*

[[[(A)] [(young)(girl)]] [[with] [(an)(umbrelIa)]]] [[(chase) (d)] [(the) (boy)]]]

*c) Segmentation using a tree diagram*

Now, the question arises as to how we should make the cuts. The answer lies in the notion of 'expansion'. A sequence of morphemes that patterns like another sequence is said to he an expansion of it. One sequence can, in such cases, be replaced by another as the similar sequence patterns will appear in the same kind of environments. Here is an example of similar sequences in expansion that can fit up into the same slot:

i. Daffodils

ii. Yellow daffodils

iii. The yellow daffodils

iv. The yellow daffodils with a lovely look.

The elements (ii), (iii), (iv) are expansions in the above set, i.e. "daffodils" the HEAD word, whereas the other words in (ii), (iii), and (iv) are modifiers. Incidentally, the set of examples given above can be grouped under the term **Noun Phrase (NP)**.

A noun phrase may be a single word, a single noun or pronoun, or a group of words that belong with the noun and cluster around it. A Noun phrase has in it a Noun (a Head word) and certain **modifiers**. Generally a noun in a Noun phrase (optionally) has the following modifiers appearing before it in the given order:

| | | |
|---|---|---|
| 1. | Restrictor | Words like: especially, only, merely, just, almost, particularly, even |
| 2. | Pre-determiners | Words like: half, double, both, one-third, twice, all of |
| 3. | Determiners | These words include<br>(a) Articles: a/an, the<br>(b) Demonstratives: this, that, these, those<br>(c) Possessives: my, his, own, Ali's |
| 4. | Ordinals | Words like: first, third, last, next |
| 5. | Quantifiers | Words like: many, several, few, less |
| 6. | Adjective Phrase | good, long, tall, or intensifier and adjective, e.g. good, or adjective and adjective, e.g. good, nice looking |
| 7. | Classifier | a **city** college<br>a **leather** purse<br>a **summer** dress |

Here are some examples of noun phrases (shown in the form of tree diagrams) referred to above.

Here are some other examples of NP:

Preposition Phrase

A preposition phrase is a Noun phrase preceded by a preposition, i.e.

Here is an example: **On the table**

Sometimes, a Noun phrase contains a Preposition phrase embedded in it. In such cases, the Noun phrase can be broken up into NP and preposition phrase. Both can then be further split up. Here is an example:

The Verbal Group (VG)

The Verbal group generally immediately follows the NP in a typical English sentence, e.g.

Raheem plays

NP VG

Raheem is playing

NP VG

Raheem has been playing

NP VG

Raheem can play

NP VG

The main (or basic) verb in all these sentences is **play**. The Verbal group consists of the main verb and the auxiliary.

Auxiliary, in turn, is made up of the **tense**(compulsory item) and any **one or more** of the following items:

i) **modal** (marked by modal auxiliaries like can, may, will, shall must).

ii) **Perfective** (marked by **have + en,**where **en** is a marker of the past participle morpheme).

iii) **Progressive** (marked by **be + ing**).

Thus, to present the whole information in the form of a tree diagram,

It should be noted that modern linguists admit of only two tenses in English Present and Past. English can express present time, past time and future time but it does not mean that it has three tenses too. Look at the following sentences:

He is playing a match now

(Present tense, Present time)

He is playing a match next Sunday

(Present tense, Future time)

If I went to Karachi, I would bring a camera for you

(Past tense, Future time)

Tense, it **may** be stated here, is a grammatical category seen in the **form** or shape of the verb. Normally, in English, tense is realized as

—e(s) (present)

—c(d) (past)

In the expressions **will play** or **will eat**, will is in the present tense, the past fort of which is **would**.

'The use of modals **shall/will** is only **one** of the mechanisms of expressing the **future time**. Also, will/shall do not **always** express the future time, e.g.

Shaista will be at home now (Present time).

Also, it should be noted that while tense and the main verb are the compulsory segments of a verbal group, the modal, the perfective and the progressive are only optional items. Given below are some model analyses of some verbal groups.

**Adverbials:** Any group of words that performs the function of an ADVERB is called an Adverbial. It may consist of a single word, a phrase or a clause. It generally specifies **time, place, manner, reason,** etc., and modifies a verb, an adjective or a fellow adverb. Given below are some sentences in which the adverbials have been underlined:

She slept *soundly*

He spoke *fluently*

We have approached him *a number of times.*

He smokes *heavily*.

He spoke in *a nice manner*.

I shall see you *in a day or so*.

I went there *as first as I could.*

She left home *when she was a young girl*.

*Where there is a will* there is a way.

He talks *as if she were a fool.*

IC Analysis of Sentences

A Single sentence is made up of an NP (subject) and a predicate phrase. This predicate phrase, apart from a compulsory verbal group, may optionally have one or more noun phrase(s), preposition phrase(s), adverbials and adjective phrases. Here are a few examples:

i) Asif has been playing cricket for several years.

ii) After depositing the fee the boys went to the hostel.

iii) These girls have been singing nicely.

Limitations of IC Analysis

Immediate constituent analysis has its limitations. It is not possible to analyse such structures, for example, as do not form proper grammatical groups. For example, here is a sentence:

She is taller than her sister.

In this sentence, the sequence **-er than** is not covered by IC analysis. Such a sequence can be explained iii terms of the following constituents only:

i) She is tall.

ii) She has a sister.

iii) The sister is short.

Similarly, there are several cases of sentences that are ambiguous, e.g. **'Time flies'**. It can have two meanings:

i) Time is flying.

ii) Time the flies *(Time as* verb).

In such a case, only proper labelling can solve the problem. There arc, however, some sentences that are structurally similar but semantically they are different. An oft quoted example is:

i) John is easy to flatter.

ii) John is eager to flatter

Such sentences cannot he explained by IC analysis unless they are broken up into simple pairs of sentences. In the case of (i) and (ii) above, one would have the following groups:

i) (It) is easy. Someone flatters John.

ii) John is eager. He wants to flatter.

Many a time, overlapping ICs also cause a problem. For example, here is a sentence:

He has no interest in, or taste for, music. This sentence means to convey:

He has **no** interest in music.

He has **no** taste for music.

The word **no** applies to both, **interest** as well as **taste**. It is not possible to show this in IC analysis.

Also, IC analysis fails to show such elements as remain unstated in a sentence, e.g. In the sentence

**Hit the ball**

Who is being addressed? The element **'you',**is missing here. There is no way of showing this in IC analysis.

Not only that. IC analysis fails to show relationship between sentence types such as active and passive, affirmative and negatives, statements and questions. Look at the following sets of sentences, which though semantically similar, have different structures:

i) Who does not love his motherland?

Everybody loves his motherland.

ii) Asif hit a six.

A six was hit by Asif.

iii) Everybody in the hall wept.

There was none in the hall but wept.

Grammarians realise the limitations of IC analysis and have to take to other means also (e.g. TG grammar) to fully explain the structure of sentences.

Phrase Structure Rules (PS Rules)

The structure of phrases, as discussed above, can be summed up in the following notation that gives the structure of the concerned phrase in a straight line. Here is a summary m of the PS-Rules.

S ¾® NP + Pied. phr.

NP ¾® Restrictor-Pre-determiner-determiner-Ordinal-Quantifier-(Adjective phrase-Classifier-noun

Pred. phr. ¾® VG – NP

Prep. phr.

Adj. phr.

Adverbial

VG ¾® Aux. + V

Aux. ¾® Tense + (Modal) + (Perfective)+(Progressive)

Prep. phr. ¾® Prep + NP

NP ¾® NP + Prep. phr.

## Semantics and Theories of Semantics

Semantics is the study of meaning in language. We know that language is used to express meanings which can be understood by others. But meanings exist in our minds and we can express what is in our minds through the spoken and written forms of language (as well as through gestures, action etc.).

The sound patterns of language are studied at the level of phonology and the organisation of words and sentences is studied at the level of morphology and syntax. These are in turn organised in such a way that we can convey meaningful messages or receive and understand messages. 'How is language organised in order to be meaningful?' This is the question we ask and attempt to answer at the level of semantics. Semantics is that level of linguistic analysis where meaning is analysed. It is the most abstract level of linguistic analysis, since we cannot see or observe meaning as we can observe and record sounds. Meaning is related very closely to the human capacity to think logically and to understand. So when we try to analyse meaning, we are trying to analyse our own capacity to think and understand, our own ability to create meaning. Semantics concerns itself with 'giving a systematic account of the nature of meaning' (Leech).

Difficulties in the Study of Meaning

The problem of 'meaning' is quite difficult, it is because of its toughness that some linguists went on to the extent of excluding semantics from linguistics. A well-known structuralist made the astonishing statement that 'linguistic system of a languagedoes not include the semantics. The system is abstract, it is a signaling system, and as soon as we study semantics we are no longer studying language but the semantic system associated with language. The structralists were of the opinion that it is only the form of language which can be studied, and not the abstract functions. Both these are misconceptions. Recently a serious interest has been taken in the various problems of semantics. And semantics is being studied not only by the linguists but also by philosophers, psychologists, scientists, anthropologists and sociologists.

Scholars have long puzzled over what words mean or what they represent, or how they are related to reality. They have at times wondered whether words are more real than objects, and they have striven to find the essential meanings of words. It may be interesting to ask whether words do have essential meaning. For example, difficulties may arise in finding out the essential meaning of the word **table** in **water table**,**dining table**, **table amendment, and the table of 9.** An abstract word like good creates even more problems. Nobody can exactly tell what good really means, and how a speaker of English ever learns to use the word correctly. So the main difficulty is to account facts about essential meanings, multiple meanings, and word conditions. The connotating use of words adds further complications to any theorizations about meaning, particularly their uses in metaphor and poetic language. Above all is thequestion : where does meaning exist: in the speaker or the listener or in both, or in the context or situation ?

Words are in general convenient units to state meaning. But words have meanings by virtue of their employment in sentences, most of which contain more than one word. The meaning of a

sentence, though largely dependent on the meaning of its component words taken individually, is also affected by prosodic features. The question whether word may be semantically described or in isolation, is more a matter of degree than of a simple answer yes or no. It is impossible to describe meaning adequately any other way except by saying how words are typically used as part of longer sentences and how these sentences are used. The meanings of sentences and their components are better dealt with in linguistics in turns of how they function than exclusively in terms of what they refer to.

Words are tools; they become important by the function they perform, the job they do, the way they are used in certain sentences. In addition to **reference** and **function,**scholars have also attached import talkie to popular historical considerations, especially etymology, while studying word-meanings. Undobtedly the meaning of any word is casually the product of continuous changes in its antecedent meanings or uses, and in many cases it is the collective product of generations of cultural history. Dictionaries often deal with this sort of information if it is available, but in so ding they are passing beyond the bounds of synchronic statement to the separate linguistic realm of historical explanation.

Different answers have been given to the questions related to meaning. Psychologists have tried to assess the availability of certain kinds of responses to objects, to experiences, and to words themselves. Philosophers have proposed a variety of systems and theories to account for the data that interest them. Communication scientists have developed information theory so that they can use mathematical models to explain exactly what is predictable and what is not predictable when messages are channeled through various kinds of communication networks. From approaches like these a complex array of conceptions of meaning emerges.

Lexical and Grammatical Meaning

When we talk about meaning, we are talking about the ability of human beings to understand one another when they speak. This ability is to some extent connected with grammar. No one could understand:

**hat one the but red green on bought tried Rameez.**

while

**Rameez tried on the red had but bought the green one** causes no difficulties.

Yet there are numerous sentences which are perfectly grammatical, but meaningless. The most famous example is Chomsky's sentence

**"Colourless green ideas sleep furiously".**

Similar other examples are:

* The tree ate the elephant.
* The pregnant bachelor gave birth to six girls tomorrow.
* The table sneezed.

In a sentence such as **Did you understand the fundamentals of linguistics?** A linguist has to take into account at least two different types of meaning: **lexical** meaning and**grammatical** meaning. Full words have some kind of intrinsic meaning. They refer to

objects, actions and qualities that can be identified in the external world, such as**table, banana, sleep, eat, red.** Such words are said to have **lexical meaning.** Empty words have little or no intrinsic meaning. They exist because of their grammatical function in the sentence. For example, **and** is used to join items, **or** indicates alternative,**of** sometimes indicates possession. These words have grammatical meaning.**Grammatical meaning** refers mainly to the meaning of grammatical items as **did, which, ed.** Grammatical meaning may also cover notions such as 'subject' and 'object', sentence types as 'interrogative', 'imperative' etc. Because of its complexity, grammatical meaning is extremely difficult to study. As yet, no theory of semantics has been able to handle it portly. But the study of lexical items is more manageable.

What is Meaning?

Philosophers have puzzled over this question for over 2000 years. Their thinking begins from the question of the relationship between words and the objects which words represent. For example, we may ask: What is the meaning of the word 'cow'? One answer would be that it refers to an animal who has certain properties, that distinguish it from other animals, who are called by other names. Where do these names come from and why does the word 'cow' mean only that particular animal and none other? Some thinkers say that there is no essential connection between the word 'cow' and the animal indicated by the word, but we have established this connection by convention and thus it continues to be so. Others would say that there are some essential attributes of that animal which we perceive in our minds and our concept of that animal is created for which we create a corresponding word. According to this idea, there is an essential correspondence between the sounds of words and their meanings, e.g., the word 'buzz' reproduces 'the sound made by a bee'. It is easy to understand this, but not so easy to understand how 'cow' can mean' a four-legged bovine'—there is nothing in the sound of the word 'cow' to indicate that, (Children often invent words that illustrate the correspondence between sound and meaning: they may call a cow 'moo-moo' because they hear it making that kind of sound.)

The above idea that words in a language correspond to or stand for the actual objects in the world is found in Plato's dialogue**CratyIus.** However, it applies only to some words and not to others, for example, words that do not refer to objects, e.g. 'love', 'hate'. This fact gives rise to the view held by later thinkers, that the meaning of a word is not the object it refers to, but the **concept** of the object that exists in the mind. Moreover, as de Saussure pointed out, the relation between the word (signifier) and the concept (signified) is an arbitrary one, i.e. the word does not resemble the concept. . Also, when we try to define the meaning of a word we do so by using other words. So, if We try to explain the meaning of 'table' we need to use other words such as 'four', 'legs', and 'wood' and these words in turn can be explained only by means of other words.

In their book, *The Meaning of Meaning,* L.K. Ogden and I.A. Richards made an attempt to define meaning. When we use the word 'mean', we use it in different ways. 'I mean to do this' is a way of expressing our intention. 'The red signal means stop' is a way of indicating what the red signal signifies. Since all language consists of signs, we can say that every word is a sign indicating something—usually a sign indicates other signs. Ogden and Richards give the following list of some definitions of 'meaning'. Meaning can be any of the following:

1. An intrinsic property of some thing
2. Other words related to that word in a dictionary

3. The connotations of a word (that is discussed below)
4. The thing to which the speaker of that word refers
5. The thing to which the speaker of that word should refer
6. The thing to which the speaker of that word believes himself to be referring
7. The thing to which the hearer of that word believes is being referred to.

These definitions refer to many different ways in which meaning is understood. One reason for the range of definitions of meaning is that words (or signs) in a language are of different types. Some signs indicate meaning in a direct manner, e.g. an arrow (¾®) indicates direction. Some signs are representative of the thing indicated, e.g. onomatopoeic wards such as 'buzz'. 'tinkle' 'ring'; even 'cough'. 'slam', 'rustle have onomatopoeic qualities. Some signs do not have any resemblance to the thing they refer to, but as they stand for that thins, they are symbolic.

Taking up some of the above definitions of meaning, we can discuss the different aspects of meaning o a word as follows:

**(i)** ***The logical or denotative meaning*****.** This is the literal meaning of a word indicating the idea or concept to which it refers. concept is a minimal unit of meaning which could be called a '**sememe**' in the same way as the unit of sound is called a 'phoneme' and is like the 'morpheme h Is structure and organisation. Just as the phoneme /b/ may be defined as a bilatial + voiced + plosive, the word 'man' may be defined as a concept consisting of a structure of meaning 'human + male + adult' expressed through the basic morphological unit 'm + æ + n'. All the three qualities are logical attributes of which the concept 'man' is made. They are the minimal qualities that the concept must possess in order to be a distinguishable concept, e.g. if any of these changes, the concept too changes. So 'human + female + adult' would not be the concept referred to by the word 'man', since it is a different concept.

**(ii)** ***The connotative meaning*****.** This is the additional meaning that a concept carries. It is defined as 'the communicative value an expression has by virtue of what it refers to over and above its purely conceptual content' (Leech, 1981). That is, apart from its logical or essential attributes, there is a further meaning attached to a word, which comes from its reference to other things in the real world. In the real world, such a word may be associated with some other features or attributes. For example, the logical or denotative meaning of the word 'woman' is the concept, 'human + female + adult'. To it may be added the concept of 'weaker sex' or 'frailty'. These were the connotations or values associated with the concept of 'woman'. Thus connotative meaning consists of the attributes associated with a concept. As we know, these associations come into use over a period of time in a particular culture and can change with change in time. While denotative meaning remains stable since it defines the essential attributes of a concept, connotative meaning changes as it is based on associations made to the concept; these associations may change.

***(iii) The social meaning:*** This is the meaning that a word or a phrase conveys about the circumstances of its use. That is, the meaning of a word is understood according to the different style and situation in which the word is used, e.g. though the words 'domicile', 'residence', 'abode', 'home' all refer to the same thing (i.e. their denotative meaning is the same), each word belongs to a particular situation of use—'domicile' is used in an official context, 'residence' in a formal context, 'abode' is a poetic use and 'home' is an ordinary use. Where one is used, the

other is not seen as appropriate. Social meaning derives from an awareness of the style in which something is written and spoken and of the relationship between speaker and hearer—whether that relationship is formal, official, casual, polite, or friendly.

***(iv) The thematic meaning:*** This is the meaning which is communicated by the way in which a speaker or writer organises the message in terms of ordering, focus and emphasis. It is often felt, for example, that an active sentence has a different meaning from its passive equivalent although its conceptual meaning seems to be the same. In the sentences:

Mrs. Smith donated the first prize

The first prize was donated by Mrs. Smith

the thematic meaning is different. In the first sentence it appears that we know who Mrs. Smith is, so the new information on which the emphasis is laid is

'the first prize'. In the second sentence, however, the emphasis is laid on 'Mrs. Smith'.

It is sometimes difficult to demarcate all these categories of meaning. For example, it may be difficult to distinguish between conceptual meaning and social meaning in the following sentences:

He **stuck** the key in his pocket.

He **put** the key in his pocket.

We could argue that these two sentences are conceptually alike, but different in social meaning––the first one adopts a casual or informal style, the second adopts a neutral style. However, we could also say that the two verbs are conceptually different: 'stuck' meaning 'put carelessly and quickly', which is a more precise meaning than simply 'put'. Of course, it is a matter of choice which word the speaker wishes to use, a more precise one or a neutral one.

Some Terms and Distinctions in Semantics

(a) Lexical and grammatical meaning

Lexical or word meaning is the meaning of individual lexical items. These are of two types: the open class lexical items, such as nouns, verbs, adjectives and adverbs, and the close class items such as prepositions, conjunctions and deter-miners. The open class items have independent meanings, which are defined in the dictionary. The closed class items have meaning only in relation to other words in a sentence; this is called **grammatical** meaning, which can be understood from a consideration of the structure of the sentence and its relation with other sentences.

For example, in the sentence The tiger killed the elephant', there are three open class items: tiger, kill, elephant. Out of these, two are nouns and one is a verb. There is one closed class tern— 'the'—which occurs before each noun. It has no independent reference of its own and can have meaning only when placed before the nouns.

This distinction may help in understanding ambiguity. Thus, if there is ambiguity in a sentence, this can be a lexical ambiguity or a grammatical ambiguity. For example, in the sentence:

I saw him near the bank.

there is lexical ambiguity, since the item 'bank' can mean (a) the financial institution or (b) the bank of a river. However, in the case of:

'The parents of the bride and the groom were waiting' there is grammatical ambiguity as the sentence structure can be interpreted in two ways: (a) the two separate noun phrases being 'the parents of the bride', and 'the groom'; or (b) the single noun phrase 'the parents' within which there is the prepositional phrase 'of the bride and the groom' containing two nouns. The first type of coordination gives us the meaning that the people who were waiting were the parents of the bride and the groom himself. The second type of coordination gives us the meaning that the people who were waiting were the parents of the bride and the parents of the groom.

The meaning of a sentence is the product of both lexical and grammatical meanings. This becomes clear if we compare a pair of sentences such as the following:

The dog bit the postman.

The postman bit the dog.

These two sentences differ in meaning. But the difference in meaning is not due to the difference in the meaning of the lexical items 'postman' and 'dog', but in the grammatical relationship between the two. In one case 'dog' is the subject and 'postman' is the object, in the other case the grammatical roles are reversed. There is also the relationship of these nouns with the verb 'bit'. In the first sentence, the action is performed by the dog, which conforms to our knowledge about dogs, but in the second sentence, the action is performed by the postman which does not match with our knowledge about what postmen do, so there is a sense of incongruity about the second sentence. Only in some exceptional circumstance could we expect it to be comprehensible.

(b) Sense and Reference

It has been explained earlier that signs refer to concepts as well as to other signs. A sign is a symbol that indicates a concept. This concept is the reference, which refers in turn to some object in the real world, called the referent. The relationship between linguistic items (e.g. words, sentences) and the non-linguistic world of experience is a relationship of reference. It can be understood by the following diagram given by Ogden and Richards:

The objects in the real world are **referents,**the concept which we have of them in our minds is the reference and the symbol we use to refer to them is the **word,** or linguistic item.

As we have seen, we can explain the meaning of a linguistic item by using other words. The relation of a word with another word is a **sense-relation.** Therefore, sense is the complex system of relationships that holds between the linguistic items themselves. Sense is concerned with the intra-linguistic relations, i.e. relations within the system of the language itself, such as similarity between words, opposition, inclusion, and pre-supposition.

Sense relations include homonymy, polysemy, synonymy and antonymy.**Homonyms** are different items (lexical items or structure words) with the same phonetic form. They differ only in meaning, e.g. the item 'ear' meaning 'organ of hearing' is a homonym of the item 'ear' meaning 'a stem of wheat'. Homonymy may be classified as:

(a) Homography: a phenomenon of two or more words having the **same spellings** but different pronunciation or meaning, e.g. lead /led/ = metal; lead/li:d/ = verb.

(b) Homophony: a phenomenon of two or more words having the **same pronunciation** but different meanings or spellings, e.g. sea/see, knew/new, some/ sum, sun/son.

It is difficult to distinguish between homonymy and polysemy as in **polysemy,**the 'same' lexical item has different meanings, e.g. 'bank*', 'face*': Two lexical items can be considered as **synonyms** if they have the same denotative, connotative and social meaning and can replace each other in all contexts of occurrence. Only then can they be absolutely synonymous. For example, 'radio' and 'wireless' co-existed for a while as synonyms, being used as alternatives by speakers of British English. But now, 'wireless' is not used frequently. What we consider as synonyms in a language are usually near-equivalent items, or descriptive items. For example, 'lavatory', 'toilet', 'WC', 'washroom' are descriptive or near-equivalent synonyms in English.

Antonyms are lexical items which are different both in form as well as meaning. An antonym of a lexical item conveys the opposite sense, e.g. single-married, good-bad. But this gives rise to questions of what is an opposite or contrasted meaning. For example, the opposite of 'woman' could be 'man' or girl' since the denotation of both is different from that of 'woman'. Thus we need to modify our definition of antonymy. We can say that some items are less compatible than other items. There can be nearness of contrast or remoteness of contrast. Thus 'man' or 'girl' is contrasted to 'woman' but less contrasted than 'woman' and 'tree'. In this sense, 'woman' and 'man' are related, just as 'girl' and 'boy' are related, in spite of being contrasted. Other meaning-relations of a similar nature are: mare/stallion, cow/bull, ram/ewe etc., all based on gender distinctions. Another set of meaning relations can be of age and family relationship: father/son, uncle/nephew, aunt/ niece. In this, too, there are differences in the structures of different languages. In Urdu, for instance, gender distinction or contrast may be marked by a change in the ending of the noun (e.g. /gho:□a:/gho:□i:/ for 'horse' and 'mare' respectively) or, in some cases, by a different word (e.g. /ga:e/bael/ for 'cow' and 'bull' respectively). In English, there are usually different words to mark contrast in gender except in a few cases (e.g. elephant, giraffe). The evolution of a complex system of sense relations is dependent on the way in which the objects of the world and the environment are perceived and conceptualized by the people who make that language. For example, Eskimos have many words related in meaning to 'snow' because snow in different forms is a part o their environment. In English, there are only two 'snow' and 'ice', while in Urdu there is only one: 'baraf'. This reflects the importance that a particular object or phenomena may have for a certain community.

Another kind of sense-relationship is**hyponymy**. Hyponymy is the relation that holds between a more general and more specific lexical item. For example, 'flower' is a more general item, and 'rose', 'lily', etc. are more specific. The more specific item is considered a hyponym of the more general item—'rose' is a hyponym of 'flower'. The specific item includes the meaning of the general. When we say 'rose', the meaning of 'flower' is included in its meaning. 'Rose' is also hyponymous to 'plant' and 'living thing' as these are the most general categories.

The combination of words to produce a single unit of meaning is also a part of sense-relations in a language. Compounds are made, which often do not mean the same as the separate words which they consist of. Thus, while 'black bird' can be understood to mean 'a bird which is black', 'strawberry' cannot be understood to mean 'a berry made of straw'. Similarly, 'fighter' can be considered to be a noun made up of the morphemes 'fight' + 'er', but 'hammer' cannot be considered as made up of 'ham' + 'er'. Phrasal verbs and idioms are also a case of such sense relations. The verbs 'face up to', 'see through', 'look upon', etc. have a composite meaning. Collocations such as 'heavy smoker' and 'good singer' are not mere combinations of heavy +

smoker meaning 'the smoker is heavy' or 'good + singer'. They mean 'one who smokes heavily' or 'one who sings well'. The collocated unit has a meaning which is a composite of both that is why we cannot say 'good smoker' and 'heavy singer'. All these sense-relations are peculiar to a language and every language develops its own system of sense-relations.

(c) Sentence-meaning and Utterance-meaning

A distinction may be drawn between, sentence-meaning and utterance-meaning. This is because a speaker may use a sentence to mean something other than what is normally stated in the sentence itself. As discussed earlier, sentence meaning is a combination of lexical and grammatical meaning. In addition to this, intonation may also affect sentence meaning. For example, 'I don't like **COFFEE'** means that the speaker does not like coffee, but may like some other drink; 'I don't like coffee' means that the speaker doesn't like coffee but someone else does. Speakers can use intonation to change the emphasis and thus the meaning of the sentence.

Further, a sentence may be used by a speaker to perform some act, such as the act of questioning, warning, promising, threatening, etc. Thus, a sentence such as 'Its cold in here' could be used as an order or request to someone to shut the window, even though it is a declarative sentence. Similarly, an interrogative sentence such as 'Could you shut the door?' can be used to perform the act of requesting or commanding rather than that of questioning (The speaker is not asking whether the hearer is able to shut the door, but is requesting the hearer to actually do the action). Usually such use of sentences is so conventional that we do not stop to think of the literal sentence meaning, we respond to the speaker's act of requesting, etc., which is the utterance meaning. This is the meaning that a sentence has when a speaker utters it to perform some act, in particular appropriate circumstances.

(d) Entailment and Presupposition

One sentence may entail other sentence—that is, include the meaning of other sentence in its meaning, just as hyponymy includes the meaning of other word. For example, the sentence 'The earth goes round the sun' entails (includes) the meaning 'The earth moves'.

A sentence may presuppose other sentences, e.g. the sentence 'Shamim's son is named Rahat' presupposes the sentence 'Shamim has a son'. Presupposition is the previously known meaning which is implied in the sentence. While entailment is a logical meaning inherent in the sentence, presupposition may depend on the knowledge of the facts, shared by the speaker and the hearer.

## Theories of Semantics

### a) Traditional Approach:

We have noted earlier that meaning was always a central concern with thinkers. This has been the root of much divergent opinions and definitions of meaning. However, there was little doubt that there are two sides of the issue : symbolic realization, whether in utterance or in writing, and the thing symbolised.

Plato's *Cratylus* clearly lays down that *word*is the signifier (in the language) and the signified is the object (in the world). Words are, therefore, names, labels that denote or stand for. Initially, a child learns to know his world, and his language in this manner. He is pointed out the objects and people; names are given to them, and in his mind link or association between the names

and the external world is established. Children have always been taught their language in this manner. This is also perhaps the way the earliest thinkers tried to understand the world through linguistic medium. That could be the reason why William Labov was prompted to say, 'In many ways, the child is a perfect historian of the language'. This simple view of the relationship between name and things is diagrammatically shown below.

However, this is an extremely simplistic theory and it would be wrong to say the child simply learns the names of things. Gradually, and simultaneously, he learns to 'handle the complexities of experience along with the complexities of language'.

**b) Analytical/Referential Approach:**

Between the symbol and the object/thing there is an intervening phenomenon which is recognized as 'the mediation of concepts of the mind'. De Saussure and I.A. Richards and C.K. Ogden are the best-known scholars to hold this view. The Swiss linguist de Saussure postulated the link, a psychological associative bond, between the sound image and the concept. Ogden and Richards viewed this in the shape of a triangle. The linguistic symbol or image, realized as a word or sentence and the referent, the external entities are mediated by thought or reference. There is no direct relation between the sign and the object but 'our interpretation of any sign is our psychological reaction to it' (Ogden).

The meaning of a word in the most important sense of the word is that part of a total reaction to the word which constitutes the thought about what the word is intended for and what it symbolizes. Thus thought (the reference) constitutes the symbolic or referential meaning of a word (YevgenyBasin : 32-33). Linguistics, in the opinion of de Saussure, operates on the borderland where the elements of sound and thought combine : their combination produces a form, not a substance. When we see an object, a bird, for example, we call it referent; its recollection is its image. It is through this image that the sign is linked to the referent.

The symbol is manifested in the phonetic form and the reference is the information the hearer is conveyed. This process thus established, makes meaning a 'reciprocal' and reversible relation between name and sense. One can start with the name and arrive at the meaning or one can start with the meaning and arrive at the name/s. The referential or 'analytical' approach, as it is also known, tries to avoid the functional domain of language, and seeks rather to understand meaning by identifying its primary components.

This approach is the descendant of the ancient philosophical world-view, and carries its limitations. It ignores the relatively different positions at which the speaker and the hearer are situated. Their positions make a reciprocal and reversible relationship between name and sense (Ullmann). This approach also overlooks other psychological, non-physical processes which donot depend upon the linguistic symbol, the reception of the sound waves for recognising the meaning of the object/thing. A word usually has multiple meaning and is also associated with other words. Which of the meanings will be received depends upon the situations.

**(c) Functional Approach**

In the year 1953 L. Wittgenstein's work*Philosophical Investigation* was published. Around this time Malinowski and J.R. Firth were working to formulate the 'operational character of scientific concepts like 'length', 'time' or 'energy'; they tried to grasp the meaning of a word by observing the uses to which it is put instead of what is said about it. They approached the problem by including all that is relevant in establishing the meaning – the hearers, their commonly shared knowledge and information, external objecs, and events, the contexts of earlier exchange and so on, and not by excluding them. This approach can directly be linked to

the concept of the *Context of situation*being developed by the London group which viewed social processes as significant factor in explaining a speech event.

While the referential approach took an idealist position, dealing, as someone said, with 'meaning in language', the functional theory or the operational theory took a realistic stand, taking 'speech' as it actually occurred. Words are considered tools and whole utterances are considered. Meaning is thus seen to involve a 'set of multiple and various relations between the utterances' and its segments and the relevant components of environment' (Robins). In placing special emphasis on language as a form of behaviour – as something that we perform, the functional approach shares a lot with *systemic linguistics*. Language is a form a behaviour which is functional, 'something that we do with a purpose, or more often, in fact, with more than one purpose. It is viewed as a form of functional behaviour which is related to the social situation in which it occurs as something that we do purposefully in a particular social setting' (Margaret Berry). The systemic organization of a language is sought to be understood through its relations with the social situations of language.

According to this theory, meaning is classified into two broad categories,*Contextual Meaning* and *Formal Meaning*.

Contextual meaning relates a formal item or pattern to an element of situation. There is a regular association between a linguistic item and something which is *extra-linguistic,*'something which is part of the situation of language rather than part of the language itself' (Berry).

Contextual meaning is further divided into*thesis, immediate situation* and *wider situation*. In *Formal meaning* The relationship between a linguistic item, pattern or term form a system and other linguistic items, patterns or terms from system belonging to the same level of language'.

Formal meaning can be understood by*collocating* and contrasting a lexical item with other lexial items. The lexical item *cat,*for instance, has the potentiality for collocating with *mew, purr, lap, milk, fur, tail,*etc. It also contrasts with *dog, mouse, kitten,*etc. Thus, the complete description of the formal meaning of a lexical item would involve the statement of all the items with which it collocates and contrasts. Such items which fall into a context or set of contexts are referred to as an association field.

### (d) Field Theory of Meaning:

Basic to this theory is the concept that each word in a language is surrounded by a network of associations that connect it with other terms.

The field theory visualizes the vocabulary as a mosaic on a gigantic scale, which is built up of fields and higher unitsin the same way as fields are built up by words. The associative field of a word is formed by an intricate network of associations, some based on similarity, others on continuity, some arising between senses, others between names, others again between both. The field is by definition open, and some of the associations are bound to be subjective though the more central ones will be largely the same for most speakers. Attempts have been made to identify some of these central associations by psychological experiments, but they can also be established by purely linguistic methods. The identification of these associations by linguistic methods is done by collecting the most obvious synonyms and antonyms of a word, as well as terms similar in sound or in sense, and those which enter into the same habitual associations. Many of these associations are embodied in figurative language: metaphors, similes, proverbs, idioms, and the link. The number of associations centred in one word will of course be extremely variable and for some very common terms it may be very high.

As one of Saussure's pupils expressed it, 'the associative field is a halo which surrounds the sign and whose exterior fringes become merged'. This field is formed by an intricate network of associations: **similarity, contiguity, sensation, name**. The associative field is by any definition open, that is, no finite limits can be assigned to any given field. Hence the aptness of the concept 'field', which serves an analogous purpose in physics.

Semantic Structure or Name-Sense Relation

Words form certain kinds of relations. These are called sense **relations** that are paradigmatic and syntagmatic.

Below we discuss five such major sense-relationships.

1. Hyponymy
2. Synonymy
3. Antonymy
4. Polysemy
5. Homonymy

Hyponymy

This refers to the way language classifies its words on the principle of inclusiveness, forming a class members of which are then called *co-hyponyms*. For example, the classical Greek has a 'super ordinate' term to cover professions of various kinds, shoemaker, helmsman, flute player, carpenter, etc. but such a term doesn't exist in English. In English the word 'animal' is used to include all living in contrast to the*vegetable* world.

Hyponymous sets can also be seen in such combinations denoting male-female-baby in*dog-bitch-puppy*; *ram-ewe-lamb;* when such terms do not exist, they are formed: *female giraffe, male giraffe, baby giraffe*. Thus the meaning of *male giraffe* is included in the meaning of *giraffe* as is the meaning of *baby giraffe* and *female giraffe*. The relationship of inclusiveness rests on the concept of reference. This gives us the idea of how a language classifies words. Words that are members of a class are called hyponyms.

Synonymy refers to similarity or 'sameness of meaning'. This is a handy concept for the dictionary makers, who need words for one word which have greater degree of similarity. To an extent this is acceptable, it is a working concept. However, one cannot disagree with Dr. Johnson's statement that 'words are seldom exactly synonymous'. In actual use where contextual nuances and situational subtleties influence meanings the degree of similarity among words reduces considerably to signify much, each word acts as a potential token of sense. Form the great literary scholars to the semanticists all agree that it is almost a truism that total synonymy is an extremely tale occurrence'.

It is clear that in considering synonymy 'emotive or cognitive import' has critical role. In the words of Ullmann, to qualify as synonyms they must be capable of replacing' 'cach other in any given context without the slightest change either in cognitive or emotive import'. John Lyon also stresses equivalence of cognitive and emotive sense.

Except for highly technical and scientific items, words used in everyday language have strongly emotional or associative significance. *Libertyfreedom; Jude-conceal; attempt-effort, cut-slash; round-circular;* have different evocative or emotive values; in a particular context *where freedom is used liberty* definitely cannot be used : it is always*freedom struggle* and not *liberty*

*struggle;* or*freedom movement* not *liberty movement*.Clear in this instance *freedom* acts as modifier while liberty does not.

Antonymy

The concept of antonymy implies 'oppositeness of meaning' where the 'recognition and assertion of one implies the denial of the other'. This is illustrated in pairs of words such as, *big-small; old-young; wide-narrow, etc.* These words can be handled in terms of the degree of quality involved. The *comparative* forms of the adjectives are graded : *wide-wider; happy-happier; old-older*. They are also made by adding *more. To* use Sapir's term, these are*explicitly graded.*

Polysemy

When a word is identified as possessing two or more meanings, it is; said to be*polysemous* or *polysemic*. These differentmeanings are derived from one basic idea or concept. Dictionaries enter different meanings of a word. *Head,* for example, has the following different meanings : the upper or anterior division of the body, scat of intellect, mind, poise, the obverse of a coin, person, individual, the source of a stream, leader, director, crisis, culminating point of action, etc (Webster's Dictionary). All these meanings derive from the same word. From this have been coined as many as seventy, compound structures, each in the right of a different word such as *headsman, headstand, headshop, headpiece, headgear, headlamp, headline, headlong, head-dress,* etc. In the latter examples, one can see that the noun acts as adjectives which show contextual shifts of application.

Problems arise when it becomes difficult to determine whether a word with several meanings must he called polysemic or*homonomous*.

Homonymy

Homonomous words are defined as sounding alike hut possessing different meanings. For example, the words *lie-lie, by-bye, I*-eye. They are spoken and sometimes, written alike, but mean totally different things, as can be seen in their uses in these sentences - *Don't lie, tell the truth*. *I have to lie down now*. Normally, in dictionaries, separate entries are made for homonymous words recognising them as separate Words rather than different meanings of the same words.

*Homophonous* words may be spelled and written identically or in different ways. The example cited above elucidates the point. For the words that are spelled alike the name *homography is used. For* the words that sound alike but may be spelled differently, the term *homophony* is used. Examples of the former are *grave-grave; pupil-pupil; light-light;* examples of the latter are *cite-site; write-right-rite-might*. *Some*homophones are also, interestingly, antonyms - *raise-raze; cleave in* the sense of severing asunder and *cleave in* the sense of 'uniting'. The problem of identifying which is a *homonym* and which *a polyseme* is a practical one and often it is difficult to determine exactly what is what. However, it is useful to know that homonymous words have generally different origins, while polysemic words, even when their meanings arc markedly divergent, have one source. We may use such metaphorical expressions as the *foot* of a bed, or the mountain; the*hands* and *face* of a clock, but we know that these are the meanings that ultimately trace to the original meanings of these words. They are, therefore, *polysemes.* Tracing the lexical etymologies is fraught with difficulties. One must have a vast knowledge of the histories of the words.

Confusion between polysemy and homonymy is natural.

Collocation

An important concept in semantics is that of*collocation,* which recognises 'the association of a lexical item with other lexical items'. J.R. Firth says, 'you shall know a word by the company it keeps'. What he calls keeping company is what we know by collocation. It is par t of the meaning of a word. Thus the word *red* is related to *blood, rose, tomato, ink, cherry,* etc. or to put it differently, *red* collocates with these words. Different linguistic contexts enable us to identity different meanings. Thus, for the word *table* we can identify these meanings front the contexts presented below.

i) writing table

ii) reading table

iii) have tabled the motion

iv) talk across the table

Most associations are loose with a freedom of movement that is not predictable. We can say *white milk,* but we can also say 'while clouds and 'white paint'. We can contrast this with such predictable collocations as*blond hair, buxom woman* and *pretty girl* or*child.* Blond cannot be collocated with *door*or *dress*. Buxom always goes with female individual - a *buxom friend would* mean a buxom woman friend and cannot mean a man. *Similarly,* a pretty boy is not heard. A more permanent collocation is seen in 'bark' always being associated with 'dog', 'roar' with 'lion' 'chirp' with 'birds', 'school' with 'fishes', 'flock' with *birds etc.*

In collocation words get special meaning.*Exceptional conditions* and *exceptional boy do* not really mean the same thing. So, the meaning of the collocated terms depends on the collocation.

'A word will often collocate with a number of other words that have something in common semantically. More strikingly ... we find that individual words or sequences of words will NOT collocate with certain groups of words' (Palmer : 78). To 'die' and to 'pass away' refer to the same happening, but to say that *daffodil passes* away, is absurd, more acdeptable is to say 'daffodil dies'.

F.R. Palmer has identified three types *of collocational restrictions*.

1. Meaning in this type is completely based on die *word. Green horse* is an unlikely collocational combination.
2. Here meaning is based on the range, which makes, *a pretty boy*unacceptable.
3. This kind of restriction involves neither range nor meaning : *rancid butter, addled brains* are a couple of examples.

# Semantics, Pragmatics and Discourse

## Semantics and Pragmatics

Not only has semantics now become an important area of inquiry in linguistics but it has also been extended to the level of pragmatics. Pragmatics is seen b some linguists as an independent level of language analysis as it is based on utterances in the same way as phonology is based on sound, syntax on sentences and semantics on both words and sentences.

The link between pragmatics and semantics remains, however, that at both levels we are concerned with meaning. Semantics attempts to relate meaning to logic and truth, and deals with meaning as a matter primarily of sense-relations within the language. Pragmatics attempts to relate meaning to context of utterance; it views language as action which is performed by speakers.

What is the context of utterance? A sentence is uttered by a speaker, and when the speaker utters it, he/she performs an act. This is called a speech-act. Since it is performed by a speaker in relation to a hearer (or addressee), it depends on the conditions prevailing at the time the speech-act is performed. These conditions include the previous knowledge shared by speaker and hearer, and the reasons for the performance of the act. All these taken together constitute the context of utterance-speaker(s), hearer(h), sentence(s) and utterance(u).

Meaning in this sense involves the speaker's intention to convey a certain meaning which may not be evident in the message itself. In the sentence 'There's a fly in my soup', the message is that 'There is a fly in my soup' in which the speaker's intention may be to complain. So the meaning of the utterance contains the meaning of complaint. A hearer hearing this sentence may interpret it not just as a statement but as a request to take the soup away. That is, the meaning will include some intended effect on the hearer.

The consideration of meaning as a part of the utterance or speech act was initiated by the philosopher J.L. Austin *(How to Do Things With Words) and* developed by J. Searle and H.Y. Grice. Let us considerAustin's idea first. Keeping in view the above distinction between the speaker's intention to convey a particular meaning which may not be evident in the message itself, Austinmakes a distinction between **Sense** and**Force.** Sense is the propositional content or logical meaning of a sentence. Austin calls it the **locutionary** meaning. Force is the act performed in uttering a sentence. It is the performative meaning, defined by Austin as **Illocutionary Force.** For example, the utterance 'Please shut the door' is an imperative sentence. The logical or propositional context is that of shutting the door. It will have the force of request if the speaker and hearer are in some relationship which allows the speaker to make requests to the hearer, the hearer is in a position where he is capable of shutting the door, there is a particular door which the speaker is indicating and that door is open. If all these conditions are not fulfilled, the utterance will not have the force of request. We can chart the meaning of the above sentence as follows:

Please shut the door  Sentence form : Imperative

Sense : Shutting the door (someone)

Force : Request

In this sentence, sense and force are very similar to each other. However, in some cases there may be a difference. For example, if the speaker says, Can you shut the door?' the sentence form is interrogative, the sense is 'can' + 'you' + 'shut the door', that is, the logical meaning of the sentence is a question about the ability of the hearer to shut the door, evident in the sense of the modal 'can'. However, the force is still that of request. In such an utterance, it is clear that the sense is not the total meaning of the utterance, and that if only the sense is considered, the utterance will not succeed as a successful communication. If the hearer takes only the sense of the above sentence, he will understand the sentence only as a question regarding his ability to shut the door; it is only when the force of the utterance is understood that the hearer takes it as a request to shut the door, provided all the conditions for the performance of the request are fulfilled.

In other instances there is even more discrepancy between what the sentence says and what the speaker of the sentence intends the hearer to understand by it, i.e. between sense and force. 'There's a cold breeze coming through the door' is a statement in terms of form and sense, but the speaker may intend it to be a request to shut the door. In this way, there can he any number of variable meanings of the same utterance.

This raises a problem: how can we interpret a sentence when sense and force are very different and nothing in the sentence itself indicates what its force can be? Here a distinction can be made between utterances which are more conventional in nature and others which are more individual and situation-specific. For example, 'Can you shut the door?' is the kind of utterance which has become conventionalized to a great extent, so that a hearer is less likely to misinterpret it as a real question, and more likely to understand its force of request. But in the case of 'There's a cold breeze coming through the door', or 'Its very cold in the room' or 'Are you immune to cold?' there is a more indirect manner of making the request to the hearer. These are more dependent on the relation between the speaker and the hearer. While the conventionalized utterance can occur in many situations, the variable utterances can occur only in specific situations e.g. informal, friendly etc. Only under such conditions will the hearer be able to infer the intended meaning of the speaker.

It is for this reason that Grice *(Logic and Conversation,* 1975) explains that all communication takes place in a situation where people are co-operative. When people communicate, they assume that the other person will be cooperative and they themselves wish to cooperate. Grice calls this the 'Cooperative Principle'. Under this principle, the following maxims are followed:

*(i) Maxim of quantity*. Give the right amount of information, neither less nor more than what is required.

*(ii) Maxirn of quality*. Make your contribution such that it is true; do not say what you know is false or for which you do not have adequate evidence.

(iii) *Maxim of relation*. Be relevant.

*(iv) Maxim of manner*. Avoid obscurity and ambiguity; be brief and orderly.

These 'Maxims' are different from rules in that while rules cannot be violated, maxims are often violated. That is, people often give more or less information than required, or make irrelevant contributions. When this happens, some implied meanings arise as a result. For example, in the interaction:

A : Where's my box of chocolates?

B : The children were in your room this morning.

B violates the Maxim of relation because the reply is apparently not relevant to A's question. A proper response to A's question would be that B answers A's question about where the chocolates are. Since B does not give this answer, it implies that B does not know the answer, and also implies a suggestion on B's part that the children may have taken the chocolates. Similarly, in the interaction:

A : I failed in my test today.

B : Wonderful !

In this case, B's response violates the maxim of quality in that the expression 'wonderful' here is not an expression of delight or actual wonder. A's statement is not such that would demand a response of exclamation of delight. That such a response is given by B means that B implies something else: the negative of 'wonderful' meaning 'its not wonderful'. But by giving a response like this, and violating the maxim, B is implying irony. The implication generated by an untruthful and exaggerated statement is sarcasm; implication generated by an opposite statement from the one expected is irony. These meanings are possible through the deliberate violation of the conversational maxims and are called 'conversational implicatures' by Grice.

The insights provided by these theories of pragmatics have helped us to understand meaning as part of communication rather than as something abstract. They have also helped to analyse units of linguistic organization higher than the sentence, pairs of sentences taken as units, and sequences of sentences taken as texts, leading us to the analysis of meaning in connected language, i.e., discourse.

## Discourse Analysis

As soon as we begin to study meaning in language in relation to context, we find that it is situated within two kinds of context. One is the **extra-linguistic**, i.e. the content of the external world. The other is the **intra-linguistic**, i.e., the linguistic context in which that piece of language occurs. So, for example, words occur within a sentential context, sentences occur within a context consisting of other sentences. In the 'analysis of language at the level of discourse, we are concerned with this intra-linguistic context.

Discourse is a level higher than that of the sentence. It includes all the other linguistic levels— sound, lexis, syntax. All these continue to make up a discourse. But here we must distinguish between the grammatical aspect and the semantic/ pragmatic aspect of discourse. The former creates a text and the latter creates a discourse. In the former, words continue to form sentences, sentences combine to form a text. Just as there are rules for combination of words, there are certain relations between sentences and rules by which they may be related. These rules of sentence-connection create **cohesion** in the text. At the same time, these sentences are also utterances, i.e. they have a force which is vital for understanding their meaning, which are combined to create **coherence**. Thus we may distinguish between text and discourse in that text is created by sentence-cohesion and discourse is created by coherence. A discourse may be defined as a stretch of language-use which is coherent in its meaning. It will of course include grammar and cohesion. The following is an example of discourse which is both cohesive and coherent:

A : Can you go to Karachi tomorrow?

B : Yes, I can.

The interchange is cohesive because the second sentence does not repeat the whole of the first sentence. Instead of the whole sentence: 'I can go to Karachi tomorrow', B says only: 'I can', omitting the rest. This indicates that the second sentence is linked to the first in sequential order. It is also coherent because B has given an appropriate response to A from A's request. However, in the following example:

A : Can you go to  Karachi tomorrow?

B : There is a general strike.

The two sentences are not cohesive because the second sentence is not linked to the first sentence in a grammatical sense. There is no repetition or obvious connection between the two sentences. But they are coherent, because B replies to A's request in a sentence which gives some information implying that it may not be possible to go to Karachi. Thus, this exchange is coherent but not cohesive.

In order to analyse discourse, it may be necessary to consider all aspects of language: the grammatical as well as the semantic and pragmatic (not forgetting the role of intonation). Grammatical forms which are used to link sentences and create cohesion can be of several kinds : logical connectors such as 'and', 'but'; conjuncts such as 'also', 'equally', 'furthermore', contrasts such as 'instead' and similarly, 'for' 'thus'.

Deictic elements such as 'here', 'there', also indicate other references and are thus important in creating cohesion as well as discourse meaning.

Apart from grammatical features, discourse is constituted of features which are particular to the mode, tenor and field or domain of that discourse. The mode may be spoken or written. In spoken discourse there will be features of: inexplicitness, lack of clear sentence boundaries and sentence-completion, repetition, hesitation, interaction and maintenance features, e.g. 'well', 'you know', while in written discourse there will be features of explicitness, clear sentence boundaries and more complex sentences, formal features but no interactional and monitoring features. The tenor of discourse refers to features relating to the relationship between the speaker and the addressee in a given situation—these features reflect the formality or informality, degree of politeness, a personal or impersonal touch. Thus, if the relationship is a polite one, there will be respectful terms of address, e.g. 'Sir', and indirect requests rather than commands. If the relationship is one of familiarity, the features will include terms of friendship e.g. 'dear', direct requests and imperatives. Lastly, field or domain of discourse pertains to the area of activity to which that discourse belongs, e.g. whether the discourse is in the field of religion, science, law, journalism, advertising. In each field, the discourse will be characterized by a particular kind of vocabulary and sentence structure, e.g. sports commentary uses present tense; advertising uses many adjectives. Literary discourse often freely combines features from many kinds of discourse and occupies a different status from other types of discourse.

## Psycholinguistics - A Study of Language and Brain in relation to psychology

Psycholinguistics is a recent branch of linguistics developed in the sixties. It is the study of interrelationship of psychological and linguistic behaviour. It uses linguistic concepts to describe psychological processes connected with the acquisition and use of language. As a distinct area of interest, psycholinguistics developed in the early sixties, and in its early form covered acoustic phonology and language pathology.

But now-a-days it has been influenced deeply by the development of generative theory, and its most important area of investigation has been language acquisition. It has raised and has partly answered questions such as how do children acquire their mother tongue? How do they grow up linguistically and learn to handle the registral and stylistic varieties of their mother tongue effectively? How much of the linguistic system that they ultimately command, are they born with and how much do they discover on the basis of their exposure to that system?

In its early form, psycholinguistics covered the psychological implications of an extremely broad area, from acoustic phonetics to language pathology. Now-a-days, certain areas of language and linguistic theory tend to be concentrated on by the psycholinguist. Much of psycholinguistics has been influenced by generative theory and the so-called mentalists. The most important area is the investigation of the acquisition of language by children. In this respect there have been many studies of both a theoretical and a descriptive kind. The need for descriptive study areises due to the fact that until recently hardly anything was known about the actual facts of language acquisition in children, in particular about the order in which grammatical structures were acquired. Even elementary questions as to when and how the child develops its ability to ask question syntactically, or when it learn the inflectional system of its language, remained unanswered. However, a great deal of work has been done recently on the methodological and descriptive problems related to the obtaining and analyzing information of this kind.

The theoretical questions have focused on the issue of how we can account for the phenomenon of language development in children at all. Normal children have mastered most of the structures of their language by the age of five or six. The generative approach argued against the earlier behaviorist assumptions that it was possible to explain language development largely in terms of imitation and selectives reinforcement. It asserted that it was impossible to explain the rapidity or the complexity of language used by the people around them.

Psycholinguistics therefore argue that imitation is not enough; it is not merely by mechanical repetition that children acquire language. They also acquire it by natural exposure. Both nature and nurture influence the acquisition of language in children. Children learn first not items but systems. Every normal child comes to develop this abstract knowledge of his mother tongue, even of a foreign language, to some extent for himself; and the generative approach argues that such a process is only explicable if one postulates that certain features of this competence are present in the brain of the child right from the beginning. ‘In other words, what is being claimed is that the child’s brain contains certain innate characteristics which ‘pre-structure’ it in the direction of language learning. To enable these innate features to develop into adult competence, the child must be exposed to human language, i.e., it must be stimulated in proper to respond. But the basis on which it develops its linguistic abilities is not describable in behaviourist terms’. (David Crystal, Linguistics, p. 256)

The boundary between psycholinguistics and linguistics is becoming increasingly blurred as the result of recent developments in linguistics which aim at giving psychological reality to the description of language. Chomsky regards linguistics as a subfield of psychology more specially the cognitive psychology. His view of linguistics, as outlined for instance, in his book Language

and Mind, is that the most important contribution linguistics can make, is to the study of the human mind. The bonds between psychology and linguistics become more and more strong by the extent to which language is influenced by and itself influences such things as memory, motivation, attention, recall and perception.

Similarly psycholinguistics and sociolinguistics are coming closer because of the realization that merely grammatical competence is not enough; we have to aim at communicative competence too. Whereas psycholinguistics is language and the mind, sociolinguistics is language and community. In other words, psycholinguistics can be said to deal with language and the individual, and sociolinguistics with language and society.

Language Acquisition

By the study of language acquisition is meant the process whereby children achieve a fluent control of their native language. Few people in the 1950s asked about the processes by which language was acquired. It was assumed that children imitated the adults around them and their speech gradually became more accurate as they grow up. There seemed to be some mystery attached to this apparently straight-forward process. Psycholinguistics have therefore attempted general theories of language acquisition and language use. Some have argued that learning is entirely the product of experience and that our environment affects all of us in the same way. Others have suggested that everybody has an innate language learning mechanism which determines learning or acquisitionof language identically for each of us. These two schools are known as 'empiricists' (ehaviourists) and 'rationalists' (mentalists).

The empiricists say that all knowledge is derived from experience. They are of the opinion that children start out as clean slates. Learning a language is a process of getting linguistic habits printed on these slates. Language acquisition is the result of stimulus-response activities. Imitation, repetition, memorization, reward, and reinforcement facilitate this process of language acquisition. The behaviourists argue that learning is controlled by the conditions under which it takes place and that, as long as individuals are subjected on the same condition, they will learn in the same way. Variations in learning are caused because of the difference in learning experience, difference in the past experience of learning, difference in aptitudes, motivation, memory and age. So, for them there is not a theory of language learning as such but merely the application to language of general principles of learning.

From this follows that in general there is no difference between the way one learns a language and the way one learns to do anything else. So, according to the empiricists, language is a result of stimulus and response. A child should therefore learn to make a response in the first place, and then the response should be reinforced in a variety of ways. Indeed strength of learning is measured in terms of the number of times that a response has been made and reinforced. A word that has been uttered thirty times is better learned than one which has been said twenty times. So language learning process is basically a mechanical process of a habit formation. Habits are strengthened by reinforcement. Language is behaviour, a conditioned behaviour which can be learned only by inducing the child to behave. Repetition plays a vital role in learning a language. Hence the necessity of mechanical drills and exercises, imitation and repetition.

The rationalists contradict the empiricists at almost every point. Children learn a language, not because they are subjected to a similar conditioning process, but because they possess an inborn capacity which permits them to acquire a language as a normal maturational process. This capacity is universal. The child has an innate language acquiring device. He learns a language by exposure to it in society and by unconsciously forming certain hypotheses about language, which he goes on modifying till he comes to the adult model to which he is for the most part exposed. So the child goes on constructing an innate grammar, operating over generalized rules.

Language acquisition is species-specific and species-uniform. The ability to take up an understand language is inherited genetically but the particular language that children speak, is culturally and environmentally transmitted to them. Children all over the world acquire their native tongue without tutoring. Whereas a child exposed to an English speaking community begins to speak English fluently, the other one exposed to a community of Urdu speakers, begins to use Urdu fluently. Only human beings can acquire language. Language acquisition thus appears to be different in kind from acquisition of other skills such as swimming, dancing, or gymnastics. Native language acquisition is much less likely to be affected by mental retardation than the acquisition of other intellectual activities. Every normal human child learns one or more language unless he is brought up in linguistic isolation, and learns the essentials of his language by a fairly little age, say by six. To acquire fluency in a language a child has to be exposed to people who speak that language. A language is not something we know by instinct or inherit from our parents. It is the result of our exposure to a certain linguistic community. It is part of that whole complex of learned and shared behaviour that anthropologists call 'culture'. By this we do not mean that language is acquired ready-made. It is created anew by each child by putting together bits and pieces of environmental raw material. The human child does play an active role in this process, he actively strains, filters, recognizes what he is exposed to. His imitations are not photographic reproductions but artistic recreations. A child is a linguist in cradle He acquires a language more easily than adults. He discovers the structure of his native language to use that language; no one hands it to him in a ready-to-use form.

Both schools have said significant things, yet neither is perfect. The mentalists' emphasis on the rule-learning is over-enthusiastic, and the behaviourists' rejection of meaning entirely is unjust. Language acquisition seems to be a process both of analogy and application, nature and nurture.

Language Learning Theories

The Spectrum of language learning theories was dominated by the behaviorists till fifties of the last century when Chomsky appeared with the beam of 'cognitive approach' and Piaget with the ray of 'Genetic Epistemology'. Ideas of both the scholars turned the mode of language learning. Chomsky emphasized the importance of 'innate cognitive abilities' for language learning which were being neglected by the behaviorists. Whereas Piaget highlighted the importance of cognitive development in the learning process. The work of both the psychologists introduced new horizons to explore. Particularly, on one side, Piaget's work patched the way of the language learning theories of cognitive process such as Paivio's 'Dual Code theory' and Anderson's 'Act theory'. And on the other side, many Constructivists like Bruner, Vydotsky and Seymour Papert, influenced by Piaget's cognitive approach, tried to synthesis the behaviorist 'environmental stimulus' and the Mentalist cognitive process in their theories. Moreover, Bloom's Cognitive Domain and Gardner's MI theory provided classroom teacher to assess and analyze the levels and problems of his students. In the following all these important theories will be discussed under these heads:

1. The Behaviorists
2. The Mentalists
3. Cognitive Process Theories
4. The Constructivists
5. Cognitive Domain
6. Multiple Intelligence Theory

In fact, all these theories tend to describe the nature and the procedure of learning as they observe it. Let's start with 'The Behaviorists'.

The Behaviorist School

Behaviorist school simply claims that language learning is the formation of a set of habits. The

roots of this claim can be found in the general theory of learning described by the psychologist John B. Watson in 1923, and is known as behaviorism. He gave the idea that knowledge is the product of interaction with the environment through stimulus-response conditioning.
B F Skinner was the psychologist who connected SRR with language learning. His book Verbal Behavior (1957) laid out a vocabulary and theory for analysis of verbal behavior. How Skinner inferred this theory is an interesting matter and is related to the operant conditioning.
Operant Conditioning Behavior:
Skinner presented his concept of Operant Conditioning behavior in his book Schedules of Reinforcement. This behavior implies that learner demonstrate the new behavior first as a response to the system of reward or punishment and finally becomes an automatic response which gradually can be developed into complex forms. In this regard Skinner conducted an experiment on rat. He put the rat in a box containing a bar. When unconsciously the rat pushed the bar, he received a pellet of food. Skinner presented the bar as stimulus, the pushing of the bar as response and the
pellet of food as reinforcement. He made the process gradually complex by including blinking-light and reinforcement on double pushing. He showed that through this SRR bond, it had developed as a habit of rat that whenever he needed food he pressed the bar. From this, Skinner conclude :
"The basic process and relation which give verbal behavior its special characteristics are now fairly understood… the results have surprisingly free of species restrictions. Recent work has shown that the methods can be extended to human behavior without serious modification."
Skinner broadened the theory to the vast majority of human learning including language learning, points out Jean Aitchison. When language acquisition is taken into consideration, the theory claims that both LI and L2 learners receive linguistic input from speakers in their environment. And when language learners' responses are reinforced positively, they learn the language relatively easily.
Influence of Behaviorism:
Behaviorism influenced a great number of learning theories in general and language learning theories in specific. In general theories Guthrie's Contiguity ,Hull's Drive Reduction Theory, Lava's Situated learning theory mark great influence of Behaviourism. In language learning theories Skinner's Operant Conditioning theory, Maltzman's Originality theory follow the behaviourism. Moreover The Bloomfieldian structuralist school of linguistics also accepted behaviorist ideas.
Maltzman proposed that Originality can be increased through instructions or practice to produce uncommon responses. He distinguished originality from creativity. He claimed latter refers to the consequences of original behavior. He is one of the few behaviorists who attempt to deal with creative behaviour. He suggested three principles:
i) Present an uncommon stimulus situation for which conventional responses may not be readily available
ii) Suggest different responses to the same situation
iii) Evoke uncommon responses as textual responses
Since the behaviorists claim that there is no need of innate or mental mechanism, they see errors as wrong habits. During learning second language errors are taken 'first language habits' interfering with the learning of second language habits thus strictly avoided. If there are similarities between the two languages, the language learners will acquire the target structures easily. If there are differences, acquisition will be more difficult. This approach is known as the contrastive analysis hypothesis. According to the hypothesis, the differences between languages can be used to reveal and predict all errors and the data obtained can be used in second

language teaching for promoting a better learning environment
The well-know application in the field of second language teaching is the Audio-lingual Method. The theory sees the language learner with no built-in knowledge. The theory and the resulting teaching methods failed to provide a sound basis for language teaching methodology. This failure is due to the consideration of mere external factors on the one hand and on the other hand the learned psychologist 'misunderstood the nature of language'. This is what Chomsky pointed out in his "A Review of B.F. Skinner's Verbal Behavior".
Chomsky's Attack:
Chomsky, a linguist and psychologist, criticized Skinner's theory and argued that he misunderstood the nature of language. He said that Skinner took language merely 'stringing words together'. The linguist pointed out that language makes use 'structure-depended operation'. Through this he implies that language is consist of double structure: Surface structure and Deep Structure. In order to understand the utterance, the listener is to comprehend both the structures.
Another quality of language that Skinner overlooked is creativity in human language. In this regard Chomsky says:
The normal use of language is a creative activity. The creative aspect of normal language is one of the fundamental factors that distinguish human language from any known system of animal communication".
Chomsky's point is that humans have freedom to create novel, and new utterance that never used before yet other can understand it. For example, the sentence "Mars told that Pluto told him that he saw a Moon in the pocket of Sun which was crying for a new pair of shoes for he wanted to go to the fun fair in girls high school at Jupiter" is a novel and never-before-heard sentence but any fluent speaker of English would be able to understand it. Thus, the behavior of rat, which is simple and contains no creativity or novelty, is irrelevant to the human language. In this regard he pointed out further lacks that are as following:
1. The conditions in rat experiment are simple, well defined, and predictable but human language is complex phenomenon and it is next to impossible to predetermine what a human is going to say.
2. The rat was repeatedly rewarded whereas children utters without any reward and even when nobody is around.
3. If approval and disapproval (reinforcement) worked in the way Skinner suggests, children should grow up always telling truth but speaking ungrammatically, since mother always approves 'true statements of a child' even though ungrammatical.
On theses sound basis Nome Chomsky rejected "the verbal behavior" of Skinner and purposed his own theory that is known as "The Mentalist Theory"
The Mentalist School
In contrast with the Behaviorists, the Mentalists claim that language learning is a rule cognition process.. They suggest that learning is connected with cognition, innovation and innate ability. Noam Chomsky suggests that humans are born with an innate knowledge of language. He presented his theory about the possibility of an innate structure "Language Acquisition Device".
Language Acquisition Device:
Chomsky named the 'innate structure', 'Language Acquisition Device'. What does this LAD do? In his "The Problem of Knowledge and Freedom", the theorist claims that it works to relate the sounds and meanings. It does this with the help of "an internalized set of rules". That is to be said a 'mental grammar'. He claimed that the grammar expresses the speaker-hearer language know ledge. Its system can be comprehended as a linguist analyses any 'unknown linguistic situation'. He receives sounds, makes hypothesizes, and sometimes for a time being abandoned

it until he compiled a set of rules accountable for all the possible structures of language. So he claimed:

"there can be little doubt that highly restrictive universal principle must exist [in mind] determining the general framework of each human language". {quoted in Aitchison' The Articulate Mammal)

Moreover, Chomsky first time made a distinction between language competence and language performance. Competence is just the knowledge that speaker possesses of the grammar of a language; performance is considered the ability to produce through use of one's competence.

Chomsky's Influence:

Chomsky's ideas about language and mind shook the behaviorists' theories about language learning. Language learning remained no more mere a matter of 'habit formation'. Educationists, psychologist and linguists recognized this fact that language learning involves various faculties such as memory, reasoning, critical thinking and problem solving etc., so the theories which came after Chomsky's work, were mostly based on cognitive approach. The more important among them are Cognitive Code Learning, Communicative approach, and The Bilingual Method. In fact, Chomsky's real achievement is that his work changed the focus of learning methods and theories from outer environment or teacher to the learner's personality and mind. Where he marked such a great influence, some of his ideas were criticized by psycholinguists even though they believed in 'cognitive abilities'.

Criticism on Chomsky:

Many research analysts criticizes the Chomsky's notion that 'grammatical rules' are given as innate knowledge. For instance Slobin modifies the Chomsky's theory in this way that the rules are not innate but capacity to process the rules is innate.

Chomsky gives little importance to the environment when he says in his" A Review of B.F. Skinner's Verbal Behavior" : "neither empirical evidence nor any known argument to support any specific claim about the relative importance of feedback from the environment. His this claim leads towards another extreme and even his design of LAD itself demands a need of exposure for language learning.

These short comings and lapses in 'cognitive approach' were patched by the work another great psychologist, Piaget, who first time proposed theory of 'cognitive development'. Piaget's influence can be seen chiefly in two streams: 1). Theories of cognitive process 2). The Constructivists theories. Let's discuss these streams.

Cognitive Process Theories

Piaget presented general theoretical framework of "genetic epistemology". The concept of cognitive structure or development stages are central to his theory and he was primarily interested in "how knowledge develops in human organisms". These stage of Cognitive developments, which he presented in his genetic epistemology, are as following:

1. Sensorimotor stage: children experience through their senses
2. Preoperational stage: motor skills are acquired
3. Concrete operational stage: children think logically about concrete events
4. Formal Operational stage: abstract reasoning is developed here.

Piaget explored the implications of his theory to all aspects of cognition, intelligence and moral development. He proposed some principle that should be kept in view during the learning process regardless of age and subject of learner. Practical implication of the principles in language learning is found useful. For instance, to the children in the Sensorimotor stage, till the age of seven, teachers should provide a rich and stimulating environment with ample objects about which they want to teach. If learner is to be taught word apple, he should be provided with the object 'apple'. The principles are as following

Principles:
1. Children will provide different explanations of reality at different stages of cognitive development.
2. Cognitive development is facilitated by providing activities or situations that engage learners and require adaptation (i.e., assimilation and accommodation).
3. Learning materials and activities should involve the appropriate level of motor or mental operations for a child of given age;
4. Avoid asking students to perform tasks that are beyond their current cognitive capabilities.
5. Use teaching methods that actively involve students and present challenges.
There are many learning theories in general and various language learning theories in particular that mark the influence of Piaget' work. Theories related to language are:
1. Dual Coding Theory
2. Architecture Cognitive Theory
3. Social Development Theory
4. Seymour Papert's Theory
Out of these four theories later two are related to 'constructivism' so they will be dealt under the headings of the constructivist whereas former two are related to cognitive process so let's have a brief introduction of these two theories.
Architecture Cognitive Theory:
John Anderson along with his research fellows proposed a theory for memory process named ACT. He distinguishes three types of memory structures:
• declarative
• procedural
• working memory.
Declarative memory takes the form of propositions, images, and sequences by direct associations. Procedural memory or long-term memory represents information in the form of productions; each production has a set of conditions and actions based on declarative memory. Working memory is that part of long-term memory that is the most highly activated. For language learning it suggests the fowling principles:
1. Relate new language items with previous knowledge
2. Minimize working memory load.
3. Provide immediate feedback on errors
Dual Coding Theory:
Piaivio is expounder of the dual coding theory. It attempts to give equal weight to verbal and non-verbal processing. Paivio emphasizes on the dual function of 'cognition process' particularly with reference to language. He says:
"Human cognition is unique in that way it has become specialized for dealing simultaneously with language and with nonverbal objects and events. Any representational theory must accommodate this dual functionality".
The theory supposes that there are two cognitive subsystems, one specialized for the representation and processing of nonverbal objects such as imagery, pictures etc and the other specialized for dealing with language. Theory of Paivio is supported by researches conducting in the field of neurology especially in regard with aphasia. These researches shows that left hemisphere of human mind is dedicated to verbal function whereas right hemisphere is dedicated to visual function. Thus, Dual Code Learning proposes a very significant principle in language teaching:
"Learning can be enhanced by presenting information in both visual and verbal form".
The cognitive process theorist' gave their more emphasis on mental process for learning. They

give little importance to external events. This gap was filled by the constructivists.

The Constructivists

Constructivism is recognized as a unique learning theory in itself. It however, may be associated with cognitive psychology, because as a theory of learning, it focuses on a learner's ability to mentally construct meaning of his own environment and to create his own learning. The term constructivism is linked to Cognitive and Social Constructivism.

Constructivist theory provides a general framework for instruction based upon the study of cognition. Much of the theory is linked to child development research especially of Piaget who first time emphasized that cognitive development is related as much with external experience as with inner innate abilities. A major theme in the theoretical framework of constructivists is that learning is an active process in which learners construct new ideas or concepts based upon their experience.

J. Bruner, who presented the constructivists theory in learning context, described that the learner selects and transforms information, constructs hypotheses, and makes decisions, relying on a cognitive structure to do so. Cognitive structure provides meaning and organization to the experiences and allows the individual to go beyond the information given.

Vygotsky, a Russian psychologist, suggests that social interaction plays a vital role in cognitive development at any stage .He says "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level:" His theory is a key component of Situated Learning Theory and Anchored instruction. Lava, the expounder of Situated Learning Theory, says:

"Learning, both outside and inside school, advances through collaborative social interaction and the social construction of knowledge".

Ideas of Piaget, Bruner and Vygotsky and Papert bring a balance in the approach of cognitive psychologists. Seymour Papert says:

"Thus, constructionism,... attaches special importance to the role of constructions in the world as a support for those in the head, thereby becoming less of a purely mentalist doctrine."

Constractivists desire students to become motivated learners, critical thinkers, problem-solvers and metacognitionists.For this they propose:

1. Language learning must be connected with the experiences and contexts that motivates learner.
2. Language items must be structured so that it can be easily grasped by the student.
3. Learner should be encouraged to explore language own their own through experience.
4. Interactive learning should be encouraged instead of instruction based.
5. Learning should be learner-centered rather than teacher centered.
6. Use of computer technology is important for cognitive growth

While Piaget and other Cognitive psychologist were giving there attentions to the 'cognitive process' some other psychologists prescribed the importance of 'learning variables' and some other of 'learner's variable'. Out of those, two names gained more importance among educationists : Benjamin Bloom for his famous 'Cognitive Domain' that deals with learning variables and Howard Gardner for his Multiple Intelligence Theory that describes 'learners' variables. Let's discuss both the theories one by one.

Cognitive Domain

Benjamin Bloom made a valuable contribution to the classification of educational objectives through his Taxonomy that is known as Bloom's Taxonomy. He emphasized the importance of different types of learning. He divided learning into three major domains:

• Cognitive: mental skills
• Affective: growth in feelings or emotional areas

• Psychomotor: manual or physical skills
Although, all three are important from teaching point of view, Cognitive Domain is more important for language teaching. Due to its this importance, this domain will be discussed in further details.
The cognitive domain involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedures, patterns, and concepts that are related to mental abilities and skills. There are six major categories starting from the simplest to the most complex according to Bloom. These are:
1. Knowledge 4. Analysis
2. Comprehension 5. Synthesis
3. Application 6. Evaluation
Let's try too understand all these concepts in the context of language.
Knowledge mean "recall data or information". When a language student is instructed to identify or label any linguistic item in the given statement, let's suppose noun, in fact, his knowledge is checked. All questions like: "narrate summery of any event", or "tell the name of places or characters", are knowledge based question. Multiple-choice tests, definitions, quotations and grammatical rules, all falls in the category of knowledge.
Comprehension implies understanding of knowledge and ideas. It can be demonstrated by the questions of organization, translation or interpretation. All questions that instruct like: "Translate paragraph into Urdu", or "State main theme of story', or "Explain with the help of examples" are likely to test comprehension of students.
Application denotes "put the theory into practice". For instance, learns are taught creative writing, they have knowledge what creative writing is, and they can understand any piece of writing, thus they have comprehension also. Application is a next step when they are asked to write a narrative essay or argumentative essay. In spoken context, they learn to handle any situation, let's say giving presentation. They have knowledge of presentation, but when they themselves give a presentation they are applying there knowledge and comprehension.
Analysis is mean "break and examine information into parts by identifying motives or causes". The tasks at this level that English language learners are give are: classify, contrast, compare, categorize, sequence. For instance, "What are the basic elements of Bacons prose? Read his essay and discuss." or "Why Elizabeth refused Darcy's proposal ?(Pride& Prejudice)"
Synthesis tends to "put parts together to form a whole, with emphasis on creating a new meaning or structure". At this level students are to compile information together in a different way by combining elements in a new pattern and by proposing alternative solutions. For instance, question like "Can you invent another character for the story?" "How would you change the story of Mill on the Floss to create a different ending?"
Evaluation means "make judgments about the value of ideas or materials." Here students are to give there own opinion. For instance "Which part of the novel Heart of Darkness did you like best? Explain why you like it?" 'Bacon is the Father of English prose", accept or refute the statement."
Although the ranking of levels according to difficulty is still controversial among psychologists, yet classification of different types of learning is Bloom's great contribution to educational scenario. It helps teacher to easily recognize and classify the weak areas of a student. As it helps in classification of learning, another theory helps in classification of learner.
Multiple Intelligence Theorem
MI theory helps in classification of learner according to their different types of intelligence. The theory of multiple intelligences was developed by Dr. Howard Gardner. It suggests that the traditional notion of intelligence, based on I.Q. testing, is far too limited. Instead, Dr. Gardner

proposes eight different intelligences to account for a broader range of human potential in children and adults. These intelligences are:

• Linguistic intelligence ("word smart"):
• Logical-mathematical intelligence ("number/ reasoning smart")
• Spatial intelligence ("picture smart")
• Bodily-Kinesthetic intelligence ("body smart")
• Musical intelligence ("music smart")
• Interpersonal intelligence ("people smart")
• Intrapersonal intelligence ("self smart")
• Naturalist intelligence ("nature smart")

In educational psychology and practice it was a great development. Prior to him, people gave importance only to logical or linguistic intelligence. For instance only those people got esteem of public who were highly articulate or who were logical. Particularly, in classroom teacher ignored all other types of intelligence and emphasized on linguistic or logical interpretation. Drawback of this was that student who were gifted with other types of intelligence were either ignored or considered 'dull'. The theory helps teacher to addressing maximum levels of understandings. This theory has a broad scope in language learning process.

MI Theory in English Language Learning:

Through different kinds of activity almost every kind of intelligence can be addressed. If a teacher is having difficulty reaching a student in the more traditional linguistic or logical ways of instruction, the theory of multiple intelligences suggests several other ways in which the material might be presented to facilitate effective learning. Whatever teacher is teaching, he should see, how can be connect it with words, numbers, pictures, music, self-reflection, any physical experience, any social experience, or with natural world.

For instance, let's suppose lesson theme that is to be taught to second language learners at beginner's level is "Helpers." The key vocabulary items are the names of community helpers (firefighter, police officer, traffic warden, postman, doctor, nurse), the names of vehicles they use and their places of work. The target structure to be used is Present Simple, with third person singular.

A whole set of activities can be designed for the purpose. Let's say take a start with an educational trip to the fire station, police station, city council and post office, around the city. First of all this will give them a direct natural and interpersonal experience of learning. Secondly, the students will produce an essay, "My Personal Account of Trip". This will address two more levels: verbal and intrapersonal intelligence. Thirdly, they will prepare a picture album with title "Our Helpers". In album they will paste different pictures of doctor, nurse, firefighters, postman etc, with their captions and with description in a few words. For example under the photo of nurse description will be "A nurse cares patients". So this activity will address spatial intelligence as well as linguistic one. Fourthly, to address musical intelligence, any light song about 'Helpers' can be produced. The whole class will sing the song. Fifthly, to address mathematical intelligence, learner can be asked to list the 'helpers' they have met and give them number in words along with in digits. Sixthly, learner will play roles of different helpers to address kinesthetic intelligence. So in this way all eight intelligence can be addressed.

One great benefit of these theories of style of learning and levels of intelligence is that these gives learner more importance who actually is the most important part of teaching/learning process. On the other hand these theories help teachers in understanding their students and to easily identify their problems and mental levels. Both the theories i.e., Bloom's 'Cognitive Domain' and Gardner's MI theory have brought educational psychology out from clinics and research centers into practice.

The Conclusion

There are two main different streams of theories. One flows with the waves of behaviorist psychologist whereas the other runs with the tides of cognitive scientists. Former observes environmental stimulus as crucial factor but later declares 'mental process' as central feature. However, both the streams are combined at the channel of the constructivists' who, according to Dr. Joseph Anthony, suggest "A Cognitive-Behavioral Approach". In all this flood of theories, two separate tides of Cognitive Domain and of MI theory make their distinction by serving two purposes respectively : by categorization of he different kinds of learning, and by identification of different types of learner. Due to these developments, language learning process has remained no more subject to theories or methods but now it gives its attention to the learner. It focuses on learner, revolves around learner, thus it has become learner-centered.

Biological Evidence for Innate Language Capacity

The qualitative growth of language till now has been a unique hallmark of humans. Language seems to arise according to an inlaid biological time clock. Children, all over the world, normally start speaking almost at the same time: between their 18th and 28th month. To provide an unaltering and a patent evidence about an innate inlaid programming of language in humans is although a colossal task because language is such a complex phenomenon, still it does not deter us from making a hypothesis: language in humans is a preplanned innate program. A few factors seem to recommend the presence of a biological set up in humans for innate language capacity. These factors may stand as biological evidence for an innate language acquisition. Let us examine them in detail.

It is usually believed that when an animal has some innate behavior, it should give some biological clues about it. Physiology is an authentic branch of biology so let us first see if any kind of physiological adaptation of the organs of speech is exclusive to humans. On examination, it seems as if partial adaptation is there.

The organs of speech are involved in planning, processing and producing speech. In humans, they show certain differences from other species. These organs are the mouth, the tongue, the teeth, the vocal cords, larynx, the lungs and the brain. Their structural adaptations are as under:

Human lips are thick-muscled and the shape of the mouth is quite plastic and variable, which can be rapidly opened and shut. The human lips have a muscular system that is more intricate than the primates. The mouth's variable size is planned to be rather small for supporting good articulation. In chimps and other animals, it is quite large to support hunting but not speech.

The human tongue is also thick-muscled and not thin like chimps and birds, the shape that impedes stressed speech. Thick tongue helps in articulating a number of sounds like /θ/, /dʒ/, /tʃ /, /z/ and /j/. Thin tongue cannot rest upon itself to produce these stressed sounds. Again, the teeth are quite distinguishable from other species. They are precisely placed, placed together and go like a barrier for the air stream coming out of the lungs. Each set of teeth, the upper and lower, gets set into each other and is not indented outwards. The indented shape of teeth in animals cannot support firm articulation.

The examination of human mouth cavity shows as if it is biologically designed to meet the needs of speech production. But, of course, only this cannot stand as a quite approved and ultimate evidence of an innate language capacity therefore we move on to downward analysis.

The larynx is unlike animals in its simple structure. It shows streamlining when compared to that of the primates. Biologically, streamlining and simplification often indicates specialization for some purpose. So this may be an adaptation to speech production. In lungs, we witness a finely balanced respiratory system. Usually, breathing is accelerated when a person pants and one may faint due to this increased rate yet during speech production, people can go on talking

without any peculiar discomfort. The rate of inhalation while speaking is increased and that of Exhalation is reduced. This adjustment is not learnt but natural. It also stands as a biological adaptation for language.

Critchley quotes Oliver Wendell Holmes praising the sophisticated adaptation for speech in humans:

'What a curious thing speech is! The tongue is so serviceable a member (taking all sorts of shapes just as it is wanted)––the teeth, the lips, the roof of the mouth, all ready to help; and so heap up the sounds of the voice into the solid hits which we call consonants, and make room for the curiously shaped breathings which we call words.'

The brain is a very crucial organ in processing speech. The human cortex or the gray matter is quite thicker than other animals and it appears reasonable to suggest that a high brain-body ratio is favorable for speech production, still the factor is not always confirmed in every animal. A camel cannot produce speech like a human even when it is more huge than human. Likewise a non-cephalic human and chimp, having the same brain-body ratio, are different in language production. The dwarf speaks while a chimp does not. This again shows that language is like innate and exclusive to humans.

We shall have to examine the brain's working in detail to comprehend its function in language processing. Many researches show that the hemispheres, the two halves of the brain, function identically in animals while in humans a considerable difference is seen in their functioning. Unlike animals, one of the hemispheres shows a high function in language production. Mostly, it is the left hemisphere. Moreover, the right hemisphere controls the left side of the body and the left hemisphere, the right side. This was first discovered by Marc Dax in 1836 that the paralysis of the right side of the body incurs speech loss while the left-side paralysis does not affect speech. This discovery also recommends that usually the left hemisphere controls not only the right side of the body but speech as well. It indicates functional difference in both hemispheres. This difference is also indicated by Barbiturate (Sodium amytal) Test, Dichotic Listening Test and Electrodiagnosis. This brain asymmetry develops gradually but even in fetus development, some neurologists found traces of future left hemisphere dominance. It shows as if the physiology of the brain is altered in humans to support language acquisition.

The breathing adaptation, neuromuscular sequencing, comprehension and fine balance of different processes during speech points toward another biological evidence. The multiplicity of the integrative processes, which operates during speech production, is usually not possible in many other processes. For example, patting one's head and rubbing one's stomach cannot take place simultaneously. But during speech production the coordination of different processes is so intense we can feel language might be innately programmed to take place.

Different experiments have shown that only human brain has been able to achieve 'semanticity' and structural development of language. The animals that were given crash training to speak could not come to the point of clear articulation and semantic usage of language in spite of providing many years of language-enriched environment. Here I shall give reference of certain experiments that were carried out on different animals.

All these experiments showed that these animals might differ in their capacity to learn language, as chimps seem to be better than others at acquiring a limited amount of language. In spite of their ability to learn to speak to a limited extent, they gave biological evidence in favor of the human brain. They showed that only the human brain possesses the unique capacity to process language up to a sophisticated and intricate level. Chimps are not physiologically capable of uttering speech sounds that humans can utter.

Let us touch upon another very important factor, which might stand as biological evidence on the innate capacity of language in humans. Biologically, if any behavior shows following

features, it is supposed to be innate:
• The behavior emerges before it is necessary
• The emergence of the behavior is involuntary. No conscious decision is made for its emergence
• The above said emergence of the behavior is not triggered by external events
• There is a 'critical period' for the acquisition of this behavior
• Direct teaching and intense practice has very little effect
• The behavior progresses through certain 'milestones'. We can say that it is sequenced.
Let us see whether language shows these features or not:
With reference to the above said points, we see that language also emerges before it is necessary. Even when their parents still fend for them, babies start speaking. It is called 'law of anticinatory maturation'. Without any inborn mechanism speech might develop in babies when their parents left them to fend for themselves. It would emerge at different times in different cultures but we can see that the emergence of speech takes place almost at the same time in all the babies.
Secondly, a child does not decide consciously, 'Tomorrow I shall start speaking.' Starting uttering words is quite unconscious. This is quite different from the decision of jumping from a high place, which has to be consciously decided. So language shows the second characteristic of an innate behavior as well.
Thirdly, children start to talk even when their external environment remains unchanged. They remain in the same house and the same place. Here, it must not be mingled with the fact that rich linguistic environment helps the child toward a far better progress. It is because any biologically programmed behavior does not develop in impoverished or unnatural surroundings.
Fourthly, all the analyses of language acquisition show that there is a certain time period in which the acquisition is on the peak, after which it slows down. We shall not go into the reasons of its slowing down. The same critical period is said to be working in children getting even two mother tongues at the same time equally effectively. The end of this critical period works in adults who do not prove to be very good at learning a second language.
Fifthly, many experiments show that direct teaching and giving forced practice only hinders the way of a child towards good learning performance. The language takes its natural course towards its development. It indicates that language is naturally programmed. And if it is naturally programmed, it is innate.
Sixthly, language acquisition is a sequenced behavior. A baby has to pass through certain milestones till he gets the language fully. At first, it starts crying, then cooing that remains for about 6 weeks. Then babbling starts and lasts for 6 months. After 2 months, intonation patterns arise, which lasts for about 2 months. 1-Word utterances are followed by 2-words utterances and last till the child is of 18 months. At the age of 5 years, children start producing rare and complex structures. And it is at 10 years of age that mature speech begins. Though this is an approximate age-schedule but the order of the events is the same.
The physiological and behavioral factors discussed above show to a very great extent that language is biologically programmed behavior and so it is innate. Lenneberg says:
'There is in fact, no evidence that any conscious and systematic teaching of language takes place, just as there is no special training /or 'stance or gait '.
Factors Affecting Foreign Language Learning
Plenty of observation has made it clear that FL learning is different from mother tongue acquisition. Although one can learn two mother tongues equally well simultaneously, FL does not seem to follow the same mode of learning. There must be then a number of factors that affect this learning and an overview might help us in getting an insight into what we can do to overcome these factors. We shall analyze the following in this regard:
• Aptitude

• Motivation
• Needs
• Age
• Personality
• Learning strategies
• Influence of mother tongue

Aptitude

Let us first see how aptitude affects the FL learning:

As teachers, we must have seen many a times that a few students in every session seem fairly better at language acquisition than the other ones. We assign to them a quality that they possess a good language learning potential, which differs from individual to individual. It follows that people are not identical in their capability to learn a foreign language. This language learning potential is actually the language aptitude'. It is the same element that can determine the success or failure of a FL learner. Whether their aptitude is a product of the innate abilities or previous learning experience does not matter. Neither influence, we suppose, is reversible so every person has a permanent and stable level up to which he can learn a foreign language. Here, it should be remembered that aptitude is a factor more concerned with FL learning. It is because mother tongue seems to develop through one's innate abilities.

To measure this aptitude, researches have developed two important language tests. This measure can give us a piece of information doubt the future performance of a learner, beforehand. It seems reasonable to expect that any test that succeed in providing such a prediction would point towards the psychological components a language learning ability. There are two existing language tests, both developed in the united states:

1. Modren Language Aptitude Test (MLA] ) developed by Caroll and Sapon.
2. Language Aptitude Battery (LAB) developed by Pimsleur

Now we can get an idea out of what has been said above that language aptitude is an important factor that can have serious effects on FL learning. A learner, who possesses an active and good aptitude, would naturally show diligent learning while a learner with a less active aptitude is expected to find hurdles in his way through language learning. That is why language aptitude tests are given a lot of significance before starting FL teaching.

We would definitely like to see how the tests work. Let us have an overview:

The MLAT in the beginning had 25 variables to determine language aptitude. The 20 variables, on seeing that they did not offer a good prediction, were dropped and 5 of them selected to develop MLAT. This test works through the following factors:

• Learning artificial numbering
• Working on a phonetic script
• Vocabulary test containing not illogical but strangely spelt words
• Identifying similar grammatical words in different sentences
• The ease of learning based on the pairs of words in English and Kurdish

After MLAT, Pimsleur's LAB was again a good predictor of success and failure in FL leaning. LAB works through the following factors:

• Vocabulary in the mother tongue
• Construction of new analogous sentences
• Ability to discriminate sounds of new language
• Testing sound––symbol relationship
• Measuring pupil's declared interest in language learning on a scale of 1–5

An analysis of LAB tells us that the first four factors are purely linguistic and the last one is non-linguistic but can show an important degree of language learning aptitude. The difference

between MLAT and LAB is that the earlier of the two contains only linguistic sub-tests whereas the second one probes into a non-linguistic measure as well. It makes LAB a better predictor than MLAT. A general analysis of the Grade Point Average is also taken into account these days. Thus, language aptitude becomes a very significant factor that affects performance of foreign language learners.

Motivation

Motivation, like aptitude, is a factor much concerned with second language learning. The reason of not associating it to first language acquisition is that L1 acquisition is thought to be a maturational process, in which motivation and aptitude seem to have no place. The psychology of first language gives a few points about motivation in second language learning as well. The two Soviet psychologists, Luria and Vygotsky describe the psychology very explicitly in an acceptable way:

It is through speech that a child learns to organize his perception and to regulate his behavior and mental activities. Faced with problems and needs, the child will in his early years merely look for outside assistance and language will have the function of obtaining this assistance for him. Then will come a stage in which the child spends a lot of time talking to himself or to anyone who cares to listen in his first efforts to find solutions to his needs himself. Finally, the external speech is internalized, so that the child's behavior is no longer simply a response to external stimuli but has come under the control of his thought processes. It is the environment that is controlled by the child rather than the other way round.

The parallel between the above said situation and that of learning an alternate language does not abound. In learning L2, a learner does not need the second language for regulating his manners or behavior. His modes of' behavior are already set in the culture of his L1. He is not 'forced mentally' to acquire a language but possesses only a desire of learning L2. He may be motivated to influence the outer environment according to his needs. The greater the motivation, the greater the success. This is where the only means available to exercise control over events and people outside himself, is the foreign language. If to satisfy his needs, to influence the actions and thoughts of others to pursue his occupation and his recreation, it is necessary to use a foreign language, then he will learn the foreign language more rapidly and effectively. These circumstances will normally arise if the learner is living in the country where a foreign language is as important functionally as the learner's L1 in his own country. So the learner would be highly motivated to learn the alternate language. If immigrants find themselves, even in the foreign land, in a situation where most of their needs can be met in their mother tongue, they would be less motivated to learn L2. Motivation can be of two kinds:

• INTEGRATIVE MOTIVATION
• INSTRUMENTAL MOTIVATION

The reason of learning may be numberless. People are motivated for different reasons. Those who want to learn a language to achieve some other goal are called instrumental learners. Some of the like reasons are mentioned below:

1. To pass an exam that is important.
2. To utilize the language at one's job place.
3. To go for a holiday to the area of 1,2.
4. To get the entertainment that is being continuously induced.
5. Under the instruction of school.

Such a learner uses the language as an instrument to get his target.

In integrative motivation, language is itself an end into it. We considered them better motivated than the instrumental learners because research has shown that integrative learners are the most successful. The reasons of integrative motivation may be such like:

1. That one wants to know about how the native speakers of the foreign language live or what kind of culture they own.
2. That one is expected to live in the country concerned.
3. That one wants to be conversant with the native speakers.

Age

Age factor is different from aptitude and motivation. Age is inverse-proportional to language learning capability therefore it is a variable and unlike aptitude and motivation, which are more or less permanent. It plays a very important role in L1 acquisition as well. After the passage of the 'critical period', it becomes hard to acquire a language fully well. In learning L2m age factor is extremely functional as a barrier because the set of behavior is already adjusted according to one's culture. Researches have shown that children are all the better able to acquire L1 and L2 than adults. Let us go into its detail:

Many sources have shown if children are exposed to two mother tongues, they become ambilingual; they can use both languages and each without being distinguishable from the native speakers. On the other hand, adult immigrants, who have acquired their first language cannot remove traces of L1 in their communication. This points toward age factor working as a barrier behind it. The capacity to master a new language is gradually reduced along with increasing age. Many adult learners remain at the primary level of their speech in second language.

Evidence of a boundary between child and adult learner, is also provided by neurophysiology. Penfield and Roberts have argued on the basis of their study of speech mechanisms that the neurological evidence is in favor of language instruction beginning at an early age. 'I he brain's motor skills are associated with the left hemisphere and if it is damaged only children can transfer the motor skills to the other hemisphere. They also argue that the brain has a certain sort of plasticity at a young age, which is lost when one becomes an adult. That is why the articulatory skills cannot be perfectly acquired at a later age. These ideas are expressed by these neurophysiologists in Speech and brain Mehanisms.

It is also observed that children can adopt a new sound system better than adults. That's why it is now preferred to start teaching a foreign language at the primary level. Inhibition also plays the part of obstruction in adults acquiring a new pronunciation. Children usually enjoy imitation and repetition, which is needed in this process. They are less self-conscious and ethnocentric. Though these factors are to a great extent operant, still exceptions can be found. If adults face a difficulty in getting a new language, they are also better off to tackle the troubles that arise on way. It takes us to another realm of a factor that might be functional in acquiring a foreign language.

Personality

Personality of a learner is also significant in learning a foreign language. An introvert learner is usually very self-conscious and due to this inhibition, he cannot take the desired advantage of teacher's instructions. Imitation is much needed in learning a language, which may not be well met by an introvert. A confident learner talks about his problems openly and gets them solved. Still, we should remember that research labels this factor as less functional in language learning.

Learning Strategies

Good and active learners are those who are apt to adopt different learning strategies. He should be ready to change his active knowledge into passive one. For example, he should try to use a newly gained item into sentences and look for opportunities in which he can be conversant in the target language. Switching on to the programs in the target language also helps. Successful learners do not feel shy at making mistakes as they are predictors of how the learning is going.

Influence of Mother Tongue

Mother tongue, for an adult, impedes the way to a thorough teaming of a foreign language. It is because his mind is already caught in the mazes of the first language so L1 interferes with the operation of a new language. The previous grammatical system and pronunciation affects the new one. Often, many adults cannot speak and hear new sounds. They seem to filter out the new sounds from their hearing because they have been using the systems of the previous language for a long time and so they become accustomed of it.

Let us now see how much functional these factors arc in our local environment. English is a significant foreign language in our locality. In Pakistan, it is mostly used among people who wish to go for higher education or immigration. In other situations, it is usually not given the attention it needs. “That is why the factors of less aptitude and age can be seen to lay the worse effects.

## SocioLinguistics - A Study of Language and Society

Language is a social-cultural-geographical phenomenon. There is a deep relationship between language and society. It is in society that man acquires and uses language. When we study a language which is an abstraction of abstractions, a system of systems, we have to study its further abstractions such as dialects, sociolects, idiolects, etc. That is why we have to keep in mind the geographical area in which this language is spoken, the culture and the society in which it is used, the speakers who use it, the listeners for whom it is used, and the purpose for which it is used, besides the linguistic components that compose it. Only then can our study of a language be complete and comprehensive.

So we must look at language not only from within but also from without; we should study language from the points of view of both form and functions. Socio-linguistics is the study of speech functions according to the speaker, the hearer, their relationship and contact, the context and the situation, the topic of discourse, the purpose of discourse, and the form of discourse. An informal definition of socio-linguistics suggested by a linguist is that it is the study of : *'Who can say what how, using what means, to whom and why."* It studies the causes and consequences of linguistic behaviour in human societies; it is concerned with the function of language, and studies language from without.

Socio-linguistics is a fascinating and challenging field of linguistics. It studies the ways in which language interacts with society. It is the study of the way in which the structure of a language changes in response to its different social functions, and the definition of what these functions are. 'Society, here is to cover a spectrum of phenomena to do with race, nationality, more restricted regional, social and political groups, and the interactions of individuals within groups. Different labels have sometimes been suggested to cover various parts of this spectrum. ETHNOLINGUISTICS is sometimes distinguished from the rest, referring to the linguistic correlates and problems of ethnic groups—illustrated at a practical level by the linguistic consequences of immigration; there is a language side to race relations. The term ANTHROPOLOGICAL LINGUISTICS is sometimes distinguished from 'sociological linguistics', depending on one's particular views as to the validity or otherwise of a distinction between anthropology and sociology in the first place (for example, the former studying primitive cultures, the latter studying more 'advanced' political units; but this distinction is not maintained by many others). 'Stylistics' is another label which is sometimes distinguished, referring to the study of the distinctive linguistic characteristics of smaller social groupings. But more usually, stylistics refers to the study of the literary expression of a community using language. Socio linguistics gradually merges into ethno-linguistics, anthropological linguistics, stylistics and the subject-matter of psychology.

Broadly speaking, however, the study of language as part of culture and society has now commonly been accepted as**Sociolingustics**. But there are also some other expressions which have been used at one time or another, including 'the sociology of language', 'social linguistics', 'institutional linguistics', 'anotheropological linguistics', 'linguistic anthropology', 'ethnolinguistics', the 'ethnography of communication', etc.

The kinds of problems which are faced by the sociolinguist are: the problems of communities which develop a standard language, and the reactions of minority groups to this (as in Belgium,

India, Pakistan or Wales); the problems of people who have to be educated to linguistic level where they can cope with the demands of a variety of social situations; the problems of communication which exist between nations or groups using a different language, which affects their 'world-view' (for example the problem of popularizing Russian among the nations which are friendly to Russia); the problems caused by linguistic change in response to social factors; the problems caused or solved by bilingualism or multilingualism. By this however, we do not mean that socio-linguistics can or does solve all such problems as stated above. Yet it can identify precisely what the problems are and provide information about the particular manifestation of a problem in a given area, so that possible solutions can thereby be found out or expedited. Furthermore, problems related to interference, code-switching or dialect-switching can be successfully handled by socio-linguistics. But the success of socio-linguistics ultimately depends upon 'pure linguistics'.

The scope of socio-linguistics, therefore, is the interaction of language and various sociologically definable variables such as social class, specific social situation, status and roles of speakers/hearers, etc. As J.B. Pride says, socio-linguistics is not simply 'amalgam of linguistics and sociology (or indeed of linguistics and any other of the social sciences)'. It incorporates, in principle at least, every aspect of the structure and use of language that relates to its social and cultural functions. Hence there seems no real conflict between the socio-linguistics and the psycho-linguistic approach to language. Both these views should be reconciled ultimately. Linguisticians like John Lyons and cognitive psychologists likeCampbell and Wales advocate the necessity of widening the notion of competence to take account of a great deal of what might be called the 'social context' of speech.

Language Variation

Language with its different varieties is the subject matter of socio-linguistics. Socio-linguistics studies the varied linguistic realizations of socio-cultural meanings which in a sense are both familiar and unfamiliar and the occurrence of everyday social interactions which are nevertheless relative to particular cultures, societies, social groups, speech communities, languages, dialects, varieties, styles. That is why language variation generally forms a part of socio-linguistic study.

Language can vary, not only from one individual to the next, but also from one sub-section of speech-community (family, village, town, region) to another. People of different age, sex, social classes, occupations, or cultural groups in the same community will show variations in their speech. Thus language varies in geographical and social space. variability in a social dimension is called sociolectical. According to socio-linguists, a language is code. There exist varieties within the code. And the factors that cause language variation can be summarized in the following manner:

**Nature of participants, their relationship**(socio-economic, sexual, occupational, etc.

**Number of participants** (two face-to-face, one addressing a large audience, etc.)

**Role of participants** (teacher/student priest / parishioner /father/son/husband/wife, etc.)

**Function of speech event** (persuasion, request for information ritual, verbal, etc.)

**Nature of medium** (speech, writing, scripted speech, speech reinforced by gesture, etc.)

**Genere of discourse** (scientific, experiment, sport, art, religion, etc.)

**Physical setting** (noisy / quiet / public / private / family / formal/familiar/unfamiliar, etc.

## Language Varieties

Language varies from region to region, class to class, profession to profession, person to person, and even situation to situation. Socio-linguistics tends to describe these variations in language with reference to their relationship with society. It shows that the relationship between language variation and society is rather a systematic relationship. It manifests that there are four major social factors involve in this variation: socio-economic status, age, gender, and ethnic background of the user or users of language. Due to all these four factors language differs on four levels chiefly:

1. Phonological Level
2. Lexical Level
3. Syntax Level
4. Discourse Level

In other words, variation within a language with reference to its use or user can be defined in terms of 'difference of linguistic items'. R. A. Hudson in his Sociolinguistics manifests:

> "What makes a language variety different from another is linguistic items that it includes, so we may define a variety of language as *a set of linguistic items with similar social distribution".*

So, to describe language varieties, on one side there are linguistic items and on the other there is 'social distribution'. Let's take two different social classes for example: Middle Class and Working Class. Language of Working Class is different form that of Middle Class. The choice of vocabulary of one class is quite different from the other. Middle class uses more adjective, adverbs and impersonal pronouns. Whereas Working class uses active and simple words and here is lesser use of adjective, adverbs and impersonal pronouns. Lower class speech (restricted code) is more direct with simple grammatical construction in contrast with middle class speech (elaborated code). If a person wants to ask for the cake placed on table, person of working class may ask another person: "shove those buns mate". A middle class person will say the same thing in rather different way: "Please pass the cake"

In the following, six major language verities will be discussed, namely: **Idiolect, Register, Diglossia, Pidgin, Lingua Franca**and **Esperanto.** Besides this, it will also be observed that how a language variety differs from another closely related variety. For instance, what is difference between Idiolect and sociolect? How register differs from dialect? What makes distinguish pidgin from other varieties?

Idiolect:

Every person have some differences with people around him. From eating habits to dressing, everyone has some quite unique feature. The same is the case with individual language use. Every individual have some idiosyncratic linguistic features in his or her use of language. These personal linguistic features are known as Idiolect. David crystal in his Dictionary of Linguistics and phonetics defines Idiolect as:

> "[Idolect] refers to Linguistic system of an individual—one's personal dialect".

This 'linguistic system' can be described in terms of personal choice of vocabulary, grammatical structures, and individual style of pronunciation. In other words idiolect refers to a person's individual phonology, syntax and lexicon.

For instance some individuals use lower pitch and some other speak with higher pitch. Some are in habit of speaking with harder tone and it feels as if they are speaking with anger, even though they are speaking 'sweetly' on their side. Similarly, some individual's use their nasal cavity, more than their vocal cord, in their production of sound and listener feels as some sharp whistle is blowing.

The best example of particular choice of vocabulary is individual use of 'catch phrases'. Most frequent among these are "I say", "I mean", "do you understand?" and "what do you think?" Some catch phrases are rather interesting and their use becomes cause of amusement. For example a student at my university is in habit of using "Bhai" with every third or fourth sentence. Once his audience was a girl instead of boy. When he said "Bhai, main explain kar raha thaa…". The girl corrected him and said "bhai nahi bhan!" and he promptly replied, "Oh bhai, I mean…"

In this way a person's speech is distinguished from other individuals and form any speech community. Idiolect is a minor speech variety than sociolect, which is used by any social class. Idiolect varies with individual whereas sociolect varies with class defined on socio-economic bases. Idiolect, sociolect and dialect are the varieties which depend on their user. However, there is another scheme of language varieties distinguishing from one and another in term of their use rather than user. Register is one of them.

Register:

Human beings are not static. Their thinking, choice, and behavior vary according to need and situation. As they adapt their behavior according to the situation, they adapt their language. This adaptation of language according to situation, context and purpose forms a language variety that is called 'Register'. David Crystal defines Register as:

> "A variety of language defined according to its use in a social situation".

Language of individual varies from situation to situation. At some occasions people talk very formally, on some other occasions they talk technically as well as formally. At some other occasion they become informal yet technical and some times informal and non-technical. Following is the example of all these 'levels of formalities':

Formal technical: "We obtained some sodium chloride."

Formal non-technical: "We obtained some salt."

Informal technical: "We got some sodium chloride."

Informal non-technical: "We got some salt."

There are two other levels: Slang, and vulgar. Question is that why a person adopts these different levels of formalities? Halliday tries to describe it in terms of 'three dimensions'.

Michael Halliday in his *Language as Social Semiotic* defines register as "A complex scheme of communicative behaviour". He observes that this scheme of behaviour has three dimensions: Field, Tenor, and Mode. These three dimensions determine speaker's choice of 'linguistic items'.

Field implies why and about what the communication is? In simple, what is the purpose and subject matter of communication? For example, a doctor's communication with other doctors will be containing more medical terminology i.e., he will be using medical register.

The same doctor will communicate with his patient in as simple language as possible. So the patient is 'Tenor' that means to whom the communication is being done. Other example of determination of speech by 'Tenor' is the difference of a person's communication with a teacher than with a friend.

Mode is the means of communication. If the mode of communication is letter, its language will be different from direct conversation. If it is an essay, its language will be differing from that of letter even though written about the same topic.

'Register' as a language variety differs from dialect_ sociolect and idiolect. These differences are:

| Register | Dialect |
|---|---|
| Register is a language variety according to use | Dialect is language variety according<br><br>to user |
| It may be related to any particular profession or situation | It may be related to any region or social class |
| It shows what the user of language is doing. | It shows who the user is. |
| Register is a set of particular linguistic items to be used in a particular situation | Dialect is a set of linguistic items to be used by people of particular area or class. |

Up till now the different variations within a language were being dealt but there are certain situations where two or more languages are used which causes such variations that are beyond the range of one language. One of these variations is known as pidgin. There is a situation in which two or more languages are used with in a society. That is known as 'Diglossia'. Let's discuss the situation.

Diglossia:

Diglossia is not a language variety but a 'linguistic situation' where more than one languages are used. In English language, term Diglossia was introduced by Charles Ferguson. He used this term to refer to those societies where two very different varieties of the same language were being used. He said:

> "Diglossia is a relatively stable language situation in which, in addition to the primary dialect of the language (which may include standard or regional standards), there is very highly codified (often grammatically complex) superposed variety."

In Ferguson's theory that society is 'diglossic' where two 'divergent' varieties of the same language are used, out of which one is 'highly codified'. Arabic speaking countries are the best examples of 'Diglossia'. Throughout the Arabic peninsula there are two varieties of Arabic language in use: Classical Arabic, and Vernaculars. Classical Arabic, which is based on the Qur'anic language, is highly codified and complex and has stable grammatical structure since The Holy Qur'an is revealed. This language is 'Lingua Franca' of Arabic Peninsula and is being taught in schools and also the language of media. Every one has to learn this variety especially and not acquired "by being born in right kind of family". Everywhere in diglossic society, vernaculars are used for daily routine conversation. Other examples of diglossic societies areGreece, where high variety is Katharevousa and low is Dhimotiki, and German speakingSwitzerland with Hochdeutsch as a high and Schweizerdeutsch as a low variety of those same languages.

It is obvious from Ferguson's definition that only that society was considered diglossic where two varieties, one high and another low, of the same language were used. However, later on, Joshua Fishman, extend the term to that society where two different languages are used. According to this extension almost all societies become diglossic society.

Ferguson also purposed that there is a strong tendency to give one language higher status or prestige and reserve it for specific occasion and purposes. According to this notion, Pakistani society is strongly a diglossic society where there are not two but three languages exist with different status. In Punjab for example, Punjabi is used at personal level, Urdu is used on social level and English is 'reserved' for high formal occasions. The existence of different languages in a society provides them to emerge into each other and sometimes results into a new mixture of languages that is called Pidgin.

Pidgin:

Pidgin is an 'odd mixture' of two languages which cannot be said a divergent variety of 'a language' but of two or more languages. Here languages mixed up oddly that from morphemes to sentence structure every thing reduces and mingles strangely. David crystal defines pidgin as:

> "A language with a markedly reduced grammatical structure, lexicon, and stylistic range, compared with other languages, and which is native language of non...and are formed by two mutually unintelligible speech communities attempting to communicate."

The vocabulary of a pidgin comes mainly from one particular language called the "lexifier". An early "pre-pidgin" is quite restricted in use and variable in structure. But the later "stable pidgin" develops its own grammatical rules which are quite different from those of the lexifier. These names of pidgins themselves reflect how the vocabulary emerges: **chinglish** "Chinese English" or **engrish** "English Chinese" and.**Singlish.** However it becomes more complex with the passage of time.

Since pidgin emerges out of practical need of communication between two different language communities having no greater language to interact, it is also called 'contact language'. R. A. Hudson in his Sociolinguistics states:

> "Pidgin is a variety especially created for the purpose of communication with some other group, and not used by any community for communication among themselves."

So pidgin is out come of interaction between two entirely different 'speech communities'. It develops because neither of the communities 'learns' the language of others due to different reasons.

Sometimes practically it is impossible to learn either of the languages so quickly and there is strong need of interaction, as for business purposes or immediate political needs.

Most of the present pidgins have developed in European colonies. A few examples are: Hawaii Creole English, AAVE, Papiamentu "Geordie Cameroon Pidgin Krio "Singlish" Tok Pisin, Bislama. Out of these, many have developed as Creoles.

Major difference between pidgin and Creole is that former has no native speakers but later has. In fact, when any pidgin is acquired by children of any community it becomes Creole. At that time it develops its new structures and vocabulary. In other words when a pidgin becomes 'lingua franca' it is called Creole.

An old example of pidgin, that later developed into creol, was "lingua franca". It referred to a mix of mostly Italian with a broad vocabulary drawn from Turkish, Persian, French, Greek and Arabic. This mixed language was used for communication throughout the medieval and early modern Middle East as a diplomatic language. Term "lingua franca" has since become common for any language used by speakers of different languages to communicate with one another.

Lingua Franca:

Lingua franca is any inter-language used beyond its native speakers for that sake of communication between the speech communities having different languages. David Crystal defines it as:

> "An auxiliary language used to enable routine communication to take place between groups of people who speak different native languages".

Term 'lingua franca' is an old one and its origin is Italian means "Frankish language". It was derived from the medieval Arab Muslim use of "Franks" mean ancient Germanic people. The Muslims used it as a generic term for Europeans during the period of the Crusades. Formerly, the term refered to an old pidgin, mixture of Italian, Turkish, Arabic, Persian, Greek and French. This pidgin was widely used in the Mediterranean area from the 14th century or earlier and still in use in the 20th century. This language served as diplomatic and trade language. However, now this term refers to any language that serves to communicate between different larger speech communities.

There are many languages which have served as 'Lingua Franca' during the course of history. For instance, during the domination of Roman Empire, lingua franca was Latin in the East and Greek in the west. With the rise of the Arab Muslims, Arabic became lingua franca in the East from South Asia to North Africa and even western part of southern Europe. Persian also have enjoyed this status around 15th century till 19th century in Indian-subcontinent and Centeral Asia. Until the late-19th and early-20th centuries, Classical Chinese served as both *a lingua franca* and diplomatic language for Far East Asia, used by China,Korea, Japan, the Ryukyus, and Vietnam in interstate communications. In Europe, From 18th century till World War II, French worked as interlingua among European nations. And now English has occupied this place and is serving as diplomatic and commerce language around the globe.

Esperanto:

The idea of a **universal language** is at least as old as the Biblical story of Babel and its fall. In the 18th century, some rationalist natural philosophers sought to recover the Edenic language that was confused in the city of Babel. Gottfried Leibniz, 18th century German rationalist philosopher, marked many elements relating to the possibility of universal language in his work. Later on, many scholars and philosophers worked on this idea. Some stressed on finding the most ancient language assuming that it would be closer to the Edenic whereas some other stressed on 'planning' a 'universal language' considering the most common structures of human languages. The major practical out come was the development of Esperanto.

Esperanto is a planned language intended for use between people who speak different native languages. This artificial language was invented in 1887 by a Polish physician Dr. L. L. Zamenhof. It is based on roots common to the chief European languages with endings standardized. Dr. Zamenhof rejected other European languages such as French, German, English because they were difficult to learn as second language and due to strong nationalism any nation will not learn the language of other as a superior one. He also rejected ancient languages, Greek and Latin, for they were far more complex than the modern languages. Thus he purposed his planned language, Esperanto. Two basic advantages of this artificial language were claimed:

- It is a neutral language, being the property of no particular group of people and therefore the equal property of everybody.
- It is relatively easy to learn. It would appear from personal experience and anecdotal evidence that, for an English speaker, Esperanto is perhaps five times as easy to learn as Spanish, ten times as easy as Russian, and "considerably" easier than Chinese, and Japanese.

Esperanto has, as claimed by Esperantists, a number of features that make it relatively easy to learn:

- A regular and phonetic spelling system:

  Esperanto phonetics spelling system (one letter = one sound) can be learnt more easily than any other language. Where the Chinese school child must spend years learning the relationship between the spoken and written language, and the American school child must spend an almost equally long period learning to spell, the Esperanto system can be learned in about half an hour. This also includes a regular system of accentuation.

- A regular and exception-free formal grammar:

  Esperanto grammar can be learnt with a mere sixteen grammatical rules. After learning eleven invariable grammatical endings and how they are used, one will immediately be able to invent grammatically correct, usable and useful sentences in Esperanto.

- A regular system of forming new words from already known words:

  This is particularly useful because it allows to take a fairly small basic vocabulary (about 500 items, including word-roots, particles, and affixes) and carry on long and fairly complex discussions about a wide range of topics, including technical ones. While modern Esperanto has a considerably larger overall vocabulary of unique roots

(officially, about 9000 at last count), many of these are simply synonymous with words that can be formed from the most basic roots, and it is always considered acceptable to create one's own words rather than borrowing somebody else's.

The number of Esperanto speakers, according to a careful figure, is two million. The speakers are more numerous in Europe and East Asia than in the Americas, Africaand Oceanian, and more numerous in urban than in rural areas. The planned language is particularly prevalent in the northern and eastern countries of Europe; in China, Korea,Japan, and Iran within Asia; in Brazil,Argentina, and Mexico in the Americas; and in Togo and Madagascar in Africa.

Despite of the claims of Espirentoists, linguistics and critics have criticised their vociferous assertion. **Justin B Rye** and many other linguists have pointed out various weak points of Esperanto:

1. Its vocabulary and grammar are too Western European.
2. Esperanto's word-classes are based on the traditions of classical Latin and Greek grammars, unfamiliar even to many Europeans.
3. Its main sources are European languages and it gave little consideration to Eastern languages.
4. Esperanto has developed fairly distinct culture, customs, mythology, and even religion (*homaranismo)* of its own. It does not suit to a language that claims to be neutral.
5. Human language is a social and cultural phenomenon thus any language cannot be culture free so, the notion of neutral.
6. Few learners of the language progress to a high level of fluency.
7. Esperanto is frequently accused of being inherently gender biased because the generic form of nouns is used for males while a derived form is used for females.
8. Esperanto has not lived up to the hopes of its creator, who dreamed of it becoming a universal second language.

Conclusion

We have studied different varieties of language and have compared their different aspect. We have observe that language varies from larger communities, down to an individual. Even language of an individual varies from occasion to occasion. We find that there are different levels of formalities with in a language and their use depends of speaker's purpose, mode and audience. Moreover it also varies due to socio-economic position of individual or group. This variation of language with social difference, makes this notion more firm that language is social phenomenon and inextricably tied with social and cultural traditions. The study of Esperanto also revealed this fact that language and culture are inseparable.

## Standard Language

In a country or speech community where different dialects are in use, growth of a 'standard' form is a matter of social acceptance and sanction. Generally, the dialect that belongs to the mightier ruling class, holding social prestige and glamour, is sought to be imitated by 'lesser' classes. William Labov has pointed out that lower-middle class shows a tendency to use more

'prestige' forms in formal discourse, than does the upper-middle class. This is called*hypercorrection* which is the case of propagation of linguistic change. It is not a question of how many people speak the. standard variety, but the institutional support it gets - its use in schools, media, government, administrative and army*functions,* literature, and so on.

A standard dialect, then 'has the highest status in a community or nation and is usually based on the speech and writing of educated native speakers of the language'. It is this variety that is taught in schools, described in dictionaries and grammars and taught 'to non-native speakers. *StandardAmerican English* is the standard variety, and British English is the *Standard British English*. Since what a speaker 'says on any occasion is in part a reflection of his social identity', he would like to be identified with the class or stratum that wields prestige, status and power. If he fails to do so, he runs the grave risk of being relegated to unimportance. As Gregory-Carroll say, some North American Indians, for instance, donot use the same verbal strategies, as do whites and the consequence of this can be serious for their children, particularly those attending white schools'.

## Growth of Standard English

We have already noted the historical stages of the growth and development of English Language. At different stages, battle for dominance and power put one tribe or community of people on top to be displaced by another after a period of time. Through this see-saw of tussle for supremacy one tribe's speech gains upper hand and becomes the norm. Treating this phenomenon in a wider sense R.A. Hall Jr. writes, 'A standard behaviour-pattern, whether linguistic or non-linguistic, is usually regarded as necessarily unitary, admitting of relatively small deviation. There have been a few exceptions to insistence on a single linguistic form, but they are found, in general, in artificial situations, involving particular literary genres. In old Provencal Lyric poetry, forms and phonetic developments from several different dialects were in free alternation ... In ancient Greece, different dialects were used for different types of literary productions ... and in Middle Indic drama, members of each caste spoke the appropriate variety of Sanskrit or Prakrit... The simplest type of linguistic variation is regional, and hence the choice of standard has usually been made among local dialects of any given language... This problem has usually been settled by choosing the dialect of the administrative centre of the region involved'.

In the Old English period, there existed four major dialects; Northumbrian, Mercian, West-Saxon and Kentish. In the eighth century it was the Northumbrian that led; it is in this dialect that the literature of the period was written 'for the history of the country caused this West-Saxon to become by the tenth century the accepted language for most vernacular literary purposes. Even the literature of other dialects such as was most of the poetry, was re-copied into the 'standard' West-Saxon which, with local modification, has become a sort of common literary language all over the country' (Wrenn). Even grammar and dictionaries in that period were based on this dialect.

*Mercian* replaced it for a short period and then the West Saxon. Till the time of King Edward the Confessor, Winchester was the centre of political activities which also made it the linguistic centre of England. But Kind Edward favoured London and Westminster, which caused London to grow as the centre of commercial, political, legal, and ecclesiastical life towards the end of the century. London had a heterogenous population coming from all over the country... They spoke a mixed dialect. Proximity of Oxford and Cambridge also influenced the city to develop a new dialect'. Another factor that helped London develop a mixed dialect of its own was the East Anglian trade (in wood and cloth) with close connection with the East

Midlands. The result was a London dialect that was largely East Midland; 'in character while retaining an underlayer of the original south-eastern of its geographical position. E.E. Wardale observes, 'by the end of the ME period the language in London shows such a mixture of forms from East Midland, South west and Kentish that it may be said to form a dialect of its own, the London dialect'. Its written language was emulated and copied by all. It came to provide the standard in literary language, though the process is said to have been completed only towards the end of the sixteenth century.

The east and west Midland dialects showed distinct linguistic characteristics. Till the 13th century when King William I died, West Midland was the dominant language in Cathedral cities of Hereford and Worcester. This was a direct descendant of Old Mercian. Around the 13th century, East Midland rose to prominence. It was the dialect of "the court, of the city of London and of both universities, Oxford and Cambridge' (Potter : 18). Geoffrey Chaucer wrote in this dialect with notable scattering of Kentish and Southern. peculiarities. Gower and Wyclif also wrote in this dialect. Regarding the standard form prevalent in this period E.J. Dobson says, 'that any conception of a standard form of English, either written or spoken, was consciously held in the fourteenth century is very doubtful'.

By the end of the ME period London's position in the country's politics and culture enabled it to lead the whole country.

English had to face a stiff struggle for recognition against Latin which was still considered the language of prestige. 'The revival of learning' only made things difficult for English. 'Latin and Greek were not only key to the world's knowledge, but the languages in which much highly esteemed poetry, oratory, and philosophy were to be read. And Latin, at least, had the advantage of universal currency, so that the educated all over Europe could freely communicate with each other, both in speech and writing, in a common idiom'. But there was a class. of scholars in England that defended the use of English and advocated its propagation. Ascham, Wilson, Elyot, Puttenham, Richard Mulcaster, all argued, 'But why-not all in English, a tong of it self both depe in conceit, and frank in deliverie ? I donot think that any language, be it whatsoever, is better able to utter all arguments, either with more pith, or greater planesse, then our English tung is, if the English utterar be as skilful in the matter, which is to utter : as the foren utterer is'.

Exposure to the great wealth of Latin and Greek learning made the English scholars only more determined in their nationalistic love for English. 'I Love Rome, but Londonbetter, I favor Italic but England more, I honor the Latin, but I worship the English'.

This spirit gaining strength everyday let loose a spate of translations of almost all the available classical works - Thucydides, Xenophone, Herodotus, Plutarch, Plato, Seneca, Cicero, Epictetus, Aristotle, Terence, Homer, Horace, Ovid, Virgil, and the rest. A standard in linguistic refinement and perfection was thus set comparison to which was the only way to improve the language.

As for spoken language M.L. Samuels says, 'there is no question of a spoken standard in the fifteenth century. We are concerned with the spoken language only in so far as any written standard must be ultimately based on it; but the evolution and spread of Standard English in the fifteenth and sixteenth centuries was primarily through the agency of writing, not speech, ... The importance of early London written English in this evolution has been overrated : consultation of any of the large classes of documents at the Public Record Office will show clearly that, until 1430-5, English is the exception rather than the rule in the written business of administration, after that, there is a sudden change, and the proportions are reversed, from a mere trickle of

English documents among thousands in Latin and French, to a spate of English documents.' As another scholar says in the sixteenth and the seventeenth centuries the standard speech was much more limited in extent, 'not only was its penetration of the North only incipient, and confined rather to spelling and vocabulary than to pronunciation, but also, south of the Trent, it was used by a far narrower range of people than in later times' (E.J. Dobson).

It is only towards the period marking the transition between the 17th and the 18th centuries that a standard form of spoken English is believed to have begun to emerge.London had already acquired the strength and prestige as the political, social and cultural centre. Other dialects had faded out of the competition. London presented a model of stability and standard. Robert Burchfield says, 'Between 1476 and 1776 the language had been set down in writing with every kind of burgeoning ornamental device and subtle constructive power by some of the greatest of English writers. A standard language' had been established, and it was admired and imitated in the provinces, that is by writers who did not happen to live inLondon. Side by side with the majestical prose of Bacon, Raleigh, Donne, Milton, Thomas Browne, Jeremy Taylor, Edward Gibbon and many other great writers, stood the undecorated work of the new urban scientific writers, beginning with the 'mathematical plainness' of the Royal Society's ideal of prose and defined by Bishop Sprat.'

It is significant to note that in Chaucer, Townley and Caxton's work ample evidence is available to show that dialectal differences often formed good subject of humorous treatment and that the royal officials were expected to use southern English, i.e. that Southern English was becoming the recognized official language.

The British Isles abound in dialectal variations marking geographical regions and areas. 'But only one form is the standard language, one that is taught to the foreigners, whose individuality and importance went hand in hand with the fortunes of London, and of people who moved into the London area.... Historically, it contains some elements from the south-west, especially Kent, and some from the east midlands as far north as the city of Lincoln. But for the most part its constituent elements are those that came to be accepted as the 'best' form of speech among educated speakers in London itself'.

This standard variety is spoken by the educated people and taught everywhere. This is understood all over England even by those who use regional dialects. OutsideEngland it is recognised in Delhi, Beijing,Moscow or Kuala Lumpur as the standard variety. In the countries where the British ruled and English is used to-day in educated society, clubs, educational centres radio and T.V. and in government work, it is thisLondon variety.

## Micro and Macro-Sociolinguistics

A major concern of sociolinguistics is the extreme variability of language in use. Variability is observable along a number of axes, spatial, role-models, behaviour inmultilingual settings and also certain*domains*. There are several other levels at which variation in speech is seen. However, a linguist always needs to determine major domains that determine language-choice. Schmidt-Rohr in 1932 identified nine domains in their study of non-German speaking populations in various types of contact settings (Fishman:19). They suggested family, playground and street, the school (subdivided into language of instruction, subject of instruction, and language of recess and entertainment), the church, literature, the press, the military, the courts and the governmental administration. These nine domains provided a model, and later on more were added by Frey, Mak, Dohrenwend and' Smith.

Domains are understood as *institutional contexts* or *socio-ecological co-occurrences*.Within these cluster 'interaction situations'. Through our understanding of domains we can relate linguistic choices to the larger sociocultural norms and expectations. The population of a speech community is thus segmented into users of a specific language style appropriate to the particular topic of the individual domains. On the other hand, the study of language behaviour of children calls for consideration of different domains.

*Macro-sociolinguistics* is concerned with the relations or patterning of relations between one wide domain or another, 'they' are as real as the very social institutions of a speech community and indeed they show a marked paralleling with such major institutions (Fishman). Speakers of one domain show a tendency to share 'common linguistic patterns - players on a football ground, for example, or teacher's language choice in class-room. One can notice variability across domains, a lecturer's language-choice in class-room can be contrasted with that outside it, say, in college gathering, or within family. College gathering, family and class room thus constitute three different domains determining three linguistic styles. What must be recognised thus is the reality of domain of language-and-behaviour in terms of *existing* norms of communication apparatus. 'The high culture values with which certain varieties are associated and the folksian values with which others are congruent are both derivable from domain-appropriate norms governing characteristic verbal interaction. .

*Micro-sociolinguistics* concerns itself with the study of variation within a larger framework (or domain) by classifying particular elements in face-to-face situations. The sociolinguist must collect data from the *individual speakers,* whatever his topic; and must analyse the particular features. He can classify the issues only after having analysed these particular features. All this activity falls within *micro-linguistics*.Thus micro-linguistics includes the detailed study of inter-personal communication, speech events, e.g. sequencing of utterances and also those investigations which relate variation in the language used by a group of people to social factors. Macro-linguistics, on the other hand, includes study of language choice in bilingual or multilingual communities, language planning, language attitudes, etc. They are also considered part of the sociology of language.

Newly freed countries where more than one language (dialect) is used, face the question of agreeing on a standard national language. Sociolinguists have come to see an active role for themselves in this area. Let us consider the following statement, 'standard languages which symbolize feelings of unification, separateness and prestige, sometimes qualify as *national* languages. Some of the recurrent aspects of this perplexing but important field of study are what are or could be some of the roles of 'languages of wide communication' (such as English, or French, or Russian) not only as national languages but also as affecting other national languages? How can or should less widely used languages expand, both formally and functionally? What principles should govern the choice of languages at various levels in the educational system of a country? And so on.' (Pride-Janet Holmes)

## Linguistic, Sociolinguistic and Social Codes

The shift of interest that we have witnessed recently in the direction of language in use, or language being considered as behaviour 'relating the participants in a speech event to their environment, to each other and to the medium of communication itself', has thrown up many issues of crucial importance to linguistic analysts. It is easy- to see the relationships. As Michael Gregory and Susanne Carroll say, 'Words change their meaning according to context. Word-meaning is neither fixed nor stable. Word-meaning can be considered to be meaning-in-use, the

'living' word as it appears in situation. Meaning realised in recurrent and typical situations can itself be seen as part of a larger system of meaning to which members of the community have access. This system of potential meaning is the culture itself. When we say that language is choice we suggest that language-in-use implies the selection of all possible meanings inherent in this extensive meaning-system called culture.'

The growth and development of linguistic science have been along rigorous scientific lines. Its tools and methods are time-tested. With a fine scientific eye it has been able to isolate and study the units of language and formulate its principles and theories. But when the scientific linguist observed the samples of utterances in actual social reality or realities, he found variations and fluctuations for which he had no explanation in the existing corpus of knowledge. It is difficult to reconcile this fluctuation with the notion that there is a fixed set of rules which speakers follow. It is not surprising, therefore, that many conscientious linguists felt it was their duty to ignore this 'purely social' variation, and concentrate on the more rigid 'central core' of the language' (Jean Aitchison)

On the other hand anthropologists and sociolinguists have always been interested in human verbal behaviour. The impact of Ferdinand de Saussure is quite clear. He felt that 'the group constrains the individual and the group culture determines a great deal of his humanity'. Sociolinguists give equal importance to *social codes* and *linguistic codes,* and seek to discover links between the two. In the words of Denis McQuail, 'We know from daily experience that the simple model of communication between two individuals cannot represent the variety of communication situations in social life. For example, communication between family members takes the form of an intricate interplay of contact connecting pairs, triads or larger numbers and governed by an equally intricate set of unstated understandings and expectations'.

Social structural system and culture are systems of meanings. They defy scientific explanations. Their complexities are overlaid with other complexities, because social structure and culture 'incorporate' all possible meaningful behaviours (linguistic or otherwise) possible within that society, the beliefs and attitudes associated with it, including the arts and sciences as we usually think of them'. 'Culture of a society is the way of life of its members; the collection of ideas and habits which they learn, share and transmit from generation to generation' (M. Haralambos). This complex socio-cultural network of values provides the basic meaning complexes to the language user. In 1936 Benjamin Lee Whorf pronounced that linguistics is concerned with meaning. This is the position from which sociolinguists see themselves facing the problem of analysing the correlation of linguistics and sociological phenomena. The problem has not easily been solved as stated. Firth, Halliday, Hasan, Trudgill, David Sankoff, Shana Poplack and many others have been trying to evolve techniques and methods to locate and describe the correlations and the mechanisms of changes such correlations result in. Most scholars have drawn upon sociological and other descriptive techniques which have proved highly useful. For example, William Labov, interested in observing language change in the *present,*used surprisingly simple technique, of interviewing the sales people without their knowing that they were being interviewed, and quietly noting down the required information which comprised his primary data.

## Labov's Analysis

William Labov, the American linguist, conducted two interesting studies, one inNew York shopping centres, and the other oh the island of Martha's Vineyard, which have become model works in the field. These studies performed the difficult work of charting fluctuations and reinforce the belief that language change is observable, and 'the variation and fuzziness which so many linguists tried to ignore are quite often indications that changes are in progress'.

Dr. Labov observed the fluctuating use of *r*in the New York speech in such words as *car, bear, beard*. In common observation it was found that New York speakers sometimes inserted *r* in these words and others, and sometimes didnot. So, the randomness in the matter, as the general opinion went, was rejected by Labov. 'He rather worked on the hypothesis that it is not a matter of pure chance, but must be correlated with social status. Labov selected Manhattandepartment stores, from top, middle, and low price and fashion range. For the study of top class shop he selected Saks Fifth Avenue, for middle-priced level he chose Macys, for the low class one he selected Klein's, close to the lower Eastside, 'a notoriously poor area'. William Labov went into these shops as a customer, asked certain questions in which *r*occurred; pretended that he had not heard properly the first time, asked again, carefully noted down the presence or' absence of it; age and sex of sales person were also noted. He went to other counters and repeated the performance. Similar questions were asked at the middle-range and low-range shops. In this manner he obtained a total of 264 interviews. The results thus obtained confirmed his 'hunch' that in the New Yorkspeech insertion of *r* was related to the social prestige factor. Percentage of *r*inclusion in the high-range Saks store was higher than in Macy's, which showed a comparatively higher percentage of its occurrence than in Klein's. New York upper class educated speakers include *r* in such words as *car, bear, beard, card,* while the lower classes omit it. At the lower level in the casual speech *r* appeared to be omitted, but when asked to repeat, the speakers became conscious and emphatic; so they showed a 'significantly higher percentage of*r's*. *As* Jean Aitchison observes, 'Labov suggested that the reinsertion of *r* was an important characteristic of a new prestige pattern which was being superimposed upon the native New York pattern. This is supported by description of New Yorkspeech in the early part of the century, which suggests that r was virtually absent at this time - a fact observable in films made inNew York in the 1930s'. It is interesting to note that till the eighteenth century, English speakers showed a tendency to insert r, but this was lost around the middle of the nineteenth century. In New Yorkpronunciation also this is a recent cultivation; its rise was witnessed in the 1940s and 1950s. Perhaps, desire to forge a distinct un-British identity led to the conscious

cultivation of this feature. That could be the reason why in unconscious casual times one witnesses absence of r.

William Labov went on to expand the study on a larger area 'obtaining speech samples from different socio-economic, ethnic, age and sex groups, in a variety of language styles. These extended studies again confirmed his thesis that *r* insertion in words such as *bear, beard* is socially prestigious, since it occurs more frequently in the casual and formal speech in the upper and middle class than in the lower social classes. A further indication of social prestige is that more careful the speech style, the more likely r is to be pronounced. Obviously, when people speak -slowly and carefully, they remember to insert an r which they feel should be there.

Martha's Vineyard Studies

Another pioneering study conducted by Prof. Labov is known as 'Martha's VineyardStudy'. Martha's Vineyard is an island, part of Massachusetts, three miles off the east coast of mainland. It has a permanent population of about six thousand. Around fifty thousand tourists visit the island in summer, and concentrate largely on the Downlsland in the eastern region. The Central and the western areas are inhabited mainly by the local population. Labov noted that a few decades earlier a linguist had visited the island and having interviewed some members, had noted that in the pronunciation of these people the diphthongs in such words as *high, pie, night, trout, house,* etc. the first vocalic element [a] + [i] and [a] + [u], showed a shift towards becoming [ə] as in American *but*.

[au] ¾® [əu]

[ai] ¾® [əi]

Labov systematically interviewed a cross-section of local population, dividing it into three age-groups and occupational classes – those engaged in the traditional fishing activity and those in the service industries attending

to the summer visitors. The results showed that the population was not aware that change in pronunciation was taking place. Secondly, in the rural areas in the western parts change was more noticeable than in the eastern part. Speakers from 31 years to 45 years of age showed greater tendency to change than older people, and least of all was it seen in people over 75 years of age. Also those less than 30 years showed comparatively lesser change. Labov argued that a distinct change in diphthong pronunciation was taking place in Martha's Vineyard more' noticeably than in the mainland America. These changes radiated from a small group of islanders and spread to more extensive areas, particularly those of English descent.

The research also indicated that the changes didnot occur all of a sudden, someone didnot suddenly decide to alter his/her speech, and others took it up. Rather, the tendency was always there. Only some people exaggerated it and made it their habit. Thus the new diphthong was always there as a form of old-fashioned element. One can compare it to the characteristic 'American sounds', which are nothing but conservative tendencies of the 18th century pronunciation, which speakers in England had long ago outgrown, but the Americans stuck to; at some time, Martha's Vineyard had begun showing loss of the diphthongs when contact with the summer visitors increased. But those old generation speakers while confined to their part of the land, did not establish any contact with the 'modern'. Down Islandclung to the older tendencies. They showed resistance to changes in other features of behaviour too and thus

exemplified the qualities of strength, tenacity, dour close-knit mentality who could oppose the incursions of outside fun-loving tourists.

> 'The next generation down island admired these old fisherman, who appeared to exemplify the virtues traditional to Martha's Vineyard, they were viewed as independent, wilful, physically strong, courageous. They epitomized the good old yankee virtues, as opposed to the indolent consumer-oriented society of summer visitors. This led a number of Vineyarders to sub-consciously imitate the speech characteristics of the fishermen in order to identify 'themselves as 'true islanders' (Aitchison).

Clearly, the tendency to change linguistically is related to certain cultural attitudes in this particular instance as well as in the Yew York *r*-experiment. The island of Martha's Vineyard presents a relatively simple social structure. Resentment toward and dislike of the tourist population are also quite unconcealed and simple. This created in the local people a desire to preserve their cultural values. That is why the speech feature which is embedded in old habits caught on with the younger speakers of ages between 30 and 45 years. Interstingly, those who wished to stay on the islands for good showed greater inclination to adopt the changed diphthongs as they had greater need to identify themselves with the locals. In this way change establishes a norm.

In the complex social scenario of New York, speaker's use of *r* is clearly related to the prestige values of upper middle class which are approximated by those below this class. Here also, New Yorkers adopted r out of a growing awareness of themselves as 'being American, and, requiring an American Standard on which to model themselves'.

Language change and Language Decline

The great Greek philosopher Heraclitus had said as early as in the sixth century, 'Everything rolls on, nothing stands still'. This wisdom has been echoed down the centuries by men active in different walks of life, from scientists to social thinkers to medicine men to philosophers, and linguists too. Poets and litterateurs have constantly lived under the overviding sense of uncertainty and transience because time is ever in flight and the world is never the same. In the words of Omar Khayyam,

> Alas, that Spring should vanish with the Rose !

That youth's sweet-scented Manuscript should close !

> The Nightingale that in the Branches sang !

Ah, whence, and whither flown again, who knows !

It is not easy to understand why man has found it difficult to reconcile with change, though he has always understood that 'since 'tis Nature's law to change constancy alone is strange' (John Wilmot, Earl of Rochester).

Like all things in life, language also changes. 'It is part of the general flux. There can never be a moment of true stand still in language ... By nature it is a continuous process of development', said Wilhelm Von Humboldt, the great German philosopher-linguist. It would be a great surprise if language didnot show changes, while everything else changed at varying rates.

It is human tendency to ignore changes that occur in language as aberrations in need of correction. Those who argue that linguistic changes are inevitable, as well as those who frown upon them, resenting and resisting any deviations from the norm, consider symptoms of transformation as signs of ignorance, sloppiness, laziness or as (often happens, simply a matter of vulgar habits of expression. 'One has only to see how fierce is the reaction of those who see in someone talking differently a violation of the norm and quick attempts to suggest prescriptive rules are made. Letters to the editors have been written in newspapers and magazines on deviant trends, move to debase and vulgarize language. Jean Aitchison quotes a reviewer, writing in 1978 edition of the*Pocket Oxford Dictionary,* announced that his 'only sadness is that the current editor seems prepared to bow to every slaphappy and slipshop change of meaning'. She says, 'the author of the book published in 1979 compared a word which changes its meaning to a piece of wreckage with a ship's name on it floating away from a sunken hulk'. The book was entitled *Decadence'*.

Efforts of Jonathan Swift to 'fix our language forever' led him to submit *A proposal for correcting, improving, and Ascertaining the English Tongue,* to the Earl of Oxford, Lord Treasurer of England in 1712. In this historical document he stresses the need to check the growing tendency to deviate from the prescribed grammatical norms. These deviations were often seen and deplored by the eighteenth century scholars as 'abuses and absurdities'. Dr. Samuel Johnson's attitudes in this regard are too well-known to need any mention except that he was particularly intolerant of what he believed to be 'barbarous corruptions' and 'licentious, idioms', etc. Such resistance to changes and desire to, keep language in a permanent state of perfection have always been seen to drive men to formulate ways and' means to artifically keep it refined.

However, changes are produced by forces that cannot be resisted by artificial means. What begins as isolated instances of variation escalates and spreads to larger number of speakers. Certain habits get rooted and then are finally accepted as norms. Older elements and habits enjoy lesser currency, with the number of users dwindling till they completely fade out of language.

Thus we know that Dr. Johnson condemned the word *lesser* as a barbarous corruption, and so *nowise* also. Today, however, no one thinks so about these words. What he, on the other hand, tried to establish as respectable Latinate or classical formations never really were accepted, and, therefore, died a natural death. Obviously these pundits failed to understand the essential nature of language, that it goes through similar life cycles of birth, growth and decay as any organism does, which the German scholar Franz Bopp supported in these words, 'languages are to be considered organic natural bodies, which are formed according to fixed laws, develop as possessing an inner principle of life, and gradually die out…' This extremely simple view of linguistic progress [or decay ?] is not accepted in our times by more scientific-minded linguists who wish to describe the exact mechanism of language growth; but formation of new languages through various diachronic processes and their being taken over by a newer, more different variety, has never been denied.

As our account of the studies conducted by William Labov and Basil Bernstein and others engaged in sociolinguistic researches reveal, changes in time begin as changes seen in the present in a particular speech community. Labov was interested in showing that it is not impossible to 'capture' those changes in the present that are only seen in their consequences over a period of time. These historical changes that create new sounds, morphemes, syntactic

relations and habits of speech, donot occur suddenly. Rather, he felt, they are to be understood by exploring those variations and deviations, those tendencies to violate or break the norms which some speakers always exhibit and others resent. This tug of war and the controversial practices are what in the long run produce 'permanent changes' in a language. Till as recently as 1958 a scholar like Charles Hockett felt, 'No one has yet observed sound change. We have only been able to detect it via its consequences... A nearly direct observation would be theoretically impossible, if impractical, but any ostensible report of such an observation so far must be discredited'.

Later linguists felt, however, that it is these fluctuations, these variations exhibited under numerous socio-cultural conditions that conceal the clue to the problem. They were interested in observing that 'the grammatical rules of a language are likely to alter slightly from region to region... Parallel to geographical variation, we find social variation. As we move from one social class to another, we are likely to come across the same type of alteration as we noted from region to region, only this time co-existing within a single area'.

One of the major points William Labov worked to prove through his New York andMartha's Vineyard studies is that what we notice as variations in accent or sound feature or any of the several linguistic features may be a pointer that language is undergoing a change. A careful analysis might show us in which direction is the change taking place.

Reasons for the spread in favour of a specific feature or set of features could be many. Generally they can be described in this way.

i) a tendency to imitate the upper class speaker's habits.

ii) the need to sound/appear like the majority speakers of the community.

iii) need to be accepted by the majority and counted as one of them.

iv) to assert one's identity and resist the majority tendencies due to particular psychological factors, i.e. dislike, bias against, etc.

The Sapir-Whorf hypothesis

In their exploration of various types of correlation between culture and language, scholars have come out with different hypotheses. These hypotheses indicate the ways to understand the complex relations language and society have. One established and more controversial theory of this kind is known as Sapir-Whorf hypothesis. This is named after two scholars of linguistics and anthropology, Edward Spair (1884-1939) and Benjamin Lee Whorf. Spair's over-riding interest in linguistic determinism operating in culture has been mentioned in volume one and this one also. He recognised linguistic relativity converging with cultural relativity. This is embodied in the following extract.

> 'Human beings donot live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society... The fact of the matter is that the 'real world' is to' a large extent unconsciously built up on the language habits of the groups. No two languages are ever sufficiently similar to be considered as representing the same social reality. The words in which different societies live are distinct words, not merely the same words with different labels attached.'

Benjamin Lee Whorf who was a student of Sapir continued studying the matter. He argued that 'language patterns and cultural norms... have grown up together, constantly influencing each other. But in this partnership the nature of the language is the factor that limits free plasticity and regidifies channels of development in the more autocratic way'. It is not difficult to see the deterministic role of language in bringing about cultural transmission. It is only through the linguistic medium that this happens.

One major problem about this hypothesis is that in terms of objective proofs and through rigorous methods Whorfian hypothesis is difficult to prove, though intuitively one can seethe natural link. As William Bright says, 'in particular, no correlations can be traced between language and world - view until specific world - views are themselves defined in terms of observable behaviour'. Whorf spent plenty of time in Mexicostudying the Red Indian speeches. His well known analysis of the Hopi's linguistic structure led him to propose that it (structure) is compatible with a world view involving a peculiar relation between subjective and objective experience, but he tends to assume rather than to demonstrate that Hopi actually hold such a view of the world'. William Bright suggests the following modification of Whorf's thesis,

> 'In so far as languages differ in the ways they encode objective experience, language users tend to sort out and distinguish experiences differently according to the categories provided by their respective languages. These cognitives will tend to have certain effects on behaviour'.

Basil Bernstein's work

A potable contribution in relating social factors to language variation and the variability functioning as an indicator of one's cognitive abilities was that of the British sociologist Basil Bernard Bernstein. Born in 1924, his extensive researches dominated the sociolinguistic thinking in the 1960s and 1970s. He is considered pioneer in research in the description of varieties of speech within a language community. He concentrated on dialect studies which rest on a key assumption that language learning is determined by social, environment and by the verbal and non-verbal expressions of speakers'. His paper 'Language and social class' (1960) puts forward the idea that speakers (particularly children) raised in culturally disadvantaged environments and exposed to non-standard dialects show stunted cognitive abilities, compared to speakers of the middle and upper classes.

Bernstein examined class based variabilities and their implications for language fluency and learning'. He reformulated and revised some of his earlier concepts and put forth the terms *elaborated code* and *restricted code;*

He uses code slightly differently. He means by it 'different ways of conveying in a social context. Restricted code has a limited vocabulary, reduced range of vocables, an abundance of question tags, and greater use of pronouns like *he* and *she*. Basing his observations on the middle-class and working class boys Bernstein argued that the latter tended to use only the restricted code. This restricted their language and thinking behaviour. Elaborate gesticulations, hand gestures and facial expressions reinforce the verbal communication. The speakers assume that the other communicants share, their emotional states and attitudes. This code showed less fluency and was what he called highly static. It has narrower range of language alternatives, 'often tended to be predictably formulaic and exhibited highly individuated utterances. It is characterized by 'a simplified grammatical system, poor syntactic forms, repetitive use of common conjunctions, little use of subordination, a rigid and limited selection of adjectives and adverbs, reinforcement

statements following what was immediately- said, and a tendency to confound reason and conclusion in statements'. Bernstein found that the middle class boys used both codes comfortably and with equal ease. These speakers showed fluency in the 'elaborated code'. They possessed a wide range of 'syntactic and lexical 'alternatives', had a level of verbal dexterity and greater manipulative power in regulating and organising what is spoken. This means that they manifested greater use of conjunctions and subordinate elements in sentences, prepositions, 'a frequent use of indefinite and third person pronouns and the use of expressive symbolism to discriminate meaning within speech segments'. The sentence structures are more complex and there is found greater use of I and adjectives. It is more explicit, 'speakers using it donot assume the same degree of shared attitudes and expectations on the part of the addressee'. Elaborated code is considered to be 'open and liberating'. It shows capacity to exploit full range of language possibilities. Restricted code is inhibiting and restrictive.

The famous sociolinguists Gregory Smith and Sussanne Carroll feel that these two types of code reflect two different principles of semantic organization. 'Each code orients the user to a specific type of meaning which is itself a function of the type of relationship that the user enters into... The codes, elaborated and restricted, are acquired through exposure to different speech models. They embody two types of meaning. The concept of code has, therefore, two facets - the semiotic and the linguistic. Both the speech models and the semiotic functions are referred to as universalistic or particularistic.'

Bernstein's findings created a lot of controversy. Some linguists believe that his opinions are linguistically insignificant. They also felt uncomfortable at one's dialect being related to cognitive abilities. 'Some questioned his conclusion as too extreme, and based on limited observation, others simply rejected the anti-egalitarian notion of social class.'

## Stylistics, Literature and Linguistics

Style means the language which is used "in a given context, by a given person, for a given purpose" (Leech). It is applied to the writer's individual characteristic manner of expression. It is applicable to the written and spoken, and literary and non-literary codes.

Mush have I travell'd in the realms of gold

And many goodly states and kingdoms seen;

Round many western islands have I been

Which bards in fealty to Appollo held.

(John Keats)

A cursory glance at these lines show that much liberty has been taken here with grammar. Such poetic 'licences' are among the 'especial norms of standard' for poetry. On the contrary, the general standard form of language would completely fail to produce the slightest poetic effect. There are indeed deviations within deviations; that is, once we accept that literary language flourishes on the principle of deviation from the norm of the standard, and 'that to deny work of poetry the right to violate the noun of the standard is equivalent to the negation of poetry' (Jan Mukarovsky).

We shall find it easy enough to recognise other deviations, both internal and external, that establish a writer's literary identity; how, for instance, Arnold Bennett is distinguished from E.M. Forster or John Galsworthy in spite of several points shared by them; or what makes Virginia Woolf's style her own as distinct from that of James Joyce.

'Stylistics' as we understand it to-day, with its being armed with the techniques of linguistics, which happened over the last three decades or so, seeks not to 'dissect the flower o of beauty', as some apparceintors of literature have come to feel, but develop a full scientific understanding of the style as evidenced in the discourse/text. Recent scholars in the field have been sensitive enough to the problem to discard the rigorous technical approach and devise a sesible middle-of-the-road means, Leo Spitzer describes it in these words,

> I would maintain that to formulate observation by means of words is not to cause the artistic beauty evoporate in vain intellectualities; rather it makes for a widening and 'deepening of the aesthetic taste. It is only a frivolous love that cannot survive intellectual definition; great love prospers with understanding.

'Linguistic stylistics' or 'new stylistics' as Roger Fowler calls it, thus provides for the first time a firm technical and theoretical base for the study of style. Without a sound theory, basic concepts and categories cannot be established, and without the precise tools of analysis any description would remain weak and unsound, prey to changing winds and whims of opinion. 'How often,- with all the theoretical experience of method accumulated in use over the years, have I stared

blankly, quite similar to one of my beginning students, at a page that would not yield its image' (Spitzer).

Out of this diversity of linguistic frameworks and systems, one concrete path that emerges is 'a tendency to explore for pattern and system below the surface form of language; to search for the principles of meaning, and language use which activate and control the code... If a text is regarded in objective simplicity as a sequence of symbols on paper, then the modem linguist's scrutiny is not just a matter of looking *at* the text, but of looking *through* the text to its significance.'

The basic assumption of stylistic approach to language is called the 'context of situation' which means that this approach considers language events as not taking place in isolation from Other events; rather they operate within a wide framework of human activity. Any piece of language is, therefore, part of a situation and so has a context, a relationship with that situation' (Sucncer-Gregory). The second assumption is that stylistics is primarily concerned with written language. Third Stylistics seeks to describe linguistic forms of the text 'in order to isolate those places in language where there are possibilities of choice which contribute to meaning. Possibility of choices varies at different places in different forms of literature. Stylistics seeks to establish what factors govern the choices.

Collocation

A significant stylistic category is *collocation*.According to it, certain items tend to occur close to each other, and share a wide semantic range of associations. Grammar is unable to explain this. For example, the word 'disaster' may occur in a particular linguistic environment in such items as 'tragedy', 'tragic', 'damages', 'loss', and so on. These are the collocates of the word 'disaster'. The word 'disaster' itself is recognised as *nodal item,* 'collateral range' is established by the collocates, that constitute the list of collocations. So, if we identify 'industry' as nodal item then the other words in close range such as factory, workers, management, strikes, etc. would be its collocates. Another nodal item 'finance' or 'economy' occurring in the same text would be found to share several collocates. The *'nodal items' economy/finance* and*industry form a set,* 'Industry' and 'economy' share part of the collocational range, indicating *a collocational overlapping*.'Identifying collocations, of course, demands large-scale frequency counts, the extensive statistical examination of many sets'.

Pragmatics

We have already noted that stylistic analysis of a work involves more than paying attention to the formal aspect of presentation. Stylistics considers other aspects that normally find no direct 'reflection', but have to be deduced from the context, the relations obtaining between one character and another, the author-reader relations and the addresser-addressee relations. These situations exert potential influence on the development of discourse, and must, therefore, be properly understood. As Leech--Short says 'The pragmatic analysis of language can be broadly understood to be the investigation into that aspect of meaning which is derived not from the formal properties of words and constructions, but from the way in which utterances are used how they relate to the context in which they are uttered'.

Interpretation strategies are, therefore, devised to unfold the 'moms and mechanism of these factors lending significance to the actual written text. J.R. Searle and J.L. Austin developed the concept of *Speech Act* relating the meaning of utterance to the context. The main assumption is

that there are a number of utterances that do not report or 'constate' anything, and are not, therefore, 'true or false', but rather that the uttering of the sentence is, or is part of, an action'. When some one says, *I bet he will come to-day,* he issimply betting an action and not making a true or false statement. Statements of this kind are called *performative*. Performatives are further divided into *explicit* and *implicit*. The former contains the expression naming the act 'I request you to sit down'; the former does not contain such expression as 'Will you sit down?' This means that in performative expression, the naming of the action doesnot seem an absolute necessity, 'The performative verb may be omitted without the loss of the illocutionary force' (Palmer).

Searle believed that in an utterance lie hidden many acts of various kinds : asking, commanding, promising, requesting, declaring, etc. It is easy enough to locate this when the performative verb is used as in 'I*request* you to come here', or 'I *beg* you to get me a pass'. But a sentence like, 'please slay there' can be interpreted both as a command and request. In the concept of speech acts we may hope to find answer to much semantic clue that doesnot appear in the actually formalised conversation.

On the one hand thus we can postulate utterances as speech acts by identifying whether they are warnings, requests, boast, etc. But an utterance may simply give a piece of information. If one says "There is a dog there', it is difficult to say what kind of speech act is involved. Even perhaps the speaker may have no clear idea of his own intentions. Ile may simply have spotted a dog and said, or have been expressing fear, which could be a veiled form of warning to his friends or just an emphatic warning with the appropriate suprasegmental marker accompanying. Speech act thus makes it necessary that we know to what use the utterance is being put.

Auxiliary modals; *can, shall, may, must,* etc. do something of the kind. These are used to indicate warnings, promises, requests, etc.*She may come tomorrow* is an utterance of*implicit performative*.

F.R. Palmer *in his book Semantics* has given the example front the games of bridge and cricket. When a bridge player calls *Three clubs, No bit]* he binds himself to that contract, while in cricket, the umpire's *No ball* makes the delivery a 'no ball' in the sense that the batsman cannot now be out by being bowled, stumped, caught or l.b.w.

In the following extract from Jane Austen's*Pride and Prejudice the* ironic suggestions are obvious, not in words spoken but in the context, in the *speech act*. Mr. *Darcy is* busy writing, while the obtrusive Miss Bingley tries all manner of ruse to draw his attention.

1. 'How delighted Miss Darcy will be to receive such a letter!'
2. He made no answer.
3. 'You write uncommonly fast'
4. 'You are mistaken I write rather slowly'
5. 'How many letters you must have occasion to write in the course of a year ! Letters of business, too ! How odious I should think them !'
6. 'It is fortunate, then, that they fall to my lot instead of to yours'
7. 'Pray tell your sister that I long to see her'.

8. ‘I have already told her so once, by your desire’.

9. ‘I am afraid you donot like your pen. Let me mend it for you. I mend pens remarkably well’.

10. ‘Thank you - but I always mend my own’.

11. How can you contrive to write so even?’

12. He was silent

13. ‘Tell your sister, I am delighted to Lear of her improvement on the harp; and pray let her know that I am quite in raptures with her beautiful little design for a table, and I think it infinitely superior to Miss Grantley’s.

14. Will you give me leave to defer your raptures till I write again? At present I have not room to do them justice’.

15. ‘Oh ! it is of no consequence. I shall see her in January. But du you always write such charming long letters to her, Mr. Daley?’

16. ‘They are generally long; but whether always charming it is not for me to determine !’

The remarkably warm, intrusive manner of Miss Caroline Bingley contrasts with the cool response of Daley. It is not in the words and structure, it is rather in the ‘tone’, in the emotive inflexions, the polite, even,unruffled manner. Jane Austen derived particular delight in portraying; such situations.

If we render the whole dialogue into indirect speech, this interpersonal force will be utterly lost. ‘Caroline said that Miss Darcy will be extremely delighted to receive such a letter to which he made no answer. Caroline then observed that he wrote uncommonly fast. Darcy replied that she was mistaken, he rather wrote slowly.

Caroline then wondered how many letters he must have occasion to write in the course of a year and added that they must include letters of business too. She then added that she thought of them highly odious’, etc.

There is no doubt that the linguistic interchange is faithfully rendered in such a transformational transcript, but a lot of speech act’s meaning is totally lost here, the subtle overtones which the author sets so much store by, is destroyed. We are left with a bunch of related sentences, but we realize that ‘speech act is not necessarily embodied in a sentence’. Speech acts, as units on the pragmatic level of analysis, do not have to correspond to easily, recognisable units of syntactic or textual analysis’.

Presuppositions

Presupposition is a crucial aspect of pragmatics. According to some scholars a statement may either be true or false. The sentence, *The Queen of Modern India is married can* be *said* to be false, since there is no queen of modern India. In the opinion of another class of thinkers, the hearers identifies the person or thing about which or whom the statement is made. This is called the *referring expression*. In this sense the speaker *presupposes* the existence of the person thing. In the above statement the sentence is not false, there is only a ‘presupposition failure’, there is only ‘truth-value gap’. The same is the case with the negative form of this utterance.

Presuppositions thus donot change under 'negation', they are constant. Both the positive and negative sentences imply the same logical presupposition. Both the sentences, The *Queen of modern India is married* and *The Queen of modern India is not married,* presuppose that there is a queen of modern India. "This is applicable to all types of noun phrase. *He wrote/didn't write to his brother pressuppose* that he has a brother.

If we take another sentence like *She wasn't worried about her brother's dishonesty,* it is normal to suppose that her brother was dishonest. It can also be taken to show that her brother was not dishonest, if we extend the sentence in this manner *She wasn't worried about her brother's dishonesty because he was not dishonest. We may* then say that presupposition is not denial but assertion. *She wasn't worried about her brother's dishonesty simply means* that *she*wasn't worried.

In *The Queen of modern India is married,* the segment marked I may be true or false independent of segment 2 (whether she is married or not). But segment 2 can be considered true or false only in the light of segment 1 if it is known who is it that is married. Only when this is established can the truth of the 'second segment be established,

In interrogative sentences also presuppositions remain constant.

Is the Queen of modern India married ?

Was she worried about her brother's dishonest) ?

These sentences in question form presuppose that there is a queen of India, she was married. Questions do not. make any assertion. This is true of the negative interrogation as well. *Isn't the Queen of Indiamarried ? Wasn't she worried about her brother's dishonesty ?*

The above examples contain *referring expression* or what is also known as factive predicates,. These arc grammatical NPs, which refer to the 'existences' of what is being mentioned, 'in either physical or factual sense'.

Verbs can also indicate certain kinds of presupposition. *She washed/didn't wash/the clothes presuppose that* the clothes need washing or they were dirty. *He killed/didn't kill the rat presuppose* that the rat was alive.

We can thus draw a neat line of distinction between what is asserted and what is presupposed. The question what should be included in presupposition is somewhat slippery, since it leads *us* to consider all kinds of semantic features associated with collocation or 'selectional restriction'. So in a sentence He *is bachelor we must* consider that the word bachelor means 'unmarried'. 'He' is a 'man' leads to the connected term 'male' and its 'female' as a term for 'woman'. An unmarried 'woman' is a 'spinster', and so on.

Implicatures

In the preceding section we have seen that the speakers assume the information as indicated in actual expression or assume that the hearer knows it. In actual day-to-day use of language the speakers 'imply further information that the hearer doesnot know'. The expression may not actually indicate what he implies. It *may rain* spoken by a woman to her maid-servant may imply the command to her to remove the drying clothes hung on the clothes line. Or someone in the house saying, *I didn't have tea this morning* may imply a request to the housewife to get him a cup of tea.

There is a *co-operative principle* operative here, between the speaker and the hearer. According to this principle, the hearer understands what the speaker means and receives the message. This also controls the direction in which the conversation goes. This principle is formulated by H.P. Grice, who distinguished four categories, each of which contains *maxims*.

**Quantity** 1) The speaker must make his contribution as informative as required.

2) He must not make contribution more informative than is required.

**Quality** The speaker's contribution must be true.

1) He shouldn't say what he doesn't believe.

2) He shouldnot say that for which he does rot have information

**Relative** His information must be relative.

**Manner** He should avoid obscurity, ambiguity, disorderliness.

If somebody asks, - Have you visited the guests and given them my regards ? and the reply given is, 'I have visited the guests', the speaker can guess that his regards have been given to them. The reply could also be conveyed by a simple 'yes', if this doesnot violate the maxim of quantity. This is also associated with the fall-rise tone, which points to the fact that intonation is crucial in implicatures. In an expression like *She* is very *intelligent,* the intonation may give the hearer what the speaker implies, and it must be worked out by the hearer.

It is the occasion that provides the clues to the implicatures. Violation of the maxim is often seen in the maxim of quality; 'You're a great friend'; 'He is the cream of the class. The interpretation depends entirely on what and much of it the hearer understands. Contexts and the common range of beliefs, shared by speaker and hearer, of course, determine the implicatures, but there has also been recognised a *conventional*implicature which depends on the conventional meaning of the words.

*The Muslims are brave and self-sacrificing* is an example. This contrasts with the conventional implicature which so far we have been discussing.

Metaphor

Haliday describes metaphor as the general term for those figures of speech that refer to different kinds of verbal transference. But it is also used, 'in a more specific sense to icier to just one kind in contrast to *metonymy;* and sometimes a third term is introduced,
namely, *synecdoche'*. Comparison is the central trait of metaphor. In the normal day-to-day communication, metaphorical uses are common *it escapes me, I can't follow, petticoat government, milk of humanism, security beefed up, etc.* Mostly, transfer is from concrete to abstract sense, and also from material to mental process. *Svnec cloche* refers to the part of the thing standing for the whole, and in *metonymy*, a word is used for 'something *related* to that which it usually refers to: He will go on working as long as the *breathes.'*

They have *a hand in* it; one twist keep one's*head.*

The act of transferring meaning is quite evident in this kind of non literal form of expression. It is the meaning of the word that determines its selection. Halliday feels that there is a strong

grammatical element in rhetorical transference. In this sense it is a matter of lexico-grammatical selection rather than simply lexical.

From the point of view of studying literature, it is interesting to note that many metaphorical representations have become norm, *living under a roof, protests flooded him, l missed a heartbeat,* etc.

'Metaphorical modes of expression are characteristic of all adult discourse'. It is only in young children's expressions that we find absence of it. News reporting, speeches, journalistic writings, even official and informal writings are sprinkled with metaphorical expressions.

Metaphorical : the fifth day saw them at the summit

Congruent : they arrived at the summit on the fifth day

Metaphorical : the guest's supper of icecream was followed by a gentle swim

Congruent : In the evening the guests ate icecream and then swam gently.

'Much of the history Of every language is a history of demetaphorizing : of expressions which began as metaphor gradually losing their metaphorical character as one can see in these expressions : *source* of income;*barrier to* understanding; *headache for* all; political *game;* political *rise; invite* trouble; no-confidence *motion;* parliament *silting;; shadow -fight; hung* parliament; *firm* step.

Metapherical wording, whether in speech or in writing introduces a degree of complexity, the least metaphorical wording will always be the one that is maximally simple : technical language, for example. The complexity of written language is a lexical complexity; written language attains a high lexical density, that is, a greater number of lexical items per clause, and the lexical items have a higher information context, often accompanied by a relatively simple grammatical structure. The complexity of spoken language is a grammatical complexity; spoken language constructs complex dependency structure... often accompanied by a relatively simple choice of words'.

Felicity Conditions

Speech acts have *felicity conditions* or the conditions of appropriacy. In the extract from *Price and Prejudice,* we recognise the absurdity of Caroline's ignorantly pursuing Darcy while the latter goes on politely to make her realize his attempts to ward her off. In words he is polite, unoffending, but the meaning he seek to convey is couched in his paralinguistic behaviour. The overall context of situation lends greater force of meaning to the total speech act. Felicity conditions are of course, determined by other factors of diverse nature, the social position of the interactants, the cultural milieu, their mutual relations, etc. that have bearing on the meaning of the discourse. Very often the readers are required to adjust themselves to the norms and conventions of the projected societies and periods, and recognise the felicity conditions accordingly. Reading a Jane Austen novel demands a different set of felicity conditions from the one required in reading a novel by Charles Dickens or Joseph Conrad. In a single novel of Dickens one comes across more .than one type of social environment. Felicity conditions must therefore, vary within one novel - in *Great Expectations, for* instance, there is dramatic change from Joe Gargery's forge to the twilight world of Miss Havisham.

Implicature in Literature

In the above extract from *Pride and Prejudice,* it becomes easier to the readers to infer 'extra meanings - meaning more than the words and tonal inflexions imply from his knowledge of what precedes this exchange. This knowledge bridges the gap between 'the overt sense and pragmatic force'. Let us look once again at these sentences.

> "you write uncommonly fast"
>
> "you are mistaken. I write rather slowly"

"How many letters you must have occasion to mite in the course of a year. Letters of business too ! How odious I should mink them !"

> "It is fortunate, then, they fall to my lost instead of to yours"

We have by now sufficiently known Daley to get to the sense of his *short, curt* replies and perceive the faint line of irritation bordering these overtly cool, impersonal sort of replies. The 'extra-meanings' thus inferred are what the philosopher H.P. Grice calls *implicature*.This is a term which refers to a kind of tacit understanding between the reader and the text in one.

Grice says that the 'tacit understanding' between the author and the reader is based on the *co-operative principle, which makes*them agree to some *maxims* (rules). The statements made must convey the truth and these must be relevant to the conversation.

It is significant that these rules or maxims are often violated in literature. The violation may be ostentatious, or clandestine. The hearer perceives the difference between what the speaker says and what he means. The meaning thus deduced is implicature.

Here is another example *from Pride and Prejudice*. Sir William says,

> 'you excel so much in the dance, Miss Eliza, that it is cruel to deny me the happiness of seeing you; and though this gentleman dislikes the amusements in general, he can have no objection, I am sure, to oblige us for one half-hour.!
>
> 'Mr. Darcy is all politeness', saidElizabeth, smiling' (27).

Miss Elizabeth Bennet's observation is a cruel one, because it is no secret that she thinks exactly the opposite. So this is the violation of the *maxim of quality*. In H.H. Munro Saki's celebrated story *The Open Window* we see the 'very self-possessed young lady of fifteen' weaving a web of lies and falsities in which she deftly traps and captures poor Franton Nuttel to the utter joy of herself and amusement of the readers. Once again, (he maxim of quality is broken. Without it there wouldn't be any story at all. As Short and Leech observe, 'pragmatic tone is not so much a function of the situation itself objectively considered, as the way participants construe the situation... where characters are at 'cross-purposes and their models are at valiance. Such variance is the basis of the dramatic juiciest in conversational dialogue'.

Thought

Authors often present the character's thought in the interrupted movement of action as a kind of elaboration or explanatory aside. This kind of 'suspended action' has generally the role of taking the story along a new path, introducing a new turn or simply providing added pace to its progress. In chapter 6 of Jane Austen's *Emma*there *occurs* a delightful exchange between Miss

Emma and Reverend Elton. The highly amusing situation is born out of Emma's efforts to push Miss Harriet Smith into Elton's favour by praising her beauty and manners. Elton's responses are aimed at making inroad into Emma's affections. But he does so in words that are oblique and make Emma interprete them as Elton's shy and half concealed admiration for Harriet.

> 'Let me entreat you", cried Mr. Elton, "it would indeed be a delight ! Let me entreat you, Miss Woodhouse, to exercise so charming a talent in favour of your friend. I know what your drawings are. How could you suppose me ignorant ? Is not this room deli in specimens of your landscapes and flowers; and has not Mrs. Weston some inimitable figure-pieces in her thawing-room at Randall's 7" Yes, good man ! - thought Emma - but what has all that to do with taking likenesses ? You know nothing of drawing. Don't pretend to be in raptures, about mine. Keep your raptures for Harriet's face' (P:71)

This aside is characteristic articulation of Emma's avowed purpose of throwing Harriet and Elton together. It is also a reflection of Emma's predilection for deriving pleasure out of some apparent weakness in the other's character. A different kind of self-address occurs in chapter 47 of the novel. The events have taken a dramatic and catastrophic turn for her. It is time now for her to look back over the ruins and do some re-evaluation.

> 'Harriet, poor Harriet !' - Those were the words; in them lay the tormenting ideas which Emma could not get rid of, and which constituted the real misery of the business to her. Frank 'Churchill had behaved very ill by herself - very ill in many ways- but was not so much his behaviour as her own, which made her so angry with him. It was the scrape which he had drawn her into on Harriet's account that gave the deepest hue to his offence - Poor Harriet ! to be second time the dupe of her misconceptions and flattering. Mr Knightley had spoken prophetically - when he once said, 'Emma, you have been no friend to Harriet Smith'" , and so on.

Throughout the chapter go on Emma's turbulent thoughts in this vein. A curious thing about this style is that it has a mixture of self-ruminating monologuic pace and tenor, and the objective manner addressed to the reader. 'Although there can be by definition no interlocutor when minds are depicted, writers often represent them as if there were. In this way thought becomes a form of suspended action; or even a form of suspended interaction between characters'. This form of description is not just a matter of 'talking' to oneself, but a useful means of sorting out the complications that surround a person and clarify the interaction.

Author to Reader

We have just seen that 'monologuic conversation' is sometimes addressed to the readers. In the above instance, it is the character who does the loud thinking. Jane Austen very infrequently appears to 'convey messages' to the readers. 'Sometimes an author conveys what he wants to say directly, and sometimes via exchange between characters. In both the cases we can expect conversational implicatures and other inferential strategies to be used'. Continuing with our example from *Emma,*below is presented an extract containing the general statement indicating author-leader implicature.

> 'Seldom, way seldom, does complete truth belong to any human disclousrue; seldom can it happen that something is not a little disguised, or a little mistaken; but where, as in this case, though the conduct is mistaken, the feelings are not, it may not be very material'.

It is less direct. The reader is 'thus involved a novel, to draw implicatures both from character speech and authorial commentary'. Jane Austen's other novel,*Pride and Prejudice,* begins with a statement of the kind, full of ironic significance.

> 'It is a truth universally acknowledged that a single man in possession of a good fortune must be in want of a wife'

In many novelists, the authorial commentary is easily recognisable which sometimes is embodied in the 'I-figure' and sometimes ostentatious voice of the writer who steps in from time to time to cast commentaries. 'The. dominant style of *Tom Jones* is a blend of the essayistic and the argumentative, as is set by the introductory chapters to each of the eighteen books of the novel, and they call attention to the controlling hand of the novelist, and to his dependence on the reader's tolerance'. (Roger Fowler)

George Eliot is another novelist who was fond of intruding into the narrative to interrupt its progess and make general observations. *Middlemarch* and *The Mill on the Floss* present examples of this.

The Irrational in Poetry

Earlier in this book, it has been pointed out that poetic language is based on the principle of deviance from the norm of the standard. This is realized in various ways, and on different levels of language structure. Any *reader* of poetry will become conscious of the unfamiliar and unusual uses of language, be it syntactical construction, phonological arrangement or any other linguistic function. We present below a few examples.

1. Queen Isabella : No, rather *will I die a thousand deaths :*And yet I love in vain; - he'll ne'er love me.

(Marlowe's *Edward the second*)

2. Late, as I rang'd the crystal wilds of air,

   In the clear *mirror of thy ruling star,*

   I saw alas I some dread event impend

(Pope's *Rape of the Lock*)

3. I die, yet depart not,

   I am bound, yet soar free;

   Thou art and thou art not

   And ever shall be

(Robert Buchanan's *The City of Dreams*)

If we look at these examples closely we can understand that by the norm of the standard principle to 'die a thousand deaths' is an impossibility. This is, therefore, an absurd statement. It is also difficult to understand how can one see anything in the 'ruling star' as one does in the mirror. So also with the third example. The contradictions are outrageously obvious, creating confusion, in the mind of the readers, who may find it verging on the nonsense, For an ordinary 'chronically literal-minded being such uses of language produce only unspeakable gibberish'.

One has only to talk to some people not used to reading literary works. Their opinion of poetry reflects to what extent does the poetic language deviate from the norm. Normally, language is used to convey ideas in direct logical manner - often aiming at simplifying things and reducing complexity, as in 'This new anthology has been compiled with two specific ends in view'.

But what is ordinarily viewed as absurdity, nonsense or 'gibberish' is a deliberate linguistic act. Without it poetry and other buns of literary writing cannot exist. This is a licence or sanction which the literary writers enjoy, most of all, the poets. Such deviations have their own rules, processes and patterns. By understanding the different 'figures of speech' one can get the basic idea of this 'logic of the irrational'. A poet's use of oxymoron, metaphor, paradox, and so on helps him get beyond the merely commonly perceptible reality and express that which eludes expression on the level of everyday logical plane of communication. Certain semantic irregularities are created for the desired poetic effect. Some fundamental processes are, *Oxymoron, Tautology, Pleonasm, Periphrasis* and *Paradox*.

We shall now discuss in brief these processes. Pleonasm, tautology and periphrasis refer to redundancy factor, such as when the poet expresses more than he is required to do: *That lie is false* (tautology);*doctor who treats patients* (pleonasm), *my male parent father* (periphrasis).

The other two, oxymoron and paradox refer to contradiction in statement and meaning. We shall begin by discussing the last two.

Oxymoron

By bringing together two expressions which have apparent semantic incompatibility, that is, which cannot show mutual semantic congruence, the poet creates *oxymoron*. John Milton uses in *Samson Agonistes* the expression 'to live a life half-dead, *a living death',* and in *Romeo and Juliet we read*'Parting is such *a sweet sorrow'*. In both the examples, the italicised expressions have words that are incompatible. This lends a degree of' ambiguity which on the surface is puzzling. But a careful reading by placing the, lines in their context would reveal that they are very much compatible. To experience pleasure with pain is common. The mingling of joy with sorrow is on the surface absurd, but particular contexts in life and literature discover for us the perfect truth of the statement, so with Milton's line. In certain conditions of life - the physically disabled person feels that his life is more merciless than death - it is living hell and also living death.

Paradox

In paradox also conllnly elements and statements me yoked together to create a strange equation of antonyms. In the opening scene of Macbeth the three witches chant.

> *Fair is foul*, and *foul is fair*
>
> Hover through the fog and filthy air.

In the commonsense interpretation of these words fair cannot be foul, if it is fair, and foul cannot be fair, if it is really foul. In the context of what follows in the play, this expression has a macabre truth in it, ringing with prophetic echoes. Another example of paradoxical statement is King Duncan's observation made to Banquo in the same play.

My plenteous joys

Wanton in fulness, Seek to hide*themselves*

*In drops of sorrow* (*Macbeth* I, iv 32-34)

Pleonasm

This refers to the expression which needlessly repeats the meaning by way of explaining and elaborating that which occurs either earlier or later. For example, when someone says, 'the doctor who treats the patients', it is not difficult to recognise that the segment 'who treats patients' is redundant, because the word 'doctor' contains that meaning. Often such explanatory clauses are considered faults of style. But in literature this serves other ends.

Clown : if he mends, he is no longer dishonest;

if he cannot, let the botcher*mend him,*

*Anything that's mended is best patched;*

(Shakespeare's *Twelfth Night*)

The clown is explicatory, anything *that's mended is but patched* is but pleonasm seeking to explain that which is already contained in the word. In Christina Georgina Rossetti's (1830-1894) poem 'When I am Dead, My Dearest', we see two stanzas, the beginning being 'when, I am dead, my dearest/sing no sad songs for me'. The poetess goes on to tell the dear one *what*he/she must do. But in the second stanza the poetess pleonasmically narrates what she herself shall miss,

I shall not see the shadows,

I shall not feel the rain,

I shall not hear the nightingale

Sing on, as if in pain.

And dreaming through the twilight

That doth not rise nor sit

In the common communicative framework the explanation that she shall not feel the rain nor see the shadows is redundant once 'when I am Dead, My Dearest' is said. But Christina Rossetti is reputed for evoking pathos of lonely and sorrowful conditions of life. She aims at building an atmosphere and a response in the readers which are vivid and distinct. Pleonasm has, therefore, a marked role here, apt and reinforcing her opening line.

Tautology

Tautology is also an expression which seeks to explain that which is already presented in a word or phrase. As Geoffrey Leech says, 'Tautologies tell us nothing about the world, but may well tell us something about the language'. Shakespeare's play *Hamlet*presents some of the most striking examples. In Act I Scene V Hamlet and Horatio exchange these observations.

Ham. The air bites shrewdly; it is verycold.

Hor. It is a nipping and an eager air.

What Horatio says is only a kind of echo of Hamlet's remarks.

In Thomas Dekker's *The Shoemaker's Opera these* lines occur.

Eyre. Leave whining, leave whining !

Away with this whimpering, this puling,

these blubbering *tears,* and these *wet eyes !*

After *blubbering tears, wet eyes* do not convey any new information. In drama, however, 'tautology can be an indirect means of conveying information about character and state of mind'.

Periphrasis

This involves saying more than is expected. In ordinary communicative situation this is considered violation of the principle of economy. However, it is a commonly employed mode in poetry, especially lengthy poems, where the poet needs to refer to the same thing in different ways. Often metrical convenience dictates its use as Shakespeare uses 'this golden rigot.' for 'crow' and 'the round and top of sovereignty'. Such uses also avoid monotony, and introduces variations. By employing round-about descriptive expressions the poet can also emphasize first one facet then another of the same thing.

I have thee not, and yet I see thee still.

Art thou not, fatal vision, sensible

To feeling as to sight ? or art thou but

A dagger of the mind, a false creation,

Proceeding from the heat-oppressed brain ?

(*Macbeth* Act 2 Scene 1)

The terrible ranting of Macbeth goes on in this rambling manner just before King Duncan is murdered. It has many examples of periphrasis which Shakespeare illuminatingly uses to reveal Macbeth's character. And then a little later Macbeth, unsettled and unhinged by the deed, tells Lady Macbeth in Scene 2 of Act 2,

Macb. Methought I heard a voice cry

1. Sleep no more :

   Macbeth does murder sleep – the innocent sleep,

2. Sleep that knits up the ravell'd sleeve of care,
3. The death of each day's life,
4. sore labour's bath
5. Balm of hurt minds,

6. great nature's second course

7. Chief nourisher in life's feast.

Macbeth has killed sleep by murdering the unguarded Duncan who looked like a sleeping babe in his deep slumber. But it is not merely the destruction of sleep and the sleeping king that has been carried out. By plunging dagger in Duncan's breast,

> Glamis bath murder**e**d sleep; and
>
> therefore Cawdor
>
> Shall sleep no more - Macbeth shall
>
> sleep no more

In this way he has also destroyed the innocence of sleep and all that sleep signifies to him. These attributes are given numbers in the above passage to indicate what it signified to him. It is a great profound self-revealing out-cry of a man who was 'too full of the milk of humanity' and who had earlier understood,

If chance will have me King, why, chance

may crown me, without my stir.

Periphrasis is thus, in this instance, a very powerful means of producing poetic effect. In the context of this tragic development, this extract is crucial in revealing an important aspect of Macbeth's character, his essential goodness. Sleep with its poetically enumerated attributes leaves the reader more enlightened as to its significance and Macbeth's character.

In the eighteenth century poetry one sees a close connection between periphrasis and the dignity of expression. Something of this is perceptible in *Macbeth* also. Talking of the 18th century linguistic practices, we turn to William Collins (1721-59) whose *The Passions An ode for* Music contains these lines.

O Music ! Sphere-descended maid,

Friend of Pleasure, Wisdom's aid !

Why, goddess, why, to us denied,

Lay'st thou thy ancient lyre aside ?

The poet emphasises those aspects of music that matter to him, creating a series of periphrastic utterances. In a similar vein Thomas Gray writes,

> Awake, Aeolian lyre awake…
>
> O Sovereign of the willing soul,
>
> Parent of sweet and solemn - breathing airs
>
> Enchanting shell

*(The Progress of Poesy)*

Periphrasis thus provides a means of building the appropriate poetic tone and evoking various facets of the dominant idea, emotion or theme. They give a heightened imaginative appreciation of the object described.

Ambiguity and Indeterminacy

A major strength of poetic writings is its ability to offer itself to multiple interpretations. The 'meaning' of a poem is, therefore, not its 'cognitive meaning', or to put it differently, 'logical denotative meaning'. This is the kind of meaning given by dictionaries. In a poem this kind of meaning constitutes only a part of its total meaning. In order to distinguish the two types of meaning, the word *significance is used* for the latter, the total meaning of a poem. In ordinary communication, in day-to-day life both the types of meaning are used. For strictly scientific or other academic purposes, 'cognitive meaning' is sought to be communicated. When Wordsworth writes,

The Being, that is in the clouds and air,

That is in the green leaves among the groves,

Maintains a deep and reverential care

For the unoffending creatures whom he loves

What his use of the words 'clouds' and 'air' signify includes the cognitive meaning weathermen attach to them. 'It would be quite absurd to insist that cognitive meaning counts for nothing in poetry'. There is, however, always an additional semantic value to be derived from the poetic use of a word.

Thou on whose stream, mid the steep sky's commotion

Loose clouds like earth's decaying leaves are shed,

Shook from the tangled boughs of Heaven and Ocean,

Angels of rain and lightning;

(Shelley's *Ode to the West Wind*)

In Shelley's use of the word 'clouds' it would be absurd to confine our attention to mere cognitive meaning; the word assumes greater strength of expression by its association with other words. In association with other words it forms an inclusive field of significance which lends it especial meaning. The assertion by a class of critics and waders that a poem cannot be paraphrased, that, as Wordsworth says

Sweet is the love which Nature brings;

Our meddling intellect

Mis-shapes the beauteous forms of things;

We murder to dissect

*(The Tables Mined)*

derives partly from this complex semantic associative whole. This means; that on the cognitive level one may present a kind of surface interpretation, but apart from this also there remains a lot to be presented. The possibility or possibilities of further interpretation to the manner in which the poet uses language. It is a language which has the *many-valued* character, a language possessing multiple significance, offering possibility of multiple interpretation. This comes about by the author's use of forms of deviation from linguistic norms. This has already been discussed earlier. Shakespeare's

put a tongue

In every wound of Caesar, that should move

The stones of Rome to rise and mutiny

(*Julius Caesar* III, ii)

defies literal paraphrasing of words. Such an attempt would not only result in nonsensical interpretation, it would also mar the force of expression, the powerful articulation of emotion that this deviant use of language achieves. It is common practice among prose writers also to resort to deviations, as the poets do. Prose writers do this in order to achieve force of expression and semantic density.

Lexical Polysemy

Similarly with polysemic words

*lie :* i. 'to lie down'

ii. as in 'tell lies'

Both the meanings of the word are effectively used in these lines from *Richard II*.

Surrey : Dishonourable boy !

That *lie* shall *lie* in my sword,

Grammatical Polysemy

It is evident in the following example,

Present Tense

A. She cooks without help

a. event occurring now

b. regularly repeated event

B. He is going home

a. event occurring now

b. event to take place in near future

These sentences written or spoken in isolation would lead to ambiguity, both the meanings being available. In poetry 'ambiguities are frequently brought to the readers' attention, and the simultaneous awareness of mote than one interpretation is used for artistic effect. One reason

why we recognise and tolerate more ambiguity in poetry is that we are iii any case attuned to the acceptance of deviant usages and interpretations'.

Ambiguities also arise from *homophones* and*homographs*. In the first, words are pronounced alike but are written differently.

*bore - boar; see - sea; cell - sell; die - dye;* etc. in the latter, the words are written alike but pronounced differently.

*row - row; lead - leed; read - read; bear* (vb) - *bear* (n).

Pun

When a writer uses pun what lie does is to foreground the homonymous or polysemous character of a word and allows more than one meaning to function in full measure in order to create dramatic situation.

Maria : Now, Sir, thought is free, I pray you, tiring your hand to th' butt'ry - bar and let it drink.

Sir Andrew : Wherefore, sweet heart ? What's your metaphor ?

Maria : It's dry, Sir.

Sir Andrew : Why, I think so. I am not such an ass but

I can keel) my hand dry.

But what's your jest ?

Maria : A dry jest, sir.

Sir Andrew : Are you full of them ?

(Shakespeare's *Twelfth Night* I. 3)

The word *dry* in the above example has been used as pun, 'hand dry' meaning in literal sense of 'not wet', and 'dry jest' meaning barren jest.

Homonymic pun is considered less serious than the polysemic one, as it is believed that the author benefits from the sheer accident of language. Pun is thus a form of word-play. Below we discuss some prominent types of pun.

Repetition

In the example from *Twelfth Night* we observe the word twice repeated, each occurrence projecting its different meanings. This has been quite popular with Elizabethan *writers. In an cat her* example*from Richard II the* word *lie* has been repeated. This is more common than a single occurrence of the word. In T.S. Eliot's*Wasteland* we read this passage in the section entitled 'The Fire Sermon'.

When lovely woman stoops to folly and

Paces about her room again, alone,

She smooths her hair with automatic hand,

And puts a record on the gramophone

The highly mechanical word 'automatic' has been yoked with the hand of the 'lovely woman', evoking the idea of dry, mechanical life of the metropolis. This single word reminds us in this passage of all the fast, impersonal, almost de-huillanized life in large cities consisting of mechanical routine of humdrum activities. As Arthur Pollard says,

> 'The pun is a form of innuendo, but its two in-congruous meanings are usually more readily, even obviously recognisable than those of innuendo proper. The latter depends, in fact, for its effect on the slight delay in realising that a second meaning underlies the first and more obvious meaning'.

To happy converts, bosom'd deep in vines when slumber Abbots, purple on their wines

(Alexander Pope's *The Dunciad IV,* 301-2)

The last phrase in the above quotation is not simply descriptive but also critical. In another of Pope's fine book The *Rape of the Lock occur* these lines

A. Oh hadst thou, Cruel ! been content to seize Hairs less in sight, or any Hairs but these !

(IV, 175-6)

B. On her white Breast a sparkling *cross*she wore; which *Jews* might kiss, and infidels adore

(II, 7-8)

In the first example (A) Belinda appears to have reached the climax of her distress. But the ambiguity of 'Hairs less in sight' raises a curious dilemma, what other hairs ? The reference is sexual and creates a new dimension of Belinda's reputation. In example B what does the word 'which' refer to, 'cross' or 'breast'? A typical ambiguity is created in that if the cross is kissed then, it is quite near the breast. Again the word 'might' would mean would desire to, and/or would be allowed to.

Pun on Antonyms

When two words with opposite meanings or connotations are use together multiple meanings arise, as by this association they intensify their antonymous sense.

therefore pardon me

And not compute this yielding to light love,

which the dark night bath so discovered.

*(Romeo and Juliet)*

Syllopsis

This is a type of pun which consists of a compound structure. In it a deliberately contrived superficial structure of identical nature is brought together.

Here thou, great Anna ! whom their reals obey,

Dost sometimes counsel take - and some time tea

*(Rape of the Lock)*

The two similarly constructed clauses clearly denote different things. Syllopsis here creates irony by bringing together two activities of different nature one abstract, the other concrete !

Jingle as Pun

Ironic or comic effect is created by using two homonymous words

A young man married is a man that's marred

*(All is Well that Ends Well)*

This of course flourishes on the musical quality of words whose sounds create not only chiming effect; but also disparate meanings.

what thou wouldst *highly*

That wouldst thou *holily*

*(Macbeth)*

'Punning' is a very popular mode of expression with the writers. It gives them the kind of expression power which is remarkably economical and pleasant. Many writers earned permanent fable by displaying especial punning skill and talent, particularly the eighteenth century poets, whose satirical works especially required this device, for it gives two meanings for the price of one, and so adds to the poem's density and richness of significance. Pun reduces possibility of discovering incongruity between two unconnected words.

Indeterminacy

A poem is always open to multiple interpretations. It has many-valued aspects, there is no definite number of possibilities to choose, from. As, William Empson says, 'what often happens when a piece of writing is felt to offer hidden riches is that one phrase after another lights up and appears as the' heart of it; one part after another catches fire, so that you walk about with the thing for several days'. A linguist studies what possibilities of choice exist. Indeterminacy is one of the prominent aspects of poetry, apart from that of multiple significance. There are various factors responsible for it. We look at them below.

1. Deviation

We have already studied the different forms of poetic deviations arising out of the poet's use of language in a special manner. We must pay particular attention to the irregularities in poetry and semantic absurdities.

2. Register and dialect

'My nerves are bad to-night, yes, bad stay with me.

Speak to me.

Why do you never speak. Speak.

What are you thinking of ? What thinking ?

What ?

I never know what you thinking. Think.

I think we are in rat's alley

Where the men lost their bones

*The Waste Land II*

T.S. Eliot here uses the *tone of discourse* that arises out of the situation. A poet makes use of *dialect* or *register* (defined elsewhere) to suit these contextual requirements. Milton's linguistic style is classical and perceptibly latinate. Wordsworth's style, on the other hand, avoids these pompous features, for he believes in the language of man speaking to men. Robert Burns has chosen to write his work outside the standard dialect. What we see in 'ES. Eliot example is not the use of dialect, but a prosaic hurried speech often dropping in colloquial tenor. In some poems one may find strange complexes of these varieties. In the words of Leech, 'These Engishes are difficult to describe precisely, because they shade into, one another and have internal variations which could, if wished, lead to interminable sub-classification. For instance, we could not, on any reasonable principle, draw a strict line between the English of journalism, and the English of *belles lettres* or of general educational writing, or to take another example. between formal and colloquial English, for there are innumerable degrees of formality and informality in language'.

3. The ground and tenor of metaphor

Metaphor is vital to poetic expression. If we look at the following line

'Life's chilled boughs emptied by death's autumn-blast'

the whole range of what 'life' signifies has been compressed into one metaphor 'boughs' that are 'chilled'. And the cruel deal of death has been viewed as 'autumn-blast'. This 'definition' of life and death are not what is given in the dictionary. On the literal plain, life is not boughs and death has no autumn blast. The 'definition' must, therefore, be taken in the linguistic sense. 'Life is like a bough', 'Life is as if it were a bough', and so on, must be the figurative description. 'Life' is the *tenor* of this metaphor and its purported definition 'a bough' its *vehicle*. To make another example from Thomas Campion's poem *Cherry-ripe*.

There is a garden in her face

1. Where roses and lilies blow;

   A heavenly paradise is that place

2. Where in all pleasant fruits do grow;

*Her face is* the tenor here, but the following descriptions cannot be taken in the literal sense. The incongriuty of seeing face as the garden with the roses and lilies blowing is too violent to sustain such comparing. The vehicle (1) represents one definition of *her face* and (2) represents a further extension in terms of seeing it as *heavenly paradise*. It is important to understand that the 'literal meaning is always basic and the figurative' meaning derived. Metaphoric transference establishes link between tenor and vehicle. This leads us to the *ground* of the comparison.

Metaphor implies the form A is like B in respect of C'. So *her face* is *like garden* in respect of the freshness and colour represented by roses and lilies.

Let us look at another example

An aged man is but a paltry thing

A tattered coat upon a stick

(W. B. Yeats *Sailing to Byzantium*)

Vividness of comparison emphasizes certain qualities of the *tattered coat upon a stick* to the *aged man* whose paltriness is already mentioned. The time-worn and battered life, and the insignificance of being hung on a stick all loose and helpless have been chosen by the poet to define the 'aged man'. These attributes into which the metaphorical comparison has been resolved form tile*ground* of the metaphor.

Distinction between metaphor and simile is well-known to the students of literature. In simile the comparisons are 'Spelt out in succession and made explicit through the constructional particles such as *like, like as, as...as, as,* etc.

She walks *like* beauty in the night

In cloudless climes and starry skies

(Lord Byron)

The above lines show the fine use of simile which compares her with the beauty of cloudless climes and star-spangled skies.

Implications of Context

The immediate context presented by a poem helps us in interpreting the text to some extent. But more useful details can be furnished from other sources. For example, in reading A. E. Houseman's *A Shopshire Lad*it would be useful to know what actually happened during Boer's war.

Connotations

Poetic' language teems with connotations, some of which Pro interpretable within the contex of the poem. The range stretches beyond this context, however. Context often gives prominence to certain attitudes and suppresses others.

A. I saw her upon near view,

A spirit, yet a woman too !

Her household motions light and free,

And steps of virgin-liberty;

(Wordsworth's *She was a phantom of delight*)

B. In spite of myself, the *insidious mastery*of song

Betrays me back, till the heart of me weeps to belong

To the old sunday evenings at home

(D.H. Lawrence's *Piano)*

What exactly does William Wordsworth mean by the compound word *Virgin-liberty is* a matter of inderminate semantic significance. So with Lawrence's phrase*insidious mastery of song*. As G.N. Leech observes, personal attitudes will always vary. This is the area of subjective interpretation *par excellence* : a person's reaction to a word, emotion, or otherwise depends to a great extent on that person's individual experience of the thing or quality referred to.

Ellipsis

Ellipsis emphasises reliance on contextual factors as providing and completing meaning. The hearer/reader derives and completes the intended meaning from the context which may be a single sentence or a larger composition where the context is built by more than one sentence. Omission from sentences of *required* elements capable of being understood in the context of their use is called *ellipsis*. 'Ellipsis creates acceptable, but nonetheless grammatically incomplete sentences'. (Noel Burton-Roberts : 101).

Why didn't you bring a spade ?

I hadn't got any.

The hearer presupposes here what is Jett out by discovering the semantic relation between what is left out and what is referred to. This is a lexicogrammatical relationship which leads to semantic relationship. Ellipsis mostly creates anaphoric cohesion.

Ellipsis works in three different contexts :

i) the clause, ii) the verbal group, and iii) nominal group

i) In question-answer dialogues ellipsis of clause is often seen.

a. Have you taken your meal ?

yes (I have taken my meal)

b. Was that fine ?

No (that was not fine)

In many such situations substitution is also used as potential referent.

He may report to duty today.

*Perhaps not*

In the above sentence, substitute *perhaps not*is used for 'he may not report to duty today'. Other such expressions *are he said so, l think so, let us say so, if so,* etc.

In the following example a positive clause is simply presupposed by ellipsis.

Would you like to see a little of it ?

- Very much indeed (I should very much indeed like to see a little of it).

In a *wh*- ellipsis the whole clause may be omitted.

I think you must get the premission of the V.C. first.

- Why ? (must I get the permission of the V.C. first).

ii) A verbal group, comprising finite plus predicator may show ellipsis in any of these or the whole.

a. I couldn't bear [to be questioned like that]

b. Can you dance ?

- yes. I can (dance).

iii) Within the nominal group ellipsis is common and its role is one of contracting the structure by reducing redundancies and thereby creating greater cohesion in the discourse.

a. He came here last week, (he) visited us only yesterday.

b. She takes tea, but I don't take *any*.

In (b) the ellipted item is replaced by a substitute *any*. 'Ellipsis-substitution is a relationship at the lexicogranimatical level: one of 'go back and retrieve the missing words'. Hence the missing words must be grammatically appropriate; and they can be inserted in place'.

(Halliday)

Conjunction

Conjunctions link phrases or clauses together. They have different kinds of function and refer to different situational factors such as causation, elaboration, exemplification, clarification, extension, enhancement. Conjunctions create linkages between subjects, verb phrases, compliments, adverbials, prepositional complements. From simple single words this device can relate to larger structure like clauses and sentences.

The cohesion thus achieved is called by the name of conjunction. 'A range of possible meanings within the domains of elaboration, extension and enhancement is expressed by the choice of a conjunction, adjunct ... or of one of a small set of conjunction ..., in thematic position at the beginning of the clause'.

Below we present in brief various categories and sub-categories to which different conjunctions belong.

i. *Elaboration.* Elaborative relation is achieved by this type of conjunctions. This category has two sub-categories a) apposition, b) exposition. In both, following conjunctions are used - *that is, in other words, for example, for instance, thus, to put it another way*.Thus the function of these conjunctions is to re-present or re-state.

ii. *Clarification*. In this category of conjunctions their role is that of summarizing, making precise or in some other way clarifying. This is achieved by these. devices : *to be precise, rather,* at least (corrective);*incidentally, by the way* (dish active);*anyway, in any case, in particular, in short, briefly, to sum up, actually, in fact,* as a *matter of fact.*

iii. *Extension:* This includes both addition and variation. In addition is included*and* (positive), *nor* (negative), *but*(adversative). 'The class of variation has other

smaller classes. These are : replacive, expressed by *instead of, on the contrary; substr*active by *apart from that, except for, except for that, etc.*

iv. *Enlargement : We can* create cohesion by using conjunctions such as here, there, anywhere else, nearby, behind, then, hitherto, previously, in the end, finally. Causation and condition are indicated by *hence, because, for, because of, on account of, for that reason, then so;* and *otherwise, or, if not, then, in that case, under the circumstances, in that event, nevertheless, though, in spite of, however,* etc.

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