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Language and Linguistics

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For

B. A. Part III

Module I
Language and Communication

- i) Definitions and Characteristics of Language**
- ii) Human and Animal Communication Special reference to Hockett's 7 characteristics of language)**

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1.0 Objectives

After studying this unit you will be able to

1. understand what the language is
2. acquaint with the definitions of language.
3. understand the characteristic features of language.
4. examine the difference between human and animal communication with special reference to Hockett's Design Features.

1.1 Introduction

Linguistics is the scientific study of language. Language is a phenomenon having the concrete shape and structure. Linguists do the systematic study of the phenomenon enabling us to state some principles or theories regarding this phenomenon by examining its various components. But in order to understand what is a language, it is necessary to know the nature of language, the characteristic features of language. In this unit we are going to study language as a communication system of human beings with all its aspects.

1.2 Subject Matter – I

Definitions and Characteristics of Language

1.2.1 What is language?

Language is essentially a means of communication and it distinguishes human beings from animals. Knowing a language is to be able to speak it. It also means ability to produce and interpret meaningful sounds. Thus knowledge of language involves knowledge of the sound system of a particular language. It also requires knowledge of sound combinations and the order in which sounds occur in a word. Every language has its sound system and governing rules. Secondly, one must know the meaning producing aspect of different sounds. There are sound patterns and also sequences which suggest meaning. If we don't know a language and its rules, communication becomes only a noise.

Even though two languages have similar sounds, they differ in meaning. There is a degree of arbitrariness in the way sound and meaning attach themselves. Sometimes certain sounds suggest or echo meaning. Such words are onomatopoeic.

There are different rules of word formation. The knowledge of these rules helps us form new words .If you say that you know the language,you accept that, you can combine words and make phrases which help you also to prepare sentences. This ability of forming new sentences indicates creativity of language. The third thing to know about language is its usage. Language is ultimately a social tool for communication .Mere ability to form sentences will not help us use it socially. We must also know the situations which require a particular type of language response. Thus in other words is the context for appropriate use of language. The speaker and hearer must have common ground or common context to interpreted sentences. This is also determined by cultural aspects of that language..

1.2.2 Definitions of Language

Language is a very complex human phenomenon. Linguistics is the scientific study of language, and its structure, including the study of grammar, syntax, and phonetics. Therefore, it is necessary for a linguist to know what language is. Many linguists have given their definitions of language. But all attempts to define it have proved inadequate. The definitions given by these linguists throw light upon one or other characteristic of language. Now let us see some of the well-known definitions of language.

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

- Sapir : 'Language'

- 2. Language may be defined as the expression of thought by means of speech sounds.**

Henry Sweet: 'The History of Language'

- 4. A language is a symbol system based on pure or arbitrary convention, infinitely extendable and modifiable according to the changing needs and conditions of the speaker.**

R. H. Robins: 'General Linguistics'

7. **A language is a device that establishes sound - meaning correlations, pairing meanings with signals to enable people exchange ideas through observable sequences of sounds.**

R.W. Langacker: 'Language and Its structure

8. **Language is the innate capacity of native speakers to understand and form grammatical sentences.**

-Noam Chomsky

9. **Language is that human expression which is uttered out by speech organs.**

Patanjali

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

Encyclopedia Britannica Vol. XIII

1.2.3 Basic Characteristics of Language

These definitions suggest the following characteristics of language.

1. Language and Communication:-

Language is an important tool of human communication. We can express our ideas, emotions and feelings by messages framed in a particular language. We can exchange ideas through these messages. Thus human interaction depends upon our ability to put our ideas in linguistic structures.

2. Language and Speech:-

We can organize sounds of a language which become vocal symbols. Thus knowledge of the sound system of a language is important. If we don't know the sounds of a language, we can't speak it properly. We should also know how to combine different sounds of a language and form words which are meaningful.

3. Language and Creation:-

Combination of different words can form phrases which lead to sentences. This capacity to make sentences with meaning is the quality of creativity of any

language. Only human beings can create any discourse as a creative result of linguistic knowledge.

4. Language and Context:-

Language is used in social context. Hence, we must know exact usage of particular language in an appropriate context. Effective Communication requires knowledge of exact usage of language fit for a particular situation. Communication depends upon symbolic meaning and literal meaning of expression that we use. It is a context which determines and controls our selection of expressions. This appropriate Social context is related with choice of language

5. Language is Symbolic -

A Symbol stands for some idea or suggestion. It is an alternative to the words that we use. Word suggests concepts, objects and ideas. They are essentially symbols. The literal meaning has one to one correspondence between a word and the object or idea it stands for.

This is called denotation. Some words suggest secondary or associative meaning. This is called connotation. Thus a rose stands as a Symbol for freshness, youth and romantic ideas. Poets make use of this symbolic quality of language.

1.3 Subject Matter – III

II. Human and animal Communication. Systems (Special reference to Hockett's Characteristics of language)

Communication is an essential phenomenon for life on this planet. Several factors which are social, environmental and based upon needs control communication system. It is clear that human Communication based upon language and non-verbal signals has a complex nature. In comparison with this, animal communication is less complex. Human Communication is helped by the unique feature of language. Human beings are blessed by being able to communicate with the help of language. Linguistic signals make the messages complex, for exchange between sender and receiver of messages. Human behavior depends upon complex interrelationships in society. Human beings can generate meaningful messages with the help of language. This Communication system has a dual nature of spoken and written language. Apart from this, human beings can express themselves through non-verbal signals such as, gesture, postures and other aspects of body language.

Animal Communication has its own special characteristics. Animals have their own inter- and intra-communication systems in the form of different sound Signals. Communication between bees has been studied at length. It is found that, bees have ability to communicate accurately the spot where they can find nectar or honey. These bees dance in a particular manner and create figure 8. It is suggested that, this figure indicates distance, excitement and quantity of honey found by the bee. This dance is performed near the beehive. The other worker bees also participate in this dance and thus the bees communicate direction and correct distance towards the flowers where honey is found. This is one kind of animal Communication.

In another type, a colony of bees is formed before going in search of honey in different directions. The bees fly in search of honey and bring reports. This is also a way of communication.

Animals produce different sounds such as bleating, hooting, and cooing. These are signals. Monkeys bark and smack their lips and dogs communicate by barking and snarling. These very many sounds produced by animals are means of communication but they are limited in and messages signals. Human language has a vast potential of complex messages as compared to the animal Communication.

Thus systems of animal communication are limited and depend upon vocal and gestural signals only. The vocal behavior is marked by imitation. Different birds imitate sounds which send signals. Human ability to produce sounds is superior and complex. Man can manage a number of combinations and variation of sounds to produce sequences which are meaningful. This phonetic ability which is a powerful communicative tool makes human communication meaningful and complex.

There are two levels of communication, instinctive or intuitive. This is found in all animals. Every animal instinctively responds to a sound. This kind of communication is unintentional and unplanned. This creates a pattern of behavior which communicates something. But human communication belongs to second type which is formal and conventional. Man follows different ways such as non-verbal Communication and verbal or Communication through language. This communication can take many forms, and is far superior to the instinctive animal communication system.

American linguist Charles Hockett (1916-2000) compared human language with animal Communication and devised what he calls Design Features of Language. Originally he posited 13 design feature of which,9 features relate to primate Communication and 4 are reserved onlyfor humans. Later he added 3 morequalities and argued that every human language has 16 characteristics. Of these 16,generally, the following7 are discussed. These characteristics are as follows:

- 1) Arbitrariness
- 2) Duality of Structures
- 3) Productivity or Creativity
- 4) Interchangeability
- 5) Reflexivity
- 6) Displacement
- 7) Interchangeability
- 8) Cultural transmission
- 8) Discreteness

1) Arbitrariness:-

Linguistic signs or words are arbitrary because the sound of a word and its meaning have no connection with each other. In animal communication the signal and the message are connected. An animal will take the pose of attacking to warn the enemy. In human Language however, there is no natural link between word and its meaning. The words are symbolic and their use is arbitrary. There is no logic behind the word and its meaning. Different languages have different words or signs for the same object or thing. It is not clear why an animal with four legs and certain qualities should be called 'dog'. Again different languages call this four legged animal by different terms: *Kutta* in Hindi, *Hund* in German, *kukkur* in Sanskrit and so on. There is an exception of certain onomatopoeic words which imitate sounds. These words have some kind of connection between sign and meaning. Coleridge uses the expression. "**Tu- whit!Tuwhoo!**" to signify whooting of a Bat, Here imitation of the sound of the Bat is suggested by the expression. So, the sign and the meaning have some connection. But such words are very few. Generally, each word indicates different a meaning and a student has to accept and memorize it when learning a

language. This arbitrariness is a special feature of every human language .It differentiates one language from another

2) Duality of Structure:-

Animals have limited number of sounds and their commands. It is said that, Gorillas have 20 sounds whereas, a cow has less than 10. So, there is a limit to the messages that animals send because they have very few sounds at their command. Human language on the other hand is more complex. The sounds produced by them combine with other sounds. Thus, languages are organized into dual structures or two levels simultaneously - the physical level at sounds and the abstract level of meanings.

English has 24 consonants, 20 vowels. But with the help of these, infinite number of meaningful messages can be formed. We utter certain sounds and this flow is automatically related to meaning. This duality which is also called dual articulation is the principle behind organization of human language. In animal communication each sound used in communication has a single fixed form. It cannot be broken into separate parts.

3) Productivity or Creativity :-

Animal Communication has limited number of creative efforts. Animals can produce a limited range of messages. These messages cannot be used with variety of meanings. For example the bees can only communicate the place where nectar can be found. They cannot bring in other matters in their messages. In a sense, there are limitations to their creativity because, their productivity has limitations. Human language is marked by the ability to create new utterances out of their material of communication. This unlimited productivity of human language is a beautiful thing about human language. Great writers can easily exploit this quality for producing different complex messages. This meaning making activity is a special gift of human language

4) Interchangeability:-

In all communication, there are two factors involved. Somebody sends a message (sender) and there is also a receiver. Communication can't be complete without this interchangeability between the messages of sender and receiver. The

roles of sender and receiver can be exchanged or interchanged. A receiver can become a sender and vice versa.

5) Displacement:-

A special feature of human Communication is displacement. We can use language to think and talk about past things or things to happen in future. We can also talk about something that is hypothetical or imaginary. In animal communication, this is not possible because it is context bound. It is concerned with here and now. Human communication can range from this moment on to area of myths which are only to be imagined. Human Communication can talk about things which are not present. This property of human language is called displacement. Compared with human language, animal communication is very limited and narrow. A writer can write about the Trojan War and the fight for the sake of Helen of Troy. A modern science fiction writer can even imagine the world as it could be after 50 years. Our fiction books thus exploit this property of displacement to create literary structures. The entire world of literary fiction depends upon this ability to utilize the quality of displacement creatively.

6) Cultural Transmission

Another important property of human language is cultural transmission. Languages acquired in a culture along with other speakers of the same language. Initially children learn language from their parents and then there are peer groups. They can also acquire language from the environment in which they live. A boy born in India but living in London can speak chaste English even though his appearance is not that of an Englishman. Language is an important element of culture. There are certain cultural presuppositions which are encoded in language. These cultural signals are automatically imbibed when one learns language. The famous American linguist Noam Chomsky proposed that, human beings are biologically programmed to acquire language. But it is also true that, one learns language by exposure to it. One generation hands down language to another. This can be called cultural transmission. A human child deprived of human society and exposed to existence with animals, will have only animal language in the form of their sounds. There will not be any touch of human communication there. This dimension brings in great variety in human communication and therefore it is an important property of language.

7) Discreteness

Discreteness in language means that even though language is produced as a stream or flow, we can break it down into meaningful units such as discrete sounds. Again, these units can be combined in various ways to form longer units. Thus, the word 'tip' is formed by combining sounds like /t/, /i/ and /p/. When we learn a new language, we listen to the flow of speech of a native speaker of that language. First we try to focus upon separate or discrete sounds. Then gradually we learn the combination of these sounds forming words. Thus we begin discrete sounds and end with comprehension of the word pronunciation. This small set of discrete sounds and their combination to produce new words is the basic fact and characteristic of human language. Animal Communication doesn't have it. The words of a language try to capture different meanings. For example, the **words** and **wood**. The English language differentiates between voiceless or voiced vowels. This helps us to understand discreteness in the set of linguistic sounds

1.4 Check your progress

D) Answer the following questions in one word /phrase/sentence each

1. What is linguistics?
2. Who introduced the Design Features of language?
3. In any communication which two factors are interchangeable?
4. Who exploit the property of displacement to create literary structures?
5. How many sounds are there in Gorilla's sound system?
6. What is arbitrariness as a feature of human language?

1.5 Let's sum up

In this unit, we have studied that, language is an effective tool of human communication for expressing our feelings and emotions. We have to manage proper organization of sounds for articulating the meaningful words. Social context plays an important role in effective communication. The symbolic quality of language is exploited by the writers in their literary works in the form of connotative use of language. Human communication system is highly meaningful and complex system having variety of linguistic signals along with non-verbal signals. Animal

Communication on the other hand limits itself to vocal and gestural signals only. In 1960, the linguistic anthropologist Charles Francis Hockett conducted a pioneering featural study of language and introduced the **Design Features of Language**.with a specific focus on how human language can be compared to animal communication.He enlisted the specific features of human communication system as Arbitrariness, Duality of Structures, Productivity or Creativity, Interchangeability,Refleivity, Displacement, Cultural transmission and Discreteness.

1.6 Glossory and Notes

1. Linguistics: a scientific study of language
2. Phonetics: the study of speech sounds
3. Discourse: written or spoken communication
4. Social Context: the immediate physical and social setting of speech
5. Denotation: literal or primary meaning
6. Connotation: suggestive meaning
6. Non-verbal: not involving or using words or speech.
7. Gestural:related to movement of body parts
8. phonetic ability: ability to express through sounds
9. instinctive or intuitive: natural and inherent
10. conventional: usual or traditional
11. Design Features of Language: the key properties of language proposed by Charles Hockett
12. arbitrariness: based on impulse
13. duality: double
14. onomatopoeia:formation of words in imitation of the sounds
15. presupposition:the thing assumed beforehand

1.7 Exercises

D) Answer the following questions in 3 to 4 sentences each:

1. What is language?
2. What is arbitrariness?
4. How is language discrete?
5. What is interchangeability of language?
6. Explain the creativity of language.
7. How is context important in language?
8. Explain the symbolic quality of language.
9. How are speech and language related?
10. How is language a tool of communication?

II) Write short notes on the following:

1. Arbitrariness of language.
2. Duality of structure as a feature of language.
3. Productivity or Creativity of Language.
4. Interchangeability of language.
5. Displacement as a quality of language.
6. Human Language and Cultural Transmission.
7. Discreteness as a distinguishing feature of human language.

1.8 Reference Books

1. Hockett C.F. **A Course in Modern Linguistics'** Oxford & IBH Pub. Company, 1958.
2. Robins R. H. : **'General Linguistics : An Introductory Survey'**, Longman 1964.
3. Langacker R. W. : **'Language and Its structure'** New York. Harcourt BraceJov, Inc. 1973

4. Verma S.K. &Krinshnaswamy N. :'**Modern Linguistics: An Introduction**',Oxford, 1992.
5. Todd Loreto:'**An Introduction to Linguistics**' Longman 1987.

1.9Answers to check your progress

1) Answers in one word/phrase/sentence each :

1. The scientific study of language
2. Charles Hockett
3. Sender and reciever
4. The writers
5. 20
6. The sound of the word and its meaning have no connection with each other



Module II

Phonology

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2.0 Objectives

After studying this unit you will be able to:

1. understand the concepts of phonology, phoneme and allophone.
2. explain speech mechanism and organs of speech.
3. describe speech sounds with three term labels.
4. understand transcription of words and transcribe words phonetically.
5. comprehend the concept of primary word stress / accent.

2.1 Introduction

Dear students, in the previous module you have studied definitions and characteristics of language. Language is a means of communication. It displays two levels of patterning: patterns of sounds and patterns of morphemes and words. In other words, we can communicate using the spoken or the written medium. Language is a system of conventional oral and written symbols. We use a number of different speech sounds while speaking English. These speech sounds are called phonemes and the study of these speech sounds is called Phonology of English. The purpose of this unit is to introduce students to English speech sounds (phonemes) and speech mechanism and to enable them to pronounce English words properly.

2.2 Presentation of Subject Matter:

2.2.1 Section 1: Phonetic symbols, phonology, phoneme, allophones and minimal pairs :

Phonetic Symbols:

Linguistics is a systematic study of language. Phonetics is a branch of linguistics which deals with the medium of speech. It is the study of the articulation, transmission and reception of speech sounds. In English, we use 26 letters of alphabet from A to Z. It is the written form of English. However, we do not use the similar speech sounds for the particular letter or alphabet. So it is difficult to talk about speech sounds using the letters of the alphabet. Moreover, sometimes the same letter is pronounced differently in different words. For instance, the letter 'a' is pronounced in a different way in different words like- 'father', 'mate', 'cat', 'about', 'talk' etc.

English has 44 phonemes or speech sounds which are further classified into: consonants, vowels and diphthongs.

Consonant Sounds

No.	Symbol	Examples
1	/p/	p age, p ump, a ppear
2	/b/	b aby, b erth , l obby
3	/t/	t able , c at, a ttack
4	/d/	d ate , l adder , d ead
5	/k/	k ey , s kill , l ock
6	/g/	g ame, a ugust , t ag
7	/tʃ/	ch alk , r itual, m atch
8	/dʒ/	j am , s uggest, j udge
9	/f/	f amily, l augh, a fford
10	/v/	v ivid , s ave, o f
11	/θ/	th ink, h ealthy, p ath
12	/ð/	th ey, m other s mooth
13	/s/	s ight , s ister , c lass
14	/z/	z oo, o zone, b irds
15	/ʃ/	sh ower, a mbition , f resh
16	/ʒ/	g arage , pl easeure
17	/h/	h at , b ehind , b ehaviour
18	/m/	m ark, r emember, u niform
19	/n/	n ow, a nnoy , u nknown

20	/ŋ/	English , ankle , ring
21	/l/	last, foolish ,wall
22	/r/	real , marry ,pray
23	/j/	yes ,beauty ,few
24	/w/	wet ,swim ,away

Pure Vowels

25	/i:/	heel,see , machine
26	/ɪ/	list ,hill , minute
27	/e/	ate, dress,sentiment
28	/æ/	bat ,fact , action
29	/ɑ:/	dark ,father ,fast
30	/ɒ/	lock ,cot , wash
31	/ɔ:/	fall, cord, all
32	/ʊ/	look,should ,pull
33	/u:/	fool, wound, group
34	/ʌ/	luck , cut, couple
35	/ə/	attend ,pilot ,colour
36	/ɜ:/	purse ,girl , third

Diphthongs

37	/eɪ/	eight, paper,sail
38	/aɪ/	rice, like ,white
39	/ɔɪ/	toy,oil, hoist
40	/əʊ/	snow, close, low

41	/aʊ/	loud, doubt, town
42	/ɪə/	year, fear, fierce
43	/eə/	hair, stare, bare
44	/ʊə/	cure, insurance, pure

Phonetics, Phonology and Phoneme:

Linguistics is a systematic study of language. Phonetics is a branch of linguistics. It deals with the production, transmission and reception of the sounds of human speech. On the other hand, phonology is a branch of linguistics which deals with the sound system of a particular language. The selection and organization of the speech sounds in that particular language constitutes the phonology of that language. It also studies how the phonemes are combined into syllables and how the prosodic features of length, stress and pitch are organized into certain patterns. It is notable that phonology of one language can be different from the phonology of other languages.

A word can be divided into smallest linguistic units which are called as 'Phonemes'. Every language has certain number of distinctive sound units which are called 'phonemes'. Thus, a phoneme is a minimal distinctive sound unit of language. For example, the word 'bat' can be divided into the smallest linguistic units such as /b/, /æ/ and /t/. These are the smallest linguistic units which cannot be divided further. They are distinctive because they are the smallest units in the sound system of a language which can be used to differentiate meanings from one another. This means that when one phoneme is substituted by another, it produces change in meaning. Thus, /b/ and /k/ are distinctive sound units because if /b/ is substituted by /k/ in the word 'bat' /bæt/, it produces a change of meaning, it becomes a different word 'cat' /kæt/. In this way, /p/, /b/, /t/, /d/, /n/..... etc. are distinctive sound units and hence they are different phonemes.

Minimal Pairs

A 'minimal pair' is a pair of words which differ only in one sound segment. The difference in the sound can be at the initial position, in the medial or in the end of the pair. For example:

- 1) beat /bi:t/ meat/mi:t/ - /b/, /m/
- 2) bat /bæt/ bet /bet/ - /æ/, /e/
- 3) cut /kʌt/ cup /kʌp/ - /t/, /p/

In the same way a series of words like *pet, bet, get, set, met, net, wet* supply us with sounds which are distinctive simply by a change in the first element of the sound sequence. It gives us a list of English phonemes like /p/, /b/, /g/, /s/, /m/, /n/, /w/ which are different phonemes.

Allophones

Allophones are positional variants of phonemes. For example, the phoneme /k/ in word 'key' and 'car' at the initial position are phonetically different. The phoneme /k/ in 'key' can be fit to be a forward articulation as it is pronounced near the hard palate; whereas the phoneme /k/ in 'car' is pronounced at the back of tongue. This difference or variation in the pronunciation of the same phoneme is called 'allophone'. In the same way, the pronunciation of the phoneme 'k' in 'kill' is with a strong puff of air or aspiration which is represented by the symbol /h/ on the top of /k/. Thus 'kill' is written as [k^hɪl]. On the other hand, the phoneme /k/ in the word 'skill' is unseparated. Thus, /k^h/ in 'kill' and /k/ in 'skill' are the variants. Phonemes are enclosed in slant lines (/.../) while allophones are enclosed in square brackets. For Example, [p^h], [k^h] and [t^h] are allophones of the phonemes /p/, /k/ and /t/ respectively.

Phoneme	Allophone
/p/	[p ^h] [p]
/t/	[t ^h] [t]
/k/	[k ^h] [k]

Allophones do not bring change in meaning of a word.

Check your progress- I

Q.1. Complete the following sentences by choosing the correct alternatives:

1. There are phonemes in English.
a) 26 b) 28 c) 44 d) 24
2. is the smallest unit of language.
a) Phoneme b) Morpheme c) Antonym d) Synonym
3. deals with the production, transmission and reception of the sounds of human speech.
a) Aesthetics b) Phonetics c) Mathematics d) Phonics
4. A minimal pair is a pair of words which differs from each other only in -----
----- sound segment.
a) one b) two c) three d) four
5. ----- are variants of phonemes.
a) Sounds b) Symbols c) Words d) Allophones

2.2.2 Section 2 : Speech Mechanism

The speech sounds are produced by human beings using a specific mechanism of body. It is called speech mechanism. We need an air-stream for the production of speech. The air that we breathe out is modified into speech sounds with the help of the actions of speech organs. The respiratory lung air that is the air that we breathe out is the basis for the articulation (production) of most speech sounds. Hence, the air-stream involving lung- air is called 'pulmonic air stream'. The sounds which are produced when the air is breathed out are called 'egressive' sounds. The sounds which are produced when the air is taken in are called 'ingressive' sounds. All the English speech sounds are produced when the air from the lungs is breathed out. Therefore all the English speech sounds are 'pulmonic egressive' sounds.

The air that we breathe out undergoes important modifications in the upper stages of the respiratory tract before it acquires the quality of a speech sound. The respiratory system consists of the lungs, the muscles of the chest and the windpipe which is called trachea. The lungs are the spongy bodies which are made up of small sacs called 'alveoli'. In these sacs the blood is cleaned of its carbon- dioxide and

provided with fresh oxygen from the outer air. The air is supplied to alveoli by small tubes which are called 'bronchioles'. The bronchioles come together into two large tubes which are called 'bronchi'. The bronchi joins the trachea or the windpipe. It is through the windpipe the breathed air passes through the larynx which contains 'vocal cords'. The vocal cords are movable. They can come closer to each other or can be held apart. When the vocal cords are loosely held together, there is a little gap between them and the air passes through this gap making them vibrate. Such sounds are called as 'voiced' sounds. For example /b/, /d/, /g/, /z/ etc. When the vocal cords are held wide apart, they do not vibrate while sounds are produced. Such sounds are called 'voiceless' sounds. e.g. /p/, /t/, /k/ etc.

When the air stream passes through larynx it is further modified by the upper cavities of the pharynx, the mouth and the nasal cavity. The air from the lungs comes at the soft palate. The soft palate can be raised or lowered. The lowering or raising of the soft palate decides whether the sound is 'nasal' or 'oral'. When the soft palate is raised the air cannot enter the nasal cavity and it goes only through the mouth cavity. Such sounds are 'oral' sounds. When the soft palate is lowered, the air passes through the nasal cavity. Such sounds are 'nasal' sounds.

The oral or mouth cavity contains the speech organs like the tongue, the palate, the teeth and the lips. The shape of the mouth cavity depends on the position of the tongue. The roof of the mouth which is called 'palate' is divided into three parts-the alveolar or teeth ridge which is located just behind the upper front teeth, the hard palate and the soft palate and the end of the palate is called the 'uvula'. The tongue is the most flexible and movable organ of speech. It is divided into four parts for the sake of descriptive convenience- the back, the front, the blade and the tip. The tongue comes in contact with the parts of the palate and certain sounds are produced. Though the teeth are not active they are used in the production of the sounds like /θ/, /ð/.

The lips constitute the final orifice/opening of the mouth cavity. The lips can be held close together or far apart. The lips are used in the production of consonant sounds as well as vowel sounds. Some consonant sounds like /p/, /b/ are produced when the lips are closed tightly with complete obstruction to the air-stream. Some speech sounds like /f/, /v/ are produced when the lower lip comes closer to the upper front teeth and the air-stream passes with friction. Besides, in the production of vowel sounds, the lips are rounded, unrounded or at the neutral position. For example, in the production of the vowel sound /ɒ/ the lips are rounded, in the

2.2.3Section 3: Organs of Speech

The air released from the lungs when we breathe out helps to produce speech sounds. With the help of various organs in our body which convert it into speech sounds. These organs are known as 'organs of speech'. The following diagram (Fig. 1 Source: *A Textbook of English Phonetics for Indian Students* .P.5)is a vertical cross-section of human speech organs.

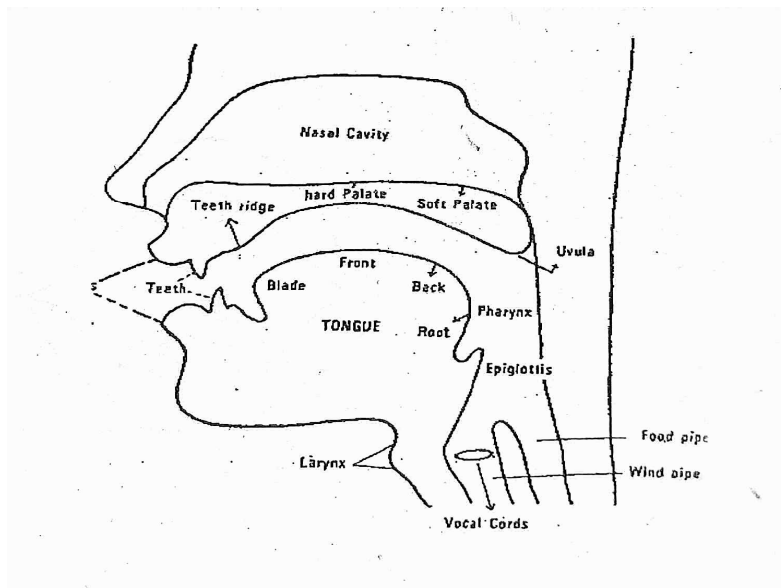


Fig.1: Organs of Speech

The organs of speech include the vocal cords, the palate, the tongue, the teeth and the lips.

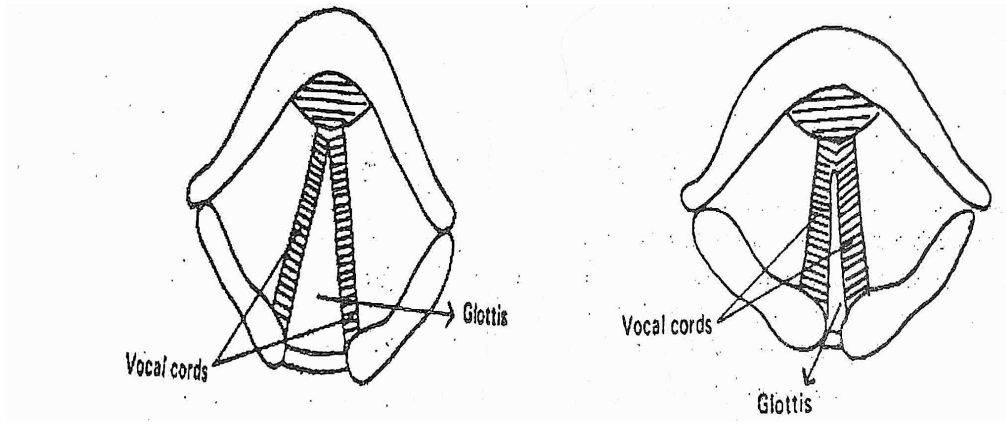
Let us see how these speech organs work in the production of sounds.

The vocal cords:

The air which is released by the lungs comes up through the wind pipe or trachea and arrives at the larynx. Larynx is situated at the top of windpipe. The larynx contains a pair of lip-like small bands of elastic tissue lying opposite to each other across the air passage. These are vocal cords. They are flexible. They can be moved closer to each other or held apart. The space between the vocal cords when they are drawn apart is called 'glottis'. Through it the air passes freely. This is the usual position when we breathe in and out

Fig. 2 (a) Fig. 2 (b)

Vocal cords held apart Vocal cords kept loosely together



In the production of speech sounds like /t/, /p/, /s/, /f/ etc. the vocal cords are held wide apart and the air from the lungs passes through them easily without vibration. Such 'non-vibrated' sounds produced with a wide open glottis are called 'voiceless' sounds. (See figure 2 (a))

When we produce speech sounds like /b/, /d/, /g/, /dʒ/, /m/ etc. the vocal cords are loosely held together with a narrow gap and the air from the lungs passes with pressure through this narrow gap causing the vocal cords vibrate and thus vibrated speech sounds are produced. Thus, the sounds produced when the vocal cords vibrate are called 'voiced sounds'. (See figure 2 (b)). In this way, the vocal cords play a very important role in the production of speech sounds.

The palate:

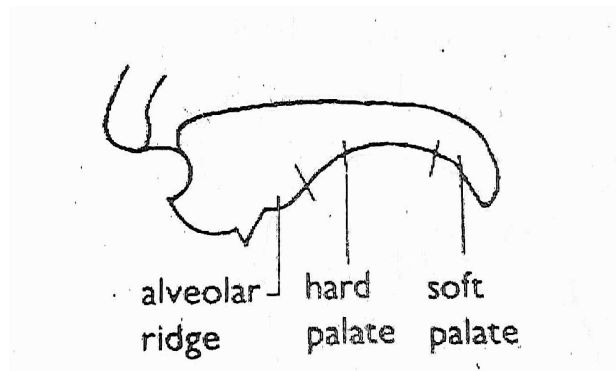


Fig. 3: The Parts of Palate

The palate, as shown in the above figure, forms the roof of the mouth and separates the mouth cavity from the nasal cavity. (See Fig. 3). It is divided into three parts for the sake of convenience. The hard, convex bony part or raised part adjacent to the upper front teeth is called the ‘teeth ridge’ or ‘alveolar ridge’. The hard and bony concave area behind the teeth-ridge is called the ‘hard palate’. There is a soft portion behind the hard palate, it is the ‘soft palate’. The fleshy finger like structure at the end of the soft palate is called the ‘uvula’.

The soft palate is movable as it can be raised or lowered. If raised, it touches the back wall of the pharynx and the passage into the nose is closed. It forms a firm contact with the rear wall of the mouth and this stops the breath from entering the nasal cavity. The air goes through mouth cavity only. Such sounds are called ‘oral sounds’ e.g. /p/, /b/, /s/ etc. If the soft palate is lowered, the passage into the nose opens and the air from the lungs passes through the nasal cavity. Thus, the sounds during the production of which the air escapes only through the nose/ nasal cavity are called ‘nasal sounds’ e.g. /m/, /n/ and /ŋ/.

Apart from this raising or lowering of the soft palate the whole of the palate (including the alveolar ridge, hard palate and soft palate) is used to produce certain sounds. The alveolar ridge is used when we produce sounds like /t/, /d/, /s/, /z/, /n/ and /l/. The hard palate is used in the production of /tʃ/, /dʒ/, /ʃ/, /ʒ/ and /j/. The soft palate is used in the production of sounds like /k/, /g/, /ŋ/.

The Tongue:

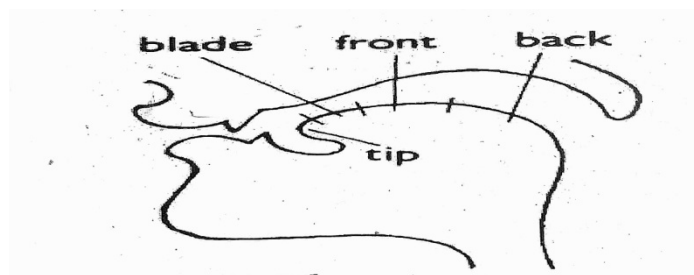


Fig. 4: The Parts of the Tongue

The tongue is the most important speech organ as it has greater variety of movement. It has a number of different positions during the production of various sounds. Although the tongue has no natural divisions like the palate, for the sake of

convenience, it is divided into four parts- the tip, the blade, the front and the back. The extreme edge of the tongue is called the 'tip'. The part immediately after the tip is called 'blade'. Both the 'tip' and 'the blade' lie under the alveolar ridge during resting position. Both these parts of the tongue are particularly movable and can touch the lips, the teeth, the alveolar ridge and the hard palate. The 'front' of the tongue lies under the hard palate. Beyond the front is the 'back' of the tongue, which lies opposite the soft palate when the speech organs are at rest. These various parts of the tongue are used to produce different speech sounds.

The Teeth:

The teeth, in fact, are not active articulators. They are the passive articulators. The upper front teeth and the lower front teeth are useful in the production of speech sounds. But the two upper front teeth are used in English to produce speech sounds like /θ/ 'thin' or /ð/ in 'they'.

The Lips:

The lips can take various different positions. Both the lower and upper lips play their part to produce certain consonant and vowel sounds. The two lips are brought together so that they completely block or obstruct the mouth and then suddenly released and certain sounds like /p/ in 'put', /b/ in 'bill' or /m/ in 'meet' are produced. The lower lip is drawn inward and slightly upward to touch the upper front teeth in the production of sounds like /f/ in 'fan' or /v/ in 'van'.

The lips play an important part in the production of some vowel sounds. In the production of some vowel sounds like /ʊ/ in 'look', /ɒ/ in 'lock', etc. the lips are in round shape. This is called 'lip rounding'. The lips are said to be either rounded or unrounded as in the production of vowel sounds like /æ/ in 'bat', /e/ in 'net', /ɪ/ in 'list', etc. The lips with regular position at the time of rest is called 'neutral'.

Check your progress- III

Q.1 Complete the following sentences by choosing the correct alternatives:

1. A pair of lip-like small bands of elastic tissue lying opposite to each other in the larynx are called
a) vocal cords b) palate c) uvula d) lungs
2. Vibrated speech sounds are produced when vocal cords are

- a) loosely held together b) held wide apart
 c) rounded d) unrounded
3. In the articulation of nasal sounds, the is lowered and the air passes through the nose.
 a) hard palate b) tongue c) upper lip d) soft palate
4. of the tongue lie under the alveolar ridge during resting position.
 a) Tip b) Blade c) Both the tip and blade d) Back
5. are passive articulators.
 a) The lips b) The tongue c) The vocal cords d) The teeth
6. In the production of some vowel sounds like /ʊ/, /ʌ/ the lips are in shape.
 a) round b) unrounded c) neutral d) none of these

2.2.4 Section 4: Description of sounds with three term labels

In the beginning of this module you have studied that in English there are 44 speech sounds. These sounds are broadly divided into two categories- consonants and vowels. This division is based on whether the obstruction is created to the air-stream during the production of sound or not. The English language has 24 consonant sounds and 20 vowel sounds. The vowel sounds are further divided into two groups- pure vowels and diphthongs. A vowel sound is a sound in the production of which the air passes over the tongue without audible friction in the mouth while a diphthong is a union of two vowels within a syllable.

I) Description of consonant sounds

Consonant sounds are those sounds in the production of which the obstruction is created to the air-stream. These sounds are generally made by a definite interference of the speech organs with the air stream. During the production of consonant sounds the air released from the lungs escapes through mouth with friction.

The 24 consonant sounds in English are -

/p, /b, /t, /d, /k, /g, /tʃ, /dʒ, /f, /v, /θ, /ð, /s, /z, /ʃ, /ʒ, /h, /m, /n, /ŋ, /l, /r, /j, /w/

The description of these consonant sounds involves:

- a) The State of Glottis(voiced or voiceless consonant sounds)
- b) Place of articulation
- c) Manner of articulation

Let us study these points in a detailed way:

a) The State of Glottis (Voiced or Voiceless consonant sounds) :-

You have studied in speech mechanism that whether the consonant sounds are voiceless or voiced depends upon the state of glottis in the vocal cords. In the production of some consonant sounds, the vocal cords are kept loosely together and therefore they vibrate while producing sounds. Such sounds are called ‘Voiced sounds’. In the production of some consonant sounds, the vocal cords are kept apart and the glottis is widely open. Hence, they do not vibrate. Such sounds without vibration are known as ‘Voiceless’ sounds. Thus, the 24 consonant sounds are divided into voiceless and voiced in a following way:

Voiceless Consonant sounds -/p/, /t/,/k/,/f/,/tʃ/,/θ/, /s/,/ʃ/ and/h/

Voiced consonant sounds- /b/,/d/,/g/,/dʒ/,/v/,/ð/,/z/,/ʒ/, /m/, /n/,/ŋ/,/l/,/r/,/j/ and/w/

b) Place of Articulation:-

Consonants can be described according to their places of articulation which refers to the organs of speech used for the production of the consonant sounds. Consonant sounds can be classified according to the place of articulation as follows:

i) Bilabial: The sounds are articulated by the two lips. The two lips (the lower and the upper lip) are used in the production of the sounds. e. g./p/, /b/, /m/, /w/.

ii) Labio-dental:These sounds are articulated by the active articulator- lower lip and the passive articulator- the upper front teeth. e.g. /f/, /v/.

iii) Dental: These sounds are articulated by the tip of the tongue which is an active articulator and the upper front teeth which is a passive articulator. e. g. /θ/,/ð/

iv) Alveolar:The tip or the blade of the tongue and the teeth ridge are the articulators in the production of these sounds. e. g./t/, /d/, /n/, /l/, /s/, /z/.

v) Post –alveolar: The sound is articulated by the tip of the tongue against the back of the teeth ridge. e .g. /r/

vi) Palato –alveolar: The tip or blade of the tongue is articulated against the teeth ridge .Simultaneously the front of the tongue is raised towards the hard palate. e.g. /tʃ/, /dʒ/, /ʃ/, /ʒ/.

vii) Palatal: The front of the tongue is raised towards the hard palate. e.g./j/.

viii) Velar: The back of the tongue is raised against the soft palate which is the passive articulator. e.g. /k/, /g/, /ŋ/.

ix) Glottal: The sound is produced by an obstruction and narrowing between the vocal cords. Glottal sounds are produced at the glottis of vocal cords. e.g. /h/.

c) Manner of articulation:-

It includes the stricture involved in the articulation of consonants. The term ‘stricture’ refers to the way or manner in which the passage of air is restricted by the various speech organs.The way in which the sound is articulated is called the manner of articulation. Consonants can be classified according to the manner of articulation as follows:

I) Plosive:The two articulators come together in the mouth cavity to form a complete closure of the air pressure. The air released from the lungs is blocked at this closure. Then the air is released suddenly with a slight explosive sound. Thus, the sound is produced with complete closure and sudden release. e .g. /p/,/b/,/t/,/d/,/k/, and /g/.

II) Affricatives:The speech organs in the mouth cavity come together to form a complete closure of the air passage in the mouth. The air pressure builds up at the closure. Then the organs are separated slowly so that friction is heard. Thus, affricate sounds are produced with a stricture of complete closure and slow release. e .g. /tʃ/, /dʒ/.

III) Fricatives: The two speech organs come close to each other but there is a narrow passage between them. The air passes through this narrow passage with friction. Thus, fricatives are the sounds that are articulated with a structure of close approximation. e.g. /f/,/v/,/θ/,/ð/,/s/,/z/,/ʃ/,/ʒ/,/h/.

IV) Nasal: The two organs come together to form a complete closure in the mouth. Then the soft palate is lowered. Therefore the air escapes through the nose cavity. Thus, the sounds that are articulated with a stricture of complete oral closure are called nasals. e.g. /m/,/n/,/ŋ/

V) Laterals: At some point in the mouth there is a closure or contact in the middle but the air escapes through the sides of the contact. Thus, the lateral sounds are articulated with a complete closure in the centre of the vocal tract but with the air escaping along the sides of the tongue without any friction. e.g. /l/

VI) Frictionless continuant or Rolled: There is no closure or friction but the sound has a consonantal function. The sound is produced with a stricture of open approximation. e.g. /r/

VII) Semi Vowels: The sounds have a vowel glide with a consonantal function. e.g. /j/,/w/,

Consonant chart

Place →	Bilabial		Labio-dental		Dental		Alveolar		Post – Alveolar	Palato – Alveolar		Palatal	Velar		Glottal
	Vl	Vd	Vl	Vd	Vl	Vd	Vl	Vd	Vd	Vl	Vd	Vd	Vl	Vd	Vl
Manner ↓															
Plosive	p	b					t	d					k	g	
Affricate										tʃ	dʒ				
Fricative			f	v	θ	ð	s	z		ʃ	ʒ				h
Nasal		m						n						ŋ	
Lateral								l							
Frictionless continuant									r						
Semi- vowel		w										j			

Vl – Voiceless

Vd – Voiced

Three Term Labels-Consonants:

Consonants are described using three term labels. The three terms refer to the state of glottis (voiced or voiceless sounds), the place of articulation and the manner of articulation which you have studied above. The three term labels of consonant sounds are:

/p/ - voiceless, bilabial, plosive

/b/ - voiced, bilabial, plosive

/t/ - voiceless, alveolar, plosive

/d/ - voiced, alveolar, plosive

/k/ - voiceless, velar, plosive

/g/ - voiced, velar, plosive

/f/ - voiceless, labio-dental, fricative

/v/ - voiced, labio-dental, fricative

/θ/ - voiceless, dental, fricative

/ð/ - voiced, dental, fricative

/s/ - voiceless, alveolar, fricative

/z/ - voiced, alveolar, fricative

/ʃ/ - voiceless, palate-alveolar, fricative

/ʒ/ - voiced, palate-alveolar, fricative

/h/ - voiceless, glottal, fricative

/tʃ/ - voiceless, palate-alveolar, affricate

/dʒ/ - voiced, palate-alveolar, affricate

/m/ - voiced, bilabial, nasal

/n/ - voiced, alveolar, nasal

/ŋ/ - voiced, velar, nasal

/l/ - voiced, alveolar, lateral

/r/ - voiced, post-alveolar, frictionless continuant/rolled

/j/ -voiced, palatal, semi-vowel

/w/ -voiced, bilabial, semi-vowel

II) Description of vowel sounds

Vowel sounds are produced by voiced air passing through different mouth shapes. A vowel sound can be defined as a voiced (vibrated) sound in the production of which the air released from the lungs passes over the tongue without audible friction in the mouth. The air is not disturbed or cut off at any point. There is no closure of the air passage and no narrowing that would cause friction. There are two types of vowels in English: pure vowels/ monophthongs and mixed vowels/ diphthongs.

The 12 pure vowel sounds in English are-

/i:/, /ɪ/, /e/, /æ/, /ɑ:/, /ɒ/, /ɔ:/, /ʊ/, /u:/, /ʌ/, /ə/, /ɜ:/

We classify the English pure vowel sounds with the help of three points.

- a) Part of the tongue that is raised (front/central/back)
- b) Height of the tongue
- c) Position of the lips (rounded/unrounded/neutral)

a) Part of the tongue that is raised:-

The part of the tongue can be raised towards the palate of the mouth. Thus, there can be raising of different parts of the tongue- front/central/back. In the production of certain vowels, the front of the tongue is raised. Such vowels are called 'front' vowels. /i:/, /ɪ/, /e/ and /æ/ are the front vowels. In the production of some vowels the back of the tongue is raised. These vowels are called 'back' vowels, which are /u:/, /ʊ/ /ɒ/, /ɔ:/ and /ɑ:/. In the production of some vowel sounds, the central part of the tongue is raised. These vowels are called the 'central' vowels. There are three central vowels in English. They are /ʌ /, /ə/ and /ɜ:/.

a) Height of the tongue:-

According to the degree of raising of the tongue, vowel sounds are positioned at/between four levels in the mouth cavity: close, half-close, half-open and open. The following diagram (Fig.4. Source: *A Textbook of English Phonetics for Indian*

Students.P.40) shows the four different tongue positions in the production of vowel sounds. These four different positions are marked in the diagram.

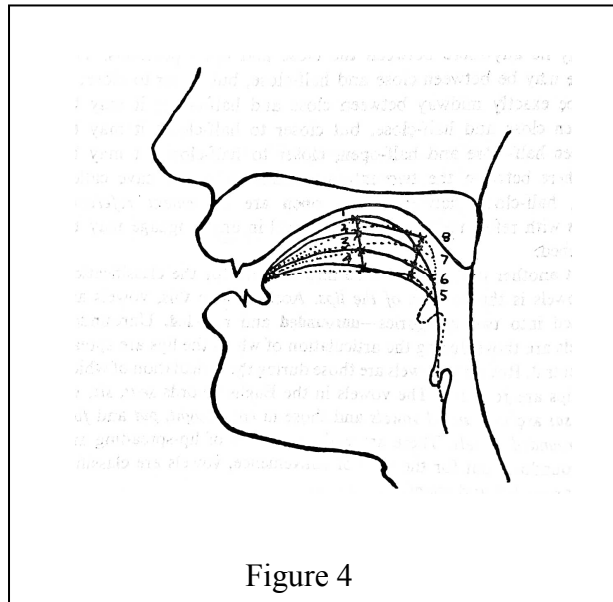
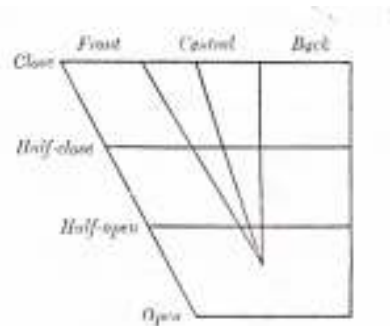


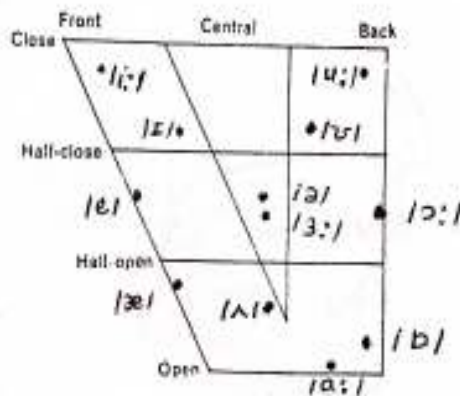
Figure 4

In the production of some vowel sounds, the tongue remains at the lowest position (see number 4). When the tongue is at the lowest position, the mouth cavity remains open. This position is called 'open' position. Here, the tongue is far away from the hard palate. In the production of some vowel sounds, the tongue is raised towards the palate. The front of the tongue is raised very close to the hard palate. (See number 1). Therefore, this position is called 'close' position. When the tongue is between the close and open position, and closer to the close position, it is called 'half-close' position (See number 2). When the tongue is between the close and open position, but closer to open position, it is called 'half-open' position (See number 3)

According to the height of the tongue and position of the lips, we get the cardinal vowel scale which is given below:



Now all the 12 vowels can be marked on the cardinal vowel scale as shown in the following diagram



b) Position of the lips (rounded/unrounded/neutral):-

You have already studied above that the lips can take various different shapes. The lips play an important part in the production of some vowel sounds. In the production of vowel sounds like /ʊ/, /u:/, /ɒ/ and /ɔ:/ the lips are in round shape. This is called 'rounded' position. In the production of vowel sounds /ɪ, i:, e, æ, ɜ:, ə, ʌ and ɑ:/ the lips are in 'unrounded' position. The lips with regular position at the time of rest are in the 'neutral' position.

Now we can describe the English vowels with the help of three terms:

- i) Part of the tongue that is raised (front/central/back)
- ii) Height of the tongue (close, half-close, half-open, open)
- iii) Position of lips (rounded/unrounded/neutral)

Now let us describe the English vowels.

1) /i: / :-

This is front vowel. During the articulation of this vowel the front of the tongue is raised towards hard palate to a position almost near close. The lips are unrounded. It can be described as a *front close unrounded vowel*.

e.g. beat/bi:t/, dream/dri:m/, free /fri:/, green/gri:n/

2) /ɪ / :-

During the production of this vowel the rear part of the front of the tongue is raised towards the hard palate, just above the half- closed position. The lips are loosely spread. It can be described as *front, just above the half close, unrounded*.

e.g. city/siti:/, effect /ɪfekt/, stick /stɪk/, build /bɪld/

3) /e / :-

This is a front vowel. During the articulation of the vowel the front part of the tongue is raised to a position between half close and half open. The lips are loosely spread. The vowel can be described as *front, between half close and half open, unrounded*.

e.g. dead /ded/, pen/pen/, sell /sel/, fresh/freʃ/

4) /æ / :-

The front of the tongue is raised slightly below the half-open position. The lips are naturally open. It can be described as *front, just below the half open, unrounded*.

e.g. back /bæk/, action /ækʃn/, mat /mæt/, tank /tæŋk/

5) /ɑ: / :-

This is a back vowel. During the production of this vowel the back of the tongue is in fully open position. The lips are neutrally open. It can be described as *back, open, unrounded*.

e.g. card /kɑ:d/, dance /dɑ:ns/, laugh /lɑ:f/, past /pɑ:st/

6) /ɒ/ :-

During the articulation of this vowel the back of the tongue is raised just above the open position. The lips are slightly rounded. The vowel is described as *back, just above the open, unrounded*.

e.g. cost /kɒst/ sorry /sɒri/
frost /frɒst/ lock /lɒk/

7) /ɔ:/ :-

This is back vowel. The back of the tongue is raised to a position between half-open and half-close. The lips are rounded. The vowel can be described as *back, between half open and half-close, rounded*.

e.g. ward /wɔ:d/ audible /ɔ:dəbl/
August /ɔ:gəst/ board /bɔ:d/

8) /ʊ/ :-

During the articulation of this sound the front part of the back of the tongue is raised towards just above half close position. The lips are rounded. The vowel can be described as *back, just above half close, rounded*.

e.g. book /bʊk/, push/pʊʃ/,
full /fʊl/, cushion /kʊʃən/.

9) /u:/ :-

During the articulation of this vowel the back of the tongue is raised very near the close position. The lips are rounded. The vowel can be described as *back, close, rounded*.

e.g. super /su:pə/ root /ru:t/
group /gru:p/ proof /pru:f/

10) /ʌ/ :-

This is a central vowel. During the articulation of this vowel the central part of the tongue is raised to a height just above the open position. The lips are neutrally open. The vowel can be described as *central, just above open, unrounded*.

e.g. cut /kʌt/ duck /dʌk/

uncle /ʌŋkl/ shut /ʃʌt/

11) /ɜ:/ :-

This is a central vowel. The central part of the tongue is raised to a height between half close and half open position. The lips are spread. The vowel can be described as *central, between half close and half-open, unrounded*.

e.g. curd /kɜ:d/ girl /gɜ:l/

person/pɜ:sən/ surface /sɜ:fes/

12) /ə/ :-

This is a central vowel. The central part of the tongue is raised just below half-open position. The vowel can be described as *central, just below half-open, unrounded*.

e.g. about /əbʊt/ father /fɑ:ðə/

ignorant /ignərənt/ human /hju:mən/.

Three Term Labels-Vowels:

We can describe the vowels using three term labels as follows:

- 1) /i:/ :- front, close, unrounded
- 2) /ɪ/ :- centralised front, just above the half-close, unrounded
- 3) /e/ :- front, between half close and half open, unrounded
- 4) /æ/ :- front, just below the half-open, unrounded
- 5) /ɑ:/ :- back, open, unrounded
- 6) /ɒ/ :- back, just above open, rounded
- 7) /ɔ:/ :- back, between half-open and half close, rounded
- 8) /ʊ/ :- back, just above half close, rounded
- 9) /u:/ :- back, close, rounded
- 10) /ʌ/ :- central, just above open, unrounded
- 11) /ɜ:/ :- central, between half-close and half-open, unrounded

12) /ə/:- central, just below half-open, unrounded

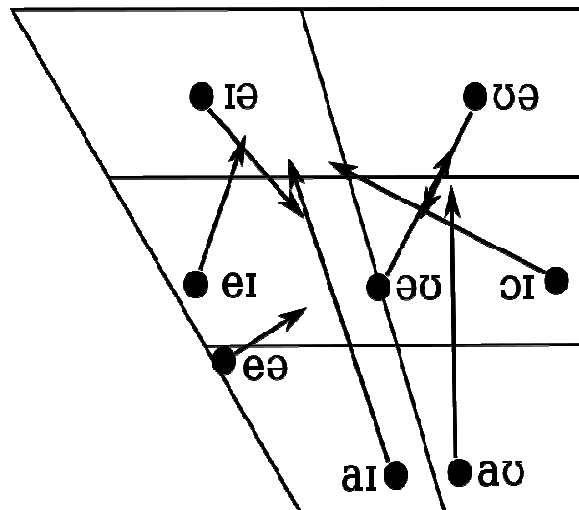
III) Description of Diphthongs/ Mixed vowels:

Diphthongs are vowel glides within a syllable. In the production of the diphthong sound, the tongue begins from a position required for the production of one vowel and moves towards another vowel within a single syllable. In diphthongs most of the length and stress is given to the first element (vowel). Thus, diphthong sounds are made up of the combination of two pure vowels where the glide begins at one element and moves towards another. That is why diphthongs are also called mixed vowels.

There are eight diphthongs in English. They are:

/eɪ/, /aɪ/, /ɔɪ/, /əʊ/, /aʊ/, /ɪə/, /eə/, /ʊə/

The following diagram represents the diphthongs in English



(Source:

https://upload.wikimedia.org/wikipedia/commons/d/da/RP_English_diphthongs_chart.svg)

Now let us describe the diphthongs in English

1) /eɪ/ :-

13) During the articulation of this diphthong the glide begins from /e/ (front, between half-open and half-close, unrounded) and moves towards RP /ɪ/ (front, just above half-close, unrounded). The lips are spread.

e.g. play/pleɪ/ table/teɪbl/
 great/greɪt/ waist /weɪst/

2) /aɪ/:-

During the articulation of this diphthong the glide begins from/a/ (front, open, unrounded) and moves towards RP /ɪ/(front,just above half-close, unrounded). The lips are neutral at the beginning and become loosely spread towards the end..

e.g. bright/braɪt/ white /waɪt/
 silence/saɪləns/ like /laɪk/

3) /ɔɪ/ :-

The glide for this diphthong begins at /ɔ/ (back, open and half-open,rounded) and moves towards RP /ɪ/(front,just above half-close, unrounded). The lips are rounded in the beginning and loosely spread at the end.

e.g. boil/bɔɪl/ point /pɔɪnt/
 moist/mɔɪst/ voice /vɔɪs/

4) /əʊ/:-

During the articulation of this diphthong the glide begins at /ə/(central, between half-close and half-open,unrounded) and moves towardsRP /ʊ/ (back, just above half close, rounded). The lips are neutral in the beginning and rounded at the end.

e.g. note /nəʊt/ home /həʊm/
 snow/snəʊ/ close /kləʊz/

5) /aʊ/:-

During the articulation of this diphthong the glide begins from /a/(back, open, unrounded) and proceeds towards RP/ʊ/ (back, just above half close, rounded). The lips are neutral in the beginning and rounded at the end.

e.g. house /haʊs/ found /faʊnd/
 about /əbaʊt/ mouth /maʊθ/

6) /ɪə/:-

During the articulation of this diphthong the glide begins from /ɪ/ (front, just above half-close, unrounded) and moves towards R.P./ə/(central, between half-close and half-open, unrounded). The lips are spread during the articulation of both the elements.

e.g. cheer /tʃɪə(r)/, period /pɪəriəd/, ear /ɪə/, clear /klɪə/

7) /eə/:-

During articulation of this diphthong, the glide begins from /e/(front, between half-open and half-close, unrounded) and moves towards RP /ə/(central, between half-close and half-open, unrounded). The lips are neutral throughout.

e. g. aeroplane /eərəpleɪn/ chair /tʃeə(r)/
dairy /deəri:/ share /ʃeə(r)/

8) /ʊə/:-

During the articulation of this diphthong the glide begins at /ʊ/ (back, just above half-close, unrounded) and moves towards RP /ə/(central, between half-close and half-open, unrounded). The lips are rounded in the beginning and spread towards the end.

e.g. pure /pjʊə/ insurance /ɪnʃʊərəns/
tour /tʊə(r)/ furious /fjʊəri;əs/

Three term labels- Diphthongs

Now let us describe the diphthongs with three term labels.

1) /eɪ/ :-

The glide begins from /e/ (front, between half-open and half-close, unrounded) and moves towards RP /ɪ/ (front, just above half-close, unrounded).

2) /aɪ/:-

The glide begins at /a/ (back, open and half-open, rounded) and moves towards RP /ɪ/ (front, just above half-close, unrounded).

3) /ɔɪ/:-

The glide starts at /ɔ/ (back, open and half-open, rounded) and moves towards RP /ɪ/ (front, just above half-close, unrounded).

4) /əʊ/:-

The glide begins at /ə/ (central, between half-close and half-open, unrounded) and moves towards RP /ʊ/ (back, just above half close, rounded).

5) /aʊ/:-

The glide begins from /a/ (back, open, unrounded) and proceeds towards RP /ʊ/ (back, just above half close, rounded).

6) /ɪə/:-

The glide begins from /ɪ/ (front, just above half-close, unrounded) and moves towards R.P. /ə/ (central, between half-close and half-open, unrounded).

7) /eə/:-

The glide begins from /e/ (front, between half-open and half-close, unrounded) and moves towards RP /ə/ (central, between half-close and half-open, unrounded).

8) /ʊə/ :-

This glide begins at /ʊ/ (back, just above half-close, unrounded) and moves towards RP /ə/ (central, between half-close and half-open, unrounded).

Check your progress –IV

Q. No. 1 Describe the following sounds giving three term labels:

/p/, /t/, /dʒ/, /tʃ/, /v/, /i/, /eɪ/, /aʊ/

2.2.5 Section 5: Word Transcription

As you know that in English language, there is no one to one correspondence between the letters of the alphabet and the speech sounds that they represent. One letter of the alphabet may stand for more than one sound or the same sound is represented by different letters of the alphabet. For example the alphabet 'a' can be represented in phonetic transcription in a different ways like ant /ænt/, laugh /lɑ:f/, about /əbəʊt/, etc. Phonetic transcription is a useful way to avoid limitation and to be more correct in pronunciation. Phonetic transcription is a way of writing words using

the phonetic script. For instance, the phonetic transcription of the word 'tax' is /tæks/. In the same way we can transcribe 'laugh' as /lɑ:f/, 'young' as /jʌŋ/, etc.

In phonetic transcription we transcribe the word using the standard pronunciation of the word. The standard pronunciation is also known as 'Received Pronunciation' (RP). The transcription of words is written between two slant lines (/...../) using the phonetic script. Good dictionaries like *Oxford Advanced Learner's Dictionary* of Current English (Written by A.S.Hornby) and *English Pronouncing Dictionary* (Written by Daniel Jones) etc. give standard pronunciation of words with stress.

Here are some words with phonetic transcription

action	/ækʃən/	admit	/ədmi:t/	thank	/'θæŋk/
book	/bʊk/	brave	/breɪv/	colour	/'kʌlə/
computer	/kəm'pjʊ:tə/	market	/'mɑ:kɪt/	condition	/kən'dɪʃən/
fashion	/'fæʃən/day	'deɪ/	decision	/dɪ'sɪʒən/	
academy	/ə'kædəmi/	pocket	/'pɒkɪt/	difficult	/'dɪfɪkəlt/
earth	/ɜ:θ/	permission	/pə'mɪʃən/	examination	/ɪgzæmɪ'neɪʃən/
fact	/fækt/	place	/'pleɪs/	freedom	/'fri:dəm/
garden	/'gɑ:dən/	close	/'kləʊs/	mouse	/'maʊs/
habit	/'hæbɪt/	home	/'həʊm/	impress	/ɪm'pres/
complete	/kəm'pli:t/	because	/br'kɒz/	church	/'tʃɜ:tʃ/
nation	/'neɪʃən/	job	/dʒɒb/	journal	/'dʒɜ:nəl/
mistake	/mɪ'steɪk/	person	/'pɜ:sən/	river	/'rɪvə/
habit	/'hæbɪt/	paper	/'peɪpə/	kind	/kaɪnd/
mobile	/'məʊbaɪl/	lamp	/læmp/	liquid	/'lɪkwɪd/
cricket	/'krɪkɪt/	college	/'kɒlɪdʒ/	machine	/mə'ʃi:n/

Check your progress: - V

Q. 1 Give the phonetic transcription of the following words:

Message, practice, position, powder, object (N), famous, water

2.2.6 Section 6: Word stress/Accent: primary stress

We have seen how to give phonetic transcription of the words. Now let us see syllable and word accent/stress.

The syllable:

Phoneme is the smallest unit of speech. Vowels and consonants are organized into syllables to form a word. A word is made up of one or many syllables. A 'syllable' is a natural division of a word. A syllable is formed by the natural change in glide within the word. For instance, the word 'tailor' has two pauses within word tai-lor. It means that the word 'tailor' has two syllables. Similarly the word 'population' consist of four syllables- 'po-pu-la-tion'. The most important segment in forming syllable of a word is the 'vowel'. If vowels are removed from a word 'solid' we will get /sld/ which do not form a syllable. Hence, the vowel is called the nucleus of a syllable.

The words containing only one syllable are called 'monosyllabic' words. e.g. get /get /, lamp/læmp/, root/ru:t/, etc. The words containing two syllables are called 'disyllabic' words. e.g. tailor/teɪlə(r)/, father/fɑ:ð(r)/ etc. The words containing more than two syllables are called 'polysyllabic' words. e.g. relationship/rɪleɪʃnʃɪp/, examination /ɪgzæmɪneɪʃən/ etc.

Word stress/Accent: primary Stress:

The syllable which is articulated with greater breath force or muscular force carries stress or accent. In other words, the syllable that is pronounced more prominently than the other or others in the same word is known as accented or stressed syllable. In English, there are several words consisting of more than one syllables. For example, the word 'examination' has five syllables- /ɪg-zæ-mɪ-neɪ-ʃən/. The forth syllable /neɪ/ is pronounced with maximum prominence. In a polysyllabic word the syllable on which pitch movement or change takes place is said to have primary stress/accent. It is also known as tonic accent. For example, in a word 'bicycle' the pitch movement is on the first syllable 'bi'. Primary stress or accent is

marked with a vertical bar '/' above and in front of the syllable to which it refers. Let us study some examples.

ad'vantage, 'calculate, de'sire, 'light

exami'nation, 'offer, 'sclupture, 'educate

It is difficult for non-native speakers of English to place the accent on the correct syllable. The second difficulty about the English word-accent is a shift in the accented syllable eg. a'cademy (N) and aca'demic (Aj).

To overcome these difficulties, here are some general guidelines about placing primary stress/accent correctly.

1) Compound words:

A compound word is a word composed of two separate words. In compounding words the primary stress/accent is generally on the first element.

e.g. 'raincoat, 'goldsmith, 'lifeboat

'schoolbus, 'postman, 'crossword

However, there are a few compound words ending with '-ever' or '-self' in which the second element receives primary stress

e.g. him'self, what'ever, when'ever

There are other compound words where both the elements are stressed but primary stress is given on the second element.

e.g. home'made, country'house, good-'looking

2) Conversion words :

There are a number of words of two syllables in which the stress pattern depends on the class of word. When the word is a noun or an adjective the stress is on the first syllable and when the word is a verb, the stress is on the second syllable

e.g.	Word	noun or adjective	verb
	absent/'æbsənt//əb'sənt/		
	object/'ɒbdʒɪkt/	/əb'dʒəkt/	
	perfect/'pɜ:fɪkt//	/pə'fækt/	

produce/'prɒdju:s/ /prə'dju:s/

- 3) Words with weak prefixes are stressed on the root and not on the prefixes.

e.g. a'lone, a'cross, be'cause,

- 4) The inflexional suffixes – *ed*, *s/es* and *ing* do not affect the stress or accent

e.g. -s/es 'match 'matches

-ed sub'mit sub'mited

-ing 'reason 'reasoning

- 5) The derivational suffixes – *age*, *ance*, *en*, *er*, *ess*, *ful*, *hood*, *ice*, *ish*, *ive*, *less*, *ly*, *ment*, *ness*, *or*, *ship*, *ter*, *ure* and *zen* do not affect the accent. Such words do not change stress in spite of addition of these suffixes.

-age 'drain drainage

'cover 'coverage

'foot 'footage

-ance a'ppear a'pearance

per'form per'formance

'clear 'clearance

-en 'dark 'darken

'bright 'brighten

'fright 'frighten

-er 'read 'reader

be'gin be'ginner

'fight 'fighter

-ess 'actor 'actress

'waiter 'waitress

'tiger 'tigress

-ful	'beauty	beautiful	
		'faith	'faithful
		'truth	'truthful
-hood		'brother	'brotherhood
'child	'childhood		
'widow	'widowhood		
-ice		'coward	'cowardice
-ish	'fool	'foolish	
'green	'greenish		
'child	'childish		
-ive	'tract	at'tractive	
'act	'active		
	per'mit (V)	per'missive	
-less		'aim	'aimless
		'care	'careless
		'colour	'colourless
-ly	'certain		'certainly
		'day	'daily
	'true	'truly	
-ment	'manage	'management	
		'arrange	'arrangement
		'settle	'settlement
-ness		'bitter	'bitterness
		'good	'goodness
		'lovely	'loveliness

-or	col'lect	col'lector
	'act	'actor
	'fact	'factor
-ship	'author	'authorship
	'friend	'friendship
	'scholar	'scholarship
-ter	'laugh	'laughter
-zen	'city	'citizen

- 6) Words ending with the suffixes – ion, ity, ic, ical, ically, ial, ian, ious take the stress on the syllable preceding the suffix

-ion	'prepare	prepa'ration
	'destiny	desti'nation
	e'xtend	ten'sion
-ic	'hero	he'roic
	'patriot	patrio'tic
	'sympathy	sympa'thetic
-ical	bi'ology	bio'logical
	psy'chology	psycho'logical
	e'lectrice	lectrical
-ous	'labour	la'borious
	'courage	cou'rageous

- 7) Words with the suffix – ee, eer, aire etc. take the stress on the suffix.

em'ploy	emplo'yee
'engine	engi'neer
'million	millio'nair

8) Polysyllabic words ending with suffix ‘-ity’ take the stress/accent on the third syllable from the end.

e.g. mo'rality, ca'pacity, oppor'tunity, elec'tricity.

9) Words ending with the suffixes al, ally, affect the stress pattern.

e.g. 'origin - o'riginal

'autumn - au'tumnal

Now, let us see some more words and their primary stress/accent.

Apology/ə'pɒlədʒi:/ international /ɪntə'næʃənəl/

backlog /'bæk'lɒg/ present (N) /'prezənt/

object (V) /ə'bdʒekt/ contact (N) /'kɒntækt/

beaker /'bi:ke(r)/ beautiful /'bju:təfəl/

bouquet /'bu:'keɪ/ alone/ə'ləʊn/

cement/sɪ'ment/ chalkboard /'tʃɔ:kbɔ:d

prevention/prɪ'venʃən/ application /æplɪ'keɪʃən/

entry /'entri/ estate/'ɪsteɪt/

private/'praɪvɪt/breakfast/'brekfəst/

circular /sɜ:kjələ/ advice/əd'vaɪs/

faithful /'feɪθfəl/contradiction /kɒntrə'dɪkʃən/

interest /'ɪntrəst/measure/'meʒə/

commerce/'kɒmɜ:s/ everywhere /'evri:hwɛə/

finger /'fɪŋge/ ground /'grəʊnd/

journey /'dʒɜ:ni:/ satisfaction /sætɪs'fækʃən

Check your progress- VI

Q.1 Mark the following words with the primary stress /accent:

footprint, perfect (V), solid, factory, faceless, target

2.3 Summary

Language is a system of conventional oral and written signals. We use a number of different speech sounds while speaking English. These speech sounds are called phonemes and the study of these speech sounds is called Phonology. A phoneme is a minimal distinctive sound unit of language. While 'minimal pair' is a pair of words which differ only in one sound segment. The variants in a phoneme is allophones. We have also studied the concepts of phonetics and phonology. Phonetics deals with the production, transmission and reception of the sounds of human speech while phonology deals with the sound system, as well as different patterns of sounds in a particular language. You have also studied how speech mechanism works. The organs which are used for the production of speech sounds are called organs of speech. The speech organs like the vocal cords, the palate, the tongue, the teeth, the lips are active articulators. You have studied in detail the description of speech sounds with three term labels as well as phonetic transcription of words. A word is made up of one or many syllables. A 'syllable' is a natural division of a word. A syllable is formed by the natural change in glide within the word. The syllable which is articulated with greater breath force or muscular force is called stress or accent. In a polysyllabic word the syllable on which pitch movement or change takes place is said to have primary stress/accent.

2.4 Terms to Remember

1. **Phonology** : a branch of linguistics which studies the sound system of a particular language.
2. **Phoneme** : minimal distinctive sound unit of language
3. **Consonant** : sounds in the production of which the obstructions is created to the air released from lungs.
4. **Vowel** : a voiced sound in the production of which the air passes out without obstruction or friction in the mouth.
5. **Diphthong** : union of two vowel sounds where the glide begins from one position and moves towards another vowel position in the mouth cavity.
6. **Syllable** : minimum rhythmic unit of spoken language consisting of a vowel often preceded or followed by consonants

7. **Primary stress** : the syllable on which pitch movement/change takes place
8. **RP**: Received Pronunciation or standard pronunciation.

2.5 Answers to Check Your Progress

Check your progress- I

Q.1 Complete the following sentences by choosing the correct alternatives:

1. c) 44
2. a) Phoneme
3. b) Phonetics
4. a) one
5. d) Allophones

Check your progress- II

Q.1 Complete the following sentences by choosing the correct alternatives:

1. a) air
2. a) ingressive
3. a) Pulmonic egressive
4. a) Voiceless
5. d) vocal cords

Check your progress- III

Q.1 Complete the following sentences by choosing the correct alternatives:

1. a) vocal cords
2. a) loosely held together
3. d) soft palate
4. c) Both the tip and blade
5. d) The teeth
6. a) round

Check your progress –IV

Q. No. 1 Describe the following sounds giving three term labels:

/p/ - voiceless, bilabial, plosive

/t/- voiceless, alveolar, plosive

/dʒ/ - voiced, palat- alveolar, affricate

/tʃ/ - voiceless, palate-alveolar, affricate

/ɒ/ - back, just above open, rounded

/i:/ - front, close, unrounded

/eɪ/ :- The glide begins from /e/ (front, between half-open and half-close, unrounded) and moves towards RP /ɪ/ (front, just above half-close, unrounded).

/aʊ/:-The glide begins from /a/(back, open, unrounded) and proceeds towards RP/ʊ/ (back, just above half close, rounded).

Check your progress: - V

Q. 1 Give the phonetic transcription of the following words:

message /mesɪdʒ/, practice /præktɪs/, position/pəzɪʃən/

powder/paʊdə(r)/, object (N)/ɒbdʒɪkt/famous/feɪməs/

water /wɔ:tə/

Check your progress- VI

Q. 1 Make the primary stress/accent on the following words:

'footprint, per'fect (V), 'solid,

'factory, 'faceless, tar'get

2.6 Exercises

Q. 1 Give the three term label description of the sounds.

/f/, /k/, /m/, /ʌ /, /ɪ /, /eɪ/, /ɔɪ/

Q. 2 Give the phonemic transcription of the following words

Feather, unhappy, progress (N), book, culture, emotion, develop

Q. 3 Make the primary stress/accent on the following words.

analysis, bread, whoever, reason, achievement, student.

Q. 4 Write Short notes on the following

1. Phoneme
2. Vocal cords
3. Voiced consonants
4. Primary stress
5. The tongue
6. The palate
7. The lips
8. Voiced and Voiceless consonant sounds
9. Place of articulation of consonant sounds.
10. Nasal consonants
11. Three term labels of vowels
12. Fricatives

2.7 References for further study:

- 1) Balasubramanian T. *A textbook of English phonetics for Indian students*. Macmillan India Limited 1981.
- 2) Bansal R.K. and Harrisan J.B. *Spoken English for India*, Orient Longman.
- 3) O' Connor, J.D. *Better English Pronunciation*. Universal Book Stall. New Delhi.
- 4) Velayudhan S. and Mohanan K.P. *An Introduction to the phonetics and structure of English*. New Delhi: Samaiya pub Pvt. Ltd.
- 5) Jones, Daniel. *English Pronouncing Dictionary* (18th edition). Cambridge University Press, 2011.



Module III

Morphology

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3.0 Objectives

- To understand the English word-formation processes and ‘Morphology’.
- To study the terms ‘Morphs’, ‘Morphemes’ and ‘Allomorphs’.
- To identify the types of morphemes
- To analyze the structure of complex words and study the affixes, roots and stems.
- To study various word-formation processes.

3.1 Introduction:

Linguistics is the scientific study of language. In the study of language, we can study Phonology, Grammar and Semantics. Phonology is the study of sounds. Semantics is the study of meaning in all its aspects. In Grammar we study Morphology and syntax. Morphology is the study of words-formation. Syntax is the study of sentences. In linguistics, morphology is the study of words, how they are formed, and their relationship to other words in the same language. It analyzes the structure of words and parts of words, such as stems, roots, prefixes and suffixes. Morphological study enriches the knowledge of vocabulary. It is useful to understand the process of various word-formation processes.

3.2 Subject Matter – I

3.2.1 Morphology

Morphology is the scientific study of word-formation. It is one of the major components of grammar. It studies word structures, especially morphemes, which are the smallest units of language. They can be base words or components that form words, such as affixes.

Definitions of Morphology:

1. **Bloomfield:** Morphology is the study of the constructions which sound forms appear among the constituents.
2. **Dorfman:** Morphology is the study of the ways and methods of grouping sounds into sound complexes or words of definite, distinct and conventional meaning.

Morphology is the study of word-formation process. It focuses on the origin of the words, the function of prefixes and suffixes in the word-formation process. Morphology is the structure level between phonology and the syntax. This is the level of words and word-endings, to put it in simplified terms. It is what one normally understands by grammar (along with syntax). The term *morphology* refers to the analysis of minimal forms in language which are, however, themselves comprised of sounds and which are used to construct words which have either a grammatical or a lexical function.

3.2.2 Morpheme

Morphemes are minimum meaningful elements. These are regular combination of phonemes. A morpheme is a minimal grammatical system of a language. Morphemes are the distinct grammatical units which form words. A morpheme is a distinct linguistic form which is not divisible or analyzable into its constituents or smaller forms/units. If the morpheme is analyzed into smaller units, it loses its identity and it will be converted into a sequence of meaningless noises, e.g. 'dance' (dan+ce) or (da+nce). Thus analyzing morphemes is found meaningless.

Morphemes are meaningful sequences of sounds-

"A word cannot be divided into morphemes just by sounding out its syllables. A morpheme is a form (a sequence of sounds) with a recognizable meaning. Knowing a word's early history, may be useful in dividing it into morphemes, but the decisive factor is the form-meaning link." A morpheme may, however, have more than one pronunciation or spelling. For example, the regular noun plural ending has two spellings (-s and -es) and three pronunciations (/s/ as in *backs*, /z/ as in *bags*, and /ɪz/ as in *batches*). Similarly, when the morpheme *-ate* is followed by *-ion* (as in *activate-ion*), the *t* of *-ate* combines with the *i* of *-ion* as the sound 'sh' /ʃ/ (so we might spell the word 'activashun'). Such allomorphic variation is typical of the morphemes of English, even though the spelling does not represent it."

A morpheme may be monosyllabic as (cat, dog, write, sing, etc.). These words are made up of one morpheme. Such words are called as 'monomorphemic' or 'simplex' words. A morpheme may be polysyllabic as (cats, writing, singing careful, etc.). These words are made up of more than one morpheme. Such words are called 'polymorphemic' or 'complex' words.

3.2.3 Classification of Morphemes

Ronald W Langacker in his book '*Language and its Structure*' has divided morphemes into two classes: Lexical and Grammatical.

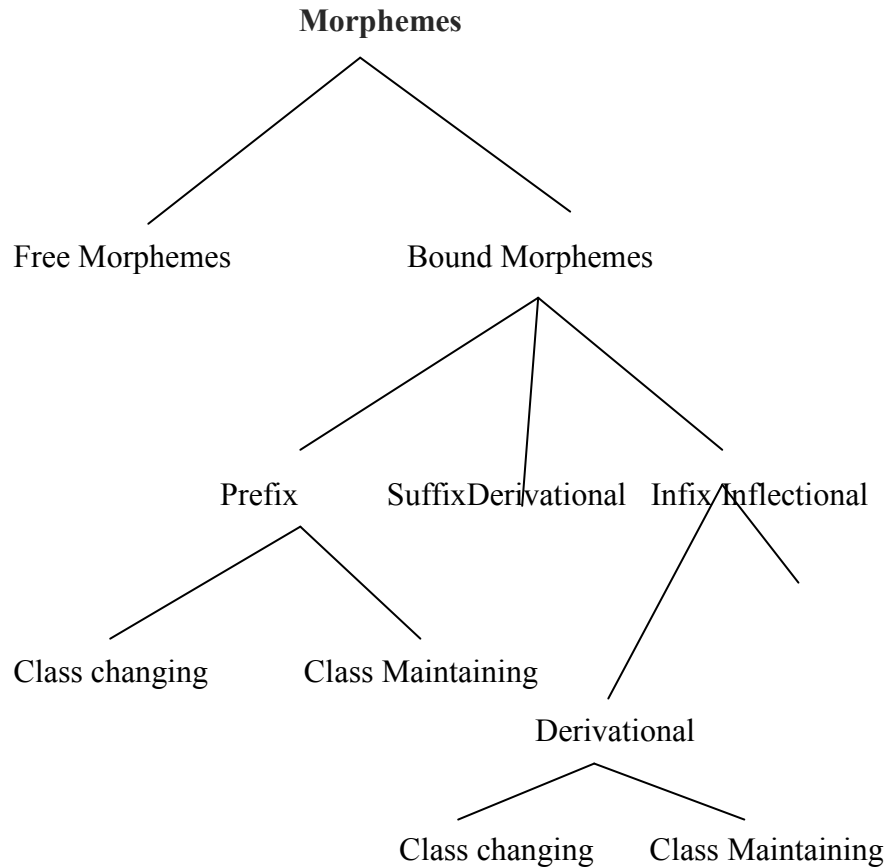
Lexical Morphemes: Lexical Morphemes are – Nouns, Verbs, Adjectives and Adverbs. They have more or less independent meaning. They change their forms frequently. Lexical morphemes are in large numbers in the language. They are open ended. So the new members are added to the lexicon quite often.

E.g. flower, rose, pluck, beautiful, rare etc.

Lexical morphemes carry the main meaning (or significance) of the word it belongs to. The morpheme 'ready' in 'readiness' carries the meaning of the word, as does 'bound' in 'unbound', or 'cran' in 'cranberry'. These morphemes, because they carry the lexical meaning, are lexical morphemes.

Grammatical morphemes: Grammatical morphemes are elements like prepositions, articles, conjunctions, forms indicating number, gender, tense or so on. They, by and large, do not change frequently. New members in their family in any language are added rather infrequently. Grammatical morphemes can become attached to lexical morphemes. The 'ing' in 'singing' carries no lexical meaning, but it does provide a grammatical context for the lexical morpheme. It tells us that the 'sing' is 'ing' (as in 'on-going'). In the same way, the morpheme '-ly' in 'timely' carries no meaning independently, but it does turn the noun 'time' into a word more frequently used as an adverb.

Types of Morpheme:



Free Morpheme: Free morphemes are those morphemes that occur alone as independent words. For example, dog, film, run, front etc. Free morphemes can be used freely as words having their own specific meaning. They always contain and sustain their meaning wherever they occur in a sentence.

Bound Morpheme:

A morpheme that doesn't have any independent meaning and can be formed with the help of free morphemes is called a bound morpheme. Bound morphemes are those morphemes that cannot occur as independent words. For example; -less, -ness, pre-, un-, en-, -ceive, -ment. In bound morphemes we can study Prefix, Suffix, and Infix. It is also called as Affixation. All affixes are examples of bound morphemes.

However, some morphemes like and, or, but etc. are grammatical morphemes yet they are independent words.

Roots

The root of a word is the part that remains after the removal of affixes. The roots are unlimited in a language because language is open-ended. Number of new words is added to the language. In a word ‘happiness’, **happy** is the root word.

Affixes

All affixes are bound morphemes because they cannot occur alone. Affixes are those bound morphemes that are naturally attached to different types of words and used to change the meaning or function of those words. For example, -ment in payment, enjoyment, entertainment en- in enlighten, enhance, enlarge, -’s in Joseph’s, Lora’s -ingin reading, sleeping, singing etc.

Affixes can be categorized into three sub-classes according to their position in the word and function in a phrase or sentence. They are:

- Prefixes
- Infixes
- Suffixes

Prefixes

Prefixes are kind of bound morphemes included at the beginning of different types of words. They are class changing and class maintaining. For example: in-, un-, sub- respectively *incomplete*, *injustice*, *unable*, *uneducated*, *subway* etc. Prefixes are affixed before the roots. They cannot occur independently.

Examples:

Negative prefixes:

Prefix	Words/examples
un-	unhappy
non-	non-smoker
in-	inactive
a-	amoral

il	illogical
mis-	misfortune
mal-	malpractice
dis-	dishonor

Prefixes of time and order

Prefix	Words/examples
Fore-	foretell
Pre-	pre-war
Post	post-war
Ex-	ex-husband
Re-	rebuild

Number prefixes

Prefix	Words/examples
Uni-	unilateral
Bi-	bilingual
Tri-	tri-colour
Multi-	multinational

Other prefixes

Prefix	Words/examples
Auto-	autobiography
Neo-	neoclassical
Pan-	pan-Indian
Proto-	prototype
Semi-	semicircle
Vice-	vice-president

Infixes

Infixes are those bound morphemes which are included within the words. They are less commonly found in English. They are used by the literary writers. For example, -bloody- in *absolutely*

Suffixes

Suffixes are those bound morphemes which are added at the end of different types of words. Suffixes are affixed after the roots or stems. Suffixes frequently alter the word class of the base.

Suffixes are of two types- 1. Derivational 2. Inflectional

Suffixes:

Suffixes are affixed after the roots or stems. Suffixes frequently alter the word class of the base.

Noun ~~noun~~ suffixes

-ster – gangster

-er – teenager

-let – booklet

-ess – waitress

-hood – boyhood

-ship – friendship

-ing – paneling

-ful – mouthful

Verb — ~~noun~~ suffixes

-er – driver

-or – actor

-ation – exploration

-ee – employee

-al – refusal

-age - drainage

Adjective — noun suffixes

-ness – happiness

-ity – sanity

Verb suffixes

-ify – simplify

-ize – popularize

Noun — adjective suffixes

-ful – useful

-less – childless

-like – childlike

-y – creamy

Adverb suffixes

-ly – happily

-ward(s) – backward(s)

-wise – weather-wise

Derivational Suffixes

Derivational suffixes are used to make new words by changing their meaning or grammatical category. In other words, derivational morphemes form new words with a meaning and category distinct through the addition of affixes.

Thus, the derivational suffix, ‘-ness’ changes the adjective, ‘kind’ into the noun, ‘kindness’. Similarly, the noun ‘care’ becomes the adjective careless. This is how derivational affixes make new words by changing their meaning or grammatical category. Derivational morphemes can be categorized into two sub-classes. They are:

1. Class-maintaining derivational affixes
2. Class-changing derivational affixes

1. Class-Maintaining Derivational Affixes

Class-maintaining derivational affixes usually produce a derived form of the same class as the root. They don't change the class of the parts of speech. For example; -ship -hood, relationship, leadership, livelihood, manhood etc.

2. Class-Changing Derivational Affixes

Class-changing derivational affixes usually produce a derived form of the other class than the class of the root. They change the class of the parts of speech. For example; -er (teach~teacher), -ish (boy~boyish), -al (nation~national), etc.

Inflectional and Derivational Suffixes:

Suffixes are of two types: 1) Inflectional suffixes

2) Derivational suffixes

1) Inflectional Suffixes:

Nouns	Adjectives and Adverbs	Verbs
i) Plural: -s, -es e.g. cats, toys, benches	i) Comparative: -er e.g. bigger, greater, taller	i) Simple Present Tense- When subject is 3 rd person singular: -s, -es e.g. plays, goes
i) Possessive: -'s e.g. sister's, father's	i) Superlative: -est e.g. smallest, fastest	i) Past Tense: -ed e.g. played, worked
		i) Present participle: -ing e.g. writing, working ii) Past participle: -en e.g. written, given

2) Derivational Suffixes:

Derivational suffixes are classified into two types; i) Class maintaining derivational suffix and ii) Class changing derivational suffix.

a) Class Maintaining Derivational Suffix: Class maintaining derivational suffixes do not change the class or the part of speech of a word to which they are attached.

e.g.

Suffix	Stem	Derived Word
-ship	friend(N)	friendship(N)
-let	book(N)	booklet(N)
-hood	mother(N)	motherhood(N)
-dom	king(N)	kingdom(N)

b) Class Changing Derivational suffix: Class-changing derivational suffixes usually produce a derived form of the other class from the root. They change the class of a word to which they are attached

Suffix	Stem	Derived Word
-ful	beauty (N)	beautiful (Aj)
-able	read (V)	readable (Aj)
-ous	virtue (N)	virtuous (Aj)
-ness	happy (Aj)	happiness (N)

Subject Matter –II

3.3.1 Allomorphs

An allomorph is a variant phonetic form of a morpheme, or, a unit of meaning that varies in sound and spelling without changing the meaning. The term

allomorph describes the realization of phonological variations for a specific environment of a morpheme.

Lyons says, “When a word is segmented into parts, these segments are referred to as morphs”. Each morph represents a particular morpheme, but each morpheme does not have a morph.

e.g. The plural noun *sheep* has one morph, but two morphemes.

First morpheme – sheep

Second morpheme – plural aspect

Morpheme	Allomorph	Example
Plural morpheme(s/es)	(-s)	Cats
	(-z)	Bags
	(-iz)	Judges
Past tense morpheme (-ed)	(-t)	Walked
	(-d)	Bagged
	(-id)	wanted

There are several irregular forms. In case of plural form of *Child-children*, *sheep-sheep*, explanation is not possible. These are morphological conditioning.

A. Zero Suffix: e.g. sheep(s) sheep(p)

Cut (present) cut (past)

B. i) Vowel mutation/replacive: A change or replacement in vowel.

e.g. find-found mouse-mice

ii) Consonant change:

e.g. send-sent wife- wives

C. Suppletion:

In suppletion, instead of a partial change in root (vowel change/ consonant change/ addition of 's'), the entire form of the root is replaced by a new form.

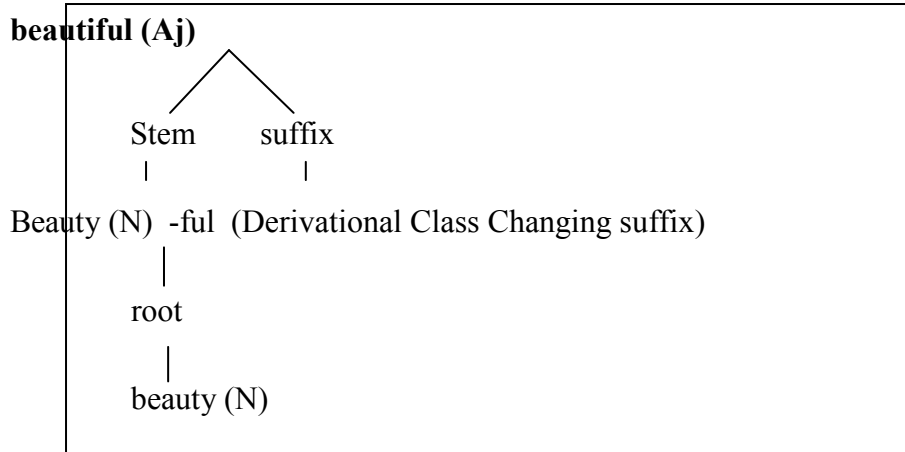
e.g. go – went, Be- am, are- was, were.

Morphological Analysis

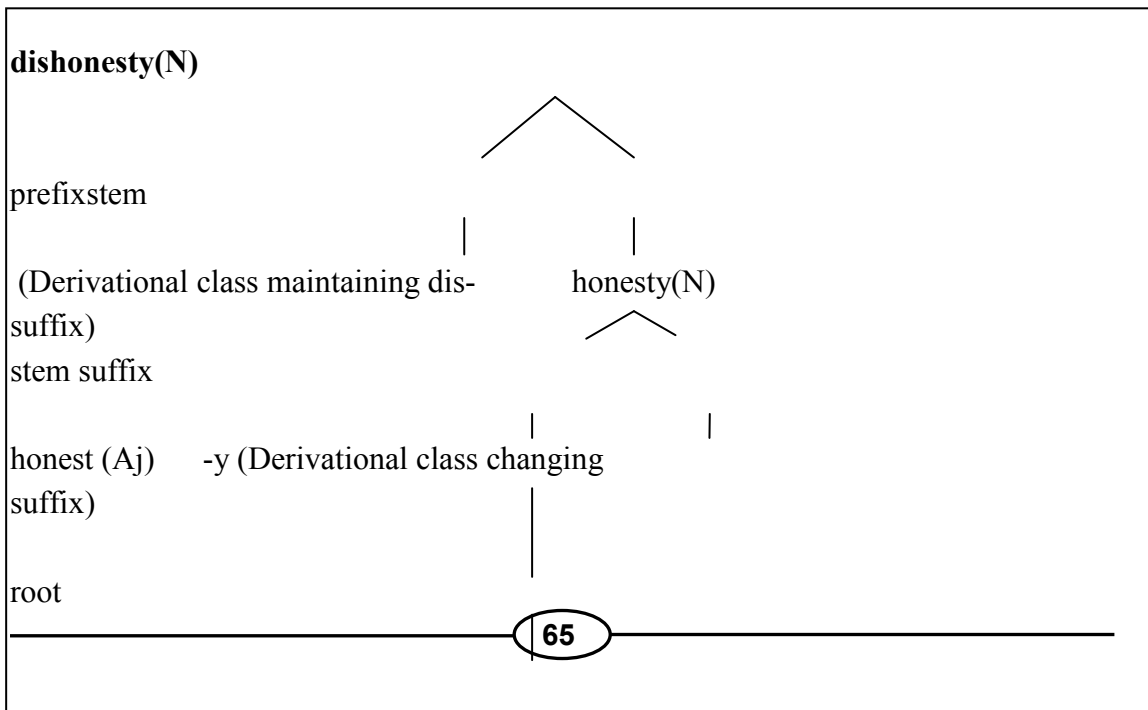
Morphological analysis is the observation and description of the grammatical elements in a language by studying their form and function, their phonological variants, and their distribution and mutual relationships within larger stretches of speech.

For example,

1)

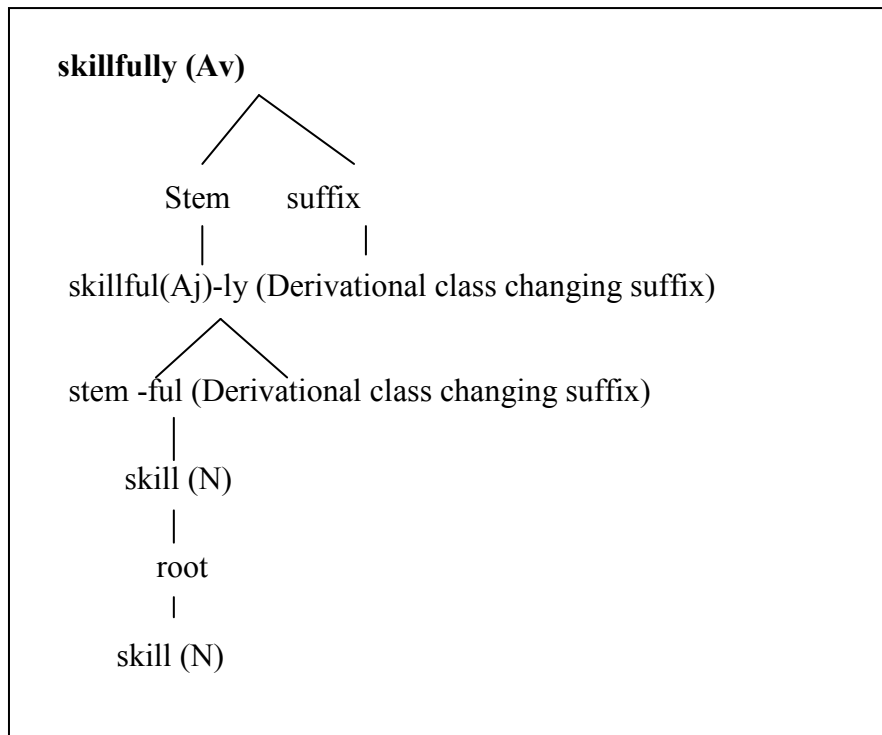


2)

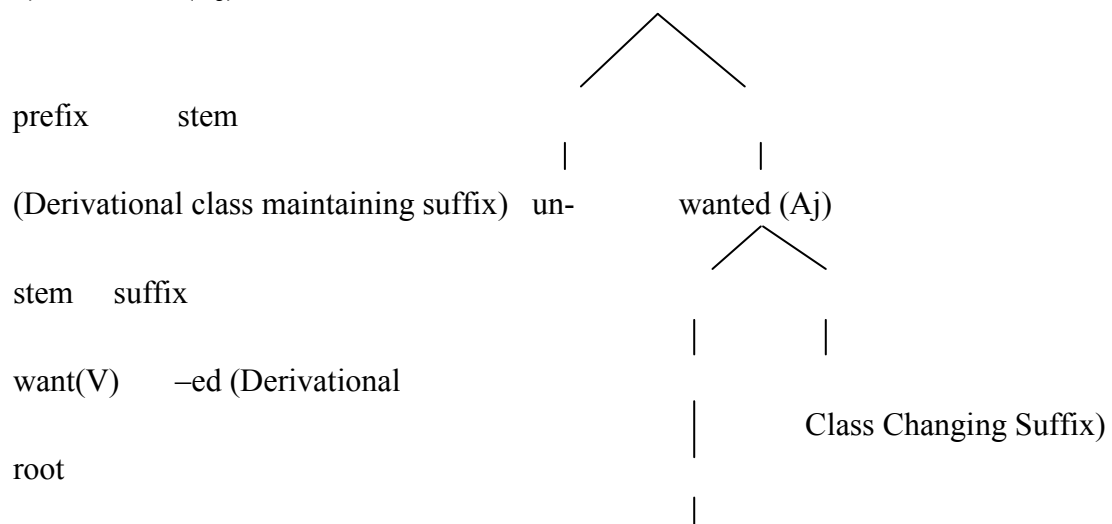


honest (Aj)

3)



4)unwanted (Aj)



6. What is 'Suffix'?
7. Give an example of compound word.
8. Give two examples of inflectional suffix.
9. Identify the free and bound morphemes in a word 'misfortunate'.
10. Identify prefix and suffix in the word 'unfriendly'.

3.4 Subject Matter – III

3.4.1 Word-Formation Processes / Morphological Processes

Word-formation processes or morphological processes produce new words. These processes are classified into major and minor word-formation processes as per their contribution in forming new words.

A) **Major word-formation processes:** Affixation, Compounding and Conversion are major word-formation processes. Let us see them one by one:

1. **Affixation:** Affixation is a morphological process which creates new words. Affixes are divided into two types: prefixes, suffixes.

On the basis of this division, there are two sub-processes.

- (a) **Prefixation:** Prefixation means fixing the prefix before the root or base form. All the prefixes are derivational. They are class maintaining or class changing. *A-* in *asleep*, *be-* in *becalm*, *en-* in *encage*, *de-* in *deforest*, *dis-* in *disbar*, *non-* in *non-stick*, and *un-* in *unhorse* are class changing prefixes. All the other prefixes are class maintaining.

Semantic types of Prefixes: negative prefixes (*un-*, *non-*, *in-*, *a-*), reversative or privative prefixes (*un-*, *de-*, *dis-*), pejorative prefixes (*mis-*, *mal-*, *pseudo-*, and others), prefixes of degree or size (*arch-*, *super-*, *out-*, *sur-*, *sub-*, *over-*, *under-*, *hyper-*, *mini-*, and others), prefixes of attitude (*co-*, *counter-*, *anti-*, *pro-*), locative prefixes (*super-*, *sub-*, *inter-*, *trans-*), prefixes of time and other (*fore-*, *pre-*, *post-*, *ex-*, *re-*), and number prefixes (*uni-*, *mono-*, *bi-*, *di-*, *tri-*, *multi-*, *poly-* and others).

Suffixation: Suffixation means fixing an affix after the root or base. Suffixes are inflectional or derivational. Derivational suffixes are class maintaining and class changing. Suffixes are occupational (-or in actor), diminutive or

feminine (-ess in tigress), suffixes of status or domain (-dom in kingdom), noun suffixes (-hood in childhood),, adjective suffixes (-ful in beautiful), verb suffixes (-ify in classify) etc.

2. **Compounding:** Compounding is a morphological process in which two roots or bases are brought together to form a new word. The roots or bases in a compound word are treated as a single word.

e.g Noun compounds: black-board, windmill, bloodstain, doorknob etc.

Adjective compounds: mouth-watering, colour-blind, home-sick, etc.

Verb compounds: sleep-walk, hand-writing, sun-bathing etc.

3. **Conversion:** This is a morphological process which give changes the class of the word without changing its form.

Noun →Verb

1. Sachin *batted* well.
2. He *penned* the letter.

Verb →Noun

1. The judge ordered his *release*.
2. We paid attention to her *walk*.

Adjective→Verb

1. Bolt *bettered* his performance.

Grammatical unit→Noun

1. English is a *must* subject.
2. Students must follow these *dos*, and *don'ts*.

B) Minor word-formation processes: They include the following processes:

1. Reduplicatives:

Some compounds have two or more elements which are either identical or only slightly different; e.g.: goody-goody. The difference between the two elements may

be in the initial consonants, e.g.: walkie-talkie, or in the middle vowel, e.g.: criss-cross. Most of the reduplicatives are highly informal or familiar.

The most common uses of reduplicative are

- (a) to imitate sounds, e.g.: tick-tock, criss-cross, din-din etc.
- (b) to suggest alternating movements, e.g.: seesaw
- (c) to suggest instability, insincerity, etc. :e.g. wishy-washy
- (d) to intensify, e.g.: tip-top

2. Clipping:

The term ‘clipping’ denotes the subtraction of one or more syllables from a word. The shortening may occur at

- (a) the beginning of the word:

e.g.: telephone-phone

- (b) the end of the word:

e.g.: photograph-photo

- (c) at both ends of the word:

e.g.: influenza-flu

3. Blends:

In a blend at least one of the elements is fragmentary. In this process fragments of the two word are brought together to form a new word.

e.g:

Sr. No.	Original words	Blends
1	Motor + Hotel	Motel
2	Breakfast + Lunch	Brunch
3	Potato + Tomato	Pomato
4	Smoke + Fog	Smog

5	Transfer + Resistor	Transistor
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4. Acronyms:

Acronyms are words formed from the initial letters (or larger parts) of words.

1. Acronyms pronounced as sequences of letters can be called ‘alpha-betisms’:
 - (a) The letters represent full words:
 - e.g. C.O.D – Cash on delivery
 - UN – the United Nations
 - USA –United States of America
 - (b) The letters represent elements in a compound or just parts of a word:
 - e.g. TV – Television
 - GHQ – General Headquarters
2. Many acronyms are pronounced as words.
 - e.g. radar – radio detecting and ranging

3.4.2 Check Your Progress II

Identify the word formation (morphological) processes in the underlined words in the following sentences.

1. The scientists completed the project successfully.
2. He bought a new type-writer.
3. She dialed wrong number.
4. He uses his old moped.
5. Mr. Patil suffered from flu.
6. Mary heard the ding-dong sound of the church bell.
7. His uncle came from USA.

8. The company offered us the brunch.
9. The tick-tock sound of the watch irritated me.
10. The teacher is writing on a black-board.

Answers to Check Your Progress- I

1. Morphology is the scientific study of words.
2. Morpheme is the minimal meaningful unit.
3. A morpheme that doesn't have any independent meaning and can be formed with the help of free morphemes is called a bound morpheme.
4. A morpheme that can be used as a unit in a phrase or a sentence.
5. Prefixes are kind of bound morphemes included at the beginning of different types of words.
6. Suffixes are those bound morphemes included at the end of different types of words.
7. Example: windmill
8. Examples: drawing, clapped
9. Free Morpheme- mis- and Bound Morpheme - -ate
10. Prefix: un-, suffix: -ly

Answers to Check Your Progress – II

- 1) Suffixation 2) Compounding 3) Suffixation
- 4) Blending 5) Clipping 6) Reduplication 7) Acronym 8) Blending
- 9) Reduplication 10) Compounding

3.5 Let Us Sum Up:

This unit discusses Morphology, the scientific study of the formation of the words. It considers morpheme, the smallest unit of form into which a word can be divided. It also discusses the difference between morphemes and allomorphs, the major and minor word-formation processes: affixation, compounding, conversion,

reduplication, blending, clipping and acronymy. The unit acquaints you with morphological analysis.

3.6 Glossary and Notes:

1. Morphology: Study of words
2. Minimal: Smallest
3. Phonetic: about pronunciation
4. Conversion: change the class of the word
5. Monosyllabic: having one syllable
6. Polysyllabic: having more than two syllables.
7. Segment: part or unit

3.7 Exercises:

I) Answer the following questions about 100 to 150 words.

1. What is morpheme? Discuss the classification of morpheme.
2. Explain the term Allomorphs. Give suitable examples.
3. What is affixation? Explain Prefix, suffix and infix.
4. Write a note on Inflectional suffixes.
5. Write a note on Conversion.
6. Explain the term Reduplication.

II) Give a labeled morphological analysis of the following words using tree diagrams:

- 1) unfaithful
- 2) readability
- 3) supernatural
- 4) wallpapers
- 5) multicultural
- 6) motor-boats
- 7) painfully
- 8) disinterestedly
- 9) interchangeable
- 10) misunderstanding
- 11) Pan-American
- 12) unknowingly

3.8 Reference Books:

1. Velaydhan and Mohanan: *An Introduction to the Phonetics and Structure of English*, Somaiya Pub. Ltd., New Delhi.

2. Hocket Charles: *The course In Modern Linguistics.*
3. Krishanaswamy N.: *An Introduction to Linguistics for Language Teachers.*
4. Dr. Varshneypaul: *An Introductory Textbook of Linguistics and Phonetics.*
5. Leech G. N.: *English Grammar Today: A New Introduction.*
6. Quirk R. and Greenbaum S.: *A University Grammar of English.*
7. Richard Nordquist: *Morphology Field of studies*



Module IV

Words

- i. Open and closed word classes
- ii. The open classes
- iii. Closed word classes

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4.0 Objectives

This unit aims to:-

- introduce students to the grammatical unit called ‘words’.
- to tell students the difference between the simple and complex words.
- acquaint students with the classes of word in English.
- familiarize students with the function of words.
- make students learn about form of words in English.
- explain to students the meaning of words.

4.1 Introduction

Hello students, in the previous unit you learned about Morphology of English. Morphology is a part of grammar that studies how words are structured. At present you are familiar with the two units of grammar namely, ‘Phoneme’ and ‘Morpheme’. A phoneme is the minimal distinct unit of language. It has no meaning. On the other hand, a Morpheme is the smallest meaningful grammatical unit of language. This clearly shows that language is a compositional system. It is a system made of subsystems like Phonology, Morphology, Syntax, Semantics and others.

While studying Morphology of English, you have studied the nature of English words. There are two types of words: simple and complex. The simple words are made of only one morpheme. They have a stem but no affixes. *Ant, bat, can, dream, eagle* and several others are simple words. The complex words are made of two or morphemes. They can have one or more stems or a stem and one or more affixes. *Rechargeable, teapots, impurity, maltreatment* and countless other such words are complex.

The complex words show that language has units which are made of smaller units. Sentence, clause, phrase, word, and morpheme are the grammatical units of English. These units can be ordered in terms of 'high' and 'low' grammatical ranks. It should be remembered that a unit of the higher rank consists of one or more of the units of the next lower rank. This means a sentence is made of one or more clauses. A clause is made of one or more phrases. A phrase is made of one or more words. Similarly, a word is made of one or more morphemes. The following figure shows the hierarchy of the grammatical units:

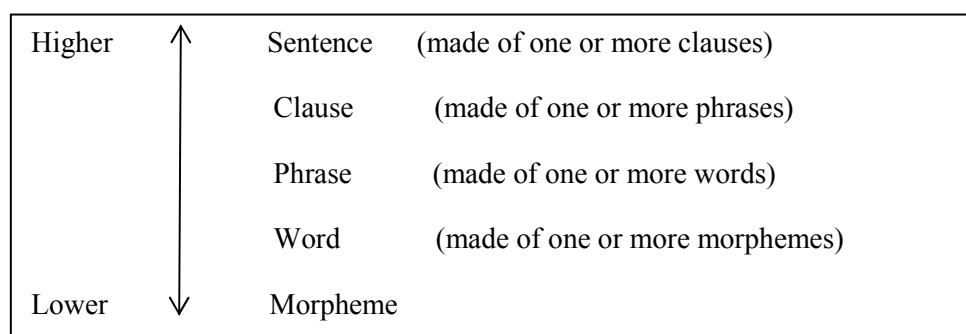


Figure No. 3.1

The figure gives the rank scale of the grammatical units. Sentence is the highest unit of grammar and morpheme is the smallest unit of grammar. The focus of the present unit is word. And it is discussed in detail in following parts of the unit.

3.2 Presentation of Subject Matter

Students, now we have reached to a special level of development in which language has played a very important and unquestionable role. We cannot imagine a language without word. Subsequently, there cannot be a human world without word. According to Dr. Earnest Klein (1966), "What elements are to Chemistry, what the sounds are to music, are words to language. However, words are not only the

elements of a language but also the history of the people speaking it. They are important milestones along the way leading to the majestic Palace of Human Knowledge” (X).

The words in this unit refer to words in English. There are different types of words. They are categorized according to the role they perform in grammar. Traditionally the types of words are called ‘parts of speech’. English, as you know, has eight parts of speech: Noun, Pronoun, Adjective, Adverb, Verb, Preposition, Conjunction and Interjection. These are classified into content words and structure words. Noun, Adjective, Verb and Adverb are content words. On the other hand, pronoun, preposition, conjunction and interjection are structure words. But Modern Grammar treats words in a different way. Instead of referring to words as parts of speech, they are understood as different classes. The traditional approach to grammar is chiefly semantic. It means it gives importance to the meaning of the grammatical units. On the contrary, the modern approach to grammar is mainly functional. It considers the position of the grammatical item rather important than its meaning. It distinguishes the words according to the way they are used.

3.2.1 Open and closed word classes

English has two major kinds of word classes: OPEN CLASSES and CLOSED CLASSES. There are four open word classes in English. The following table 3.1 shows them:

Sr. No.	Open word class	Symbol for form label	Examples
1.	Noun	N	apple, boy, matter, plan, idea, sky, turn
2.	Verb (Full-verb)	V	accept, run, sit, come, appear, turn
3.	Adjective	Aj	nice, happy, flowery, quiet, uncomfortable
4.	Adverb	Av	here, then, today, too, seldom, frequently

Table 3.1

The above classes are called open word classes because new members (words) can be freely invented and added to the existing list of these word classes. Presently, under the influence of globalization and information technology, the English

language has been continually evolving. New words and expressions are being invented or reinvented. ‘Google’, ‘jeggings’, ‘listicle’, ‘Locavore’, ‘screenager’, ‘snackable’, ‘rage-quit’, ‘Youtuber’, and many others are some of the 21st century words. ‘Google’ was a nonsense word in the beginning.

The membership of the open word classes is fairly open-ended. For example, the word, ‘google’ is a noun which came into existence in 1996-1998. It refers to a search engine that gives access to huge data available on internet. But nowadays it can be found somebody speaking, “They google celebrities.” In this sentence ‘google’ is used as a verb which means ‘search the internet (for information) using the Google search engine’. This small and simple example shows that English vocabulary is constantly developed to fulfill the new requirements.

It must also be noted that a member of one class may be similar in spelling as well as pronunciation with a member of another class. See for instance the following examples:

1. ‘Milk’ can be a noun or a verb as in:
 - a. We need *milk* (noun).
 - b. Farmers *milk* (verb) cows.
2. ‘Fast’ can be an adjective, adverb, a noun or a verb.
 - a. The *fast* (adjective) train arrived.
 - b. The train went *fast* (adverb).
 - c. They observe *fast* (noun) every Thursday.
 - d. They *fast* (verb) every Thursday.

Now let’s see the closed word classes. Determiner, pronoun, proposition, conjunction, operator verb, interjection and enumerator are closed word classes in English. Unlike the open word classes, the closed word classes have a fairly fixed membership and not open-ended and that is why they are called closed word classes. We seldom develop new words like ‘a’ (determiner), ‘I’ (pronoun), ‘but’ (conjunction), ‘can’ (operator verb) and ‘by’ (preposition). Therefore, it is possible to give a full list of each closed word class practically. However, in some ways interjections and enumerators are like open classes but for the sake of convenience

they are considered under the closed word classes. Table 3.2 gives some common members of each closed word class.

Sr. No.	Open word class	Symbol for form label	Examples
1.	Determiner	d	a, the, this, that, these, those, some, many
2.	Pronoun	pn	i, we, you, he, she, it they one, some
3.	Preposition	p	at, before, by, for, from, in, of, on, past, to, under
4.	Conjunction	cj	and, or, but, if, when, that, because, so, though
5.	Operator-verb	v	be, have, do, shall, will, can, may
6.	Interjection	ij	ah, oh, gee, hell, hey, gee, OMG, shoo, ugh
7.	Enumerator	e	one, two, three, first, third, last, seventh

Table 3.2

Table 3.1 and Table 3.2 clearly show that the open word class symbols are capital letters while the symbols used for the closed word classes are small letters.

It must be noted that the closed word classes are not as simple as they appear. They too have some confusing qualities. Firstly, the prepositions, for example, can be made of a single word (at, by, in, to, with), two words (into, inside, within, instead of, away from, up to) or a sequence of words (according to, with a view to, by virtue of, with reference to). The two words prepositions or double prepositions and the prepositions made of a sequence of words or phrase prepositions sometimes act like a single preposition and sometimes like a sequence of words.

Secondly, there is an overlap between the members of the closed word classes. They have members which are similar in spelling and pronunciation to members of other classes, for instance, ‘this’, ‘that’, ‘these’, ‘those’ can be determiners or pronouns. Similarly, ‘as’ and ‘than’ can be either prepositions or conjunctions. In addition to this, there can also be the overlap between a closed class word and an open class word: for example, ‘in’ can be either a preposition or an adverb. Similarly, ‘round’ can be an adjective, a noun, a verb, or a preposition.

Furthermore, it must also be noted that the traditional part of speech namely 'Verbs' is included separately under the open word classes and the closed word classes. The verbs under the open word classes become the full-verbs which are large in number. On the other hand, the verbs under the closed word classes are operator, helping or auxiliary verbs which make a small closed class with a fixed number of members. The full-verbs are labeled with the capital 'V' and the operator verbs are labeled with the small 'v'.

3.2.2 Three types of criterion or test:

Traditionally, the part of speech of a word is mostly defined by its meaning. However, with constituent structure approach uses three types of test or criterion to define the class of a word. The three types of test or criterion are Function, Form and Meaning.

1. **Function:** The class of a word can be identified by the way it comes in certain positions or structural contexts. The function of a word means the position taken by it in a phrase and subsequently indirectly in a clause or sentence. For example,

'They drink only the lemon drink.' It can be easily recognized that the first 'drink' is a verb and the second 'drink' is a noun according to their function.

2. **Form:** The class of a word can be recognized partly from its form which means the affixes attached to the word. In the previous unit, 'Morphology', you have studied how new words are derived by adding derivational affixes. For example, *-al* (proposal), *-ation* (examination), *-cy* (delicacy), *-dom* (kingdom, freedom), *-ee* (employee), *-er* (worker), *-ess* (poetess), *-ette* (kitchenette), *-hood* (childhood, falsehood), *-ism* (Marxism), *-ist* (socialist), *-let* (flatlet), *-ling* (duckling), *-ment* (enjoyment), *-ness* (happiness), *-scape* (landscape), *-ship* (friendship) *-th* (warmth) and others are noun forming suffixes. It means the class of a word can easily be recognized by its form.

Similarly, *-ify*, *-ize* and *-en* are verb forming suffixes and *-ly*, *-ward(s)* and *-wise* are adverb forming suffixes. In this way the class of words belonging to open classes can be identified by their form.

3. **Meaning:** As pointed out earlier, traditionally the class of a word is recognized by its meaning. Meaning of a word means the thing or idea that it represents. However,

with the constituent structural approach in grammar meaning is a less reliable criterion.

In this way, the position of the word plays a very important role in recognizing its class. Next to function, the affixes attached to the word also help in identifying its class. Accordingly, the above three criteria can be arranged in the following order of importance:

- Function is the most important.
- Form is the next important.
- Meaning is the least important.

It is necessary to understand the above order importance. Meaning is always not useful in defining word classes. Let's see the following nonsense verse, "The Faulty Bagnose" by John Lennon

The Munglepilgriffs far away
Religeorge too thee world.
Sam fells on the waysock-side
And somforbe on a gurlled,
With all her faulty bagnose!

You will see that the words 'Mungle', 'somforbe', 'gurlled', 'bagnose' are unfamiliar to us. We do not know their meanings. Still we can identify their word class with the help of the function. The function means the position the words have in the larger unit. It can be seen that the words given above are all nouns. 'Mungle' comes between the determiner, 'the' and the verb, 'pilgriffs' which is in Vs form. Similarly, 'bagnose' comes after the adjective, 'faulty'. In this way class of all the nonsense words can be identified by considering their function. That is why meaning is a less reliable test or criterion to identify the class of a word.

As far as form is concerned it can be partly useful in identifying the class of a word. As discussed earlier form refers to the affixes added to a word. But there are so many words containing no affixes such as answer, stand, fast, early, work, too, seldom and many others. Such words may belong to more than one word class. For example, in 'The passengers fast₁ in the fast₂ train that do not go fast₃.' fast₁ is a noun; fast₂ is an adjective; and fast₃ is an adverb.

Similarly it would be misleading to suppose that all the words ending in '-ly' are adverb and all the words ending in '-ed' and '-ing' are verbs. For example, 'lovely' and 'womanly' are adjectives and 'tired' in 'a tired horse' and 'approved' in 'the approved proposal' are adjectives. So the criterion of form is less important than the criterion of function. All this shows that the criteria of form and meaning have limitations in defining the class of a word, so as it is pointed out by Leech, Deuchar and Hoogenraad (2015) we chiefly rely on the function of a word as a criterion of identifying its class. Now let us consider the four open word classes:

3.2.3 The open classes

As discussed earlier, there are four open word classes. Let us discuss nouns as per the criteria considered above:

3.2.3.1 Nouns (N)

It is the most abundant class.

I) Function:

Nouns can function as :

i) Head (H) of a noun phrase (NP):

$\text{NP}(\text{N stars})$, $\text{NP}(\text{d a N book})$, $\text{NP}(\text{d the}_{\text{Ajp}} \text{best}_\text{N} \text{friend}_{\text{Av}} \text{ever})$,

$\text{NP}(\text{GP}(\text{N Shakespeare's})^{\text{M}} \text{lovely}_\text{N} \text{poem}_{\text{PP}}(\text{on true love}))$

ii) Premodifier (M) in an NP:

$\text{NP}(\text{d a N gold}_\text{N} \text{necklace})$, $\text{NP}(\text{d the}_\text{N} \text{noun}_\text{N} \text{phrase})$,

$\text{NP}(\text{d the}_\text{N} \text{marriage function})$

iii) Head of a prepositional phrase (PP)

$\text{PP}(\text{p on}_\text{d} \text{a}_\text{N} \text{table})$, $\text{PP}(\text{p to}_\text{N} \text{Kolhapur})$, $\text{PP}(\text{p inside}_\text{d} \text{the}_\text{N} \text{haveli})$

iv) Head of a genitive phrase (GP):

(^H_{GP}(^H_N Ravi's)_N runs), (^H_{GP}(^H_N Dinkar's)_N dance)

[^H_{NP}(^H_{GP}(_N Lata's)) is a big car].

It must be noted that Head (H) is the chief or main word of a phrase. It is the compulsory element of the noun phrases, prepositional phrases, genitive phrases, adjective phrases and adverb phrases. A single head makes one phrase. On the other hand, modifiers (M) are optional elements of these phrases. Premodifiers (M) come before the Head and the post-modifiers (M) come after the Head.

II) Form:

i) Usually count nouns have two forms: singular and plural. Most count nouns can be changed from singular to plural form by adding the plural inflectional suffix -s (apples, books, bags, teachers), -es (buses, churches, judges) or -ies (babies, mangoes, spies) These are called regular plural nouns. Irregular plural nouns are formed by some other change of form. They are unpredictable. For example, *wife: wives /waɪvz/, man~men, child~children, stimulus~stimuli*.

ii) The following derivational suffixes are characteristic noun suffixes:

a) Suffixes Forming Nouns from Nouns:

-*dom* (duke ~ dukedom), -*ess* (poet ~ poetess), -*er* (bat ~ batter), -*ette*(kitchen ~ kitchenette), -*hood* (boy ~ boyhood), -*ism* (Gandhi ~ Gandhism), -*let* (book ~ booklet), -*ling* (duck ~ duckling), -*scape* (land ~ landscape), -*ship* (relation ~ relationship), and others.

b) Suffixes forming Nouns from Verbs:

-*ation* (examine ~ examination), -*ee* (employ ~ employee), -*al* (propose ~ proposal), -*ary* (dispense ~ dispensary), -*er* (work ~ worker), -*ment* (enjoy ~ enjoyment), and many others.

c) Suffixes Forming Nouns from Adjectives:

-*cy* (delicate ~ delicacy), -*dom* (free ~ freedom), -*er* (ten ~ tenner), -*hood* (false ~ falsehood), -*ist* (social ~ socialist), -*ness* (happy ~ happiness), -*th* (warm ~ warmth), and others

III) Meaning:

As far as meaning is concerned nouns can be subclassified into proper/ common nouns, concrete/abstract nouns, count/mass nouns and collective nouns. It must be noted that nouns indicate physical things, objects, places, substances, events, states, activities, processes, times, occasions, etc.

- A) Proper vs Common Nouns: Proper nouns are used refer to a specific individual person, things, etc. Normally a proper noun begins with a capital letter (e.g. Rohan, India, Shivaji University, Sangli, etc.). Furthermore, a proper noun does not have a plural form (e.g. Rohans*, Indias*, or Sanglis*), therefore it cannot generally come after ‘a/an’ or ‘the’ (e.g. a Rohan*, the Sangli*). On the other hand, common nouns are used to refer to animals, persons, things, places in general (horse, boy, woman, book, village, city, etc.). A common noun can have a plural form (men, boys, matches, trees). Hence, common nouns can come after the determiners, ‘a/an’ or ‘the’. But occasionally, proper nouns are treated like common nouns as in ‘There is a Gandhinagar in Kolhapur.’ And ‘I have seen such many Patils.’
- B) Concrete vs Abstract Nouns: Concrete nouns refer to everything that can be seen, touched, heard, tasted, and/or smelled. It means a concrete noun is used to identify whatever that is tangible. It represents actual substance, living- non-living things animals and places such as sugar, water, air, plant, tiger, officer, stone, book, school, hospital, etc. On the other hand, abstract nouns refer to everything which is fictional and non-tangible. For example, happiness, joy, bliss, ecstasy, pleasure, delight, gladness, and many others.
- C) Count vs Mass Nouns: Count nouns refer to countable things that can have a plural form. For example, book~books, star~stars, joy~joys, litre~litres, and many more. On the other hand, mass nouns refer to things that cannot be counted. They refer to substances, qualities, etc. Mass nouns normally have no plural forms. For example, milk~*milks, sugar~*sugars, happiness~*happinesses, gold~*golds, etc. However, it must be noticed that a noun can be both count (countable) and mass (uncountable). For example, chicken, hair, room, etc. as used in the following examples:
1. She likes to eat **chicken**. (Mass)
 - 1a. She has kept five **chickens**. (Count)
 2. She has long **hair**. (Mass)

2a. She found two long **hairs**.(Count)

3. He has no **room** in her life.(Mass)

3a. He owns two big **rooms**. (Count)

In addition, a good indicator of count nouns is the use of the indefinite article, 'a' or 'an' and numbers which normally premodify the count nouns. For example, 'a girl', 'a book', 'an eagle', 'an umbrella', 'two men', 'one pen', 'four fans', etc. On the other hand, the mass nouns do not take such premodifiers. For example, '*a sugar', '*one happiness' and '*ten cheeses' are not approved.

D) Collective Nouns: Normally the collective nouns are count nouns. Even in their singular form they refer to groups of people, animals or things (heard, crowd, family, government, committee) but grammatically they can take a plural verb. For example, 1. The crowd enters/enter the park. 2. The committee visits/visit Kolhapur. 3. The pride has/have left the area.

3.2.3.2 Verbs (V)

As pointed out earlier, English has two types of verbs. One belongs to the open classes. It is called Full verbs which can come independently. And when they come with other operator verbs, they always come after all the operator verbs in a verb phrase. The other belongs to the closed classes. It is called operator verbs. Here we will discuss the full verbs.

I) Function:

The full verb always functions as the MAIN VERB in a verb phrase. They can come independently as a predicator. In a verb phrase a full verb can either come on its own or come after other operator verbs. For example,

[^S (They) ^P (^{Mv}_v dance)],

[^S (Birds) ^P (can ^{Mv}_v sing)],

[^S (She) ^P (was ^{Mv}_v walking)],

[^S (The tree) ^P (has been ^{Mv}_v watered)],

[^S (That room) ^P (might have been being ^{Mv}_v painted)].

II) Form:

There are some affixes that help in identifying verbs. There are a few verb forming prefixes in English. For example, *be-* in *befriend*, *bemoan*; *en-* in *encode*, *enjoy*; *de-* in *derail*, *denude*; *un-* in *unhorse* and others.

Similarly, English has only three suffixes to form verbs: *-ify* in *classify*, *beautify*; *-ize/-ise* in *realize*, *civilize*, *energise*, *modernise*; and *-en* in *brighten*, *hasten*, and *soften*.

Moreover, English full verbs also take different inflectional suffixes. Accordingly they have six forms which express tense and aspects. The inflectional forms of English verbs are *Vo*, *Vs*, *Ved*, *Vi*, *Ving* and *Ven*. They are presented in Table 3.3. It must be noticed that *Vo* and *Vi* forms look identical. However, *Vo* shows present tense and is used if the Subject is not third person singular. On the other hand *Vi* is infinitive form. It is a tenseless verb form. It comes without subject in imperative clauses. Normally *Vi* follows the particle, *to* in subordinate clauses. It must also be noticed that the *Ved* and *Ven* forms of the REGULAR VERBS like *agree*, *call*, and others are identical. They are formed by adding *-ed* suffix. The *Ven* form is the past participle form of the verb. It is called so because some verbs take *-en*, inflectional suffix for the past participle form. The past participle is also called the passive participle (*are taken*, *is written*, *was connected*) and perfect participle (*has taken*, *have written*, *had collected*). The verbs that do not have identical *Ved* and *Ven* forms formed by adding *-ed* are IRREGULAR VERBS (*come*, *cut*, *buy*, *take*). There are around 200 IRREGULAR VERBS in English.

Verb type	Vo	Vs	Ved	Vi	Ving	Ven
Regular	accept	accepts	accepted	to accept	accepting	accepted
	call	calls	called	to call	calling	called
	move	moves	moved	to move	moving	moved
	wait	waits	waited	to wait	waiting	waited
Irregular	buy	buys	bought	to buy	buying	bought

	cut	cuts	cut	to cut	cutting	cut
	write	writes	wrote	to write	writing	written
	shake	shakes	shook	to shake	shaking	shaken

Table 3.3

It must be noticed that the Vo form of a verb is the plain verb form. It is without any suffix. The Vo, Vs and Ved forms are tensed or finite. They show tense. The Vo and Vs forms show the present tense. On the other hand, the Ved form shows the past tense.

III) Meaning: As far as meaning is concerned, full verbs show happenings. They express actions, events, processes, activities, states. Accordingly, there are verbs of action/dynamic verbs (eat, cut, run, walk) and verbs of emotions/ static verbs (enjoy, think, worry, meditate). Further, the full verbs show the actions which are physical (dance, jump, bend); mental (agree, think, wonder); perceptual (see, feel, taste, hear, sense); social (buy, sell, work); and others.

3.2.3.3 Adjectives (Aj)

Traditionally adjectives are the words that give additional information about a noun. Let us see the function, form and meaning of adjectives.

I) Function:

Adjectives can function as:

- a) Head of an Adjective Phrase (AjP):

[She is ^M_{AjP} (_{Av} ^Hvery ^{Aj}clever)], [The tea was ^M_{AjP} (_{Av} ^Htoo ^{Aj}hot)]

- b) Premodifier (M) in a Noun Phrase (NP):

[They met ^M_{NP} (_d ^Ma ^{Aj}beautiful ^Hlady)], [She likes ^M_{NP} (_d ^Mthose ^{Aj}good ^Hguys)]

- c) Postmodifier (M) in a Noun Phrase (NP):

[He saw ^H_{NP} (_{Pn} something ^Mhorrible)], [She needs ^H_{NP} (_{Pn} someone ^Mscholarly)]

- d) Head of a Noun Phrase:

$\begin{matrix} \text{M} & \text{H} \\ \text{[NP (}_d \text{The}_{Aj} \text{greedy) ate everything.]} & \text{[She met}_{NP} \text{(}_d \text{the}_{Aj} \text{haunted).]} \end{matrix}$

II) Form:

Morphologically, adjectives are formed by adding suffixes to Nouns. For example, *-al* (nation ~ national), *-ate* (passion ~ passionate), *-en* (gold ~ golden), *-ese* (Pekin ~ Pekinese), *-esque* (picture ~ picturesque), *-ful* (colour ~ colourful), *-ic* (artist ~ artistic), *-ly* (friend ~ friendly), *-ous* (courage ~ courageous), *-y* (luck ~ lucky) and others.

Further, some adjectives are also formed by suffixes to Verbs. For example, *-able* (walk ~ walkable), *-ant/-ent* (ignore ~ ignorant), *-atory* (affirm ~ affirmatory), *-ful* (scorn ~ scornful), *-ive* (possess ~ possessive), *-less* (help ~ helpless), and others.

Grammatically, gradable adjectives have degree forms. They can occur in positive/plain, comparative or superlative degree forms. For comparative and superlative gradable adjectives take *-er* and *-est* inflectional suffixes respectively: *tall~taller~tallest*, *heavy~heavier~heaviest*.

III) Meaning

Usually adjectives refer to the qualities or properties of nouns. They are used to delimit or define specifically meaning of nouns. Adjective express different types of meanings, such as:

- Physical qualities like colour (blue, green), size (huge, tiny), shape (oval, short);
- Psychological qualities of emotion such as happy, sad, angry, serene, joyful;
- Evaluative qualities: nice, right, childish, lovely, intelligent;
- Temporal (time-based) qualities: recent, modern, present, new, old, early, late;

Besides, adjectives can be attributive and/or predicative. The attributive adjective typically modify the meaning of a noun as in (a good girl), (those tall trees), (something energetic), etc. On the other hand, the predicative adjectives come as a part of the predicate of a sentence and modify the meaning of the subject or object. For example, in the sentence [That boy is happy] the adjective, 'happy' describes some quality of the subject, 'that boy'. In this way it is SUBJECT COMPLEMENT (Cs). Similarly, in the sentence [That boy made the king happy] the adjective 'happy'

attributes some quality to the Object, ‘the king’. Hence, in a way it is OBJECT COMPLEMENT (Co).

However, to function as COMPLEMENT an adjective has to be the HEAD of an Adjective phrase. As the Cs an adjective typically come after the so-called COPULA verb *to be*. Hence, it becomes a good test to identify an adjective if there is a form of BE as the Main Verb in a sentence. For example,

[She is ^{Cs H}_{AjP} (Aj lucky)], [They were ^{Cs H}_{AjP} (Aj fine)].

On the other hand, the OBJECT COMPLEMENT comes after the OBJECT:

[They made the boy ^{Co H}_{AjP} (Aj happy)].

Notice should be taken of GRADABLE and NON-GRADABLE adjectives. Gradable adjectives refer to the qualities like size, age, weight, emotion, etc.: big/tiny, young/old, heavy/light, happy/sad. They can be modified by degree adverbs like very, too, extremely, utterly, rather. They can have comparative and superlative forms too. The shorter and more common gradable adjectives take -er and -est suffixes, while the longer and less common gradable adjectives are modified by a separate comparative or superlative adverb: more or most.

Non-gradable adjectives describe ‘all-or-nothing’ qualities, such as sex/gender and nationality: female, Indian, chemical, golden. They do not have comparative and superlative forms.

Furthermore, adjectives can also be REGULAR and IRREGULAR. The former take either -er and -est or more and most respectively for their comparative and superlative forms. The latter, the irregular adjectives have special comparative and superlative forms like bad/worse/worst. Table 3.4 shows the classification of Adjectives:

Type of Adjective		Plain	Comparative	Superlative	Degree adverb
Gradable	Regular	wise	wiser	wisest	very wise
		marvellous	more marvellous	most marvellous	quite marvellous
		easy	easier	easiest	rather easy

	Irregular	good	better	best	very good
		little	less	least	too little
Non-gradable		male	*maler	*malest	*very male
		Indian	*Indianer	*Indianest	*very Indian

It can be seen from the above table that non-gradable adjectives can only come in the plain construction.

3.2.3.4 Adverbs (Av)

An adverb is a word that gives additional information about the action. It modifies an adjective, a noun or an adverb. There are three chief kinds of Adverb.

- i) **Circumstance Adverbs:** They add some kind of circumstantial information such as time, place, manner, etc. to the action expressed in the clause:

[(She) (came) (home) (Av quickly) (Av yesterday)].

(A= Adverbial, an element of clause)

- ii) **Degree Adverbs** give additional information about adjectives and other words in terms of gradability. For example, *very happy, too hot, rather fast, etc.*

- iii) **Sentence Adverbs:** Usually these adverbs come in the beginning of a sentence or clause. They are semantically applicable to the whole clause or sentence. They express an attitude to the sentence. They can also show a connection between two clauses or sentences. For example, [(Av Thus), we reached at the place], [(Av Actually), she knows the secret] It must be noticed that there is considerable overlap between adverbs of different kinds.

I) **Function:** At the level of phrase, an adverb can function as:

a) **Head of Adverb Phrase (AvP):** ${}_{AvP} \begin{matrix} H \\ (Av \text{ happily}) \end{matrix}, {}_{AvP} \begin{matrix} H \\ (\text{very } Av \text{ slowly}) \end{matrix}$

b) **Premodifier in Adjective Phrase (AjP), Adverb phrase (AvP) and Noun Phrase (NP):** ${}_{AjP} \begin{matrix} M & H \\ (Av \text{ too } Aj \text{ easy}) \end{matrix}, {}_{AjP} \begin{matrix} M & M & H \\ (Av \text{ rather } Av \text{ quite } Aj \text{ simple}) \end{matrix}$

^M ^H ^M ^H ^M ^M ^M ^H
 AvP (Av tooAv fast), AvP (Av very Av luckily) NP (Av quite d a Aj quiet N queue),
^M ^M ^M ^H
 NP (Av rather d a Aj rosy N row)

c) Postmodifier in Noun Phrase, Adjective phrase and Adverb phrase:

^M ^M ^M ^M ^M ^M ^M
 NP (d theN girlsAv upstairs), NP (d the N people Av there);
^M ^H ^M ^H ^M ^H ^M
 AjP (Av tooAj tall Av indeed), AjP (Aj useful Av enough); AvP (Av happily Av indeed)

II) Form: Normally *-ly*, *-ward(s)*, and *-wise* are adverb-forming suffixes of English. Out of these, *-ly* is very productive and is added to adjective to form adverb. For example, *happy ~ happily*, *slow~slowly*, *careful~carefully*. *-ward(s)*, and *-wise* are added to noun to produce adverb. For example, *home ~ homeward(s)*, and *student ~ studentwise*.

Besides, a few adverbs have comparative and superlative forms like adjectives: *fast ~faster~fastest*; *well~better~best*; etc.

III) Meaning: Semantically adverbs play a very important role. They can express several types of meaning, especially as Adverbial (A) in the clause. Accordingly, there are adverbs expressing manner (well, happily, skillfully); place (here, there, everywhere); direction (up, back, forward); time-when (now, then, soon, yesterday); frequency (daily, always, often, seldom); and degree (very, rather, much, more, pretty).

In addition there are sentence adverbs which are either ATTITUDE ADVERBS (fortunately, actually, oddly, perhaps, surely, actually and others) or CONNECTIVE ADVERBS (so, yet, however, therefore, secondly, though, etc.) Sentence adverbs modify the meaning of a sentence or a clause.

I. Check Your Progress I

1. Which of the following nouns are count nouns; which are mass nouns; and which are both count and mass nouns?

airplane, paper, weed, room, silver, cake, happiness, laugh, grass, rubbish, employer, music, steam, month, rope

2. Identify the word classes of the repeated words in the following sentences:

- i. The ¹early bus came ²early.
- ii. The ¹daily exercise is done ²daily.
- iii. She ¹left him at the ²left side of the bus-stop.
- iv. The soldiers ¹point towards the lowest ²point.

3.2.4 Closed word classes

Now let us see the Closed Word Classes. They are, as seen earlier, seven. They have relatively few members so that they can be listed. As they are structure words their function within the higher units is a key to identify their class. You should notice that the closed word classes tend to come at or towards the beginning of the larger units of which they are part. In this way they become the **MARKERS OF IDENTITY** of the units they introduce. Let us consider the closed word classes one by one:

3.2.4.1 Determiners (d)

Normally determiners come at the beginning of noun phrases. When there is a singular count noun, a determiner becomes a compulsory part of the noun phrase.

Function: Determiners function as premodifiers in a noun phrase. For example,

NP (^M_d ^Mthis_N book), NP (^M_d ^Mthose_N eyes), NP (^M_d ^Ma_{Aj} beautiful_N girl), NP (^M_d less_N money)

The list of the determiners is as follows:

the, a/an; this, that, these, those; all, some, any, no, every, each, either, neither, one, several, enough, such; many, much, more, most; (a) few, fewer, fewest; (a) little, less, least; what, which, whatever, whichever, half, my, our, your, his, her, its, their, yon.

The articles *a* and *the* are the most common determiners and *yon* is the least used determiner.

3.2.4.2 Pronouns (pn)

Pronouns are words which are used in the place of nouns. So they are in a sense ‘dummy’ nouns or noun phrases. They are meaningful only contextually.

Function: Pronouns always function as the head of noun phrases. For example,

H H H H
NP (P_n I), NP (P_n them), NP (P_n everybody), NP (P_n who)

List of pronouns is as below:

I, me, mine, myself; we, us, ourselves, ours; you, yourself, yourselves, your, yours; he, him, himself, his; she, her, herself, hers; it itself; they, them, themselves, theirs; this, that these, those; all, some, any, none, each, either, neither, one, oneself, several enough; everybody, everyone, everything; somebody, someone, something; anybody, anyone, anything; nobody, no one, nothing; many, much, more, most; (a) few, fewer, fewest; (a) little, less, least; who, whom, whose; what, which; whoever, whichever, whatever; each other, one another.

You can find that there is a great overlap between pronouns and determiners. *This, that, these, those, all, some, which* can be both pronouns and determiners. It is their function that helps us to identify their class. For instance,

S M H
1) [NP (d That N girl) (is) (clever).]

S H
1a) [NP (P_n That) (is) (a clever girl).]

S M H
2) [NP (d Some N mangoes) (were) (ripe).]

S H M
2a) [NP (P_n Some PP (of the mangoes)) (were) (ripe).]

3.2.4.3 Enumerators

Enumerators are number words. There are three types of enumerators:

1. **CARDINAL NUMBERS:** They are natural numbers used in counting to show quantity. They are :*one, two, three, ... twenty, hundred,*

2. ORDINAL NUMBERS: They are numbers that show the position or order of something in relation other numbers. They are: *first, second, third, ..., twentieth, ...hundredth...*
3. GENERAL ORDINALS: They indicate the position of the something in general. They are: *next, last, other, further, etc.*

Function: Enumerators can function as:

- i) premodifier in a noun phrase: $NP (\overset{M}{e} \overset{H}{three}_N \overset{M}{thieves})$, $NP (\overset{M}{e} \overset{H}{five}_N \overset{M}{figures})$,
 $NP (\overset{M}{d} \overset{M}{those}_e \overset{H}{ten} \overset{M}{tall}_N \overset{H}{trees})$, $NP (\overset{M}{d} \overset{M}{the}_e \overset{H}{next}_N \overset{M}{question})$,
 $NP (\overset{M}{e} \overset{H}{fifth}_N \overset{M}{fairy})$
- ii) Head of a noun phrase: $[(He) (ate) \overset{M}{d} \overset{H}{all}_e \overset{M}{ten}]$,
 $[\overset{M}{d} \overset{H}{The}_e \overset{M}{nine} (could\ pass) (the\ test)]$

You should note that in a noun phrase enumerators come after determiners.

3.2.4.4 Prepositions

Prepositions are words used to show relations about place and time with the event. They play various semantic roles. They do not have any function label as such like determiners, pronouns and enumerators.

Prepositions come in the beginning of prepositional phrases (PP). The PPs are Noun Phrase that begin with a preposition. They express relations of place, time, direction, possession, agency, instrument and many other meanings. For example,

- $$PP (\overset{M}{p} \overset{H}{at}_d \overset{M}{the}_N \overset{H}{station})$$
- ,
- $PP (\overset{M}{p} \overset{H}{by}_{Pn} \overset{M}{him})$
- ,
- $PP (\overset{M}{p} \overset{H}{to}_N \overset{M}{Kolhapur})$
- ,
- $PP (\overset{M}{p} \overset{H}{with}_d \overset{M}{a}_N \overset{H}{knife})$
- ,
-
- $PP (\overset{M}{p} \overset{H}{to}_{Pn} \overset{M}{US})$
- ,
- $PP (\overset{M}{p} \overset{H}{of}_d \overset{M}{a}_N \overset{H}{boy})$
- ,
- $PP (\overset{M}{p} \overset{H}{in}_d \overset{M}{the}_N \overset{H}{morning})$

English prepositions are: *about**, *above**, *across**, *after**, *against*, *along**, *alongside**, *amid*, *among*, *around**, *as*, *at*, *before**, *behind**, *below**, *beneath**, *beside*, *besides**, *between**, *beyond**, *by**, *despite*, *down**, *during*, *for*, *from*, *in**, *inside**, *into*, *of*, *off**, *on**, *opposite**, *outside**, *over**, *past**, *round**, *since**, *than*,

*through**, *throughout**, *till*, *do toward(s)*, *under**, *underneath**, *until*, *up**, *via*, *with*, *within**, *without**.

The words marked * in the above list can also be adverbs. This means there is large overlap between prepositions and adverbs, especially adverbs of place or direction:

1. [(The tigr^S) (walked)^P _{PP} (_p about^A _d our^M _N courtyard)^H].

1a. [(The tigr^S) (walked)^P _{AvP} (_{Av} about)^{A H}].

2. [(He)^S (went)^P _{PP} (_p down^A _d the^M _N town)^H].

2a. [(He)^S (went)^P _{AvP} (_{Av} down)^{A H}].

3.2.4.5 Conjunctions (cj):

Conjunctions are the words used to join words, phrases, clauses and/or sentences together. They allow us to join together the grammatical units of equal as well as unequal status. Like prepositions, conjunctions also do not have function label.

Conjunctions are linking words which have two main types:

I) Coordinating conjunctions:

They connect two or more units of equal grammatical rank (i.e. two or more words, phrases, and clauses). The coordinating conjunctions are: *and*, *or*, *but*, *nor*, *neither*.

e.g. 1. ^H _{NP} (the _{Aj} beautiful _{cj} and _{Aj} fresh^H _N flowers),

2. _{NP} (_d those^M _{Aj} tall^{M H} _N boys _{cj} and _N girls[>])

3. [(She)^S (will come)^P _{PP} (in car)^A _{cj} or _{PP} (on motorcycle)[>]]

4. [(He)^S (knows)^P _{NCl} [what she learns]^O _{cj} and _{NCl} [how she learns][>]]

5. Se \langle_{MCI} [She will come here] \rangle_{ej} or \langle_{MCI} [she will send us a message] \rangle

II) Subordinating conjunctions: They join Subordinate clauses (SCI) to Main clauses (MCI). They come in the beginning of a subordinate clause. They are as follows:

after, although, as, because, before, but, if, how, however, like, once, since, than, that, till, unless, until, when, whenever, wherever, whereas, whereby, whereupon, while; in that, so that, in order that, except that; as far as, as soon as; rather than, as if, as though, in case.

For example, 1. [Students cannot speak English \langle_{SCI} [\rangle_{ej} because they do not speak it.]]

2. [she knows \langle_{SCI} [\rangle_{ej} that English is very easy.]]

III) Correlative Conjunctions: They are pairs of conjunctions that work together. Out of the two one comes before one construction and another comes before the other. They are two types:

A) **Subordinating correlative conjunctions:** if...then, although...yet, hardly...when, no sooner...than.

B) **Coordinating correlative conjunctions:** both ... and, either...or, neither...nor, not only...but also.

3.2.4.6 Operator-verbs

The operator verbs are called so because they perform various grammatical operations. They are also called auxiliary verbs or helping verbs. They can function as Auxiliary (Aux) in the verb phrase. The operator verbs have two chief types: Modal verbs and Primary verbs.

A) **Modal verbs:** *can, will, may, shall; could, would, might, should; must, ought to* are the modal verbs. They cannot be used independently. Whenever they are used, they come at the beginning of a verb phrase and are followed by the Vi form of a verb. For example,

1. [We \langle_{VP} (\langle_{v} ^{P Aux} can ^{Mv} \rangle_{v} speak) English.]

2. [She ^P_{VP} (^{Aux}_v might ^{Aux}_v have ^{Aux}_v been ^{Mv}_v offered) the job]

The modal verbs express modality meanings like ability, possibility, permission, compulsion, probability, certainty, surety, etc.

Function: The modal verbs can function as only ‘Auxiliary’ (Aux) in a verb phrase.

- B) Primary verbs: They are the three most important verbs in English. They are called primary verbs because each of them can function either as auxiliary or as main verb (Mv) in a verb phrase. They are so irregular that they have an irregular Vs form. Like full verbs primary verbs have six forms:

Primary verb	Vo	Vs	Ved	Vi	Ving	Ven
BE	am, are	is	was, were	to be	being	Been
HAVE	have	has	had	to have	having	Had
DO	do	does	did	to do	doing	done

The primary verb ‘be’ as an operator verb shows either progressive aspect or passive aspect. When a form of ‘be’ is followed by the Ving form of a verb, it is progressive aspect. And when a form of ‘be’ is followed by the Ven form of a verb, it is passive aspect. For example,

1. [She ^P_{VP} (^{Aux}_v was ^{Mv}_v watching) TV] = progressive

2. [He ^P_{VP} (^{Aux}_v has ^{Aux}_v been ^{Mv}_v trained)] = passive

The primary verb, ‘have’ as an operator verb expresses perfect aspect. When a form of ‘have’ is followed by the Ven form of a verb, it is perfect aspect. For example,

1. [They ^P_{VP} (^{Aux}_v have ^{Mv}_v taken) precautions] = perfect

2. [We ^P_{VP} (^{Aux}_v had ^{Mv}_v had) lot of fun] = perfect

The primary verb, 'do' as an operator is used as a 'DUMMY' verb. It is used while deriving negative and interrogative sentences, the verb phrase of the basic sentence does not have any operator verb. For example,

1. They know answers.
- 1a. They do not know answers. = Negative
- 1b. Do they know answers? = Interrogative
- 1c. What do they know? = Interrogative

Function: Primary verbs can functions as:

A) **Main verb (Mv) in a verb phrase:** $VP (\overset{P}{\text{v}} \overset{Mv}{\text{was}}), VP (\overset{P}{\text{v}} \overset{Mv}{\text{has}}), VP (\overset{P}{\text{v}} \overset{Mv}{\text{did}})$

B) **Auxiliary (Aux) in a verb phrase:** $VP (\overset{P}{\text{v}} \overset{Aux}{\text{was}} \overset{Mv}{\text{reading}}),$

$VP (\overset{P}{\text{v}} \overset{Aux}{\text{has}} \overset{Aux}{\text{been}} \overset{Mv}{\text{studying}}), VP (\overset{P}{\text{v}} \overset{Aux}{\text{has}} \overset{Mv}{\text{had}}), VP (\overset{P}{\text{v}} \overset{Aux}{\text{didn't}} \overset{Mv}{\text{know}})$

3.2.4.7 Interjections (ij)

Interjections have relatively a minor status in language. They are spontaneous words or expressions that express spontaneous feelings or reactions. They include words like 'ah', 'oh', 'ouch' 'phew', 'ugh', 'wow' and many others. Interjections also include swear words like 'damn', 'hell', 'Jesus', 'shit' and others; greetings such as 'good morning', 'hello', 'Hi' and others; and other signaling words like 'goodbye', 'gee', 'yes', 'no', 'okay', 'shoo', etc.

Like prepositions and conjunctions, interjections too do not have any function label. For example, 1. [_{ij} Ugh, I forgot my purse].

2. [_{ij} Wow, they are serving ice-cream].

3.2.4.8 Particles

The closed class words are further classified into the words having a function in phrases and the words having no function in phrases. Determiners, enumerators, pronouns, operator verbs have a function in phrases. On the other hand, prepositions, conjunctions and interjections have no function in function labels. They are simply

‘markers’. For instance, prepositions are introductory markers in prepositional phrases. These marker words are called ‘particles’ which literally means ‘little part’. It means prepositions, conjunctions and interjections are ‘little parts of sentences. However, they meaning and importance but they do not come in the structure of phrases. The following sentence is an example:

[_{cj} And _{ij} alas she did not get the bus].

Furthermore, there are words which cannot be included in any of the word classes we have discussed so far. They are unique in function. For example, the word ‘to’ which comes before the infinitive verb form (‘to read’, ‘to be’, ‘to write’) and the negative word ‘not’. These words do not have any special label in the constituent structure grammar.

Check Your Progress II

1. Identify the class of the underlined words in the following examples:

- i. She came in.
- ii. They love English.
- iii. Guradi has been reading a book.
- iv. The climbers need a solid support.
- v. She could see no man on the hill.
- vi. We have something for everybody.
- vii. The third step is quiet easy.
- viii. Now the sun will set and the stars will twinkle.
- ix. She lives for him.
- x. They are beinghonoured.
- xi. Hey!, wait a minute.
- xii. That might not happen.

Terms to Remember

1. Word : a unit of grammar bigger than morpheme and smaller than phrase

2. Open word classes: open ended word classes
3. Closes word classes: word classes with fixed number of members
4. Form labels: labels given at the foot of the unit and showing its grammatical class
5. Function labels: labels showing the position the unit and given at the top of the unit
6. Function: the position taken by the unit in a large unit.
7. Form: structure of the unit
8. Particles: word classes without any function labels

3.3 Summary

The course 'Language and Linguistics' introduces you to the constituent structure grammar. In this unit we have discussed word classes which are traditionally called parts of speech. Now you are familiar with the following word classes:

- A) Open word classes: noun (N), verb (i.e. full-verb) (V), adjective (Aj), adverb (Av)
- B) Closed word classes: determiner (d), pronoun (pn), enumerator (e), preposition (p), conjunction (cj), operator-verb (v) and interjection (ij)

3.4 Answers to Check Your Progress

- I) 1. Count nouns: airplane, weed, laugh, employer, month,
Mass nouns: silver, happiness, rubbish, music, steam
Nouns both count and mass: paper, grass cake, room, rope
2. i. ¹early (Aj), ²early (Av); ii. ¹daily(Aj), ²daily(Av); iii. ¹left (V), ²left(Aj);
iv. ¹point(V),
²point(N).
- II) 1. i. in (Av);ii. love (V); iii.Guradi (N); iv. solid (Aj); v. no (d); vi. something (pn); vii. third (e); viii. and (cj); ix. for (p); x. being (v); xi. Hey!(ij); xii. might (v)

3.5 Exercises

I. Write short notes:

- a) Three criteria b) Open word classes c) Closed word classes

II. Distinguish between:

a) Form and function b) count nouns and mass nouns c) concrete nouns and abstract nouns d) proper nouns and common nouns e) gradable adjectives and non-gradable adjectives f) regular verbs and irregular verbs g) full verbs and operator verbs h) primary verbs and modal verbs i) determiners and pronouns j) prepositions and adverbs

III. Give the plural forms of the following nouns:

- a) child b) woman c) foot d) radius

IV. Give the Ved and Ven forms of the following verbs:

- a) come b) sit c) be d) see e) write f) cut

3.6 Further Readings:

Leech, Geoffrey N. (1969), Margarette Deuchar and Robert Hoogenrood. (1982). *English Grammar for Today A New Introduction*. London: MacMillan Press Ltd.

Quirk, Randolph, Greenbaum, S., Leech, N., and Svartvik, J. (1972). *A Comprehensive Grammar of the English Language*. England: Longman.

_____. and Sidney Greenbaum. (1975). *A University Grammar of English*. England: Longman.

