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M.A. ENGLISH - SECOND YEAR

ASPECTS OF LANGUAGE - I

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M.A. ENGLISH - SECOND YEAR

ASPECTS OF LANGUAGE – I

OBJECTIVES:

- To introduce the students to the general concepts of language and linguistics.
- To facilitate the students to the study of English language, language history, cultural implications and linguistics.
- To assist the students in grasping the essentials of the structure and systems of language.
- To understand the basic principles of linguistic theory.

UNIT I - NATURE OF LANGUAGE

Language as a written text, Language as a Socio-cultural heritage, language as a marker of social identity.

UNIT II - APPROACHES TO THE STUDY OF LANGUAGE

Approaches to the Study of Language, language as a system of communication

Saussurean dichotomies, signifier and signified, langue and parole, synchronic and diachronic, Syntagmatic and paradigmatic.

UNIT III - LANGUAGE AND LINGUISTICS

Language Analysis: Levels and their hierarchy - phonetic/phonological, morphological, syntactic and semantic/pragmatic; their interrelations; linguistic units and their distribution at different level.

UNIT IV - PHONETICS

Phonetics as a study of speech sounds: articulatory, auditory, and acoustic phonetics. Articulatory Phonetics: Processes of speech production: Classification of speech sounds, syllable.

UNIT V - PHONETIC TRANSCRIPTION

Transcription of Passages.

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Unit I

Nature of Language

Written texts are shorter and the language has more grammatical complexity, with more subordinate clauses and passives. Written language is the written form of communication which includes both reading and writing. Most written languages have some distinctive characteristics. It is usually planned, organized, and durable. It is not bound by any physical setting, and it is often read by people unknown to the writer.

Written language has longer words, it is lexically denser and it has a more varied vocabulary. It uses more noun-based phrases than verb-based phrases. As a means of communicating ideas and storing information, written language is the single most important and far-reaching technology available to humans and has served as the foundation for virtually all other information technologies from early etchings in clay to the world of digital access that humans enjoy today.

A written communication means the sending of messages, orders or instructions in writing through letters, circulars, manuals, reports, telegrams, office memos, bulletins, etc. It is a formal method of communication and is less flexible. It has three genres: the writing of fiction/literary nonfiction, poetry, and drama. The written language is not an image of oral language; it has an independent role in linguistic communication. As an independent system of signs, written language mediates between its producers, recipients, and reality.

Language as a Socio-cultural Heritage:

Language determines the ethnic identity of the carriers of culture. It is an important factor in national development and the carrier of the intangible heritage of each nation, because it reflects ethno-cultural, psychological and mythological ideas and experiences. If not the foundation stone, language is, without a doubt, an integral part of any culture and one

of the most significant conditions of its existence. Various aspects of cultures, such as mentality, lifestyle, beliefs and values, play a huge role in the field of intercultural communication. More specifically, the convention for the safeguarding of the intangible cultural heritage mentions oral traditions and expressions, including language as a vehicle of the intangible cultural heritage, as well as performing arts; social practices, rituals and festive events; knowledge and practices concerning nature.

Language presents humans with two functions to consider: one being an instrument of communication and the other as a way of asserting a person's or nation's identity or distinctiveness from another, accepting the argument that language is intrinsic to the expression of culture. It is one of the most important parts of any culture. It is the way by which people communicate with one another, build relationships, and create a sense of community.

There are roughly 6,500 spoken languages in the world today, and each is unique in a number of ways. It has been seen that language is much more than the external expression and communication of internal thoughts formulated independently of their verbalization. In demonstrating the inadequacy and inappropriateness of such a view of language, attention has already been drawn to the ways in which one's native language is intimately and in allsorts of details related to the rest of one's life in a community and to smaller groups within that community. This is true of all peoples and all languages; it is a universal fact about language.

Anthropologists speak of the relations between language and culture. It is indeed more in accordance with reality to consider language as a part of culture. Culture is here being used in the anthropological sense, to refer to all aspects of human life insofar as theyare determined or conditioned by membership in a society. The fact that people eat or drink is not in itself cultural; it is a biological necessity for the preservation of life. That they eat particular foods and refrain from eating other substances, though they may be perfectly edible and nourishing,

and that they eat and drink at particular times of day and in certain places are matters of culture, something "acquired by man as a member of society," according to the classic definition of culture by the English anthropologist, Sir Edward Burnett Tylor. As thus defined and envisaged, culture covers a very wide area of human life and behavior, and language is a part, probably the most important part of it.

The faculty of language acquisition and language use is innate and inherited, and there is legitimate debate over the extent of this innateness. Every individual's language is acquired by man as a member of society, along with and at the same time as other aspects of that society's culture in which people are brought up. Society and language are mutually indispensable. Languages have developed only in social settings; however, this may have been structured, and human society in any form even remotely resembling what is known today or is recorded in history could be maintained onlyamong people utilizing and understanding a language in common use.

The very notion of Heritage Language (HL) is a socio-cultural one, and it is defined in terms of a group of people who speak it. Heritage Languages also have a socio-cultural function, both as a means of communication and as a way of identifying and transforming socio-cultural groups. While both of these approaches acknowledge the close connection and mutual dependency between HL learning processes and socio-cultural processes, they differ in that one of them takes a correlational perspective, and the other a social constructivist perspective.

Socio-cultural heritage is defined in terms of a group of people who speak it. Heritage languages also have a socio-cultural function, both as a means of communication and as a way of identifying and transforming socio-cultural groups. It is passed from generation to generation by parents, religion, education, friends, books, radio, television and movies, among others. Cultural heritage implies a shared bond, our belonging to a community.

The definition of socio-cultural is something that involves the social and cultural aspects. An example of socio-cultural is a focus of study in anthropology. An example of socio-cultural is knowing about the people around you and their family backgrounds. Socio-cultural perspective seeks to understand human behavior and personality development by examining the rules of the social groups and subgroups in which the individual is a member. These rules are often unwritten guidelines that direct a person's actions.

Language, no less than other aspects of human behavior, is subject to purposive interference. When people with different languages need to communicate, various expedients are open to them, the most obvious being second-language learning and teaching. This takes time, effort, and organization, and when more than two languages are involved, the time and effort are much greater. Other expedients may also be applied. Tacit or deliberate agreements have been reached whereby one language is chosen for international purposes when users of several different languages are involved. In the Roman Empire, broadly, the western half used Latin as a lingua franca, and the eastern half used Greek. In western Europe during the Middle Ages, Latin continued as the international language of educated people, and Latin was the second language taught in schools. Later the cultural, diplomatic, and military reputation of France made French the language of European diplomacy. This use of French as the language of international relations persisted until the 20th century. At important conferences among representativesof different nations, it is usually agreed which languages shall be officially recognized for registering the decisions reached, and the provisions of treaties are interpreted in the light of texts in a limited number of languages, those of the major participants.

The part played by variations within a language in differentiating social and occupational groups in a society has already been referred to above. In language transmission this tends to be self-perpetuating unless deliberately interfered with. Children are in general

brought up within the social group to which their parents and immediate family circle belong, and they learn the dialect and communication styles of that group along with the rest of the subculture and behavioral traits and attitudes that are characteristic of it. This is a largely unconscious and involuntary process of acculturation, but the importance of the linguistic manifestations of social status and of social hierarchies is not lost on aspirants for personal advancement in stratified societies.

The deliberate cultivation of an appropriate dialect, in its lexical, grammatical, and phonological features, has been the self-imposed task of many persons wishing to better themselves. Much of the comedy in George Bernard Shaw's *Pygmalion* (first performed in 1913, with subsequent film adaptations) turns on Eliza Doolittle's need to unlearn her native Cockney if she is to rise in the social scale. Culturally and sub culturally determined taboos play a part in all this, and people desirous of moving up or down in the social scale have to learn what words to use and what words to avoid if they are to be accepted and to belong in their new position. The same considerations apply to changing one's language as to changing one's dialect.

Language acquisition is harder for the individuals and is generally a rare occurrence, but it is likely to be widespread in any mass immigration movement. In the 19th and early 20th centuries, the eagerness with which immigrants and the children of immigrants from continental Europe living in the United States learned and insisted on speaking English is an illustration of their realization that English was the linguistic badge of full membership in their new homeland at the time when the country was proud to consider itself the melting pot in which people of diverse linguistic and cultural origins would become citizens of a unified community. A reverse movement, typically by third generation immigrants, manifests a concern to be in contact again with the ancestral language. The same sort of self-perpetuation, in the absence of deliberate rejection, operates in the special languages of sports and games

and of trades and professions. Game learners, apprentices, and professional students learn the locutions together with the rest of the game or the job. The specific words and phrases occur inthe teaching process and are observed in use, and novices are only too eager to display an easy competence with such phraseology as a mark of their full membership of the group.

Languages and variations within languages play both a unifying and a diversifying role in human society as a whole. Language is a part of culture, but culture is a complex totality containing many different features, and the boundaries between cultural features are not clear-cut, nor do they all coincide. Physical barriers such as oceans, high mountains, and wide rivers constitute impediments to human intercourse and to culture contacts, though modern technology in the fields of travel and communications makes such geographical factors of less and less account. More potent for much of the 20th century were political restrictions on the movement of people and of ideas, such as divided western Europe from formerly communist eastern Europe; the frontiers between these two political blocs represented much more of a cultural dividing line than any other European frontiers.

The distribution of the various components of cultures differs, and the distribution of languages may differ from that of non-linguistic cultural features. This results from the varying ease and rapidity with which changes may be acquired or enforced and from the historical circumstances responsible for these changes. From the end of World War II until 1990, for example, the division between East and West Germany represented a major political and cultural split in an area of relative linguistic unity. It is significant that differences of vocabulary and usage were noticeable on each side of that division, overlying earlier differences attributed to regional dialect.

Transmission of Language and Culture:

Language is transmitted culturally; that is, it is learned. To a lesser extent it is taught, when parents, for example, deliberately encourage their children to talk and to respond to talk, correct their mistakes, and enlarge their vocabulary. But it must be emphasized that children very largely acquire their first language by grammar construction from exposure to a random collection of utterances that they encounter. What is classed as language teaching in school either relates to second language acquisition or, insofar as it concerns the pupils' first language, is in the main directed at reading and writing, the study of literature, formal grammar, and alleged standards of correctness, which may not be those of all the pupils' regional or social dialects.

All of what goes under the title of language teaching at school presupposes and relies on the prior knowledge of a first language in its basic vocabulary and essential structure, acquired before school age. If language is transmitted as part of culture, it is no less true that culture as a whole is transmitted very largely through language, insofar as it is explicitly taught.

The fact that humankind has a history in the sense that animals do not is entirely the result of language. So far as researchers can tell, animals learn through spontaneous imitation or through imitation taught by other animals. This does not exclude the performance of quite complex and substantial pieces of cooperative physical work, such as a beaver's dam or an ant's nest, nor does it preclude the intricate social organization of some species, such as bees. But it does mean that changes in organization and work will be the gradual result of mutation cumulatively reinforced by survival value; those groups whose behaviour altered in any way that increased their security from predators or from famine would survive in greater numbers than others. This would be an extremely slow process, comparable to the evolution of the different species themselves. There is no reason to believe that animal behaviour has

materially altered during the period available for the study of human history in the last 5,000 years or so except, of course, when human intervention by domestication or other forms of interference has itself brought about such alterations. Nor do members of the same species differ markedly in behaviour over widely scattered areas, again apart from differences resulting from human interference. Bird songs are reported to differ somewhat from place to place within species, but there is little other evidence for areal divergence. In contrast to this unity of animal behaviour, human cultures are as divergent as are human languages over the world, and they can and do change all the time, sometimes with great rapidity, as among the industrialized countries of the 21st century.

Cultural changes and its relation to language is by far the greatest part of learned behaviour, and is transmitted by vocal instruction, not by imitation. Some imitations are clearly involved, especially in infancy, in the learning process, but proportionately this is hardly significant. Through the use of language, any skills, techniques, products, modes of social control, and so on can be explained, and the end results of anyone's inventiveness can be made available to anyone else with the intellectual ability to grasp what is being said. Spoken language alone would thus vastly extend the amount of usable information in any human community and speed up the acquisition of new skills and the adaptation of techniques to changed circumstances or new environments. With the invention and diffusion of writing, this process widened immediately, and the relative permanence of writing made the diffusion of information still easier. Printing and the increase in literacy only further intensified this process.

Modern techniques for broadcast or almost instantaneous transmission of communication all over the globe, together with the tools for rapidly translating between the languages of the world, have made it possible for usable knowledge of all sorts to be made accessible to people almost anywhere in the world. This accounts for the great rapidity of

scientific, technological, political, and social change in the contemporary world. All of this, whether ultimately for the good or ill of humankind, must be attributed to the dominant role of language in the transmission of culture.

Language as a Marker of Social Identity:

Languages symbolize identities and are used to signal identities by those who speak them. People are also categorized by other people according to the language they speak. People belong to many social groups and have many social identities. Social markers in language and speech are conveyed through verbal and nonverbal means that serve to identify individuals in the groups to which they belong. Language is intrinsic to the expression of culture. As a means of communicating values, beliefs and customs, it has an important social function and fosters feelings of group identity and solidarity. It is the means by which culture and its traditions and shared values may be conveyed and preserved.

Language is a fundamental aspect of cultural identity. It is the means by which we convey our innermost self from generation to generation. It is through language that we transmit and expressour culture and its values. It is a fundamental aspect of cultural identity, and the means by which weconvey our innermost self from generation to generation. It is through language that we transmit and express our culture and its values.

Linguistic identity refers to a person's identification as a speaker of one or more languages. Linguistic identity is often an important part of our identity. And this is especially truefor multilingual individuals. Language is defined as a system of doubly articulated signs, that is to say that the meaning making is done at two levels of articulation: that of significant entities (Morphemes and lexemes) forming statements and that of distinctive units (phonemes) forming the signifying units. Saussure distinguishes the language and the word, which is the use and the realization of the system of language by its speakers.

Speakers of commonly comprehensible dialects interact and converse with each other, the dialects that are in contact may be changed linguistically. When speakers of a particular dialect are exposed to another dialect in the long term, such as in the case of migration, these speakers may adjust their speech to accommodate to the members of local speech community and modify their pronunciation of certain linguistic variables that are markers within the local community. Gradually, they acquire a dialect other than their native dialect.

Languages symbolize identities and are used to signal identities by those who speak them. People are also categorized by other people according to the language they speak. People belong to many social groups and have many social identities. Each group has its own language or variety of a language e.g., a regional group will have a regional dialect (which is a language variety), or a football team supporter's club will have its own jargon. Speaking that language/variety/jargon gives a sense of belonging to the group. There is often a particularly strong link between language and a sense of belonging to a national group, a sense of national identity. In some cases, there is one 'national language' which is spoken by everyone with the same national identity. Most cases are however complex, and involve more than one language, and some languages are linked to more than one national identity.

National language(s) are taught in schools as subjects and are also used in schools to teach other subjects. For some children this means learning to read and write, and then speak, a different language from the language of the home (or a new version of their home language), and in doing so there may be implicit or explicit encouragement to forget the language of the home. Such children are not learning their 'mother tongue', and because of the link between language and identity, this can mean weakening or even forgetting the social identity created in the home, a regional identity or an identity brought from another country.

The use of the national language for teaching/learning other subjects can be a barrier to learning those subjects for children for whom it is not the first language, 'mother tongue'. This may be caused by terminology and ways of speaking/writing in those subjects. It can also be understood as a link between language and subject identity. Learning the subject is like joining the social group who identify with that subject (e.g., historians, physicists) and it is necessary to learn their language.

The link between learning foreign languages and the emergence of new identities is not clearbut is potentially important. Learning foreign languages in certain circumstances may be an experience of acquiring a new identity, although the methods of teaching may also actually prevent this. The implications for the emergence of a European identity in addition to national identities can be speculated on in the light of policies to encourage this.

Culture is perceived as a society's software, which is cumulative, ongoing, adapts and evolves overtime with members having multiple identities and having membership to multiple subgroups in society. As such evolution takes place, new societal and cultural identities are formed. Language can be a robust marker of social and cultural identity at many levels in society with the capability of binding and dividing groups in society. However, the loss of language, through either lack of opportunities for maintenance or as a deliberate policy of suppression by the dominate language affects a person's and a nation's cultural heritage and social identity.

Language is a heterogeneous system of communication; variation has a direct impact on all languages as members of any society differ in terms of social variables such as age, gender and the level of education. Moreover, languages are also affected by change because of the many extra linguistic factors which can be political, social and economic. The motivation of language change can be introduced from other language

systems or in relation to social attribute. It can also be described through mutual contact and speech accommodation processes.

The most crucial factor is the attitude of those who speak a particular language, it is essential that the state creates a social and political environment that encourages multilingualism and respect for minority languages. It should enact laws that recognize and protect minority languages, encourage an education system that promotes mother-tongue instruction and create creative collaboration between community members and linguists to develop a writing system and introduce formal instruction in these languages. Linguistic forms vary between groups of speakers, language serves as a source of social markers, allowing people to distinguish between those who do and do not belong to the same social group.

Language is intrinsic to the expression of culture. It is the means by which we convey our innermost self from generation to generation. It is through language that we transmit and express our culture and its values. Words, language, have the power to define and shape the human experience. Language use as an aspect of social identity is described in terms of (1) culturally specific vocabulary, (2) context-sensitive topics and (3) shared attitudes. As people become members of a social group and learn to share that group's identity, they acquire this 'group talk'. An understanding of group talk analyzed on such a three-part model discoverable via participant observation may also be useful in leading toward an understanding of the process of social categorization as it plays a role in inter group communication.

People in new geographical locations may redefine their identities to conform to their context. Language helps in determining the identity of an individual. Language may identify an individual with a certain social status, race, nationality, or gender. People who identify

themselves with a certain group usually use a common language. In the family setting, people communicate using a certain language. Using this language to communicate with family members may elicit feelings of endearment either consciously or unconsciously. Therefore, use of the language gives them a sense of belonging. In addition, the national language of a country gives the residents of the country a national identity. Therefore, language is the unifying factor that helps in determining the identity of a certain group of people.

First of all, here are some definitions and explanations which describe the key concepts and ideas. There is inevitable simplification and anyone can think of many exceptions, but the purpose is to establish the main trends in the relationships among languages and identities.

Languages and Language Varieties:

People communicate with each other using the shared language of their group. The group might be as small as a couple (married or unmarried partners, twins, mother and daughter etc. who share a 'private' language where only they know the meaning of some words) or as large as a nation, where everyone understands the allusions in their shared language (often allusions to shared history, to contemporary events, to media people of fact or fiction etc). The 'secret' language of the smallest group and the public language of the national group are two varieties of the same language. Every social group, large or small, has its own language variety, (regional groups have varieties of the national language as opposed to regional or minority languages, which are usually called dialects') and there is overlap among all the varieties.

Social Identities:

People belong to groups (a family, a sports club, a company, a school, a minority, a nation, etc.)

i. They identify with groups and say ‘I am an X’;

ii. They are identified and accepted by others in the group: ‘You are one of us; we are X’ (but sometimes they are rejected by people in a group to which they would like to belong)

iii. People from other groups identify them as belonging to a group: ‘You are an X and we are a Y, where X and Y are the same kind of group (e.g., two families, two sports clubs or two nations).

Multiple Social and Linguistic Identities:

Individuals belong to many groups and speak the language varieties of each group. An individual can be a member of a family, a sports club, a nation, and (unconsciously) speak in each group a variety of ‘the same’ language. They become conscious of this only if someone uses the ‘wrong’ words for the group or does not recognize the allusions being made in a group conversation. Speaking the correct variety makes the individual an insider, a member of the in-group; not doing so identifies the individual as an outsider or a member of an out-group: ‘S/he is not one of us, an X, because s/he does not speak our language’.

Individuals Acquire the (spoken) Language Variety of a Group Naturally:

Children are (usually) born into a family and acquire the language variety of the family; theygo through the same process with their group of friends and acquire a different language variety of ‘the same’ language, one which may be partly incomprehensible to their parents and is meant to create a sense of inclusion in an in-group (simultaneously creating a means of excluding unwanted people).

When the group of friends speaks a completely different language (not just a new variety of the same language) to that of the family, the difference is noticeable and people say that the child is ‘bilingual’. This process of acquiring either new language varieties or

completely new languages can continue throughout life as people become members of different groups within the same society, or move to a different society. Sometimes they do not notice they are acquiring a new variety of 'the same' language, and sometimes they do especially if they have to acquire a completely different language.

Schools teach (written) language formally:

Children acquire spoken language naturally and inevitably; written language has to be formally taught and learnt (and this is not always inevitable and successful). Because schools are (usually) institutions created by states and owing allegiance to states, the variety of written languagetaught is the 'official' language and children learn to read and write the language of the state, i.e., one of the versions present in the society. They are also often encouraged to speak the language they write, to make their spoken language more like the language of the state. The name of this language is often related to the name of the state (French/ France etc.) but not always (French/ Belgium for example). The process of learning the state language (or languages) is part of the process of learning/ acquiring one's state/ national identity, a process in which the whole school curriculum plays an important role.

UNIT II

APPROACHES TO THE STUDY OF LANGUAGE

Language as a System of Communication:

A language is a structured system of communication. The structure of a language is its grammar and the free components are its vocabulary. Languages are the primary means of communication of humans, and can be conveyed through speech (spoken language), sign, or writing. Many languages, including the most widely spoken ones, have writing systems that enable sounds or signs to be recorded for later reactivation. Human language is unique among the known systems of animal communication in that it is not dependent on a single mode of transmission (sight, sound, etc.), is highly variable between cultures and across time, and affords a much wider range of expression than other systems.

Human languages have the properties of productivity and displacement, and rely on social convention and learning. Estimates of the number of human languages in the world vary between 5,000 and 7,000. Precise estimates depend on an arbitrary distinction (dichotomy) being established between languages and dialects. Natural languages are spoken, signed, or both; however, any language can be encoded into secondary media using auditory, visual, or tactile stimuli for example, writing, whistling, signing, or braille. In other words, human language is modality independent, but written or signed language is the way to inscribe or encode the natural human speech or gestures.

Depending on philosophical perspectives regarding the definition of language and meaning, when used as a general concept, language may refer to the cognitive ability to learn and use systems of complex communication, or to describe the set of rules that makes up these systems, or the set of utterances that can be produced from those rules. All languages rely on the process of semiosis to relate signs to particular meanings. Oral,

manual and tactile languages contain a phonological system that governs how symbols are used to form sequences known as words or morphemes, and a syntactic system that governs how words and morphemes are combined to form phrases and utterances.

The scientific study of language is called linguistics. Critical examinations of languages, such as philosophy of language, the relationships between language and thought, etc., such as how words represent experience, have been debated at least since Gorgias and Plato in ancient Greek civilization. Thinkers such as Rousseau (1712 – 1778) have debated that language originated from emotions, while others like Kant (1724 –1804), have held that languages originated from rational and logical thought. Twentieth century philosophers such as Wittgenstein (1889 – 1951) argued that philosophy is really the study of language itself. Major figures in contemporary linguistics of these times include Ferdinand de Saussure and Noam Chomsky.

Language is thought to have gradually diverged from earlier primate communication systems when early hominins acquired the ability to form a theory of mind and shared intentionality. This development is sometimes thought to have coincided with an increase in brain volume, and many linguists see the structures of language as having evolved to serve specific communicative and social functions. Language is processed in many different locations in the human brain, but especially in Broca's and Wernicke's areas. Humans acquire language through social interaction in early childhood and children generally speak fluently by approximately three years old. Language and culture are codependent. Therefore, in addition to its strictly communicative uses, language has social uses such as signifying group identity, social stratification, as well as use for social grooming and entertainment.

Languages evolve and diversify over time, and the history of their evolution can be reconstructed by comparing modern languages to determine which traits their ancestral

languages must have had in order for the later developmental stages to occur. A group of languages that descend from a common ancestor is known as a language family; in contrast, a language that has been demonstrated to not have any living or non-living relationship with another language is called a language isolate. There are also many unclassified languages whose relationships have not been established, and spurious languages may have not existed at all. Academic consensus holds that between 50% and 90% of languages spoken at the beginning of the 21st century will probably have become extinct by the year 2100.

Language is an important aspect in our day-to-day life because it enables us to communicate. Effective communication is made possible with the help of language. If we used a dictionary to find alternative words for language the top alternative is verbal communication, words and speech. Language is the single greatest human invention of all time. Without proper language, humans would have died off and gone extinct thousands of years ago. Though language is still in early development, we know more about the power of language than any other time in human history. Language not only helps us to communicate information, it also gives us the ability to process information and the ability to interpret and reinterpret information. But sadly, language can also be used as a weapon of control.

When schools and the media control the narrative, language can be used a method to control the mind, instead of language being used as a tool to free the mind. And, when language is not being taught effectively, or used effectively, this creates language disorders,which makes this a type of child abuse that can have devastating consequences. Language is the software of the mind and the brain is the hardware. Language is the machine code of the human brain. Language is the human operating system that shapes our reality and gives life meaning.

Saussurean Dichotomies:

Saussure defines linguistics as the study of language, and as the study of the manifestations of human speech. He says that linguistics is also concerned with the history of languages, and with the social or cultural influences that shape the development of language. One of the concepts introduced by Saussure in his linguistic theory is the linguistic sign. He regards langue as a system of arbitrary signs. First, he defines the sign as a relationship between two equally participating characteristics: the signifier and the signified.

Saussure defines linguistics as the study of language, and as the study of the manifestations of human speech. He says that linguistics is also concerned with the history of languages, and with the social or cultural influences that shape the development of language. A dichotomy is a partition of a whole (or a set) into two parts (subsets). In other words, this couple of parts must be jointly exhaustive: everything must belong to one part or the other, and. mutually exclusive: nothing can belong simultaneously to both parts. Various theoretical dichotomies can be extracted from Saussure's work. This has become a tradition. He made a clear distinction between several new concepts: signifier/signified langue/parole, synchronic/diachronic studies, and syntagmatic/paradigmatic studies.

Signifier / Signified:

One of the concepts introduced by Saussure in his linguistic theory is the linguistic sign. He regards langue as a system of arbitrary signs. First, he defines the sign as a relationship between two equally participating characteristics: signified and the signifier. The first refers to an idea or a concept, the second to a form or an acoustic image. The sign is a meaningful entity, and it is the basic unit of communication. Arbitrariness of the linguistic sign means that there is no inherent or inevitable link between the signifier and

the signified: it is a matter of convention within a speech community. Saussure divides the sign into two distinct components: the signifier (sound-image) and the signified (concept). For Saussure, the signified and signifier are purely psychological: they are form rather than substance.

Today, following Louis Hjelmslev, the signifier is interpreted as the conceptual material form, i.e., something which can be seen, heard, touched, smelled or tasted; and the signified as the conceptual ideal form. In other words, contemporary commentators tend to describe the signifier as the form that the sign takes and the signified as the concept to which it refers.

The relationship between the signifier and signified is an arbitrary relationship: there is no logical connection between them. This differs from a symbol, which is never wholly arbitrary. The idea that both the signifier and the signified are inseparable is explained by Saussure's diagram, which shows how both components coincide to create the sign. In order to understand how the signifier and signified relate to each other, one must be able to interpret signs. The only reason that the signifier does entail the signified is because there is a conventional relationship at play. That is, a sign can only be understood when the relationship between the two components that make up the sign are agreed upon.

Saussure argued that the meaning of a sign depends on its relation to other words within the system; for example, to understand an individual word such as tree, one must also understand the word bush and how the two relate to each other. It is this difference from other signs that allows the possibility of a speech community. However, we need to remember that signifiers and their significance change all the time, becoming dated. It is in this way that we are all practicing semioticians who pay a great deal of attention to signs even though we may never have heard them before. Moreover, while words are the

most familiar form signs take, they stand for many things within life, such as advertisement, objects, body language, music, and so on. Therefore, the use of signs, and the two components that make up a sign can be applied to everyday life.

Langue / Parole:

Saussure distinguished between three main senses of language, and then he emphasized two of them. He sees that language is composed of two aspects langue and parole. These terms have obtained a wide approval in modern linguistics, without any specific translations in European languages. Language is the hereditary propensity of human speech present in all normal human beings. For its correct development, it needs the appropriate environmental prompts. It is a natural bequest distinguishing the human species.

Langue refers to the abstract system shared by all the speakers of the same language, like English, Arabic, French, etc. It is an underlying system of abstract rules of lexicon, grammar and phonology which is implanted in each individual's mind resulting from his nurture in a given speech community. Being peculiar to the speech community, langue is something which the individual can make use of but cannot influence by himself. It has a social nature according to Saussure. Parole refers to the real speech of the individual, an instance of the use of system. It is the concrete side of language. According to Saussure, it is langue that should be the primary concern of the linguist.

Referring to two aspects of language examined by Ferdinand de Saussure at the beginning of the twentieth century, langue denotes a system of internalized, shared rules governing a national language's vocabulary, grammar, and sound system; parole designates actual oral and written communication by a member or members of a particular speech community. Saussure's understanding of the nature of language and

his belief that scholarship should focus on investigating the abstract systematic principles of language instead of researching etymologies and language philosophy led to a revolution in the field of linguistics.

The discussion concerning langue and parole was first suggested by Ferdinand de Saussure and popularized in his *Cours de Linguistique Générale* (*Course in General Linguistics*), a series of Saussure's university lectures collected by his students and published posthumously in 1916. Abandoning the mindset, goals and objectives of historical linguistics, Saussure advocated a synchronic examination of language. Not interested in studying a particular language or the linguistic habits of any one member of a given speech community, Saussure sought to examine language in general and to identify the systems or rules and conventions according to which language functions.

Saussure's views on language influenced linguistics during the twentieth century, and his imprint can be found in theoretical works discussing phonetics, phonology, morphology, syntax, pragmatics and especially semantics. Indeed, the distinction between langue and parole forms an important part of the theoretical basis of structuralism. In a popular lecturer at the University of Geneva, Saussure suggested ideas and concepts that fascinated his students, yet he did not personally write an authoritative guide to his views. Two colleagues of his, Charles Bally and Albert Sechehaye, collected and edited student notes from three occasions during 1906–11 when he delivered his lectures, publishing the assembled remarks under the title *Cours de Linguistique Générale* in 1916.

In the 1990s newly edited versions of student notes based on Saussure's lectures, along with translations into English, appeared. At the beginning of the twenty-first century, there is still disagreement about a number of Saussure's statements, and problems surrounding the fragmented nature of some of the student notes have not been fully resolved. Through *Cours de Linguistique Générale*, Saussure's views concerning language

and the study of language were introduced to scholars throughout the world.

Saussure rejected the nineteenth century notion that linguistics should be primarily historical and comparative, and disagreed languorously with the idea that substantial effort should be made to identify, codify and promote the standard form of any national language; he felt it was more worthwhile to focus attention on describing language as it exists at a given point in time, and believed that this activity could be conducted in an impartial manner. For Saussure, three aspects of language could be potential objects of consideration in linguistic study, and he used the French words langage, langue and parole to designate these aspects.

Language refers to the anatomical ability and psychological need or urge of humans to create a system of linguistic signs for expressing ideas. Langue represents a system of rules, usages, meanings and structures that are products of the human ability to create language and are shared by members of aspecific speech community. Parole is often equated with speech. It is the concrete realization of a collectively internalized system and also reflects the personality, creativity and physiological capabilities of an individual speaker.

Saussure paid little attention to language, considering it the subject matter of other fields of inquiry, and he regarded parole as too idiosyncratic. Instead, he believed that linguistics should study langue in order to gain a picture of the comprehensive, complex, ordered assemblage of sounds, words and syntactical units. Making use of a concept suggested in the writings of the French sociologist and philosopher Émile Durkheim, Saussure viewed language as a social fact.

According to Saussure, language is acquired through the socialization process; it is not created through a speaker's ingenuity or experimentation. Moreover, he felt that an individual's potential influence on language is minimal. An individual might create a

memorable turn of phrase, but that person is unable to affect the overall structure or sound system of a given language. Finally, speakers can manipulate language in minor ways, but language imposes its rules, order and possibilities on all speakers without exception. As part of their intuitive knowledge of langue, members of a speech community share possession and comprehension of a body of signs.

According to Saussure, a sign consists of two components: a signifier and a signified. Linguistic signs can encompass words, units of grammar, and expressions. The signifier is a sound or series of sounds, and the signified is the meaning that the sounds represent. Saussure was careful to note that signs are actually linked to clusters of meanings or associations and not to specific things. For example, the word 'house' does not refer to a specific object in the world but rather to a concept involving images and associations that speakers have in mind when they say or write the word. Furthermore, the connectionbetween the series of sounds and the cluster of images and emotions is arbitrary. The words 'girl', 'Mädchen', and 'niña' might all refer to a female child, but there is no direct connection between the sounds of each word and the meaning. Even so, speakers form a strong connection in their minds between sounds and meaning.

Saussure stated that langage, the psychological and physiological faculty to produce meaningful language, does not manifest itself solely in the creation of individual sounds, words or units of meaning, and he stressed that parole, individual communication within a speech community, does not take on the form of a string of unrelated utterances. Langage becomes a reality in langue and ultimately in parole through the rules governing the use and organization of signs. These linguistic conventions are expressed in the form of syntagmatic and paradigmatic rules that enable language to convey messages by organizing and sequencing the building blocks of sound and meaning. Syntagmatic relationships refer to the limitations governing sequences of sounds, parts of words, and

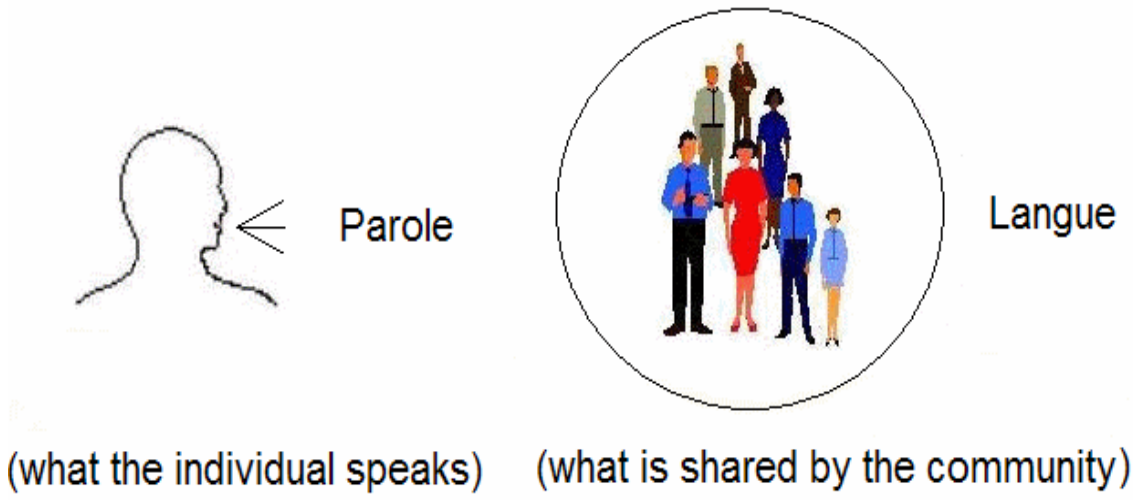
complete words offered by a given national language to create meaning. Paradigmatic relationships concern the existence of words of similar meaning or grammatical form that can substitute for each other in a given context. Saussure's views concerning langue and parole, as well as his understanding of the purpose and goals of linguistics, have exerted immense influence on linguists in Europe and North America.

Leonard Bloomfield, Franz Boas and Edward Sapir adopted Saussure's method of objective, synchronic language study as the basis for their descriptive analyses of various North American Indian languages. Bloomfield also incorporated elements of Saussure's innovative teachings into his writings, most notably *Language* (1933). Roman Jakobson and other members of the Prague School of Linguistics were inspired by Saussure as they investigated sound systems and developed theories of phonetics and phonology. On occasion, agreement or disagreement with Saussure's beliefs can be traced back to an individual's political and philosophical leanings.

The Marxist linguist, Mikhail Bakhtin disapproved of Saussure's efforts to distinguish individual production of language (parole) from collective knowledge and linguistic awareness (langue), a division that, to Bakhtin's way of thinking, isolates an individual from society; he was much more in favour of a theory of language that portrays speech as dependent one, and a product of a specific social context. Stimulated by Saussure's discussion of the sign and its two components – the signified and the signifier – Roland Barthes investigated the contrast between the message of our speech and its form and articulation, and Kenneth Pike advanced his system of tagmemics, a type of grammatical analysis developed in the 1950s.

Noam Chomsky, too, responded to Saussure's ideas when he transformed Saussure's concepts of langage, langue and parole into 'language capacity', 'competence' and 'performance', and achieved a new understanding of the Saussurean

concepts. Twenty first century linguists remain attracted to Saussure's concept of the dual nature of language and to his theory of meaning.

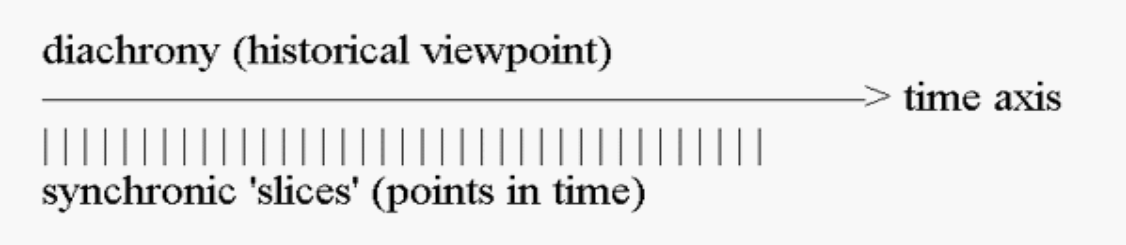


SYNCHRONIC / DICHRONIC:

Contrary to the entirely historical view of language of the earlier hundred years, Saussure emphasized the value of seeing language from two dissimilar views, which he called synchronic and diachronic. A synchronic approach to language studies investigates the state of language at a particular phase of its development without allusion to its history. Saussure referred to this state as an état de langue. In order to study this, linguists will collect samples of language within a fixed period, describing them not considering any historical factor which might have influenced the state of language up to that time. The time factor is irrelevant here.

A diachronic approach, in contrast, is the study of the history of a language, focusing on language change in pronunciation, grammar or vocabulary. This approach deals with the never-ending successions of language states. A diachronic study presupposes a synchronic study. Saussure emphasized that modern linguists should be synchronic in perspective.

The key difference between synchronic and diachronic linguistics lies in the view point used to analyze these two branches of linguistics. Synchronic linguistics, also known as descriptive linguistics, is the study of language at any given point in time while diachronic linguistics is the study of language through different periods in history. Synchronic linguistics and diachronic linguistics are two main divisions of linguistics. The Swiss linguist, Ferdinand de Saussure introduced these two branches of linguistics in his *Course in General Linguistics*. Overall, synchrony and diachrony refer to a language state and to an evolutionary phase of language.



Syntagmatic / Paradigmatic:

Syntagmatic relationships exist between items in a sequence. They are also called linear, co- occurrence, sequential or horizontal relations. By contrast, paradigmatic relationships hold between existing items and other items in the same language that can take the same position in the sequence: between actual elements and their substitutes. Taken together, all elements form a class, a system. These relationships are also called associative, substitution and vertical relationships.

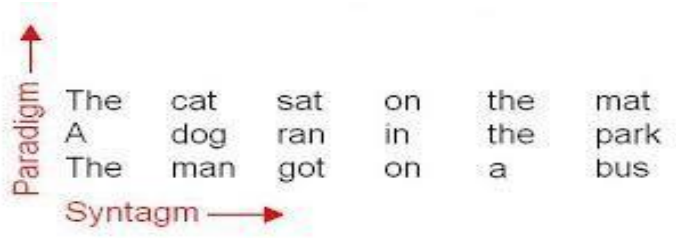
According to Saussure, language, then, has a two-dimensional structure. Syntagms and paradigms explain with how signs relate to each other. Syntagmatic relationships are about positioning. Paradigmatic relationships are about substitution. A syntagmatic relationship involves a sequence of signs that together create meaning. A paradigmatic relationship involves signs that can replace each other, usually changing the meaning with the substitution. The words in a sentence are all syntagms and together they form a

syntagmatic relationship that creates meaning. If one changes the order of syntagms in a sentence it can change the meaning significantly.

E.g., John ate an octopus. An octopus ate John.

Two sentences using the exact same words (syntagms), but very different meanings because the order (the syntagmatic relationship) of the words changed. Sticking with John and his dinner, John might have chosen a variety of things to eat besides octopus. He might have chosen beef, eggplant chicken, or pasta for his meal. Each is part of a paradigm of foods or specifically foods John might eat. The items in a paradigm share some kind of function and the paradigm is the set or category they belong to.

The syntagmatic relationship is seen along the horizontal axis and the paradigmatic relationship is seen along the vertical axis. Start at any row and read across for the syntagmatic relationship. Look up and down any column for the paradigmatic relationship. For example, "The cow jumped over the moon" (syntagmatic) together form one meaning, but you could replace cow with another word in the column (paradigmatic) to form a different sentence with adifferent meaning such as the "The fish jumped over the moon."



Approaches to the Study of Language:

Over the past 20-30 years the study of language has received great impetus. Linguists, psychologists, speech pathologists, educators and others have been involved in analyzing the structure of language, its development, and its function in other forms of human behavior, as well as developing techniques and instruments for measuring ordered and disordered language abilities.

Definition of Language:

The literature provides us with many definitions of language. One of the most meaningful is a linguistic definition provided by Werfel (1962). Language is a structured system of overt, learned and therefore non instinctive, sequentially produced, voluntary, human, symbol carrying vocal sounds by which communication is carried on between two or more persons. Warfel goes onto discuss the meaning of each of the ten terms used in his definition. Some people would take exception to the delimiting nature of his definition; that is, he defines language in terms of overt vocal sounds. To many this implies only speech, one of the aspects of language. Warfel, however, is concerned with language as a system.

Classic approaches treated language as a strongly formal system, with syntax specifying well formedness conditions on strings of abstract lexical items, semantics providing encoding meanings for those items, and pragmatics concerned with the uses to which such strings of items can be put. There was a brief flurry of excitement in the 1960s at the prospect that the formal syntactic rules for language strings might include psychologically real 'transformations', but that hypothesis was quickly disproved. Since then, considerations of psychological reality, the actual dynamics of language and language processing, and the functional purposes and constraints involved in language interactions, productions, and understanding, have progressed, but have done so largely in the shadow of and against the pressures of a formalistic center of linguistics. Nevertheless, dynamic and functional approaches have developed, and are now reaching into the core assumptions of the formalistic approach. These formalistic assumptions include: a base set of sound items that can serve as bricks in the construction of:

• higher level items such as morphemes and words, rules for the formal

combination of such formal items into well-formed strings,

- encoding rules for the meanings of those items,
- compositionality assumptions that the meanings of sentences are strictly compositional from the syntax and the encoded meanings of the items in that syntacticstructure, and that language development honors the boundaries among syntax, semantics,
- and pragmatics, however much it may be the case that learning in one of these sub domains may be scaffolded by previous learning or innate scaffolds in a neighboring domain.

Recent movement has been away from these rather ad-hoc assumptions toward addressing and modeling much more realistic psychological processes toward real language dynamics. In this issue, there is a strong sampling of some of these approaches manifesting an interesting and important partial consilience regarding new ways of thinking about the nature of language and language processes. If language is truly a dynamic process, both in the moment and over time, then grammar must emerge out of such dynamics.

Among other consequences, such a dynamically emerging view of grammar would place both internal and external dynamical considerations at the center of considerations in accounting for grammatical structure. This issue shows that grammatical regularities, considered across multiple languages, honor hierarchies of internal processing costs. Hence, for multiple hierarchies of grammatical possibilities for a given function, structural possibilities higher in the hierarchy demand greater than the processing costs from the individual may happen.

Language honors these processing cost hierarchies in the sense that, whenever a particular language accepts as grammatical any one level in such a hierarchy, it always accepts all lower processing cost possibilities as well. The processing cost hierarchies, then, impose universal constraints on the structure of the space of possible grammatically acceptable structures. Such influences of processing costs on grammatical structure are not consistent with formalist approaches to language. On the external side, Diessel notes that, if language is fundamentally a dynamic phenomenon, frequency can be expected to be an important influence on language on use, acquisition, and on diachronic change. He illustrates the general point with numerous analyses addressing language acquisition, sentence processing, diachronic change, and some cross-linguistic tendencies. He concludes that grammar is an emergent phenomenon that is fundamentally grounded in language use. This too is not consistent with a formalist approach.

Goldberg, Casenhiser, and White address the processes by which one learns general linguistic categories from exposures to exemplars. They find that minimal exposure suffices, and that generalizations in language are akin to non-linguistic generalizations. That is, the processes of generalizing on the basis of similarities seems to be similar to the learning of general non-linguistic categories.

A deeper theme is that the learning of grammatical structures arises from category and organizational decompositions within general forms conveying particular forms of meaning. Grammatical structuring, then, does not arise as a formal system to which meanings can then be attached. Instead, grammar and meaning are progressively and only partially differentiated with respect to each other: the boundary between syntax and semantics is not a priori and is not strict - it is not formal. If language is a social, dynamic process, then there is no appropriate reason why the formal boundaries commonly postulated hold at all. Certainly, this seems to be the case forthe boundaries within what

is taken as the domain of language studies, such as between syntax and semantics. But there is equally little reason to accept the strong boundary between formal cognitive aspects of language and social/emotional aspects of language.

Greenspan and Shanker outline an approach to language acquisition in which functional aspects of emotional signaling and emotional regulation between adult caregivers and infants plays a central, or even the central, role in language development. If language arises out of social interaction, rather than as an austere encoded transmission of formal mental contents, then emotional aspects must be involved.

One of the core foundational assumptions of classical language studies is that language units are constructed out of more basic units, which are constructed out of still more basic units, with the whole hierarchy bottoming out in little atoms of sound: phonemes. Port argues that there are no psychologically real phenomena that answer to the notion of a phoneme.

Phonemes are analytic idealizations and abstractions generated within the study of language, but not units or phenomena that are real in the actual processes of language production and understanding. Note that if this foundational level of linguistic bricks does not exist, then neither does any higher level of assumed linguistic atomic units, such as words. Phenomena that one attempt to address in such terms are dynamically emergent and partially differentiated for functional purposes. One should take the partial functional differentiations as constituting fixed units only at the cost of ignoring the actual dynamics by which such phenomena are produced. Finally, Bickhard outlines a general dynamic model of language as a special kind of social interaction, illuminating several consequences of such an approach.

A major focus is on showing how the assumptions and arguments for the standard formal approach to language are invalid and unsound. There are no good reasons, either apriorism or empirical, for maintaining the formal approach. Most generally, all sciences, outside of studies of mental phenomena, have historically transcended substance and structural understandings of their subject matter to a recognition that they are fundamentally concerned with process, with dynamics. Phlogiston as a substance model of fire was replaced with combustion; caloric as a substance model of heat with random kinetic energy; and so on. That replacement, that move to process, is finally underway with respect to psychological phenomena, and, most especially, with respect to language.

Language as a System of Communication:

Language is a system of communication that relies on verbal or non-verbal codes to transferinformation. Communication is a way of interchanging messages or information between two or more people, focusing on the message. Consider the following definitions of language found in dictionaries and introductory text books:

a) Language is a system of arbitrary, vocal symbols which permit all people in a given culture, or other people who have learned the system of that culture, to communicate or interact.
b) Language is a system of communication by sound, operating through the organs of speech and hearing, among members of a given community, and using vocal symbols possessing arbitrary conventional meanings.
c) Language is any set or symbols of linguistic symbols as used in a more or less uniform fashionby a number of people who are thus enabled to communicate intelligibly with one another.
d) Language is a system of arbitrary vocal symbols used for human communication.

Saussurean Dichotomies: Signifier and Signified, Langue and Parole:

By langue, best translated in its technical Saussurean sense as language system, is meant the totality of regularities and patterns of formation that underlie the utterances of a language; by parole, which can be translated as language. The Swiss linguist, Saussure is sometimes thought of as the father of modern linguistics. Although Saussure was well known in his lifetime for his work in the history of Indo-European, his most influential work was not published until after his death, when some of his students got together and, on the basis of their lecture notes, reconstructed the course in linguistics that he had taught in Geneva. The *Cours de linguistique générale* became one of the key texts in linguistics, and ushered in the era of structuralism.

Langue versus Parole:

Saussure says there are two sides to language: langue and parole. While the French terms are generally used in English, they are sometimes translated as 'language' and 'speech' respectively, though not without some danger of ambiguity. Langue is that part of language which is not complete in any individual, but exists only in the collectivity. Parole, on the other hand, is observable in the behaviour of the individual. According to Saussure, it is not homogeneous.

Chomsky introduces the distinction between competence and performance. Performance is very like Saussure's parole. It is prone to error, tomemory lapse and the like. Chomsky also points out that for Saussure langue is a system of signs, while for him competence is a generative system. This is an accurate description of langue, but does not seem to be fundamental to the notion of it in the way that its social aspect is.

Synchrony versus Diachrony:

A given language can be studies in two ways as Saussure maintains. The first is to look at the language as it is (or was) at any particular point in time. Thus, one might study the syntax of American English in the early twenty-first century, or the phonology of seventeenth century French or the patterns of compounding in Classical Chinese. These are all Synchronic studies (syn- 'alike', chronos 'time').

The alternative is to look at the way in which a language develops or changes over time. In this way we might consider the development of the English verb system, or changes in Arabic phonology from the classical period until today. These are diachronic studies (dia- 'through', chronos 'time'). Despite such problems, the distinction between synchronic and diachronic studies is generally maintained today.

Paradigmatic versus Syntagmatic:

English is written from left to right, with elements further to the left corresponding to elements produced earlier than elements further to the right. So, in (1) 'cat' precedes 'mat' in linear order, corresponding to temporal structure in speech: we would say 'cat' before we would say 'mat'.

(1) The cat sat on the mat

The elements in (1) are said to be related to each other syntagmatically. Together they form a syntagm (/sɪntæm/) or construction. We can say that the verb 'sit' (or sat in this particular sentence) determines what it will be related to syntagmatically in that it demands something in the position ofthe cat in (1) and allows, but does not demand, an equivalent phrase after it (as in They sat the dog on the mat). However, language is also structured in terms of the words (or other elements) which arenot there but which could have been. Each of the words in (1) could have been replaced by a number of other possible words.

(2) This girl sits across your bed.

The words in each of the columns in (2) are related to each other paradigmatically. They are related by being alternative possible choices at a position in the syntagm. While elements which are related syntagmatically are all present, elements which are related paradigmatically are mostly absent: they are relationships of potential.

Signifier and Signified:

Saussure insisted that the linguistic sign has two aspects to it: a sound side and a meaning side. The two are tightly linked within a speech community, and can be seen as being the two sides of the same playing card, but we must nevertheless keep these two aspects of the sign separate from each other in our technical understanding of the way in which language functions. The sign unites the physical set of sounds (the signifier, or signifiant) with a particular mental image (the signified or signifié). Saussure makes a number of other points about linguistic signs which have become accepted, although they had not always been seen as obvious prior to Saussure. Perhaps the most important of these is the fact that the linguistic sign is arbitrary.

UNIT - III

LANGUAGE AND LINGUISTICS

Analysis refers to how the writer conveys meaning through language techniques, such as figures of speech, sentence structure, tone and word choice. When analyzing language, one must show that they are aware of how it is written. This means identifying the language features used and explaining their effect. For example, in persuasive speaking or writing what we are primarily examining is the art of rhetoric. This means more than the identification of persuasive techniques used by writers; it means that one must identify how writers use these techniques to persuade. There are six levels of linguistic analysis. They range in depth between the specifics of thesounds we make to form language to the context surrounding speech events. They are phonetics, phonology, morphology, syntax, semantics, and pragmatics.

Phonetics:

Phonetics studies individual speech sounds (phonemes) and how they are pronounced. This is the most basic level of analysis because we use these specific sounds to make up words. Certain languages use certain sounds to convey meaning that others do not, so establishing a standard symbol system (that is, the International Phonetic Alphabet) allows phoneticians to analyze basic levels of speech in various languages without barriers of understanding. Phonetics also touches on the physiology behind creating speech sounds.

Phonetics is the study of speech sounds and their physiological production and acoustic qualities. It deals with the configurations of the vocal tract used to produce speech sounds (articulatoryphonetics), the acoustic properties of speech sounds (acoustic phonetics), and the manner of combining sounds so as to make syllables, words, and sentences (linguistic phonetics).

Articulatory Phonetics:

The traditional method of describing speech sounds is in terms of the movements of the vocal organs that produce them. The main structures that are important in the production of speech are the lungs and the respiratory system, together with the vocal organs. The airstream from the lungs passes between the vocal cords, which are two small muscular folds located in the larynx at the top of the windpipe. The space between the vocal cords is known as the glottis. If the vocal cords are apart, as they are normally when breathing out, the air from the lungs will have a relatively free passage into the pharynx and the mouth. But if the vocal cords are adjusted so that there is a narrow passage between them, the airstream will cause them to be sucked together. As soon as they are together there will be no flow of air, and the pressure below them will bebuilt up until they are blown apart again. The flow of air between them will then cause them to be sucked together again, and the vibratory cycle will continue. Sounds produced when the vocal cords are vibrating are said to be voiced, as opposed to those in which the vocal cords are apart, which are said to be voiceless.

The air passages above the vocal cords are known collectively as the vocal tract. For phonetic purposes they may be divided into the oral tract within the mouth and the pharynx, and the nasal tract within the nose. Many speech sounds are characterized by movements of the lower articulators that is, the tongue or the lower lip toward the upper articulators within the oral tract. The upper surface includes several important structures from the point of view of speech production, such as the upper lip and the upper teeth; The alveolar ridge is a small protuberance just behind the upper front teeth that can easily be felt with the tongue. The major part of the roof of the mouth is formed by the hard palate in the front, and the soft palate orvelum at the back. The soft palate is a muscular flap that can be raised so as to shut off the nasal tract and prevent air from going out through the nose. When it is raised so that the soft palate is pressed against the back wall of the pharynx

there is said to be a velic closure. At the lower end of the soft palate is a small hanging appendage known as the uvula.

There are also specific names for different parts of the tongue. The tip and blade are the most mobile parts. Behind the blade is the so-called front of the tongue; it is actually the forward part of the body of the tongue and lies underneath the hard palate when the tongue is at rest. The remainder of the body of the tongue may be divided into the centre, which is partly beneath the hard palate and partly beneath the soft palate; the back, which is beneath the soft palate; and the root, which is opposite the back wall of the pharynx.

The major division in speech sounds is that between vowels and consonants. Phoneticians havefound it difficult to give a precise definition of the articulatory distinction between these two classes ofsounds. Most authorities would agree that a vowel is a sound that is produced without any major constrictions in the vocal tract, so that there is a relatively free passage for the air. It is also syllabic. This description is unsatisfactory in that no adequate definition of the notion syllabic has yet been formulated.

Consonants:

In the formation of consonants, the airstream through the vocal tract is obstructed in some way. Consonants can be classified according to the place and manner of this obstruction. Some of the possible places of articulation are indicated by the arrows going from one of the lower articulators toone of the upper articulators. The principal terms that are required in the description of English articulation, and the structures of the vocal tract that they involve are: bilabial, the two lips; dental, tongue tip or blade and the upper front teeth; alveolar, tongue tip or blade and the teeth ridge; retroflex, tongue tip and the back part of the teeth ridge; palato-alveolar, tongue blade and the back part of the teeth ridge; palatal, front of tongue and hard palate; and velar, back of tongue and soft palate.

The additional places of articulation are required in the description of other languages.

Note that the terms for the various places of articulation denote both the portion of the lower articulators (i.e., lower lip and tongue) and the portion of the upper articulatory structures that are involved. Thus, velar denotes a sound in which the back of the tongue and the soft palate are involved, and retroflex implies a sound involving the tip of the tongue and the back part of the alveolarridge. If it is necessary to distinguish between sounds made with the tip of the tongue and those made with the blade, the terms apical (tip) and laminal (blade) may be used. There are six basic manners of articulation that can be used at these places of articulation: stop,fricative, approximant, trill, tap, and lateral.

Stops:

Stops involve closure of the articulators to obstruct the airstream. This manner of articulation can be considered in terms of nasal and oral stops. If the soft palate is down so that air can still go out through the nose, there is said to be a nasal stop. Sounds of this kind occur at the beginning of the words my and nigh. If, in addition to the articulatory closure in the mouth, the soft palate is raised so that the nasal tract is blocked off, then the airstream will be completely obstructed, the pressure in the mouth will be built up, and an oral stop will be formed. When the articulators open the airstream will be released with a plosive quality. This kind of sound occurs in the consonants in the words pie, tie, kye, buy, die, and guy. Many authorities refer to these two articulations as nasals, meaning nasal stops(closure of the articulators in the oral tract), and stops, meaning oral stops (raising of the soft palate to form a velic closure).

Fricatives:

A fricative sound involves the close approximation of two articulators, so that the airstream is partially obstructed and a turbulent airflow is produced. The mechanisms used in the production of these sounds may be compared to the physical forces involved when the wind whistles round a corner. Examples are the initial sounds in the words ‘fie’, ‘thigh’,

‘sigh’, and ‘shy’. Some authorities divide fricatives into slit and grooved fricatives, or rill and flat fricatives, depending on the shape of the constriction in the mouth required to produce them. Other authorities divide fricatives into sibilants, as in ‘sigh’ and ‘shy’, and nonsibilants, as in ‘fie’ and ‘thigh’.

Approximants:

Approximants are produced when one articulator approaches another but does not make the vocal tract so narrow that a turbulent airstream results. The terms frictionless continuant, semi vowel and glide are sometimes used for some of the sounds made with this manner of articulation. The consonants in the words ‘we’ and ‘you’ are examples of approximants.

Trills:

A trill results when an articulator is held loosely fairly close to another articulator, so that it is set into vibration by the airstream. The tongue tip and blade, the uvula, and the lips are the only articulators than can be used in this way. Tongue tip trills occur in some forms of Scottish English in words such as ‘rye’ and ‘ire’. Uvular trills are comparatively rare but are used in some dialects of French, but not Parisian French. Trills of the lips are even rarer but do occur in a few African languages.

Taps:

A tap is produced if one articulator is thrown against another, as when the loosely held tongue tip makes a single tap against the upper teeth or the alveolar ridge. The consonant in the middle of a word such as ‘letter’ or ‘Betty’ is often made in this way in American English. The term flap is also used to describe these sounds, but some authorities make a distinction between taps as defined here and flaps, in which the tip of the tongue is raised up and back and then strikes the alveolar ridge as it returns to a position behind the lower front teeth. Some languages e.g., Hausa, the principal language of Northern Nigeria

distinguish between words containing a flap and words containing a tap. The distinction between a trill and a tap is used in Spanish to distinguish between words such as ‘perro’, meaning ‘dog’ and pero, meaning ‘but’.

Laterals:

When the airstream is obstructed in the mid-line of the oral tract, and there is incomplete closure between one or both sides of the tongue and the roof of the mouth, the resulting sound is classified as a lateral. The sounds at the beginning and end of the word lull are laterals in most formsof American English. The production of many sounds involves more than one of these six basic manners of articulation.

The sounds at the beginning and end of the word church are stops combined with fricatives. The articulators - tongue tip or blade, and alveolar ridge come together for the stop, and then, instead of coming fully apart, they separate only slightly so that a fricative is made at the same place of articulation. This kind of combination is called an affricate. Lateral articulations may also occur in combination with other manners of articulation. The laterals in a word such as lull might moreproperly be called lateral approximants, in that the airstream passes out freely between the sides of the tongue and the roof of the mouth without a turbulent airstream being produced. But in some sounds in other languages the sides of the tongue are closer to the roof of the mouth and a lateral fricative occurs; an example is the sound spelled ll in Welsh.

Secondary Articulations:

When an approximant articulation occurs at the same time as another articulation is being made at a different place in the vocal tract, the approximant is said to form a secondary articulation. There are special terms for some of these possibilities. Added lip rounding is called labialization; it occurs in the formation of several English sounds e.g., during the pronunciation of the palato-alveolar fricative at the beginning of the word ‘shoe’.

Raising of the front of the tongue while simultaneously making another articulation elsewhere in the vocal tract is called palatalization. It is the distinguishing characteristic of the soft consonants in Russian and also occurs, to a lesser extent, in English; e.g., in the first consonant in the word ‘leaf’. Raising of the back of the tongue to form a secondary articulation is called velarization; it occurs in the last consonant in the word ‘feel’, which therefore does not contain the same sounds as those in the reverse order in the word ‘leaf’. Retracting of the root of the tongue while making another articulation is called pharyngealization; it occurs in Arabic in what are called emphatic consonants.

The states of the glottis, places of articulation, and manners of articulation discussed above are sufficient to distinguish between the major contrasts among the consonants of English and many other languages. But additional possibilities have to be taken into account in a more detailed description of English, or in descriptions of several other languages. Among these possibilities are variations in the timing of the states of the glottis. In addition to the contrast between the voiced and voiceless states of the glottis that occur during an articulation, there may be variations in the state of the glottis during the release of the articulation. Thus, both the p in pin and that in spin are voiceless bilabial stops, but they differ in that the glottis remains in a voiceless position for a short time after the release of the bilabial stop in pin, whereas in spin the voicing starts as soon as the lips come apart.

When there is a period of voicelessness during the release of an articulation, the sound is said to be aspirated. The main difference between the consonants in pea and bee, when these words are said in isolation, is not that the one is voiceless and the other voiced, but that the first is aspirated and the second is unaspirated. Some languages distinguish between both voiced - voiceless and aspirated - unaspirated sounds. Thus, Thai has contrasts between voiceless aspirated stops, voiceless unaspirated stops, and voiced unaspirated stops.

Many other interesting and important developments occurred in 19th century linguistic research. Several languages use more than just the voiced and voiceless states of the glottis. In Hindi and many of the other languages of India, some sounds are produced while the vocal cords are vibrating for part of their length but are apart, so that a considerable amount of air escapes between them at one end. This phenomenon is known as breathy voice, or murmur. Other languages have sounds in which the vocal cords are held tightly together so that only part of their length can vibrate. This kind of sound, which is usually very low pitched, is sometimes called creaky voice, or vocal fry. It is used to make contrasts between consonants in several American Indian languages. This articulation also occurs in many forms of English as the usual pronunciation of 't' in words such as 'bitten' and 'fatten'.

Types of Airstreams:

In English, all sounds are produced with an airstream caused by the expiration of the air from the lungs. This is known as a pulmonic airstream. Other mechanisms for producing an airstream also occur. If there is a glottal stop and the closed glottis is moved rapidly upward or downward it can act like a piston pushing or pulling the air in the pharynx. This is the glottalic airstream mechanism.

When there is an upward movement of the closed glottis the resulting sound is called an ejective. Amharic, the national language of Ethiopia, uses this mechanism to produce both ejective stops and fricatives, which contrast with the more usual stops and fricatives made with a pulmonic airstream mechanism. A downward movement of the glottis is used in the production of implosive sounds, which occur in many American Indian, African, and other languages. The use of movements of the tongue to suck air into the mouth is known as the velaric airstream mechanism; it occurs in the production of clicks, which are regular speech sounds in many languages of southern Africa.

To summarize, a consonant may be described by reference to seven factors: (1) state

of the glottis, (2) secondary articulation (if any), (3) place of articulation, (4) type of airstream, (5) central orlateral articulation, (6) velic closure - oral or nasal, and (7) manner of articulation. Thus, the consonant at the beginning of the word swim is a (1) voiceless, (2) labialized, (3) alveolar, (4) pulmonic, (5) central, (6) oral, (7) fricative. Unless a specific statement is made to the contrary, consonants are usually presumed to have a pulmonic airstream and no secondary articulation, and it is also assumed that they are not laterals or nasals. Consequently, points 2, 4, 5, and 6 are often disregarded and a three-term description e.g., voiceless alveolar fricative is sufficient.

Vowels:

Vowels traditionally have been specified in terms of the position of the highest point of the tongue and the position of the lips. The highest point of the tongue is in the front of the mouth for the vowels in heed, hid, head, and had. Accordingly, these vowels are classified as front vowels, whereas the vowels in 'hod', 'hawed' and 'hood' are classified as back vowels. The tongue is highest in the vowels in 'heed', which are therefore called high, or close, vowels, and lowest in the vowels in 'had' and 'hod', which are called low, or open, vowels. The height of the tongue for the vowels in the other words is between these two extremes, and they are therefore called mid vowels. Lip positions may be described as being rounded, as in 'unrounded' or 'spread' and 'heed'.

The specification of vowels in terms of the position of the highest point of the tongue is not entirely satisfactory for a number of reasons. In the first place, it disregards the fact that the shape of the tongue as a whole is very different in front vowels and in back vowels. Second, although the height of the tongue in front vowels varies by approximately equal amounts for what are called equidistant steps in vowel quality, this is just not factually true in descriptions of back vowels. Third, the width of the pharynx varies considerably, and to some extent independently of the height of the tongue, in different vowels.

Some authorities use terms such as tense and lax to describe the degree of tension in the tongue muscles, particularly those muscles responsible for the bunching up of the tongue lengthways. Other authorities use the term tense to specify a greater degree of muscular activity, resulting in a greater deformation of the tongue from its neutral position. Tense vowels are longer than the corresponding lax vowels. The vowels in ‘heed’ and ‘hayed’ are tense, whereas those in ‘hid’ and ‘head’ are lax.

In many languages there is a strong tendency for front vowels to have spread lip positions, andback vowels to have lip rounding. As will be seen in the next section, this results in vowels that are acoustically maximally distinct. But many languages e.g., French and German have front rounded vowels. Thus, French has a contrast between a high front unrounded vowel in ‘life’, and a high front rounded vowel with a very similar tongue position in vu, ‘seen’ as well as a high back rounded vowel in ‘you’. Unrounded back vowels also occur e.g., in Vietnamese. Nasalized vowels, in which the soft palate is lowered so that part of the airstream goes out through the nose, occur in many languages. French distinguishes between several nasalized vowels and vowels made with similar tongue positions but with the soft palate raised.

Low vowels in many forms of English are often nasalized, especially when they occur between nasal consonants, as in man. Because of the difficulty of observing the precise tongue positions that occur in vowels, a set of eight vowels known as the cardinal vowels has been devised to act as reference points. This set of vowels is defined partly in articulatory and partly in auditory terms. Cardinal vowel number one is defined as the highest and farthest front tongue position that can be made without producing a fricative sound; cardinal vowel number five is defined as the lowest and farthest back vowel.

Cardinal vowels two, three, and four are a series of front vowels that form auditorily equidistant steps between cardinal vowels one and five; and cardinal vowels six, seven, and

eight are a series of back vowels with the same sized auditory steps as in the front vowel series. Phoneticians who have been trained in the cardinal vowel system are able to make precise descriptions of the vowels of any language in terms of these reference points.

Supra Segmentals:

Vowels and consonants can be considered to be the segments of which speech is composed. Together they form syllables, which in turn make up utterances. Super imposed on the syllables thereare other features that are known as supra segmentals. These include variations in stress (accent) and pitch (tone and intonation). Variations in length are also usually considered to be suprasegmental features, although they can affect single segments as well as whole syllables. All of the suprasegmental features are characterized by the fact that they must be described in relation to other items in the same utterance. It is the relative values of the pitch, length, or degree of stress of an item that are significant. The absolute values are never linguistically important, although they may be of importance paralinguistically, in that they convey information about the age and sex of the speaker, his emotional state, and his attitude.

Many languages like Finnish and Estonian use length distinctions, so that they have long and short vowels; a slightly smaller number of languages, among them Luganda (the language spoken by the largest tribe in Uganda) and Japanese, also have long and short consonants. In most languages segments followed by voiced consonants are longer than those followed by voiceless consonants. Thus, the vowel in ‘cad’ before the voiced ‘d’ is much longer than that in ‘cat’ before the voiceless ‘t’.

Variations in stress are caused by an increase in the activity of the respiratory muscles, so that a greater amount ofair is pushed out of the lungs, and in the activity of the laryngeal muscles, resulting in significant changes in pitch. In English, stress has a grammatical function, distinguishing between nouns and verbs, such as an insult versus to

insult. It can also be used for contrastive emphasis, as in 'I want a RED pen, not a black one'.

Variations in laryngeal activity can occur independently of stress changes. The resulting pitchchanges can affect the meaning of the sentence as a whole, or the meaning of the individual words. Pitch pattern is known as intonation. In English the meaning of a sentence such as 'That's a cat' can be changed from a statement to a question by the substitution of a mainly rising for a mainly falling intonation. Pitch patterns that affect the meanings of individual words are known as tones and are common in many languages. In Chinese, for example, a syllable that is transliterated as 'ma' means 'mother' when said on a high tone, 'hemp' on a mid rising tone, 'horse' on the falling-rising tone, and 'scold' on a high-falling tone.

Acoustic Phonetics:

Speech sounds consist of small variations in air pressure that can be sensed by the ear. Like other sounds, speech sounds can be divided into two major classes: those that have periodic wave forms (i.e., regular fluctuations in air pressure) and those that do not. The first class consists of all thevoiced sounds, because the vibrations of the vocal cords produce regular pulses of air pressure.

From a listener's point of view, sounds may be said to vary in pitch, loudness, and quality. The pitch of a sound with a periodic wave form i.e., a voiced sound is determined by its fundamental frequency, or rate of repetition of the cycles of air pressure. For a speaker with a bass voice, the fundamental frequency will probably be between 75 and 150 cycles per second. Cycles per second are also called hertz (Hz); this is the standard term for the unit in frequency measurements. A soprano may have a speaking voice in which the vocal cords vibrate to produce a fundamental frequency of over 400 hertz. The relative loudness of a voiced sound is largely dependent on the amplitude of the pulses of air pressure produced

by the vibrating vocal cords. Pulses of air with a larger amplitude have a larger increase in air pressure.

The quality of a sound is determined by the smaller variations in air pressure that are superimposed on the major variations that recur at the fundamental frequency. These smaller variations in air pressure correspond to the overtones that occur above the fundamental frequency. Each time the vocal cords open and close there is a pulse of air from the lungs. These pulses act like sharp taps on the air in the vocal tract, which is accordingly set into vibration in a way that is determined by its size and shape. In a vowel sound, the air in the vocal tract vibrates at three or four frequencies simultaneously. These frequencies are the resonant frequencies of that particular vocal tract shape. Irrespective of the fundamental frequency that is determined by the rate of vibration of thevocal cords, the air in the vocal tract will resonate at these three or four overtone frequencies as long as the position of the vocal organs remains the same. In this way a vowel has its own characteristic auditory quality, which is the result of the specific variations in air pressure caused by the superimposing of the vocal tract shape on the fundamental frequency produced by the vocal cords.

Vowel Formants:

The resonant frequencies of the vocal tract are known as the formants. The frequencies of the first three formants of the vowels in the words heed, hid, head, had, hod, hawed and hood. There are no simple relationships between actual tongue positions and formant frequencies. There is, however, a good inverse correlation between one of the labels used to describe the tongue position and the frequency of the first, or lowest formant. This formant is lowest in the so-called high vowels, and highest in the so-called low vowels. When phoneticians describe vowels as high or low, they probably are actually specifying the inverse of the frequency of the first formant.

Most people cannot hear the pitches of the individual formants in normal speech. In

whispered speech, however, there are no regular variations in air pressure produced by the vocal cords, and the higher resonances of the vocal tract are more clearly audible. It is quite easy to hear the falling pitch ofthe second formant when whispering the series of words heed, hid, head, had, hod, hawed and hood. Conversely, the auditory effect of the second and higher formants is lessened when speaking ina creaky voice. Under such conditions, it is possible to hear the rise in pitch of the first formant during the first four of these words, and the fall in pitch during the last.

Consonant Formants:

Voiced consonants such as nasals and laterals also have specific vocal tract shapes that are characterized by the frequencies of the formants. They differ from vowels in that in their production the vocal tract is not a single tube. There is a side branch formed when the nasal tract is coupled in with the oral tract, or, in the case of laterals, when the oral tract itself is obstructed in the centre. The effect of these side branches is that the relative amplitudes of the formants are altered; it is as if one ormore of the possible superimposed variations in air pressure had been lessened because it had been trapped in the cavity formed at the side.

Nasals and laterals can therefore be specified in terms of their formant frequencies, just like vowels. But in a complete specification of these consonants the relative amplitudes of the formants also have to be given, because they are not completely predictable. Other voiced consonants such as stops and approximants (semi vowels) are more like vowels inthat they can be characterized in part by the resonant frequencies - the formants of their vocal tract shapes. They differ from vowels in that during a voiced stop closure there is very little acoustic energy, and during the release phase of a stop and the entire articulation of a semivowel the vocal tractshapes are changing comparatively rapidly. These transitional movements can be specified acoustically in terms of the movements of the formant frequencies. Voiceless sounds do not have a periodic wave form with a well-defined fundamental frequency. Nevertheless,

some sensations of pitch accompany the variations in air pressure caused by the turbulent airflow that occurs during a voiceless fricative, or in the release phase of a voiceless stop. This is because the pressure variations are far from random. During the first consonant in sea these have a tendency to be at a higher centre frequency, and hence a higher pitch, than in the pronunciation of the first consonant in she. There is also a difference in the average amplitude of the wave form in different voiceless sounds. All voiceless sounds have much less energy i.e., a smaller amplitude than voiced sounds pronounced with the same degree of effort. Other things being equal, the fricatives in 'sin' and 'shin' have more amplitude i.e., are louder than those in 'thin' and 'fin'.

Speech sounds are fairly well defined by nine acoustic factors. The first three factors include the frequencies of the first three formants; these are responsible for the major part of the information in speech. Characterizing the vocal tract shape, these formant frequencies specify vowels, nasals, laterals, and the transitional movements in voiced consonants. The frequencies of the fourth and higher formants do not vary significantly.

The fourth factor is the fundamental frequency speaking, the pitch of the larynx pulse in voiced sounds, and the fifth, the amplitude roughly speaking, the loudness of the larynx pulse. These last two factors account for suprasegmental information; e.g., variations in stress and intonation. They also distinguish between voiced and voiceless sounds, in that the latter have no larynx pulse amplitude. The center frequency of the high frequency hissing noises in voiceless sounds constitutes the sixth acoustic factor, and the seventh is the amplitude of these high frequency noises. These two factors characterize the major differences among voiceless sounds.

In more accurate descriptions it would be necessary to specify more than just the center frequency of the noise in fricative sounds. The eighth and ninth factors include the amplitudes of the second and third formants relative to the first formant; the amplitudes of the formants

as a whole are determined by the larynx pulse amplitude. These latter factors are the least important in that they convey only supplementary information about nasals and laterals.

Linguistic Phonetics:

Phonetics is part of linguistics in that one of the main aims of phonetics is to determine the categories that can be used in explanatory description of languages. One way of looking at the grammar of a language is to consider it to be a set of statements that explains the relation between themeanings of all possible sentences in a language and the sounds of which they are composed. In this view, a grammar may be divided into three parts: the syntactic component, which is a set of rules describing the ways in which words may form sentences; the lexicon, which is a list of all the words and the categories to which they belong; and the phonological component, which is a set of rules that relates phonetic descriptions of sentences to the syntactic and lexical descriptions.

Phonological Rules:

In the lexicon of a language, each word is represented in its underlying, or basic, form, which discounts all of the alternations in pronunciation that are predictable by phonological rules. For example, there are phonological rules that will account for the variations in the placement of stress and the alternations of vowel quality that occur in sets of words such as harmOny, harmOnic, harmOnious and melOdy, melOdic, melOdious. The rules that predict the pronunciation of the capitalized O's are general, rather than specific for each word, and the grammar should state such rules so that the regularities are revealed. Accordingly, each of these words must be entered in the lexicon in a way that represents simply its underlying form, and that allows the alternations that occur to be generated by phonological rules. The underlying form is known as the phonemic sometimes morphophonemic, or phonological representation of the word.

The phonemes of a language are the segments that contrast in the underlying forms. American English may be said to have at least 13 vowel phonemes, which contrast in the underlying forms of words such as bate, bat, beat, bet, bite, bit, bout, but, boat, dot, bought, balm, and boy. Some authorities consider that there are additional vowel phonemes exemplified in the words bush and beauty, but others believe that these can be derived from the sameunderlying vowel as that in the word bud. Phonemes are traditionally written between slanting lines, as /P/, /M/, or /L/.

The variants of phonemes that occur in phonetic representations of sentences are known as allophones. They may be considered to be generated as a result of applying the phonological rules to the phonemes in underlying forms. For example, there is a phonological rule of English that says that a voiceless stop such as /P/ is aspirated when it occurs at the beginning of a word (e.g., in pin), but whenit occurs after a voiceless alveolar fricative (i.e., after /S/), it is unaspirated (e.g., in spin). Thus, the underlying phoneme /P/ has an aspirated and an unaspirated allophone, in addition to other allophones that are generated as a result of other rules that apply in other circumstances. Allophones are conventionally written inside brackets e.g., [p] or aspirated [ph]. In stating phonological rules, it is necessary to refer to classes of phonemes. Consider part of the rule for the formation of the plural in English: there is an extra vowel in the suffix if the word ends in the same sound as occurs at the end of horse, maze, fish, rouge, church, or judge. The plural forms of words of this kind are one syllable longer than the singular forms.

The phonological rules of English could simply list the phonemes that behave in the same way in the rules for plural formation; the rules for the possessive forms of nouns and for the third person singular of the present tense of verbs are similar in this respect. The rules are more explanatory, however, if they show that these phonemes behave in a similar way because they form a natural class, or set, whose members are defined by a common property.

In the case of these plural forms, the phonemes are all, and only those that have a high-frequency fricative component; they may be called the sibilant, or strident, phonemes.

Other phonological rules that refer to the natural classes of phonemes have already been mentioned. The rule concerning voiceless stops' being aspirated in some circumstances and unaspirated in others refers to the subset of phonemes that are both voiceless sounds and stops. Similarly, the variations in vowel length in 'cat' and 'cad' can be expressed with reference to the set of phonemes that are vowels, and also to the set that comprises both voiceless sounds and stops.

Features:

Each of the phonemes that appears in the lexicon of a language may be classified in terms of a set of phonetic properties, or features. Phoneticians and linguists have been trying to develop a set of features that is sufficient to classify the phonemes in each of the languages of the world. A set of features of this kind would constitute the phonetic capabilities of man. To be descriptively adequate from a linguistic point of view, the set of features must be able to provide a different representation for each of the words that is phonologically distinct in a language; and if the feature set is to have any explanatory power it must also be able to classify phonemes into appropriate natural classes as required in the phonological rules of each language.

Phonology:

Phonology seeks to understand the way phonemes are organized in a language or dialect. It examines what sort of rules a language follows to determine how certain words should be pronounced. One can understand clearly why a native Spanish speaker would pronounce English words like 'street' or 'stop' as 'eh-street' or 'eh-stop' when learning the language if one understands phonology.

Phonology deals with sound structure in individual languages: the way distinctions in

sound are used to differentiate linguistic items, and the ways in which the sound structure of the ‘same’ element varies as a function of the other sounds in its context. Phonology and phonetics both involve sound in natural language, but differ in that phonetics deals with sounds from a language-independent point of view, while phonology studies the ways in which they are distributed and deployed within particular languages.

Phonology originated with the insight that much observable phonetic detail is irrelevant or predictable within the system of a given language. This led to the positing of phonemes as minimal contrastive sound units in language, each composed of a collection of distinctive features of contrast. Later researches showed that a focus on surface contrast ultimately was misguided, and generative phonology replaced this with a conception of phonology as an aspect of speakers’ knowledge of linguistic structure. Important research problems have involved the relation between phonological and phonetic form; the mutual interaction of phonological regularities; the relation of phonological structure to other components of grammar; and the appropriateness of rules versus constraints as formulations of phonological regularities.

Phonology is concerned with the abstract, whereas phonetics is concerned with the physical properties of sounds. In phonetics one can see infinite realizations, for example every time one says a ‘p’ it will slightly different than the other times they have said it. However, in phonology all productions are the same sound within the language’s phoneme inventory, therefore even though every ‘p’ is produced slightly different every time, the actual sound is the same. This highlights a key difference between phonetic and phonology as even though no two ‘p’s are the same, they represent the same sound in the language.

Morphology:

Morphology deals with the formations of words when one puts these sound segments together. This field of study can help explain why humans can understand some words that we

have never heard before. The word ‘embiggens’ from the show *The Simpsons* is a great example. Though this word was made up by the show, the morphemes (em + big + ens) are familiar to English speakers and operating in ways similar to how many of other words work. One can understand these features separately, so when they are put together, it is relatively easy to determine the meaning of this made-up word.

Morphology, in linguistics, is study of the internal construction of words. Languages vary widely in the degree to which words can be analyzed into word elements, or morphemes. In English there are numerous examples, such as “replacement,” which is composed of re-, -place, and -ment, and “walked,” from the elements -walk and -ed. Many American Indian languages have a highly complex morphology; other languages, such as Vietnamese or Chinese, have very little or none. Morphology includes the grammatical processes of inflection and derivation. Inflection marks categories suchas person, tense, and case; e.g., “sings” contains a final -s, marker of the 3rd person singular. Derivation is the formation of new words from existing words; e.g., ‘singer’ from ‘sing’ and ‘acceptable’ from ‘accept.’ Derived words can also be inflected: ‘singers’ from ‘singer.’

Word is the smallest independent units of language. Words are thus both independent since they can be separated from other words and move around in sentences, and the smallest units of language since they are the only units of language for which this is possible. Morphemes are the building blocks of morphology. Words have internal structure built of even smaller pieces.

1. SIMPLE WORDS: Do not have internal structure (only consist of one morpheme) eg. work, build, run. They cannot be split into smaller parts which carry meaning or function.
2. COMPLEX WORDS: Have internal structure (consist of two or more morphemes) eg. worker: affix

-er added to the root work to form a noun.

Morphemes are the smallest meaning bearing units of language.

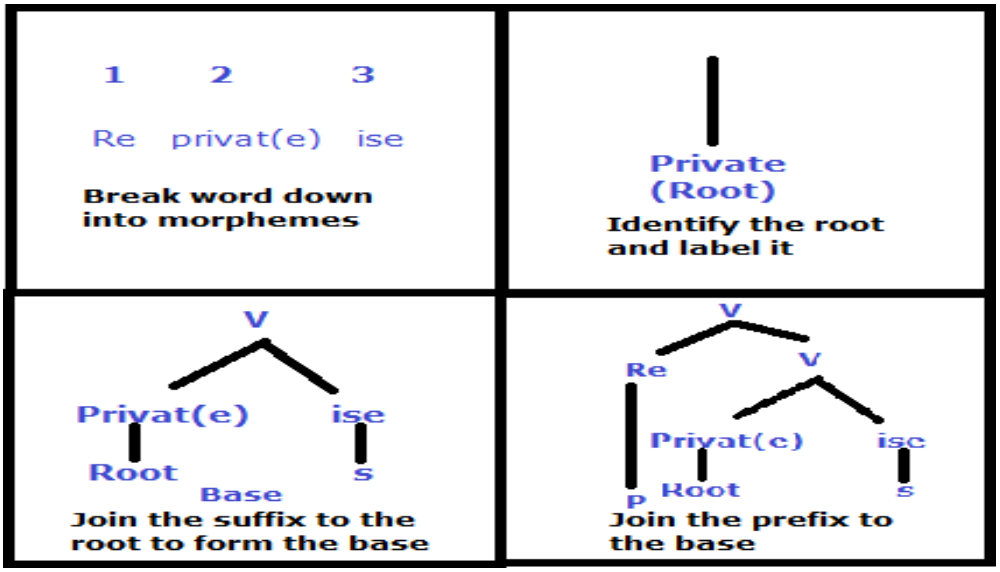
Free VS Bound Morphemes:

Free morpheme: a simple word, consisting of one morpheme e.g., house, work, high, chair, wrap. They are words in themselves.

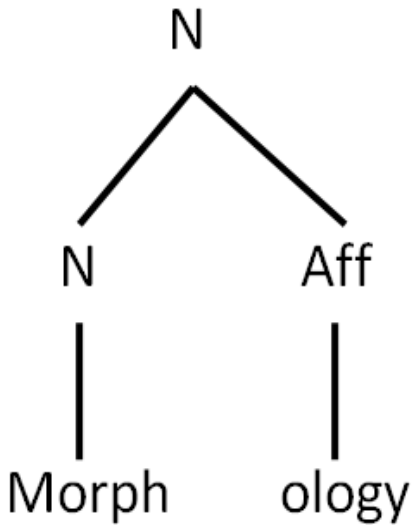
Bound morpheme: morphemes that must be attached to another morpheme to receive meaning. Example: UNKIND**NESS.** UN- and -NESS are the bound morphemes, requiring the root KIND to form the word. These are also called affixes as they are attached to the stem.

Morphology Tree:

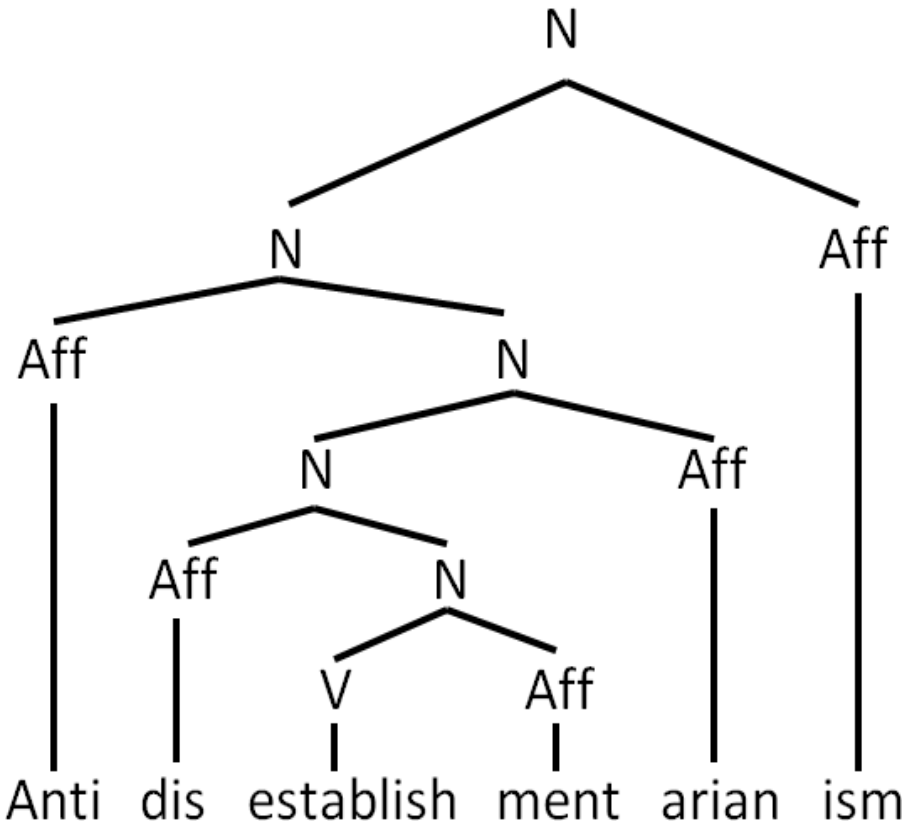
Morphology trees show the internal structure of a word.



Simple morphology tree



Complex morphology Tree



Syntax:

Syntax works similarly to morphology but refers to sentence structure. This field studies the rules speakers follow in order to organize their words into coherent sentences. Through studying syntax, one can understand why the sentences “I have to go to the bathroom” and “the bathroom I have to go to” have different meanings, despite being made up of the exact same words. Syntax, the arrangement of words in sentences, clauses, and phrases, and the study of the formation of sentences and the relationship of their component parts. In a language such as English, the main device for showing the relationship among words is word order; e.g., in “The girl loves the boy,” the subject is in initial position, and the object follows the verb. Transposing them changes the meaning.

In many other languages, case markers indicate the grammatical relationships. In Latin, for example, “The girl loves the boy” may be puella puerum amat with “the girl” in initial position, or puerum puella amat with “the boy” in initial position, or amat puella puerum, amat puerum puella, or puella amat puerum. The meaning remains constant because the -um ending on the form for “boy” indicates the object of the verb, regardless of its position in the sentence.

Sentences:

Sentences are constructed from phrases or groups of words that have a closer relationship to each other than to the words outside the phrase. In the sentence “My dog is playing in the yard” there is a closer relationship between the words “is playing,” which together form the verb, than between the words “playing in the,” which form only part of the verb and part of the phrase indicating the location of the playing.

Semantics:

Semantics is where these concepts begin to get more external. This level of analysis

focuses onstudying the meanings of words. It is the interface between our words and the world. Understanding what certain words or phrases point to in our lives is to understand the meaning behind these words. Semantics addresses the various things to which a single word can point and how this can create ambiguity in meaning and thus, misunderstandings.

Pragmatics:

Pragmatics is similar to semantics but with words, phrases, and utterances being studied in context rather than independently. For example, without context, the phrase "I'm going to drop off the keys" seems to have a very clear meaning. However, consider a context in which this was uttered in a phone conversation between two individuals exchanging money for an illegal service. If they are both aware the transaction is taking place, but want to avoid suspicious language, "keys" may refer to eitherthe money or the illegal good being exchanged. Pragmatics analyzes how words and phrases operate within their context and what the goals of each utterance are.

In linguistics (the study of language), pragmatics is a specialized branch of study, focusing on the relationship between natural language and users of that language. Pragmatics focuses on conversational implicatures or that which a speaker implies and which a listener infers. To define pragmatics, experts sometimes compare and contrast it with linguistic semantics (the meaning of a sentence) or compare it to syntax (word order) or semiotics (the study of symbols), all of which are distinct terms. Pragmatics dates back to antiquity when rhetoric was one of the three liberal arts. The more modern idea of pragmatics arose between 1780 and 1830 in Britain, France, and Germany. Pragmatism saw a rise in popularity between 1880 and 1930 when linguists studying the philosophy of language agreed on a point of view that language must be studied in the context of dialogue and life, and that language itself is a kind of human action. Today, linguistics is a multidisciplinary realm of study spanning the natural sciences, social sciences, and humanities.

UNIT IV

PHONETICS

Phonetics is a study of speech sounds: articulatory, auditory, and acoustic. It is a branch of linguistics and deals with the sounds produced by human beings in their speech behavior. In speaking, there is the production of speech which is the result of simultaneous activities of several body organs. These activities are aimed at creating disturbances in the air. The inhaled air acts as source of energy setting the outside air vibrating so that the sound thus generated is carried along to the ears of the listener. The auditory process is set in motion which is again a complicated process involving auditory organs; perception of speech segments which involves discarding the non-significant features from the significant or distinctive features and perceiving only those that are meaningful.

Even a single speech sound combines a large number of distinctive features which provide the information on which an auditor bases recognition of the sound. It is like retrieving a small visual image from a crowd of intricate details. But the brain can quickly decode the incoming signals that have been encoded by the speakers.

Physical energy in the form of sensory nerve impulses reaches the brain, the brain circuitry is understood to organize them into percepts which are the basis of recognition. Obviously, a complex of multiple factors in the form of the listeners' interest, his social background, intellectual level, past experience and other parameters play an active and significant rolein the perception level, and the interpretation is made accordingly. Speech act encompasses intricate movements and activities that occur on different planes, some of them simultaneously and at incredible speed.

Branches of Linguistics:

Phonetics has three major branches:

1) Articulatory Phonetics

2) Auditory Phonetics

3) Acoustic Phonetics

Articulatory Phonetics:

Articulatory phonetics is also known as physiological phonetics; and auditory phonetics isknown by the name perceptual phonetics. This branch of phonetics recognizes that there is speech producing mechanism in human beings. The apparatus that produces speech sounds is situated within the human body. However, it must be clear that there are no separate apparatuses exclusively used for generating speech sounds. Speech is, in fact, an overlaid function in that human beings utilize in a special way organs which are part of the respiratory and digestive system.

Man uses those organs for speaking which already serve other biological needs. Thus lips, teeth, tongue, hard palate, soft palate, trachea, lungs – all these organs used in speech production have different basic biological functions. In the process of cultural evolution, man devised ways of utilizing these organs and parts thereof (such as the tip, blade, front, center, back of the tongue along with the corresponding areas or points in the roof of mouth or hard palate) for verbal communication. Besides these the airstream that goes in and out of the lungs forms the basis of speech; that is, speech is based **o**n the outgoing airstream. Articulatory phonetics studies how the outgoing airstream is regulated along the vocal tract to form various speech sounds.

Auditory Phonetics:

Auditory phonetics is a branch of phonetics that studies how speech sounds are heard and perceived. This galls for a close study of the psychology of perception on the one hand, and the mechanism of the neuro-muscular circuitry on the other. Hearing is a very intricate process; it implies interpreting the physical description of actual orproposed signals in terms of the

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

i) the physical aspect of die auditory system

ii) recognition of the essential characteristics of hearing.

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

The physical aspect of the auditory system involves a detailed description of the external, middle and inner ear, and the auditory receptive centers of tic bran, the neural network. This also takes into account translating acoustic signals into auditory sensations which begins with the transfer of pressure variation of sound waves to the fluids in the inner ear. The inner ear analyses these vibrations and encodes them into neural pulses of electrochemical activity. The inner ear is connected to the auditory receptive centers by the auditory nerve which carries these pulses. The auditory centers are correspondingly stimulated.

The basic characteristics of healing include such features as loudness, absolute sensitivity, frequency tones, ‘masking’ or the elimination of the subjective traces of one of the two or more sounds; that the ear is exposed to, pitch etc. Interpreting, the auditory sensations into their physical signals poses serious problems. The auditory sensations do lint offer a featly, palpable pattern that can satisfactorily be described sound signals may be composed of a variety of components – horn bits of ‘transients’ to sounds of longer duration; from single

unit tones to multiple segment complexes. It is not necessary that the auditory sensation would reflect the identical occurrences of these sound signals.

In the complex sound patterns, their separate components may retain the identity in the resulting sensation or may produce an entirely new sensation. Signals of varying frequencies may produce a study pattern of sensations or separate sensations. Composition of the human brain plays a crucial role in this regard. It poses difficulties in the way of interpretation. Many signals are highly complex and can only be described in mathematical terms. However, such descriptions do not have any relevance to phonetics and must, therefore, be ignored.

Acoustic Phonetics:

Acoustic phonetics is the study of the physical properties of speech sounds such as frequency and amplitude in their transmission. Acoustic phoneticians analyze the speech waves with the help of instruments, attempt to describe the physical properties of the stream of sound issues forth from the mouth of a speaker. It is in the field of acoustic phonetics that the most sulking developments have taken place since the Second World War. Complex sound waves produced in speech can be analyzed into their component frequencies and relative amplitudes. Considerable progress has also been made in speech synthesis. Acoustic analysis has confirmed that speech is not made up of a sequence of discrete sounds. The articulatory features of rounding of voice, of nasality, of obstruction and of friction can also be identified acoustically. Acoustic phonetics achieved a good deal of success in matters of the study of the vowels, but regarding consonants it has not reached final conclusions.

Articulators:

All speech organs are known as articulators. They are broadly divided into two categories:

a) Mobile or active articulators

b) Fixed or passive articulators

As already noted, there is perceptibly significant mobility in the laryngeal and pharyngeal regions. In fact, the whole of sub-laryngeal area is active in speech production. However, there are more noticeable movements in the larynx and areas immediately above it. The throat forms a crucial factor in determining resonance. The length of the pharyngeal resonator can be changed by muscular actions which raise and lower the larynx. Among the mobile or active articulators, the centrally important one is the tongue. It is extremely flexible and mobile. The other two mobile articulators are the lower jaw (mandible) which can move both vertically and horizontally to change the phonetic qualities of sounds, and the lips; they can be rounded or spread, brought closer to the upper teeth or simply held neutrally.

The fixed or passive articulators include the roof of the mouth. This is dome-shaped, hard and bony. It is known as the hard palate. The hard palate and the teeth play a necessary, although passive role in articulation. The bony palate forms the anterior part of the roof of mouth, separating the oral cavity from the nasal passage. The hard palate terminates in the soft palate which is muscular. This is also called velum or velum palatinum which forms the posterior section of the roof of the mouth, separating the mouth cavity from nasopharynx. The velum can be lowered or raised for opening or closing the nasopharyngeal passage. The upper teeth also participate in articulatory process, with the active articulators coming into contact with them to form various constrictions, thus modifying the airstream and producing different speech sounds.

Active Articulators:

The main role of the active articulators is to actively interfere with the outgoing airstream and modify it to produce various types of speech sounds. This is done either by approximating (forming a constriction) or coming into full contact with the passive articulators (forming complete stoppage). We have seen the functioning of the larynx, glottis

and vocal cords in earlier sections. Now we shall take alook at the oropharyngeal articulators that are situated in the mouth:

Tongue:

The most active of articulators is the tongue. It shows an amazing range of adjustments and movements mainly because it is made of two groups of muscles, intrinsic ones are fibers of the longitudinal, transverse and vertical is lingual muscles. These muscles are within the tongue and mainly responsible for changes in its shape. They blend with the extrinsic muscles which originate outside of the tongue. Their function determines the position and movement of the tongue. The tongue is an organ of taste, and used for chewing and swallowing activities. On the basis of its great flexibility and motility, the secondary function of articulation has been superimposed. It has been divided into the following major parts on the surface along its length.

i) apex or tip

ii) blade

iii) front

iv) back or dorsum

v) root

The sides of the tongue can also be used in speech, these are known as margin. For lateral sounds the sides are raised enough for the airstream to create turbulence and escape continuously. The tip can be raised and curled backwards letting the passing airstream to vibrate it. This produces retroflex sounds of various types. The lower lip is a mobile articulator which can be used for many oral configurations. With the upper lip it can form various degrees of rounding that produce different vowels. It can bring about complete oral occlusion with the upper lip which produces bilabial sounds, plosives and in many languages' fricatives also.

When the lower lip comes into contact with upper teeth, we hear fricative sounds (labio-dental).

Passive Articulators:

Passive or immobile articulators cannot be moved about, but perform a very crucial role in speech production. The mobile organs approximate them, i.e., come close enough to affect the shape ofthe outgoing column of air, or form a complete closure by coming into full contact with them. These organs are mostly located in the upper part of the mouth, beginning in front with theupper lip, upper teeth, the gum ridge or alveoli, hard palate, the soft palate, just behind the hard palate and the back wall of the throat (pharynx).

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

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

Gum ridge: Just behind the upper teeth is located alveolar or gum ridge. The mobile speech organs – various parts of the tongue reach it to form either a narrow stricture or a complete closure. Hindi /d/ and /t/ and their aspirated counterparts are dental stops. But English /0/ in thin and /ð/ in this are fricatives.

Hard Palate: Behind the alveoli or gum ridge begins the hard palate which forms the major part of the oral arch or roof of the mouth. It is made of the horizontal plates of bone which terminate in the soft palate. Some part of both the hard and the soft palates serves as a

point of contact or near-contact for the tongue in the production of a number of speech sounds. It can be divided into parts or areas where the tongue makes contact. Phonetic quality is changed according to the point at which the hard palate is approximated by the tongue. These sounds are recognized as palatal. These are further classified according to which part of the tongue comes into contact with the precise palatal area. For example, one can produce palato-alveolar sounds by bringing the tip of the tongue to touch the extreme front of the hard palate or the place lying between the gum-ridge and the palate. Alveo-palatal area lies further back of the region just mentioned; palatal the slope of the hard palate and domal is the dome of it. Classification is largely a matter of convenience and practical need of the particular language. Not all the languages or dialects make use of all the classification criteria. What is suggested here is that precise classifications are possible.

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

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

phonemes.

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

Labialization:

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

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

Velarization: Velar sounds are produced by this process. The back of the tongue either approximates or forms total occlusion for articulating certain types of stop and fricative sounds. The velar sounds are /k/ and /g/ in English. /h/ is a velar nasal heard in such words as king, sing, inquest and conquer.

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

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

coupled to a large cavity, the oropharyngeal cavity. Nasals are also classed as resonants or continuants.

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

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

Manner of Articulation:

The manner or way in which the outgoing airstream is interfered with determines the manner of articulation. A sound can be described in this light. The airstream may completely be stopped and released with force producing a plosive or stop sound. The occlusion may occur anywhere between larynx and the two lips; or the passage of air may be constricted enough for it to produce audible friction. The sound thus produced is called fricative.

According to the manner of articulation sounds are classified into smaller classes as stops, fricatives, affricates, nasals, laterals, trills or flaps and semivowels. These constitute the larger class of consonants. For the complete description both the point/place and manner of articulation are taken into consideration.

Fortis and Lenis:

In producing speech sounds a great deal of muscular energy is involved. Some of the sounds need greater energy than others. Voiceless sounds are the examples of sound pronounced with greater energy. The dichotomy signifies grouping of sounds according to the degree of muscular tension. The former tends to be voiceless, the latter voiced, but considerable contextual modification of these qualities are possible, especially as a result of accentual features. English /p/, /t/, and/k/ are the examples of sounds pronounced with greater effort and breath. In lenis, the muscular, energy is markedly decreased and so also breath. Mostly voiced sounds are lenis such as /b/, /d/, /z/, /v/, /ʒ/, etc.

Voiced and Voiceless Sounds:

The division of speech sounds into the voiced and the voiceless ones is of great importance in phonetics. The beginners should familiarize themselves with the vibrations felt during the production of voiced sounds.

Description of Speech Sounds:

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

Consonants:

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

(i) Is the airstream set in motion by the lungs or by some other means? (Pulmonic ornon-pulmonic).

(ii) Is the airstream forced outwards or sucked inwards? (egressive or ingressive)

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

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

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

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

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

The Nature of the Airstream Mechanism: Most speech sounds and all normal English sounds are made with an egressive pulmonic airstream, e.g., the air pushed out of the lungs.

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

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

The Articulators Involved: The articulators are active (the lower lip and the tongue) and passive (the upper lip, the upper teeth, the roof of the mouth divided into the teeth-ridge, the hard palate, and the soft palate, and the back wall of the throat pharynx). In the production of a consonant the active articulator is moved towards the passive articulator. The chief points of articulation are bilabial, labiodental, dental, alveolar, post-alveolar, palato-alveolar, retroflex, palatal, velar, uvular, and glottal.In the case of some consonantal sounds, there can be a secondary place of articulation in addition to the primary. Thus, in the so-called dark /l/,

in addition to the partial alveolar contact, there is an essential raising of the back of the tongue towards the velum (velarization); or, again some post-alveolar articulator of ‘r’ (r) as in red are accompanied by slight lip-rounding (labialization). We can classify consonants according to the place of articulation.

The Nature of Stricture:

By the nature of stricture, we mean the manner of articulation. This stricture of obstruction made by the organs may be total, intermittent, partial, or may merely constitutea narrowing sufficient to cause friction. When the stricture is that of a complete closure, the active and passive articulators make a firmcontact with each other, and prevent the passage of air between them. For instance, in the production of /p/ as in pin and /b/ as in bin, the lips make a total closure.

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

In the partial stricture, the air passes between the active and passive articulators continuously, but with some difficulty. The sounds thus produced are clear /1/ and dark /1/ in late, and hill, the clearand the dark ‘1’ respectively. And lastly, the stricture may be such that the air, while passing between the active and passivearticulators, produces audible friction. /f, v, q, ð, s, z, f, ʒ, h/ in English are examples of this kind of stricture. Or the air may pass without friction. Examples are /w/ in wet, /j/ in yes and flap /r/ as in butter. A stricture which involves audible friction, can be called a stricture of close approximation,whereas one which involves no such friction can be called a stricture of open approximation.

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

1. /p/ in the English word pack.

(i) The vocal cords are held apart and the sound is voiceless:

(ii) The soft palate is raised and the nasal passage is closed.

(iii) The active articulator is the lower lip.

(iv) The passive articulator is the upper lip.

(v) There is a stricture of complete closure.

2. /b/ in the English word back.

(i) The vocal cords vibrate, and the sound produced is voiced.

(ii) The soft palate is raised and the nasal passage is closed.

(iii) The active articulator is the lower lip.

(iv) The passive articulator is the upper lip.

(v) There is a stricture of complete closure.

3. /g/ in the English word god.

(i) The vocal cords vibrate, and the sound produced is voiced.

(ii) The soft palate is raised and the nasal passive is closed.

(iii) The active articulator is the back of the tongue.

(iv) The passive articulator is the soft palate.

(v) There is a stricture of complete closure; the back of the tongue makes a complete closurewith the soft palate.

4. /t/ in the English words cat.

(i) The vocal cords are wide apart, and the sound is voiceless.

(ii) The soft palate is raised and the nasal passage is closed.

(iii) The active articulator is the tip of the tongue.

(iv) The passive articulator is the teeth ridge.

(v) There is a stricture of complete closure. The tip of the tongue makes a firm contact withthe teeth ridge.

5. /m/ in the English word man.

(i) The vocal cords vibrate and the sound is voiced.

(ii) The soft palate is lowered and the air passes through the nose.

(iii) The active articulator is the lower lip.

(iv) The passive articulator is the upper lip.

(v) There is a stricture of complete oral closure.

6. /v/ in the English word van.

(i) The vocal cords vibrate and the sound is voiced.

(ii) The soft palate is raised and the nasal passage is closed.

(iii) The active articulator is the lower lip.

(iv) The passive articulators are the upper front teeth.

(v) The stricture is one of close approximation. (The lower lip is brought very

near the upperfront teeth. The air passes between them with audible friction.)

7. /j/ in the English word yet.

(i) The vocal cords vibrate and the sound is voiced.

(ii) The soft palate is raised.

(iii) The active articulator is the front of the tongue.

(iv) The passive articulator is the hard palate.

(v) There is a stricture of open approximation. The front of the tongue is brought near thehard palate but the space between them is sufficient for the air to pass without any audible friction.

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

a) plosive: complete closure,

b) affricate: complete closure and slow release,

c) nasal: complete oral closure,

d) frigate: close approximation,

e) lateral: complete closure in the center of the vocal tract and the air passes along the side(s) of the tongue,

f) vowel: open approximation,

g) semi-vowel: open approximation,

h) frictionless continuant: open approximation.

Classification of Consonants:

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

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

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

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

Classification	Articulators	Examples
Bilabial	Upper lip and lower lip	/p b m w/
Dental	Teeth and tip of tongue	/q ð/
Labio-dentel	Lower lip and upper teeth	/f v/
Alveolar	alveolar (teeth) ridge and tip and blade of tongue	/t d s z r k b/
Post-alveolar	Hard palate and tip of Tongue	/r/

Palato-aveloar	Hard palate—alveolar and tip, blade and front of tongue	/f/z/ò/dʒ/
Palatal	Hard palate and front of Tongue	/j/
Velar	Soft palate and back of Tongue	/k g ŋ/
Glottal	Glottis (vocal cords)	/h/

The Manner of Articulation:

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

(1) Stop: In the production of a stop, the oral and nasal passages arc closed simultaneously. The active and passive articulators come in contact with each other forming a stricture of complete closure and preventing the air from escaping through the mouth. The soft palate is raised and thus the nasal passage is also blocked. (This is also known as velic closure). The air behind the oral closure is compressed, and when the active articulator is removed from contact with passive one, the air escapes with an explosion. Stops are also known as mutes. explosives. plosives or occlusives. /p/ in pat and /b/in hat are the examples of stops.

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

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

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

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

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

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

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

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

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

The classification of the consonants in English on the basis of the manner of articulation is in the following table:

Name of the Class	**Structure Involved**	**Examples**
Stop	Complete closure	/p b t d k g/
Affricate **Frication**	Closure, then slow separation Narrowing, resulting audible Friction	/t ò dʒ/ /f v q ð s z ò ʒ/
Nasal	Complete closure in mouth, air escapes through nose	/m n ŋ/
Rolled	Rapid intermittent closure	/r/
Lateral	Closure in the center of mouth, air escapes over the sides of tongue	/l/

Frictionless Continuant	Slight narrowing, not enoughto cause friction	/r/
Semi-vowels/ Semi-consonants	Slight narrowing, notenough to cause friction.	/w j/

Vowels:

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

(1) height of tongue

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

(3) lip-rounding.

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

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

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

iii) Central vowels, during the production of which the central part of the tongue (the part between the front and the back) is raised. For example, /ə, ə:, Λ/ in

English as in ‘about’, ‘earth’ and ‘but’ respectively.

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

Diphthongs:

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

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

A diphthong, thus, always occupies one syllabic. If two adjacent vowels form the nuclei of twosuccessive syllables, they are not a diphthong. For example, the vowels in bay, boy, and buy are diphthongs, but the vowels in doing are two different vowels since they belong to two different syllables. One end of the diphthong is generally more prominent than the other. Diphthongs are termed ‘decrescendo’ of FALLING if the first element is louder or more prominent than the second, and ‘crescendo’ or RISING if the second element is louder or more prominent than the first. All the English diphthongs are falling diphthongs, because in them the first clement is louder or more prominent than the second clement.

Diphthongs are represented in phonetic transcription by a sequence of two letters,

the first showing the position of the organs of speech at the beginning of the glide, the second their position atthe end. In the case of the 'closing' diphthongs the second letter indicates the point toward which glide (movement) is made.

Phonetic Transcription:

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

The Usefulness of the International Phonetic Alphabet (IPA):

The IPA gives us a uniform international medium of studying and transcribing the sounds of all the languages of the world. Many languages in the world have no orthographic (written) form at all. It has been made possible to study such languages with this alphabet. In other words, the IPA is 'a precise and universal' means (i.e. valid for all languages) of writing down the spoken forms of utterances as they are spoken without reference to their orthographic representation, grammatical status, or meaning. As regards English, the IPA helps us in establishing and maintaining international intelligibilityand uniformity in the pronunciation of English. With the help of the IPA one can easily teach the pronunciation of English or of any other language. The IPA has contributed a lot in the teaching and description of language. The teachers and learners of English can improve, and standardize their pronunciation and can overcome the confusion created by the spellings with the help of the international phonetic alphabet.

Unit V

Phonetic Transcription

Phonetics:

Phonetics is a branch of science. It deals with the production and articulation of speech sounds. In general phonetics deals with speech sounds which are produced, transmitted and received.

1. English words are not pronounced as they are written.
2. One letter represents many sounds.
3. Many sounds are represented by a single letter.
4. In the same word one particular letter sounds variously.

Example: college - /kɔlidʒ/ e sound, dʒ sound

Mother Tongue and English:

In most of our Indian languages we write as we speak and speak as we write. This we can do because the letter and the sound are one and the same.

Word	**Sound**
though	/ð ə ʊ/
through	/θ r ʊ :/
thorough	/ˊθ ʌ r ə/
rough	/r ʌ f/
bough	/b ə ʊ/
cough	/k ɔ f/

There are 44 basic sounds in the English language.

Another difficulty with English spelling and pronunciation is caused by the fact that in most places one letter or another is mute i.e., not pronounced. But even here there is

no uniformity or regularity.

Eg.	**Word**	**Sound**
	c a l m	/ k a: m/
	b a l m	/ b a : m/
	p a l m	/ p a: m/

From these examples, we may tend to think that whenever 'l' occurs before 'm' in a word it is silent. But it is not so.

Eg:

Word	**Sound**
film	/film/ ('l' is pronounced)
realm	/relm/
elm	/elm/

International phonetic Association has invented international phonetic Alphabet. They have chosen 44 symbols for the English language and here one sound is represented by one symbol of these 44 sounds, 20 are vowels and 24 are consonants vowels are speech sounds that are produced freely without any obstruction or narrowing in the mouth passage.

For e.g., / i:/ as in see, bee

/a:/ as in park, mark

On the contrary, consonants are speech sounds that are produced with some kind of obstruction or narrowing in the vocal tract. They can be produced only with the help of

Vowels Sounds and their Symbols:

1. **/i:/ (ordinary English i with a colon; The Colon indicates the duration or length of a sound.) This represents the sound of 'ee' as in bee, see,**

key /bi:/, /si:/, /ki:/

Ghee - /gi:/

Be - /bi:/

Me - /mi:/

We - /wi:/

Scene - /si:n/

Pea - /pi:/

Sea - /si:/

Tea - /ti:/

Receive - /risi:v/

Conceive - /kənsi:v/

Believe - /bɪli:v/

Relieve - /rɪli:v/

Machine - /məʃi:n/

Kilo - /ki:lðu/

Quay - /ki:/

Caesar - /'si:zə/

Peace - /pi:s/

Piece - /pi:s/

2. /i/ (small capital I) This denotes the sound of i as in sit, bit

Bit - /bɪt/

It - /ɪt/

Fit - /fɪt/

Kit - /kɪt/

knit /nɪt/

3. /a:/ This sounds like 'a' in 'calm' and 'balm'

Bark - /ba:k/

Mark - /ma:k/

Park - /pa:k/

Past - /pa:st/

Class - /kla:s/

aunt - /a:nt/

heart - /hait/

hearth - /ha:θ/

clerk - /kla:k/

castle - /ka:sl/

car - /ka:/

brand - /bra:nd/

farm - /fa:m/

psalm - /sa:m/

cast - /ka:st/

hark - /ha:k/

sardine - /sa:di:n/

market - /ma:kit/

fast - /fa:st/

last - /la:st/

mast - /ma:st/

vast - /va:st/

balm - /ba:m/

calm - /ka:m/

palm - /pa:m/

dark - /da:k/

art - /a:t/

cart - /ka:t/

dart - /da:t/

mart - /ma:t/

4. /ɔ/ It is similar to the sound of 'o' as in cot, dot, pot etc

dog - /d ɔ g/

hot - /hɔt/

doll - /dɔl/

what	-	/w ɔ t/
boss	-	/b ɔs/
stock	-	/st ɔk/
stop	-	/st ɔp/
lot	-	/l ɔ t/
god	-	/g ɔ d/
socks	-	/s ɔ ks/
cot	-	/kɔt/
dot	-	/d ɔt/
got	-	/g ɔt/
not	-	/n ɔt/
bog	-	/b ɔ g/
fog	-	/f ɔ g/
jog	-	/dʒɔg/
log	-	/l ɔ g/
jot	-	/dʒɔt/
what	-	/wɔt/
wasp	-	/w ɔ s p /
wash	-	/wɔʃ/
god	-	/g ɔd/
hog	-	/h ɔg/
orange	-	/ɔrindʒ/
long	-	/lɔʒ/
coy	-	/k ɔ i/
toy	-	/t ɔ i/

boy - /b ɔi/

boil - /bɔil/

5. /ɔ:/ It is similar denotes the sound we hear in words like ball, call, fall etc. represented by the letter a.

all - /ɔ: l/

ball - /b ɔ: l/

call - /k ɔ: l/

fall - /f ɔ: l/

gall - /g ɔ: l/

hall - /h ɔ: l/

tall - /t ɔ: l/

wall - /w ɔ: l/

crawl - /k r ɔ: l/

draw - /dr ɔ:/

roar - /r ɔ:/

board - /b ɔ:d/

hoard - /h ɔ: d/

cork - /k ɔ:k/

stork - /st ɔ:k /

fort - /f ɔ: t/

author - /ɔ:θə/

audit - /ɔ: dit/

brought - /brɔ:t/

fought - /f ɔ: t/

course - /kɔ:s/

pour - /pɔ:/

broad - /brɔ:d/

lord - /l ɔ: d/

force - /fɔ:s/

fourteen - /fɔ:ti:n/

daunt - /d ɔ:nt/

autumn - /ɔ:t ə m/

pork - /p ɔ: k/

thought - /θ ɔ: t/

6. /ʊ/ This symbol denotes the sound of oo as heard in words like book, took, shooketc.

book - /bʊ k/

took - /t ʊ k/

shook - / ʃ ʊ k/

wolf - /w ʊ l f/

cook - /k ʊ k /

hook - /h ʊ k/

look - /l ʊ k/

nook - /n ʊ k/

could - /k ʊd/

would - /w ʊ d/

should - / ʃ ʊ d/

full - / f ʊ l/

pull - /p ʊ l/

wool - /w ʊ l/

bull - /b ʊ l/

wood - /w ʊ d/

good - /g ʊ d/

bud - / b ʊ d/

foot - /f ʊ t/

rook - / r ʊ k /

push - /p ʊ ʃ/

foot - /f ʊ t/

put - /p ʊ t/

7. /ʊ:/ This symbol denotes the sound of oo combination as in pool / p ʊ: l/ cool /k ʊ:l/

fool - /f ʊ:l/

tool - /t ʊ: l/

move - /mʊ: v/

prove	-	/pr ʊ: v/
approve	-	/ə p r ʊ: v/
rule	-	/ rʊ: l/
scruple	-	/ skrʊ:p/
soup	-	/s ʊ: p/
troup	-	/t r ʊ:p/
group	-	/grʊ:p/
cowper	-	/k ʊ: pə/
brew	-	/b rʊ:/
crew	-	/krʊ:/
grew	-	/ grʊ:/
true	-	/trʊ:/
glue	-	/glʊ:/
blue	-	/blʊ:/
fruit	-	/frʊ:t/
juice	-	/dʒʊ:/
route	-	/rʊ:t/
school	-	/skʊ:l/
goose	-	/gʊ: s/
roost	-	/rʊ:st/

brute - /brʊ:t/

slew - /slʊ:/

8. /ʌ/ This symbol represents the sound of u as heard in the words cup /k ʌp/ mug etc.

bun - / bʌn/

fun - /fʌn/

gun - / gʌn/

nun - /nʌn/

pun - /pʌn/

sun - /sʌn/

son - /sʌn/

ton - /tʌn/

won - /wʌn/

cousin - /kʌzn/

couple - /kʌpl/

blood - /blʌd/

flood - /flʌd/

does - /dʌz/

fund - /fʌnd/

fuss - /fʌz/

bus - /bʌs/

dusk - /dʌsk/

one - /wʌn/

won - /wʌn/

bud - /b^d/

luck - /l^k/

duck - /d^k/

must - /m^st/

rusk - /r^sk/

gush - /g^ʃ/

rush - /ruʃ/

shun - /ʃ^n/

dust - /d^st/

just - /dʒ^st/

9. /ə/ This symbol denotes the sound we hear in words like idea /aidi ə/, china representedby the final a

Camera - /kæmə rə/

China - /tʃ ainə/

doctor - /dɔktə/

manor - /mənə/

victor - /viktə/

sister - /sistə/

mother - /mʌðə/

brother - /brʌðə/

driver - /draivə/

metre - /mi:tə/

liter - /litə/

creeper - /kri:pə/

neighbour - /neibə/

parlour - /pa:lə/

labour - /leibə/

connect - /kə nekt/

correct - /kə rekt/

consider - /kənsidə/

possess - /pəzes/

suspect - /səspekt/

surrender - /sərendə/

pepper - /pepə/

faster - /fa:stə/

wonder - /wandə/

colour - /k^lə/

master - /ma: stə/ paragraph - /pærəgra:f/

debtor - /detə/

10. /ə:/ This symbol denotes the sound heard in words like bird and girl represented by ir.

bird - / bə: d/

gird - / g ə: d/

curl - / k ə: l/

furl - /fə:l/

turk - /tə: k/

heard - /hə:d/

pearl	-	/p əːl/
work	-	/wəːk/
jerk	-	/ʤ əːk/
perk	-	/p əːk/
curse	-	/kəːs/
sir	-	/səː/
purse	-	/pəːs/
hurt	-	/həːt/
herd	-	/həːd/
fern	-	/fəːn/
lurk	-	/ləːk/
worse	-	/wəːs/
nurse	-	/nəːs/
turn	-	/təːn/
murk	-	/məːk/
shirk	-	/ʃ əːk/
hearse	-	/həːs/
burn	-	/bəːn/
church	-	/tʃəːtʃ/
third	-	/θəːd/

germ - /ʤ ə:m/

serve - /sə:v/

dirt - /də: t/

shirt - /ʃ ə:t/

11. /e/ as in the following words

pet - /pet/

sent - /sent/

attention - /əˈten.ʃən/

12. /æ/ as in the following words:

Pat - /pæt/

Flat - /flæt/

family - /ˈfæ.mə.li/

Dipthongs:

Dipthongs are fusion of two vowel sounds forming one unit of sound and constituting one syllable in a word. They are represented phonetically by sequence of two letters.

13. /ei/ This symbol is a combination of two sounds, that is e and but sounding as oneunit with a glide. The sound we hear in the initial letter a in the word 'ace' is represented by ei.

came - /keim/

fame - /feim/

name - /neim/

great - /greit/

pain - /pein/

gain	-	/gein/
main	-	/mein/
weight	-	/weit/
freight	-	/freit/
reign	-	/rein/
pay	-	/pei/
may	-	/mei/
lay	-	/lei/
say	-	/sei/
grey	-	/grei/
brey	-	/brei/
precis	-	/preisi:/
crepe	-	/kreip/
late	-	/leit/
neigbour	-	/neibə/
way	-	/wei/
waste	-	/weist/
cable	-	/keibl/
veil	-	/veil/
vale	-	/veil/
bale	-	/beil/
table	-	/teibl/
paste	-	/peist/
maid	-	/meid/

mail - /meil/

14. /ai/ This symbol is a blend of a+ i forming ai representing the sound as heard in the initial 'i' of the word 'ice' /ais/

ice - /ais/

rice - /rais/

nice - /nais/

high - /hai/

might - /mait/

light - /lait/

bright - /brait/

Height - /hait/

My - /mai/

Cry - /krai/

Type - /taip/

Tyre - /taiə/

Cycle - /saikl/

Buy - /bai/

Guy - /gai/

Dye - /dai/

Bye - /bai/

Die - /dai/

Lie - /lai/

Guide - /gaid/

White - /wait/

typhoon - /taifu:n/

Wise - /wais/

Bite - /bait/

Sight - /sait/

Vine - /vain/

Wine - /wain/

Pie - /pai/

Sigh - /sai/

Why - /wai/

15. /ɔi/ This symbol is a combination of ɔ + i. This symbol denotes the sound heard inthe combination of the two letters 'oy' in 'boy'.

boy - / bɔi/

coy - /k ɔi/

joy - /ʤ ɔi/

toy - /tɔi/

soil - /sɔil/

boyde - /bɔid/

choice - /tʃɔis/

joyce - /ʤɔis/

voice - /vɔis/

Royce - /rɔis/

poise - /pɔiz/

noise - /nɔiz/

employ - /implɔi/

16. /əu/ This is a combination of ə + u = əu This sounds like 'o' in 'cold', 'gold' etc.

cold - /kəuld/

gold - /gəuld/

hold - /həuld/

fold - /fəuld/

boat - /bəut/

coat - /kəut/

toast - /təust/

roast - /rəust/

crow - /krəu/

grow - /grəu/

mould - /məuld/

coast - /kəust/

rose - /rəuz/

ode - /əud/

most - /məust/

role - /rəul/

bone - /bəun/

road - /rəud/

bode - /bəud/

code - /kəud/

node - /nəud/

toad - /təud/

oat - /əut/

dote - /dəut/

mote - /məut/

note - /nəut/

quote - /kwəut/

wrote - /rəut/

nose - /nəuz/

toes - /təuz/

17. /au/ This symbol represents the sound we hear in the combination of ou as in /haus/.This sound is a blend of two sounds namely a and u a+u = au.

mouse - /maus/

grouse - /graus/

fowl - /faul/

gown - /gaun/

brown - /braun/

proud - /praud/

crowd - /kraud/

crown - /kraun/

cow - /kau/

arouse - /ərauz/

vows - /vaus/

thou - /ðau/

noun - /naun/

owl - /aul/

own - /taun/

18. /iə/ This is a combination of two symbols i + ə = iə which represents the sound asheard in deer /diə/

hero - /hiə r ə u/

zero - /z i ərəu/

nero - /niərəu/

beer - /biə/

seer - /siə/

tier - /tiə/

dear - /diə/

fear - /fiə/

gear - /giə/

mere - /miə/

here - /hiə/

rear - /riə/

tear - /tiə/

clear - /kliə/

fear - /fiə/

near - /niə/

lear - /liə/

hear - /hiə/

tier - /tiə/

ear - /iə/

idea - /ai diə/

fierce - /fiəs/

beard - /biəd/

weary - /wiəri/

pier - /piə/

seer - /siə/

jeer - /ʤ i ə/

queer - /kwi ə/

19. /eə/ This is combination of e+ə = eə. This symbol is used to denote the sound.

fare - /f eə/

hare - /heə/

bare - /beə/

care - /keə/

dare - /deə/

fair - /feə/

pair - /peə/

heir - /heə/

sarah - /seərə/

mayor - /meə/

aeroplane - /eərəplein/

tare - /teə/

mary - /meəri/

air - /eə/

mare - /meə/

hair - /heə/

there - /ðeə/

where - /weə//

fairy - /feəri/

hairy - /heəri/

flair - /fleə/

flare - /fleə/

glare - /gleə/

stairs - /steəs/

pears - /peəs/

apparent - /æpeərənt/

vary - /veəi/

20. /uə/ This symbol is formed by u + ə = uə. The sound represented by this symbol is heard in words like poor / puə/ where 'oor' combination gives the sound.

tourist - /tuərist/

tournament - /tuənəmənt/

your - /juə/

yours - /juəz/

our - /auə/

ourself - /auəself/

cure - /kjuə/

curious - /kjuəriəs/

curettment - /kjuəretmənt/

curative - /kjuərətiv/

endure - /indjuə/

endurance - /indjuərnts/

endurable - /indjuərəbl/

during - /djuəriŋ/

duration - /djuəreiʃn/

durable - /djuərəbl/

tourist - /tuərist/

Tourism - /tuərizm/

English Sounds: Consonants:

21. /p/ The symbol P has the usual sound value /p/

paper - /peipə/

cup - /k^ p/

parade - /pəreid/

appoint - /əpɔint/

apparatus - /æpreitəs/

shepherd - /ʃepəd/

pepper - /pepə/

pence - /pens/

pull - /pul/

pulp - /p^lp/

pool - /pu:l/

paradise - /pærədaiz/

puppy - /p^pi/

peep - /pi:p/

pound - /paund/

parent - /peərnt/

pant - /pænt/

parker - /pa:kə/

people - /pi:pl/

picnic - /piknik/

p is mute in most words beginning with ps, pn,

pt, ph etc.Psalm - /sa:m/

Pterodactyl - /terədætil/ (an extinct flying reptile)Psyche - /saiki/

Pneumonia - /njuməunjə/

Photo - /fəutəu/

raspberry - /ra:zbri/

receipt - /risi:t/

cupboard - /k^bəd/

22. /b/ this Symbol 'b' denotes the sound /b/

bag - /bæg/

ban - /bæn/

bundle - /bʌndl/

bubble - /bʌbl/

pebble - /pebl/

stable - /steibl/

rub - /rʌb/

rubber - /rʌbə/

club - /klʌb/

grub - /grʌb/

baby - /beibi/

cub - /kʌb/

bull - /bul/

cabbage - /kæbidʒ/

bun - /bʌn/

nib - /nib/

rib - /rib/

sub - /sʌb/

lab - /læb/

bail - /beil/

‘b’ is silent in ‘mb’ combinations in some words

Lamb - /læm/

Comb - /kəum/

Plumb - /pl^m/

Womb - /wu:m/

Bomb - /bɔm/

Tomb - /tu:m/

"b" is pronounced in tumbler - /t^mblə/ but not in plumber - /pl^mə/

23. /t/ The symbol t denotes the usual sound

take	-	/teik/
better	-	/betə/
state	-	/steit/
study	-	/st^di/
clipped	-	/klipt/
worked	-	/wə:kt/
time	-	/taim/
wait	-	/weit/
thames	-	/temz/
esther	-	/estə/
pat	-	/pæt/
rat	-	/ræt/
sat	-	/sæt/
bat	-	/bæt/
cat	-	/kæt/
hat	-	/hæt/
mat	-	/mæt/
mate	-	/meit/
parked	-	/pa:kt/

letter - /letə/

24. /d/ The symbol ‘d’ has the pronunciation of |d|

god - /gɔd/

dog - /dɔg/

desk - /desk/

dumb - /d^m/

sudden - /s^dn/

doctor - /dɔktə/

adder - /ædə/

bud - /b^d/

demand - /dima:nd/

daddy - /dædi/

dam - /dæm/

madam - /mædəm/

pudding - /pudiŋ/

ladder - /lædə/

pad - /pæd/

sad - /sæd/

ride - /raid/

side - /said/

tide - /taid/

wide - /waid/

‘d’ is always silent in ‘dge’ sequence.

25. /k/ The symbol ‘k’ has the sound of |k|

mask	-	/ma:sk/
masque	-	/ma:sk/
decorate	-	/dekəreit/
school	-	/sku:l/
antique	-	/ænti:k/
comrade	-	/kɔmreid/
lack	-	/læk/
deck	-	/dek/
chemistry	-	/kemistri/
account	-	/əkaunt/
kid	-	/kid/
kiss	-	/kis/
book	-	/buk/
come	-	/k^m/
camera	-	/kæmərə/
record	-	/rekɔ:d/
pack	-	/pæk/
park	-	/pa:k/
luck	-	/l^k/
ache	-	/eik/

26. /f/ The f symbol represents the |f| sound

face	-	/feis/
wife	-	/waif/.
Cliff	-	/klif/
Photo	-	/fəutəu/

Graph - /gra:f/

Rough - /r^f/

Laugh - /la:f/

Knife - /naif/

Claf - /ka:f/

Fence - /fens/

Phone - /fəun/

Tough - /t^f/

Free - /fri:/

Fifty - /fifti/

Coffee - /ka:fi/

Leaf - /li:f/

Fable - /feibl/

Father - /fa:đə/

Physics - /fiziks/

Phosphate - /fosfeit/

27. /v/ The sound /v/ is represented mostly by vand rarely by f. v is always sound. It is never mute.

Vine - /vain/

Of - /əv/

Fever - /fivə/

Veil - /veil/

Voile - /vɔil/

Clever - /klevə/

Move - /mu:v/

Valve	-	/vælv/
Van	-	/væn/
Vanilla	-	/vənilə/
Vapour	-	/veipə/
Velvet	-	/velvet/
Vein	-	/vein/
Calves	-	/ka:vz/
Halve	-	/ha:v/
Knives	-	/naivz/
Wives	-	/waivz/
Visible	-	/vizəbl/
Vary	-	/veəri/
Various	-	/veəriəs/
Vegetable	-	/vedʒtəbl/
Verb	-	/və:b/

28. /s/ The symbol ‘s’ represents the same /s/

acid	-	/æsid/
scenery	-	/si:nəri/
niece	-	/ni:s/
bus	-	/b∧s/
basket	-	/ba:skit/
blossom	-	/blɔsəm/
race	-	/reis/
script	-	/script/
scissors	-	/sizəz/

mass - /mæs/

sun - /s^n/

basic - /beisik/

kiss - /kis/

boss - /bɔs/

ace - /eis/

price - /prais/

scene - /si:n/

science - /saiənts/

face - /feis/

case - /keis/

's' is silent in words like island, isle etc.

29. /z/ This symbol represents the sound |z| in zoo.

physics - /fiziks/

resolve - /rizɔlv/

possess - /pəzes/

zone - /zəun/

zebra - /zi:brə/

lizard - /lizəd/

rose - /rəuz/

lazy - /leizi/

cosmos - /kɔzmɔs/

missis - /misiz/

eyes - /aiz/

zoo - /zu:/

30. /h/ This symbol is used to denote the |h| sound as heard in 'hen'

history - /histri/

heaven - /hevn/

herb - /hə:b/

behind - /bihaind/

behave - /biheiv/

holy - /həuli/

hero - /hiərəu/

home - /həum/

host - /həust/

hen - /hen/

hand - /hænd/

had - /hæd

hat - /hæt/

hot - /hɔt

hear - /hiə/

here - /hiə/

health - /helə/

high - /hai/

hide - /haid/

help - /help/

'h' is mute in words like 'honour', 'honest', 'hour' etc.

Honour - /ɔnə/

honest - /ɔnist/

hour - /auə/

'h' is silent in all combinations i.e., gh, ph, rh, th, sh

Eg: rough - /r^f/

photo - /fəutəu/

rhyme - /raim/

ship - /sip/

Thin - /ɵin/

What - /wɔt/

31. /m/ The symbol 'm' gives the usual sound |m|

marry - /mæri/

madam - /mædəm/

master - /ma:stə/

meet - /mi:t/

memory - /meməri/

melody - /melədi/

matric - /mətrik/

mill - /mil/

calm - /ka:m/

blossom - /blɔsəm/

must - /m^st/

mike - /maik/

many - /meni/

32. /n/ This symbol represents the usual sound |n|

name - /neim/

fun - /f^n/

nun - /n^n/

winner - /winə/

beginner - /biginə/

comptroller - /kən'trəulə/

nay - /neivi/

done - /d^n/

din - /din/

gun - /g^n

bun - /b^n/

on many occasions n is silent. In 'mn' sequences, it is silent.

Eg: solemn - /sɔləm:/

but, Solemnity - /səlemniti/

33. /l/ The symbol 'l' denotes the solund | l |

lamb - /læm/

lily - /lili/

lull - /l^l/

pull - /p^l/

'l' is mute is many places like 'lf', 'lm' sequence

calf - /ka:f/

half - /ha:f/

golf - /gɔlf/

calm - /ka:m/

balm - /ba:m/

palm - /pa:m/

alm - /a:mz/

psalm - /sa:m/

34. /r/ This symbol r denotes the sound /r/ as in ram /ræm/

cry	-	/krai/
marry	-	/mæri/
rat	-	/ræt/
raffle	-	/ræfl/
ready	-	/redi/
merry	-	/meri/
reply	-	/riplai/
rang	-	/ræŋ/
rare	-	/reə/
right	-	/rait/
taurus	-	/tɔːres/
furrow	-	/fʌrəu/
farn	-	/faːrn/

r is usually silent at the end of a word in English.

Eg:	sister	-	/sistə/
	driver	-	/draivə/
	steamer	-	/stiːmə/

r is not pronounced before consonants.

Eg:	cart	-	/kaːt/
	Park	-	/paːk/
	card	-	/kaːd/

The silent r is pronounced when it is followed by a vowel.

Eg: How far? - /haufa:/

How far is it? -/hau fæ: izit/

rum - /rʌm/

red - /rʌd/

35. /w/ The symbol w denotes the sound |w|. 'w' is never pronounced at the end of a word.

Eg. grow, how, grew

In 'wr' sequence, w is not pronounced

Eg. Write- /rait/

Wrong - /rɔŋ/

In 'sw' sequence, w is silent

Eg. word - /sɔːd/

wine - /wain/

white - /wait/

will - /wil/

whim - /wim/

Wool - /wul/

So far, we have discussed 15 symbols representing 15 consonants. All these 15 symbols – p,b,t, d, k, f, v, s, z, h, m, n, l, r and w are in the English alphabet. Now let us consider the 9 other consonant symbols having different shapes. They are:

g, θ, ð, ʃ, ʒ, tʃ, dʒ, ŋ, j

36. /g/ This symbol is used to denote the sound of g as in the words mug, dog and give, 'g' is silent in 'gn' combinations.

Eg. design - /dizain/

resign	-	/rizain/
reign	-	/rein/
guide	-	/gaid/
gold	-	/gəuld/
game	-	/geim/
bigger	-	/bigə/
glad	-	/glæd/
good	-	/gud/
gossip	-	/gɔsip/
grammar	-	/græmə/.
Hag	-	/hæg/
Give	-	/giv/
Get	-	/get/
Rag	-	/ræg/
Bag	-	/bæg/
Lag	-	/læg/
Gain	-	/gein/
Dig	-	/dig/
Pig	-	/pig/
Gum	-	/gʌm/

37. /θ/ This is the Greek letter 'theta' This is used to represent the sound of 'th' as heard in the words thin, thick, thanks, think etc.

thick - /θik/

breath - /braθ/

theory - /θiəri/

method - /meθed/

third - /θə:d/

faith - /feiθ/

anthem - /ænθəm/

thermos - /θə:mɔs/

hrow - /θrəu/

thrice - /θrais/

thread - /θred/

thousand - /θauznd/

thrush - /θrʌʃ/

thumb - /θʌm/

thud - /θʌd/

thin - /θin/

The ‘th’ combination does not always represent θ. Sometimes, ‘h’ is silent and it gives ‘t’sound.

Eg: Thomas - /tɔməs/Thames - /temz/

38. /ẟ/ This is another Greek symbol. This is Greek delta slightly modified. This symbolis used to denote the sound of ‘th’ in words like ‘breathe’, ‘ mother’ etc. When ‘th’ combination gives ẟ or θ sound must be learnt from observation.

there - /ẟeə/

thy - /ðai/

brother - /brʌðə/

mother - /mʌðə/

father - /fa:ðə/

wreathe - /ri:ð/

bathe - /beið/

wither - /wiðs/

39. /ʃ/ This is known as the integral sign used in mathematics. This symbol is used to represent the sound of sh in words like ship. Shape etc.

sugar - /ʃugə/

mission - /miʃn/

pressure - /preʃə/

shoe - /ʃu:/

polish - /pəliʃ/

40. /ʒ/ This a Greek symbol. This denotes the sound of s as in the word.

Measure - /meʒə/

measurable - /meʒrəbl/

41. /tʃ/ This symbol is a combination of t and ʃ. This is used to symbolize the soundof 'ch' in words like cheap, chicken etc.

chair - /tʃeə/

beach - /bi:tʃ/

cheap - /tʃi:p/

rich - /ritʃ/

nature - /neitʃə/

catch - /kætʃ/

coach - /kəutʃ/

cheek - /tʃi:k/

42. /dʒ/ This symbol is a combination of d‾and ʒ. This is used to denote the usual sound of 'j' as in jam - /dʒæm/, joy, jack etc.

jasmine - /dʒæsmin/

jelly - /dʒeli/

gem - /dʒem/

agitate - /ædʒiteit/

gentle - /dʒentl/

jug - /dʒʌg/

43. /ŋ/ This symbol is used to denote the sound of 'ng' as heard in the words 'sing', 'sung' etc.

king - /kiŋ/

ring - /riŋ/

zinc - /ziŋk/

ink - /iŋk/

thank - /θæŋk/

wing - /wiŋ/

think - /θiŋk/

bang - /bæŋ/

bangle - /bæŋgl/

gang - /gæŋ/

sang - /sæŋ/

44. /j/ this symbol is English small j. This normally represents the sound of y as in the word 'you'

you - /ju:/

yes - /jes/

hue - /hju:/

Use |i| sound in the following words:

Budget - / 'bʌdʒit/

destroy - /dIstrɔi/

eccentric - /iksentrik/

effect - /ifekt/

eleven - /ilevn/

electronic - /elektrɔnik/

embrace - /imbreis/

employ - /implɔi/

erratic - /irætik/

exactly - /igzæktli/

reduce - /ridju:s/

restore - /ristɔ:/

rocket - /rokit/

seepage - /si:pidʒ/

Use /ə/ sound in the following words:

Alternate	-	/’ɔ:ltəneit/
Adequate	-	/ædikwət/
Amount	-	/ə’məunt/
Among	-	/ə’mʌŋ/
Aspire	-	/ə’spæiə/
Ultrasonic	-	/ʌitrəsɒnik/

Use /ei/ sound in the following words:

Ache	-	/eik/
Aggravate	-	/ægrəveit/
Amiable	-	/eimiəbil/
Agency	-	/eidʒntsi/
Blade	-	/bleid/
Mistake	-	/misteik/
Sacred	-	/seikrid/
Shame	-	/ʃeim/
Shape	-	/ʃeip/
Opaque	-	əupeik/
Taste	-	/teist/
Teenage	-	/ti:neidʒ/
Tape	-	/teip/
Take	-	/teik/
Vibrate	-	/vəıbreit/

Use /æ/ sound in the following words:

Adverse	-	/ædvɜ:s/
Advocate	-	/ædvəkeit/
Opacity	-	/əupæsəti/
Wagon	-	/'wægən/

Words with stress on the first syllable:

Adequate	-	/'ædikwət/
Affluent	-	/'æfluənt/
Athlete	-	/' æθli:t/
Amateur	-	/' æmətə/
Temperature	-	/'temprətʃə/
Yesterday	-	/'jestədei/

Words with stress on the second syllable:

Alternative	-	/ɔ:l'tɜ:nətiv/
American	-	/ə'merikən/
Ambition	-	/æm'biʃn/
Anxiety	-	/æŋ'zaiəti/
Canal	-	/kə'næl/
Career	-	/kə'riə/
Taboo	-	/tə'bu:/
Utility	-	/ju:'tılətı/
Voluminous	-	/və'lu:mınəs/
Variety	-	/və'raiəti/
Validity	-	/və'lıdətı/

Words often Mispronounced:

Aeroplane	-	/'eə̯ rə̯ pleɪn/
Ambulance	-	/'æm.bjə.lənts/
Bracket	-	/'brækɪt/
Brother	-	/'brʌðopaque
orthopaedic	-	/ɔ:θəpi:diks/
Them	-	/ðem/ (strong form)