


Lecture (1)

**The Role of Sound in
Communication
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Introduction

To pronounce is to say correctly that employs the organs of speech to produce correct sounds. And the Correct pronunciation is the key to enhance better personality and is nowadays one of the most important soft skills. To have a successful and charismatic personality, one has to have polished and correct pronunciations. It also reflects the culture in which a person is born and brought up as a result of that it is held in high esteem.

Technological boom has spread its wings in all spears of our life including Education. One who aspires to pursue technical education in the Global market, English is a vital medium of communication to sail successfully. To carry out one's professional practice in global arena, communication skills are mandatory in the new millennium. English, being the lingua franca of the world, is a prerequisite to be acknowledged globally. With English, one can easily get recognized in Net world.




As a matter of fact, English is that key which takes the tech-savvy from University to Industry. In the age of Globalization, English has acquired a status of a global language. Since English is the major international language, standard pronunciation facilitates greater international intelligibility and acceptability.



Language is an art and pronouncing correctly is a vital soft skill. This requires a blend of correct articulation of sounds, right accentuation, proper rhythm, correct intonation patterns and the extensive study of phonetics. With the fusion of all these elements, oral fluency can easily be achieved. **The aim therefore is to use 'appropriate' pronunciations.** But how do we decide what is correct? Present essay tries to discuss the methods of acquiring appropriate pronunciation and the hurdles therein. The fact remains that dialectical differences, regional differences particularly in Iraq, the impact of mother tongue and individual differences do hamper the perfection in pronunciation.

Communication is essentially the transfer of information and knowledge. Communication comprises three important elements, a sender, a message and a recipient. It is derived from the Latin word Communicare that means to share. And the process is called conveying information from one end to the other end through the code of symbols. These symbols are often words. To compose message mostly these symbols are used. If it is a presentation, these messages are to be pronounced correctly and accurately. The absence of correct pronunciation convey wrong message and create unwanted situations. Through which symbols the information is conveyed, guarantees the authenticity of it. Another important thing is transferring knowledge. That also requires the choice of words and its appropriate pronunciation.

When we talk on Oral Communication Skills, Pronunciation comes on the first and foremost position. Knowledge and technical know-how needs to be presented extraordinarily. Therein lays the importance of Pronunciation as an essential soft skill. The one and only gift that has been bestowed upon mankind is the ability to speak. Pronunciation is the key feature of the spoken form of English as it brings diversity in phoneme level (all phones), morphemes, syllables that contribute in variations in Pronunciation.



But how/what to speak?? These two things require special attention. Some people believe that over generalizing or over emphasizing of grammar of a language undermine the role of pronunciation and the impact of phonetic and phonological factors on language teaching/learning process. Some sociolinguists do believe that diversity in pronunciation occurs due to social and ethnic factors such as gender, race, social status, region and individual difference. Major role in inappropriate pronunciation is played by the speaker. He can shorten, lengthen, stress or alter any speech sounds at his will that gives variations in pronunciations and is the sole reasons to have pronunciations differ individually. Thus speaker can add a meaningful flavor and emotive shade to his language.

Although there are two dominant models of pronunciation to be emulated in the global scenario, namely, the English R.P. and the American Pronunciation, most people in the world follow extensively English R.P. as they believe it to be the Standard English/King's or Queen's English or B.B.C. English. Even though it is widely accepted, with the boundaries removing American variety has entered in day to day lives of the people.

To have further discussion, we must understand that there is a system of symbols for writing the sounds of English. *It is a science that focuses on production of speech sounds. This science is called Phonetics.* Organizing these sounds into patterns is known as Phonology. A phoneme is a minimal unit of distinctive sound feature. The knowledge of all these details directly influences pronunciation. One of the problems in mastering over English Pronunciations is stated as the following:-

Phonological Problem:–

There are twenty four consonant sounds in English and twenty vowel sounds which are always written in two slashes. If the set of sounds are not familiar to the speaker then the speaker's pronunciations vary while articulating these sounds. Vowel sounds play very important role while pronouncing words particularly in stretching vowels or shortening them.

This differentiate vowel sounds between short vowels, long vowels and **the gliding of one vowel sound on another that is known as diphthongs.** The distinctness of the vowel sounds confirms the syllables, stress, and intonation so on so forth. Most often the speakers do have less knowledge of the sounds that reflect that s/he is not trained in good institute and have the fear of having least employability. Mother Tongue interference is also a great threat in enhancement of Pronunciation that **hampers phonological loopholes.**

For ESL/EFL students, their native language has been deeply ingrained in their mind that has very limited sounds registered in their mind that results in sound recognition problem that weakens his/her pronunciations. Some dialectical accents are also fused in speaker's personality that affects his/her pronunciation. "The main problem of English pronunciation is to build a new set of boxes (in the mind) corresponding to the sounds of English, and to break down the arrangement of boxes which the habits of our native language have so strongly built up."(J. D. O'Connor, 2008).

When one person wants to convey a message to another he can use a variety of means. He may write it down on a piece of paper (parchment, wood, bone, clay, wax, stone) and hand it over; he may transmit in sign language, as deaf mutes do; he may stand on one lap and wave or drape flags in a pre-arranged way to the recipient standing on another; or he may prefer to flash a mirror. All these are visual means. On the other hand the message may be passed by audible means, by fog-horn, Morse-key or drum; or it may simply be spoken: transmitted by word of mouth.

In all ages, even the most literate, the vast majority of messages have been spoken: transmitted by means of sound generated by certain of the bodily organs available to every normal human being. The spoken is, and is likely to remain, by far the most frequent medium of communication between man and his neighbour, and it is, to this extent at least, the most important such medium. But since other media are also available – flags, drums, gestures, writing – and since the same message may be passed by any of these media, it would be wrong to argue that speech is at the centre of communication. Whilst the medium may vary, the message does not, and it is therefore the message itself, independent of the means of transmission, which is the heart of the matter. In this sense at least the medium is precisely *not* the message.

It is necessary to acknowledge the centrality of “the message” in order to be able to place phonetics – the study of the sounds of spoken language – in the context of linguistic studies generally. Phonetics is concerned with the human noises by which “the message” is actualized or given audible shape: the nature of those noises, their combinations, and their functions in relation to the message. Figure 1 may help to clarify our ideas about the domain of phonetics in the communication process; it is a simple model of a single act of communication, the passing of one message from a speaker to a listener.

The act of communication starts in the brain of the speaker and we may think of the speaker's brain as having two distinct functions: a creative function and a forwarding function.

Creative function. This is the central function and through it that the message is conceived and formed. Stored in the brain is a profound knowledge of the way in which the language operates.

This knowledge is of many kinds, all derived from our experience of operating the language as both speaker and listener from earliest childhood. We know the permissible grammatical patterns and the vocabulary items which can be used to fill out those patterns; we know that the voices of a man, a woman, a child sound like; we know what a good many individuals sound like; we have at least some knowledge of dialects other than our own; we know what the general probabilities are of one word or expression following another; and so on.

This does not mean that each of us is capable of codifying all this stored information– that is the business of writers of grammars, dictionaries, etc. – but we are able to make use of it. Nor does it mean that each of us has exactly the same information stored away: almost certainly every individual's store is to a greater or lesser extent different from everyone else's. But if we are to communicate efficiently there must be a sufficient stock of common information at our disposal.

- ▶ There are three distinguishable phases of the creative function. First, a need to communicate arises; this may be in response to some outside event or entirely to some inner thought process.
- ▶ Ex: Suppose that a wife sees her husband finish his first cup of tea at the tea-table. She may simply take his cup and refill it, or she may decide to initiate a message which will lead to that happening. If she decides on a message, she must then decide.

secondly, what medium to use? speech, writing, sign language, etc.; this will often be determined by the circumstances of the case, but notice our frequent hesitation between telephone and letter. Thirdly, a decision must be made as to the form the message will take. Is it to be imperative (Have another cup)? Or interrogative (would you like another cup?) If imperative, should it be: Pass your cup, or Have some more? And so on. We make these decisions of form very rapidly and indeed without consciously thinking of them at all in most cases, and the message is ready formed. *The forwarding function of the brain now takes over.*

Forwarding function. The part of the brain which is concerned with controlling muscular movement now sends out patterned instructions in the form of nervous impulses along the nervous pathways connecting the brain to the muscles of the organs responsible for speech sounds, the lungs, larynx, tongue, etc. these instructions call upon the muscles concerned to perform various delicate combinations and sequences of movement which will result in the 'right' sounds being emitted in the 'right' order.

Vocal organs. At this stage the neurological activity which has been taking place in the brain and along the nervous pathways is transformed into muscular activity: the lungs are contracted, the vocal cords vibrate, the tongue wags, the jaw goes up or down, the lips part or come together and so on. All these actions are most beautifully and accurately controlled—learning the coordination of movement required for the emission of speech is probably the most stupendous feat of muscular skill any one of us will ever perform.

The result of these movements is to set air in motion, air from the lungs which is acted upon, impeded, obstructed, released by the vocal organs so that it comes out from the mouth in a sequence of complex waves of pressure. A second transformation has now taken place, *from movement of muscles to movement of air.* The movement of lung air is now transferred in the same form to the outer air and the waves of varying air pressure spread out in every direction around us, gradually growing weaker as the distance increases and their original energy is absorbed. This moving air eventually impinges on the ear of the listener, if he is near enough.

The ear. The ear-drum is sufficiently sensitive for the air pressure waves to cause it to move in and out in a way closely related to the movement of the air itself. This further transformation from air movement back to the organic movement of the ear-drum-is now followed by a final transformation, in the inner ear of this organic movement back to neurological activity, which results in nerve impulses being sent along the nervous pathways connecting the ear to listener's brain. The listener's brain may also be thought of as having two functions, **a hearing function and again a creative function.**

Hearing function. The impulses coming from the ear are accepted as sound sequences of constantly changing quality and characteristic length pitch, loudness. The listener *hears* the message but does not yet *understand* it. This is what happens when we listen to a foreign language that we don't know: we hear the sounds but we do not receive the message. To understand the message the listener must interpret the sounds he hears in the light of the stored knowledge in his brain; he not only hears the sounds but recognizes them and matches them up with what he knows to be possible in the language at various levels, and finally selects the most likely meaning in all the circumstances

Neurological activity → muscular movement →
air movement → organic movement

The process of matching starts with the sounds themselves. If, at the stage of simple reception by the brain, I hear a sound or a combination of sounds which my stored knowledge tells me is not permitted in the language, I immediately reject the data and look around for something similar which is permitted.

For example, if what I actually hear is this: His name is Stveet; I reject the (v) because I know from previous experience that (stv) is not a sequence used at the beginning of English words and I either replace it by something—probably (r)—which makes the sequence acceptable or a repetition. Until the brain has arrived at satisfactory interpretation of the incoming sounds. Satisfactory in the limited sense that they are at least English sounds in English sequences.

The accepted sound train must now be repeatedly matched with the possibilities at other levels. If what we hear (or what we think we hear) is : The man are on strike, possibly as: The man is on strike, both being equally acceptable grammatically. It should be noticed that this is a grammatical decision and not a decision about sounds—the sound sequence represented by *man are* is perfectly acceptable: it is the grammar which is not. Equally, matching at the level of vocabulary is independent both of sound and grammar.

The utterance, which is now linguistically acceptable, must now be matched first against the situation in which it is functioning, and second against the general cultural background. *(1) The situation or context may be purely verbal or it may be a-matter of surrounding things, people, and events.* There is nothing wrong linguistically with: Come and see me at three o'clock, but in the context: I can't see you at three o'clock, so....., there is a mismatch between the two parts, and the utterance must therefore be rejected.

Similarly, if it is a question of an appointment the same day, and the time at the moment of speaking is *3.30*, there is a lack of match between: Come and see me at three o'clock and (2) the non-verbal situation. Finally, if the linguistically unexceptionable utterance, *My wives just told me about it*, occurs in a generally monogamous culture it will be rejected—or queried— because (3) of failure to match cultural expectations.


The passing of a spoken message, then, involves a great deal of activity beyond the production, transmission and reception of sound. The sound is not the message, but it is what gives the message shape in spoken communication, and it is worth study simply for that reason: (1) in speech we rely very heavily upon sound to make plain the significant distinctions of meaning which can be made by the more central operations of grammar and vocabulary. A word, when it is pronounced, must have a particular sound-shape if it is to be recognized, just as it must have a particular letter-shape when written.

Furthermore, the constituent sound must be in *a particular order*. dog is not god and still less ogd or dgo, in a language like English, (2) stress too, may help to give the word its individual shape: the word 'forebear is distinguished in pronunciation from for' bear by the former having its first syllable stressed and the latter it's second. (3) Stress may also distinguish a word functioning as a noun, like *incense*, from an otherwise similar word functioning as a verb, like *incense (anger)*.

Differences of pronunciation also allow us to distinguish longer forms such as *grey tape* from *great ape*; or *my tight shoes* from *might I choose*. And at the level of whole sentences, patterns of pitch (or intonation) permit distinctions which are not usually made in writing, such as: *I thought it was going to rain, (but it didn't)* and: *I thought it was going to rain, (and it did)*.

(4) It should be noticed at this point that not all the distinctions of grammar and vocabulary are reflected in sound: *taut* and *taught* (and for some people *tort*) are identical, as are *by*, *buy* and *bye*, and the noun *intent* and the adjective *intent*. Equally *a tack* and *attack* are rarely distinguished in pronunciation any more than ambiguous sentences such as *Buy me a present* (buy it to give me or buy it as my agent). Yet by the nature of things most of the meaningful distinctions of the language must be capable of being given distinctive shape in sound, and it is this close dependence of sound and meaning which justifies the study of speech sounds, i.e. phonetics.

(1) The phonetician is interested in the way in which the air is set in motion, in the movements of the speech organs and the coordination of these movements in the production of single sounds and trains of sounds. His interest at this point borders upon the study of anatomy and physiology, and his tools for investigating just what the speech organs do are tools which are used in these fields:



direct observation, where possible, e.g. of lip-movement, jaw-movement and some tongue-movement; X-ray photography, either still or moving, for recording positions and movement of the tongue, soft palate and vocal cords: observation and or photography through mirrors, as in the laryngoscopic investigation of vocal cord movement; and electromyography, or the detection and measurement of the small electrical potentials, associated with muscle contraction at relevant points in the vocal tract. This whole area of interest is generally known as Articulatory phonetics.

(2) The phonetician is interested in the way in which the air vibrates between the mouth of the speaker and the ear of the listener. In this, he is close to the physicist studying acoustics; and the tools he uses are such as will enable him to measure and analyse the movement of air in the terms of physics. This means introducing a microphone into the communication chain, converting the air movement into corresponding electrical activity and analyzing the result in terms of frequency of vibration and amplitude of vibration in relation of time. This is the domain of **acoustic phonetics**.

(3) The phonetician is also interested in the hearing process; not so much in the physiological working of the ear, or the nervous activity between the ear and the brain, but more in the sensation of hearing, which is brain activity. Sounds may be characterized just well in terms of hearing as by their Articulatory or acoustic specifications. The means by which and the extent to which we discriminate sounds are relevant here, as well as the sensations of pitch, loudness, length and sound quality; and the methods by which we investigate these are the methods of experimental psychology. Particular interest is centered on the hearer's reaction to known physical stimuli fed into his ear. This is the domain of auditory phonetics.

The three facets of phonetic study may be used to describe and classify the sound features of all known languages, from Arabic to Zulu. But the phonetician is interested, *in the way in which sounds function in particular language, how many or how few of all the sounds of language are utilized in that language, and what part they play in manifesting the meaningful distinctions of the language.* Because one knows what a sound is— how it is produced, what its physical characteristics are and what effect it has on the ear— one does not therefore know what *it does*, and the same sound may have quite different tasks to perform in different languages.

That is to say, the difference in sound between *d* and *th* is used in English to differentiate between one word and another; *then|den, lather|ladder, breathe|breed.* In Spanish this is not so; the difference between *d* and *th* can never be used to differentiate one word from another because *th* occurs only between vowels, as in *todo* ('all'), and at the end of a word, as in *herdad* ('truth'), whereas the sound *d* never occurs in these positions. So in Spanish the two sounds can never be '**opposed**' to each other in the same place in a word, and therefore they can never be '**distinctive**'.

Similarly, variations of pitch play a part in all languages but the basic function of those variations may be quite different in different languages. In English, pitch changes are not a part of the shape of a word: that is to say, we can pronounce a word such as *NO* with a variety of pitch patterns, level, rising, falling or combinations of these, so as to add overtones of doubt, certainty, apathy, interrogation and the like, but the word remains the same old basic negative. This is not the case, however, in a language such as Chinese where the pitch pattern is indeed a part of the basic shape of the word, which is not identifiable without it.

There are four different words in national language of china all of which are pronounced rather like English *Ma*, and they are distinguished by their patterns of pitch. *Ma* with high, level pitch means **mother**; with a rise from medium to high pitch, the meaning is **hemp**; a rise from low to medium gives **horse**; and a fall from high to low gives **scold**. In Chinese, Then, pitch is an essential part of the shape or profile of the word, and is distinctive in the same way that stress is distinctive in the two forms of **incense**. In English pitch is not a part of word shape but rather a part of the shape of longer bits of speech. We can say single words like *No* with rising pitch to make them interrogative—**No?**

THANK YOU FOR YOUR ATTENTION

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