

PHONETICS AND ITS BRANCHES

Phonetics is that branch of linguistics which deals with the characteristics of speech sound. It may be subdivided into articulatory phonetics, acoustic phonetics and auditory phonetics.

Articulatory phonetics deals with the production of sounds by the organs of speech.

Acoustic phonetics deals with sound waves and the transmission of sounds. The sub-branch of phonetics which uses instruments in the analysis of sound features is called instrumental phonetics or experimental phonetics.

Auditory phonetics deals with the reception and perception of sounds and hearing.

The way speech sounds are produced can be divided into three categories depending upon the part of the speech organs play in the production of speech.

(i) Initiation: Generally the process of getting the airstream moving is initiated in the lungs. This is known as the pulmonic airstream. The other two are the glottalic airstream in which the larynx with the glottis firmly closed is the initiator and the velaric airstream where only the air in the mouth is set in motion.

(ii) Phonation: This refers to the part played by the vocal cords in the production of speech. The opening between vocal cords or bands is called glottis. If the glottis is wide enough to permit the air to pass through without any obstruction a voiceless sound is produced. If glottis

[p, t, k]

is completely closed, a glottal stop is produced. If the glottis is half-open, the vocal cords vibrate and the sound produced is a voiced sound [b, d, g, m, n].

(iii) Articulation: The parts which are involved in articulation may be divided into three groups - resonating cavities or chambers (oral, nasal and pharyngeal), articulators (the lower lip, the tongue, the uvula, and the lower jaw), and points of articulation (the upper lip, the upper teeth, the alveolar ridge, the palate and the velum).

Speech sounds are classified according to the state and direction of the airstream and the degree of the stricture of air passage. If air stream is pushed outside, explosives are produced, and if it is pushed inside, implosives are produced.

On the basis of the degree of stricture, categories like Plosives, aspirates, fricatives, nasals, laterals, rolls (trills), frictionless continuants and vowels are established. These are further subdivided according to the parts of vocal apparatus involved in the articulation. Consideration as to which active and which passive articulators are involved lead to the establishment of a set of categories of articulation like bilabial, labio-dental, dental, alveolar, palatal, velar, uvular, and glottal.