

Classification of speech sounds

on the basis of

Manner of Articulation

Classification of speech sounds on the basis of the manner of articulation

- Complete closure and sudden release—The structure is one of complete closure, i.e., the active and the passive articulators come into firm contact with each other, thus preventing the lung air from escaping through the mouth. Simultaneously there is a velic closure, i.e., the soft palate is raised, thereby shutting off the nasal passage of air. Thus the lung air is blocked in the mouth. When the oral closure is released, the air escapes with a small explosive noise. Sounds produced with such a structure of complete closure and sudden release are called **plosives**. There are six plosives in English R.P.—/p/, /b/, /t/, /d/, /k/, /g/

- Complete closure and slow release—If after the blocking of the lung air in the mouth, the oral closure is removed slowly ,i.e., the active articulator is removed slowly from the passive articulator, instead of the small explosive sound that is characteristic of plosives, friction will be heard. Such sounds that are produced with a structure of complete closure and slow release are called **affricates**. There are two affricates in English R.P.—/tʃ /, /dʒ/

- **Complete Oral Closure**—The active and passive articulators are in firm contact with each other, thereby blocking off the oral passage of air completely. But the soft palate is lowered so that there is a velic opening, i.e., the nasal passage of air pass through the nasal passage. Sounds articulated with such a structure of complete oral closure are called **Nasals**. There are three nasal sounds in English R.P. –/m/, /n/, /ŋ/

- **Close Approximation**—The active articulator is so close to the passive articulator that there is a very narrow gap between them. The soft palate is raised so as to shut off the nasal passage of air. The lung-air escapes through the narrow space between the two articulators producing audible friction. Such sounds are called **fricatives**. There are nine fricatives in Eng. R.P.—/f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, /h/

- **Partial Closure**—In the structure, the center of the tongue is raised to touch the roof of the mouth so that there is a complete closure in the center of the vocal tract. But the sides of the tongue are lowered, so that the air escapes along the sides of the tongue without any friction. Such sounds are called **laterals**. There is one lateral sound in English R.P.—/l/

- **Open Approximation**—The soft palate is raised, thereby shutting off the nasal passage of air. If the active articulators so that the gap between them is wide, the air escapes through this gap without any friction. Such sounds, articulated with a structure of open approximation are called **frictionless continuants or semi- vowels**. There are three semi-vowels in Eng. R.P.—/r/, /j/, /w/



Classification of consonants
on the basis of
Place of Articulation

Classification of consonants on the basis of place of articulation

- **Bilabial**—Lower lip is the active articulator. Upper lip is the passive articulator.
- **Labio-Dental**—Labio-Dental sounds are produced by the articulators – lower lip & the upper set of teeth.
- **Dental**—During the production of dental sounds the tip and the front of the tongue are the active articulators and the upper set of teeth are the passive articulators.

- **Alveolar**—Tip of the tongue or the blade of the tongue is the active articulator and alveolar ridge is the passive articulator.
- **Post- Alveolar**—Back of the teeth ridge is the passive articulator and the tip of the tongue is the active articulator.
- **Palato-Alveolar**—Tip of the tongue articulates against alveolar ridge and the front of the tongue articulates against the hard palate.

- **Palatal**—Tip of the tongue turns downward. Front of the tongue articulates against the hard palate.
- **Velar**—Back of the tongue articulates against the soft-palate.
- **Glottal**—Glottal is a sound produced at the glottis and vocal cords are the articulators . Vocal cords are held wide apart and the sound is produced without any audible friction.

Reference Readings :

- A Textbook of English Phonetics for Indian students by T. Balasubramanian, pp.17-31.
- E-learning:
<http://www.nptel.ac.in/courses/109106080/>
<http://nptel.ac.in/courses/109106067/>

Assignment to be given :-

- Classify the consonant sounds on the basis of place and manner of articulation.