

## **CONSONANTS AND VOWELS**

### ***Distinguish between consonants and vowels and describe how consonants are classified.***

Consonants and vowels are two different qualities of sounds that are found almost in all languages of the world. The distinction between them are discussed below.

Consonants are defined as the sounds articulated by temporary obstruction in the air stream which passes through the mouth. The obstruction made by the articulators may be 'total', 'intermittent', 'partial', or may merely constitute a narrowing sufficient to cause friction. In the articulation of consonants almost all articulators are involved. Especially the position of the soft palate causes the division of consonants into 'oral consonants' and 'nasal consonants'. When the soft palate is raised, 'oral consonants' are produced; the soft palate is lowered, 'nasal consonants' are produced. In English /m/, /n/, and /ŋ/ are nasal consonants and rest of all are oral consonants. The function of vocal cords also causes the division of consonants as 'voiceless' and 'voiced'. When vocal cords are kept apart, voiceless consonants as /p, t, k, c, f, θ, s, ʃ, h/ are produced whereas their vibrations produce voiced consonants as /b, d, g, j, v, ʒ, z/. But vowels are the sounds that are produced with an approximation without any obstruction in the air passage. Among all articulators, only tongue is prominent in their production. All vowel sounds are voiced and all of them are 'oral' as during the production of them the soft palate is raised and hence the nasal cavity is completely blocked. The examples of the vowels are /i, I, e, a, u, U, o, ɔ/.

Consonants in phonetics are referred to as 'contoids' which often appear as the marginal elements in the 'syllable'. They seldom form nucleus of the syllable except some case. The consonants 'n' and 'l' in the second syllable of the words 'button' and 'apple' form nucleus.

But vowels referred to as 'vocoids' in phonetics always form the nucleus of the syllable as in 'bill', 'pill', 'mill', 'heat', etc.

Even in their manner of classification, consonants and vowels show apparent distinction. Consonants are identified or classified in terms of 'voicing', 'place of articulation', and 'manner of articulation', whereas vowels in terms of the 'height of tongue', 'part of tongue', which is raised or lowered, and 'lip rounding'.

After all consonants are auditory impressions and they are twenty five in number whereas vowels are articulatory impressions and are only twelve in number.

### ***Classification of consonants***

Consonants as discussed above are classified in terms of:

1. voicing
2. place of articulation
3. manner of articulation

## VOICING

On the basis of voicing, consonants are divided into 'voiced consonants' and 'voiceless consonants'. Voiced consonants are those which are articulated with the vibration of the vocal cords. In English voiced consonants are /b, d, g, j, v, z, z/. Voiceless consonants are articulated without vibration of vocal cords or it may be said that during the production of voiceless consonants vocal cords are kept apart. Examples: /p, t, k, c, f, θ, s, s, h/.

## POINT OF ARTICULATION

On the basis of the points of articulation, consonants are divided as:

**Bilabial (or labial):** Both lips as the primary articulators articulate with each other.

Examples: /p/, /b/, /m/, /w/.

**Labio-dental:** The lower lip articulates with the upper teeth.

Examples: /f/, /v/.

**Interdental:** The tip and the rims of the tongue articulate with the upper teeth.

Examples: /θ/, /ð/.

**Alveolar:** The blade, or tip and blade of the tongue articulates with the alveolar ridge (the upper teeth ridge).

Examples: /t/, /d/, /s/, /z/, /n/, /l/, /r/.

**Palato-alveolar:** The blade, or the tip and blade of the tongue articulates with the alveolar ridge and there is at the same time a raising of the front of the tongue towards the hard palate.

Examples: /ç/, /j/, /ʃ/, /zʃ/, /j/.

**Velar:** A glottal obstruction, or a narrowing causing friction and vibration between the vocal cords. However, some consonants in this category may be produced without vibration between the vocal cords.

Examples: /k/, /g/, /h/, /ʔ/.

## MANNER OF ARTICULATION

The manner of articulation describes the different types of obstructions made by the articulators. These obstructions may be total, intermittent, partial or may merely constitute a narrowing sufficient to cause friction. According to the manner of articulation consonants are divided into 'plosives', 'affricates', 'fricatives', 'lateral', 'retroflex', and 'nasals'.

**Plosives (stops):** For this, there occurs a complete closure at some point in the vocal tract, behind which the air pressure builds up and is released explosively.

Examples: /p/, /t/, /k/, /b/, /d/, /g/.

**Affricates:** For this, a complete closure appears at some point in the mouth, behind which the air pressure builds up; the separation of the articulators is slow with that of a plosive, so that friction is a characteristic second element of the sound.

Examples: /c/, /j/.

**Fricatives:** Two articulators approximate to such an extent that the air stream passes through them with friction. The sounds produced in this way are called fricatives.

Fricatives may be voiced as /v/, /l/, /z/, /ʒ/ and voiceless as /f/, /θ/, /s/, /ʃ/, /h/. Fricatives differ also in the shape of the narrow opening in which they are produced. In /f/, /v/, /θ/, /l/ it is relatively wide from side to side but very narrow from top to bottom. Because of this slit like shape of the opening, these sounds are called 'slit fricatives'. In contrast, in /s/, /z/, /c/, /j/, the opening is much narrower from side to side and deeper from top to bottom. These sounds are called 'groove fricative'.

**Lateral:** For lateral, a partial closure is made at some point in the mouth, the air stream being allowed to escape from one or both sides of the contact. For example, /l/ in 'loud' or 'late'.

**Retroflex:** In the production of this sound, the tip of the tongue is raised towards the alveolar ridge without touching it. The sides of the tongue are pressed against the upper back teeth. As the sound is produced, air flows out over the tip of the tongue and vocal cords vibrate.

Example: /ɻ/.

**Nasals:** These sounds are produced with a complete closure at some point in the mouth but the soft palate is lowered and hence the oral cavity is blocked and air escapes through nasal cavity. These sounds are continuants. In the voiced form, they have no noise component. They are, to this extent, vowel like.

Examples: /m/, /n/, /ŋ/.