CONSONANTS AND VOWELSDistinguish between consonants and vowels and describe how consonants areclassified.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 articualtors 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 / /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, 0, s, s, h/ are produced whereas
their vibrations produce voiced consonants as /b, d, g, j, v,
,z, 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, /.
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 consonantsConsonants as discussed above are classified in terms of:
1. voicing
2. place of articulation
3. manner of articulation
VOICINGOn 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, 0,
s, s, h/.
POINT OF ARTICULATIONOn 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: /o/, / /.
Alveolar: The blade, or top 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: /c/, /j/, /s/, /z/, /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/, / /.
MANNER OF ARTICULATIONThe 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 extend that the air stream passes
through them with friction. The sounds produced in this way are called fricatives.
Fricatives may be voiced as /v/, / /, /z/, /z/ and voiceless as /f/, /0/, /s/, /s/, /h/. Fricatives
differ also in the shape of the narrow opening in which they are produced. In /f/, /v/, /0/,
/ / 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: /r/.
**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/, / /.