Phonetics

Revison of Place and Manner of Articulation of English Consonants

A consonant is a speech sound produced by a partial or complete obstruction of the air stream by a constriction of the speech organs.

24 consonants both in terms of their function and phonetic nature have been identified. They are classified according to: manner of articulation, place of articulation and voicing.

The chart below shows how they are classified and the place of articulation of each one:

Manner of	bilabial	Labio	dental	alveolar	Post	Palatal	velar	Glottal
Articulation		dental			alveolar			
plosives	рb			t d			k g	
fricatives		f v	бð	S Z	∫ 3			h
affricates					t∫ dʒ			
lateral				l				
nasals	m			n			ŋ	
Semi-vowels/	W				r	j		
approximants								

Chart of English Consonants (Roach, 1993, p.62)

I. Manner of articulation

The manner of articulation shows how narrow the constriction is and whether the air stream is flowing through the nose or the oral cavity

- **1. Plosives:** Plosives involves a total closure. Their articulation consists of three stages: the closing stage, the compression stage and the release stage during which a plosion occurs.
- 2. Fricatives: Fricatives are sounds produced with a partial closure producing friction because of the narrow passage left to the air stream by the organs involved in their articulation.

- 3. Affricates: Affricates involve a complete closure like plosives, but the release of the air is with friction (of a short duration)
- **4.** Laterals: Laterals are sound articulated by means of a partial closure with the air escaping through both sides of the mouth.
- 5. Nasals: Nasals are produced with the passage of the air through the nasal cavity.
- **6.** Semi-vowels: Semi-vowels are in phonetic terms vocalic (produced like vowels), but treated like consonants because their function is consonantal.

II. Place of articulation

The place of articulation specifies where in the vocal tract the closure or the narrowing is made and which organs are Involved in their articulation.

- 1. Bilabial: the lower lip and the upper lip approach or teach each other /p, b, m,w/
- 2. dental: the tip or the lade of the tongue approach or touch the upper teeth / $\Theta \tilde{O}/$
- 3. Labio-dental: The lower lip approach or touches the upper teeth / f, v /
- 4. alveolar: The tip of the tongue approaches or touches the alveolar ridge /t, d, n, s, z//
- 5. post-alveolar: Th constriction is made just after the alveolar ridge / \int , 3, t \int , d3, r/

retroflex: /I/I is said to be retroflex because he tip of the tongue is curled up backward in the mouth towards the post-alveolar ridge.

- **6.** Palatal: The body of the tongue approaches or touches the hard palate /j/
- 7. velar: The body of the tongue approaches or touches the soft palate, or the velum. / k, g, η /
- **7. glottal**: In the production of /**h**/, the glottis is narrow enough to create turbulence in the air stream while flowing through the vocal cords.
- **III. Voicing** specifies whether the vocal cords are vibrating

Several sounds in English differ voicing - the two sounds have the same place of articulation but differ inVoicing.

Voiceless	voiced
/p/	/ b /
/t/	/d/
/k/	/g/
/ f /	/v/
/0/	/ð/
/s/	/z/

/ʃ /	/3/
/t∫ /	/ dʒ/