**2. Voicing and consonants**

 **Sétif-2- University 1st Year Classes 2017-2018**

**2.1 The role of the larynx**

 Before starting the study of the different speech sounds**,** it is of paramount importance to introduce the larynx or voice box as it is known in lay terms.The larynx, visible as our Adam’s apple, along with the vocal folds is responsible for:

- Voicing sounds (Ahh!) or making them voiceless (Shh!)

- For creating different voice qualities (normal, creaky, breathy, … )

- For making the pitch of our voice goes up and down.

- For being a place where certain speech sounds are produced.

**2.2 Voicing**

The firstimportant feature in the distinction of speech sounds is **voicing**, also known as **phonation** and whichrefers to the vibration of the vocal folds. When the vocal folds are not tightly close, air passing between them causes them to vibrate.

**a. The glottis positions** (The figure below summarises the glottal states)

1. Widely open for voiceless consonants like / p, k, f, s, … /

2. Narrowly open the glottal fricative /h/

3. Position for vocal folds vibrating. Voiced sounds like / b, g, v, z, … /

4. Tightly closed. The glottal stop / ʔ /



**3. Manners and Places of Articulation**

In addition to voicing, two other features are used to differentiate between consonants, or to describe consonants, and they are manner and place of articulation.

**a. Manner of articulation** refers to the degree to which the air stream is obstructed at the place of articulation of consonants.

**b. Place of articulation** refers to the place where the sounds are articulated; it refers to the two speech organs which come together to produce the consonants.

**3.1. The plosives**

The plosives are produced as following:

-Two speech organs *come together* or one against the other making a **complete closure.**

**-**The air is *released from the lungs* and **blocked** for a moment.

-the organs *come apart* making a *sudden* opening.

-The air is *released to the atmosphere* with an *audible noise* known as the **plosion** which could be either strong or weak.

 The plosives’ production could be summarised in terms of four phases:

-The closure phase (the air is not yet released from the lungs)

-The hold phase (the air is released from the lungs and blocked + possible voicing for voiced plosives)

-The air is released (The air released to the atmosphere)

-The post-release phase (Weak or strong plosion known as ***aspiration***)

 The English plosives also called the oral stops are also called the oral stops, and they are described in the chart below:

|  |  |  |
| --- | --- | --- |
| **Glottal state****( + - ) Voicing** | **Point of articulation** | **Transcription****(IPA symbol)** |
| Voiceless Voiced Voiceless Voiced VoicelessVoicedVoiceless | **Bilabial**PetBet**Alveolar**TenDen**Velar**Card Guard**Glottal** Cu’p /Cu’t /Du’ckNa’ture | / p // b // t // d // k // g // ʔ p, ʔt, ʔk // ʔ ʧ / |

**The phonetic description of the plosives (the sound described in isolation at the level of production and reception)**

/ p / and / b / are bilabial, voiceless and voiced, aspirated and unaspirated respectively, oral consonants.

/ t / and / d / are alveolar, voiceless and voiced, aspirated and unaspirated respectively, oral consonants.

/ k / and / g / are velar, voiceless and voiced, aspirated and unaspirated respectively, oral consonants.

 **The phonological description of the plosives (the sound described in combination with other sounds)**

The plosives can be initial, medial or final in a word.

**-In initial position**

/ p /, / t /, / k / can be word initial, and they are aspirated [ pʰ, tʰ, kʰ ]. They can be followed by a consonant (one of the set of / l /, / r /, / w / and / j /) or a vowel. Play / p l eɪ / Crowd / k r aʊ d / Twins / t w ɪ n z /, Cube / k j uː b / Pay / p eɪ / Tea / t iː /

They can be preceded by the consonant “s” like Splendid / ˈsplendɪd / Scream / skriːm / Stream /striːm /, and they become unaspirated.

 / p / and / k / are silent before / n /, and / p / is also silent before the consonant “s” and “t”, and it’s pronounced / f / when occurring before the letter “h”. Pneumonia/ njuːˈməʊnɪə / Knit / nɪt / psychology / saɪˈkɒlədʒi / pterodactyl / ˌterəˈdæktɪl / philosophy / fɪˈlɒsəfi /.

**-In medial position**

Medial in orthography is either initial or final in the syllable in phonetics. Being in a word with more than one syllable, / p /, / t /, / k / are aspirated when occurring initial in a stressed syllable. Aspiration /ˌæs. pə.ˈreɪ. ʃən / Important [ ɪm. ˈpʰɔː. tənt ] Prepare [ prɪ ˈpʰ eə ] People [ˈpʰiː pəl ]

**-In final position**

/ p /, / t /, / k/ when being final, they become unaspirated. Pump / pʌmp / Cute /kjuːt/ Cracks /kræks/

**-In initial position**

/ b /, / d /, / g / in word initial position are devoiced (pronounced with little voicing) [ b̥, d̥, g̥ ]. They can never be preceded by a consonant like their counterparts / p, t, k /. They can be followed by a consonant (one of the set of / l /, / r /, / w / and / j /) or a vowel. Blue / bluː / Dwell / dwel/ Grind / ɡraɪnd / Beauty /bju:ti/ Bye / baɪ / Dye / daɪ / Guy / ɡaɪ /

In initial position / g / becomes silent before / n /. Gnome / nəʊm / gnaw / nɔː /

**-In medial position**

/ b /, / d /, / g / in medial position in orthography become fully voiced when occurring between voiced sounds. Rubber / ˈrʌbə /, Reader / ˈriːdə /, Ago / əˈɡəʊ /, Carbs / k ɑː b z /

**-In final position** In final position, / b /, / d /, / g / are devoiced. Blurb / blɜːb / Rid / rɪd / Flags / flæɡz /

/ b / is silent after / m /. Comb / kəʊm / Limb / lɪm /

/ g / becomes silent before final / m /. Diaphragm / ˈdaɪəfræm / phlegm / flem /.