



University of Al-Mustaqbal
College of Science
Department of Medical
Physics



Phonetics

Second stage

Contextual audio phenomena

Third lecture

Ali Jaafar

2024- 2025

Contextual audio phenomena:

They are the phenomena resulting from the use of language, where use leads to the interaction of adjacent sounds to different degrees according to the strength of the influencing and affected person and the factors controlling the use. The phenomena are divided into three sections.

- a) A - **The phenomena that occur in consonants**, the most famous of which are (silent or consonant letters): loudness, whispering, substitution, and assimilation in which we find a sound that disappears at the end of its complete annihilation.
- b) B - **The phonetic phenomena that occur in consonants (movements)**, the most famous of which are: reducing the time of the vowel if it is followed by a consonant in an adjacent word, or increasing the time of the consonant if it is followed by a hamza or a silent consonant in the same word, as we found in syllabic changes, following, and tilting.
- c) **The phonetic phenomena that occur in vowels and consonants**, the most famous of which is: nasalization.

• In the Arabic language, the vowels are the three vowels - fatha, kasra, and dam - and the three madd sounds - madd alif, yaa, and waw. Consonants (silent or consonant letters) are all other sounds.

Factors controlling leg vocal phenomena

1. **Lower voltage factor** :This factor means achieving a maximum effect with a minimum of effort. In his pronunciation, the speaker tends toward the lighter, easier sounds and phonetic series, provided that ease and lightness do not come at the expense of meaning. This is what leads to the speaker sometimes dispensing with some elements of the sentence or with some sounds, and perhaps being content with making changes within the series. Phonological, which involves replacing sounds or changing their locations.
2. **Frequent use**: Frequent use leads to an effect on the language similar to the factor that provides muscular effort, and we can say

that the two factors are complementary, as frequent use leads to bringing the sounds closer together or deleting them, and this saves the muscular effort that the speaker replaces.

3. **The strongest factor**: Maurice Gramont spoke about the factor of the strongest and its impact on linguistic development in the modern era. He said: “When one sound influences another, the weakest, by its position in the syllable or by its pronunciation extension, is the one that is susceptible to being influenced by the other.” The talk about the strongest is old in the Arabic linguistic study, and we find it with the oldest phonetic studies related to it.

With intonation, the elements of strength in the voice are:

- Outbreak in the shin
- Repetition in the letter r (If you pronounce the rā', it comes out as if it were doubled, and the pause increases its clarification).
- Whistling in the group (y,g,x) (This group is distinguished by the whistling resulting from the force of air friction with the walls of the mouth).
- Occlusal (It is the elevation of the back of the tongue towards the plate so that it does not connect to it while pronunciation takes place in a way other than the plate. The tongue is likely to be one of the organs working on it. The vowel sounds in Arabic are the ta', the tha', the dha' and the sād).
- Locationality (A secondary factor supports the strength factor, so the distinct sound must support its effect with the position to be effective. Al-Khalil noticed that and saw that the qaf cannot affect the sād).

- 4- **External factor** : This factor explains the development that occurs in the language as a result of its influence by another language. The Arabs realized the impact of this factor at an early period, so we often find them sending their children to the heart of the desert from a young age to learn the pure Arabic language that was not affected by the factors of development as happened to city dwellers. Likewise, linguists identified those who They collected the language of the eloquent tribes from whom the language could be taken because of its isolation and distance from influence.

5- **Stopping and connecting factor**: Spoken language is affected by the speaker's physiological state if it becomes difficult for him to pronounce a long string of sounds, forcing the speaker to stand to rest and breathe. This standing is accompanied by a change in stress and is therefore one of the processes that affects meaning. The speaker can change the meaning of a sentence by manipulating stress and intonation and changing places of standing.

❖ **Phoneme**

The smallest phonetic unit has no meaning, and the meaning of the word changes as it changes. It may be a letter or a vowel. Example: the word (heart); The letter (q) is a phoneme that has no meaning in itself, and if we replace the kaf with the qaf, the meaning of the word changes to (dog). Second example: the word (he wrote); It consists of six phonemes: (k, fatha, t, fatha, b, fatha).

We also found that there are many trends in those who defined the phoneme, and it is possible that several definitions may even emerge from one school, **such as**:

1. The Prague School, which defined a phoneme as (a bundle of abstract distinguishing features or correspondences between sounds such as loudness).
2. Some of them viewed the phoneme as a virtual, abstract unit that has no real existence, whether physical or mental, including the Japanese Gimbo and the English Palmer, W.F. Twaddell and others.
3. Others considered the phoneme alone psychological, as did Wijk. N.Van who said: (Phonemes are the smallest units that are felt. They are not divisible further by linguistic feeling).

Functions occupied by phonemes:

1. Function as a suitable unit of alphabetical expression.
2. Its function as a semantic unit of distinction
3. Its function is in language structure

Questions

1. What is the phonetic phenomenon that occurs in vowels and consonants and leads to changes in the pronunciation of sounds or affects neighboring sounds?
A- Elision B- Negation C- Reduction

2. What is the factor that refers to achieving the maximum effect with minimal effort in pronunciation, where the speaker tends to use lighter and easier sounds without affecting the meaning?
3. What is the factor that influences linguistic development and states that the weaker sound, in terms of its position or duration, is the one that is affected by the stronger sound?
A-Low effort factor B- Frequent usage C- The stronger factor

4. Which of these phonetic phenomena refers to the raising of the back of the tongue towards the palate without touching it, resulting in non-palatal articulation in sounds such as "T," "Th," "Dh"?

5. Which of these factors relates to the physiological state of the speaker affecting the pronunciation of a long sequence of sounds, which may lead to changes in pressure and affect meaning?
A- External factor B- Pause and connection factor
C- Low effort factor