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Importance of English Consonants Classification for EFL Learners

Bahaa A. Muslim Abdul-Ameer Al-Zobaidy

English Department, Faculty of Education, University of Kufa, Iraq

Abstract---The practical formula of this paper helps the readers (EFL learners) how can they work by themselves to explain and realize the articulation of the English consonant sounds. However, the theoretical material is necessary for anyone who needs to understand the principles of regulating these sounds in spoken English. Most of the readers (EFL students) are aware of the importance of linguistics topics, but they do not have sufficient basic knowledge to understand these topics, especially Phonetics and Phonology. It is an endeavor to show the general categorization existing in consonants on the phonological aspects. Most of the time, there are three labels that are given a little awareness in instructors' lectures to EFL students as if they existed worthless. Thus, while explaining the English consonant sounds, it is recommended that the EFL instructors should pay equal awareness to these labels with different class activities. The quantity of data displayed in some figures with (151) examples as part of direct education. These data were procured from Google Scholars, Google Books and other websites.

Keywords---articulation, bilabial, larynx, pronunciation, tongue, velum, vocal folds (cords), voiced.

Introduction

This paper seeks to raise the awareness of both instructors and students to the VPM-label. So, it can reach this goal through the following questions that have been answered in the paper:

- What does VPM-label stand for?
- How does the mobility of the function of voicing indicate?
- How many are all consonant sounds of English?
- How can classify these sounds via the VPM-label?

English speech sounds are classified into consonants and vowels (Widayati, 2016; Suardiana, 2016). Consonants phonetically are sounds produced by closing or narrowing the vocal tract so that the airflow is either prevented or restricted that apparent friction is generated (Costanza & Sklar, 1985; Gomi et al., 2002). Phonetically [f], for example, is a consonant in that there is apparent friction, and the sound transpires marginally, as in far, beef. In sounds such as [l], [r], [w] and [j]. Phonologically, these sounds are consonants because their position in syllables is the same as that taken by [f] and [p], e.g., tip, lip, wet, yet. However, they decrease the friction demanded by the above definition (Crystal, 2011).

Consonants in English

Consonant sounds are probably classified as being given a denominated VPM-label. (VPM) stands for Voicing, Place of articulation, and Manner of articulation (see table 1 on page 9) (Vocroix, 2021; Rinarta et al., 2018). Voicing signifies that the vocal folds are used; the sound is voiceless if they are not used. The place of articulation relates to the place where the airflow will be more or less obstructed. The manner of articulation is related to the nature of the obstruction (Forel & Puskás, 2005).

Voicing

Voicing is whether the vocal folds are vibrating through the production of consonants. If the vocal folds vibrate during the production of the consonant, it is said to be voiced (O'Connor, 1980). This vibration can be felt if your hand is placed outside the throat as a sound is uttered; if there is no vibration, it is said to be voiceless (Aitchison, 2003). Consonant sounds are classified according to the criteria of voiced and voiceless:

- Voiced: when the sound is articulated with the vibration of the adducted vocal cords in the larynx (see figure 1). In English, the following fifteen consonants are voiced: /b, d, g, v, ð, z, ʒ, l, r, j, w, dʒ, n, m, ŋ/ (Roach, 1998).

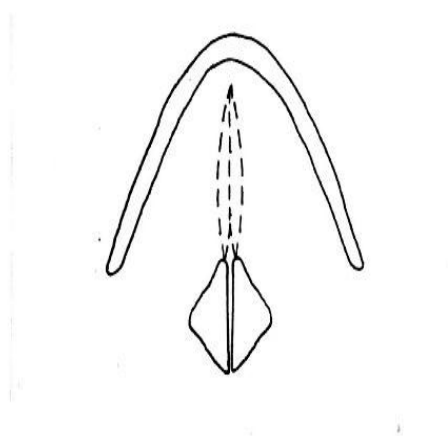


Figure 1. The vocal folds are adducted and vibrated

- Voiceless (unvoiced): when the sound is produced without vibration of the seized vocal cords in the larynx (see figure 2). The following nine consonants are unvoiced: /p, t, k, f, θ, s, ʃ, h, tʃ/.

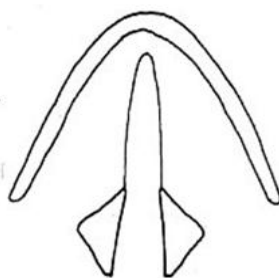


Figure 2. The vocal folds are adducted and not vibrated

Place of articulation

These places demand to which articulators are involved in the production of a specific sound (Spahiu & Kryeziu, 2021; Khasanovna & Farkhodovna, 2021). The articulators are part of the vocal tract that can be used to form sounds (see figure 3). They can form the lower surface of the vocal tract which is highly mobile. They also make the gestures that demanded speech by moving toward the articulators that form the upper surface (Ladefoged & Johnson, 2010; Roach, 1983).

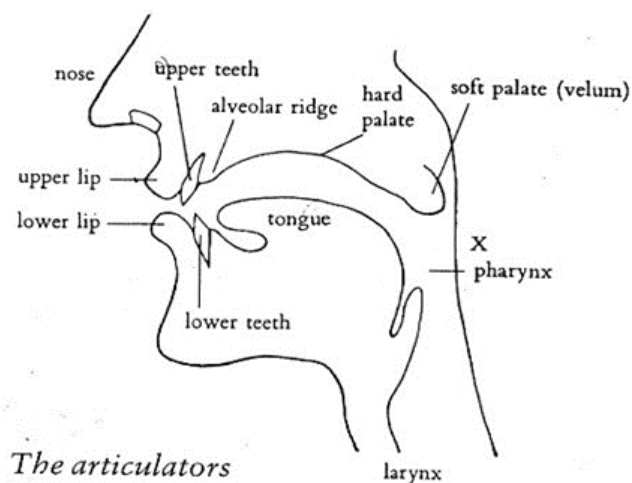


Figure 3. Places of articulation (articulators)

These are:

- Bilabial is referred to speech sounds, such as /p, b, m, w/, produced by contact of the lower and upper lips.
Examples are:
[p] Which is voiceless, as in *pot*, *happy* and *top*.
[b] Which is voiced, as in *ball*, *taboo* and *rub*.
[m] Which is voiced, as in *mask*, *amount* and *calm*.
[w] Which is voiced, as in *wish*, *awhile* and *what*.
- Labiodental refers to speech sounds, such as /f, v/, produced by the lower lip touching with the upper front teeth.
Examples are:
[f] Which is voiceless, as in *food*, *lifeboat*, and *thief*.
[v] Which is voiced, as in *voice*, *waiver* and *above*.
- Dental sounds are articulated with the tongue touching the teeth, such as /θ, ð/.
Examples are:
[θ] Which is voiceless, as in *thing*, *toothbrush*, and *death*.
[ð] Which is voiced, as in *that*, *wither* and *smooth*.
- Alveolar is a consonant sound articulated with the tongue touching the upper alveolar ridge, such as /t, d, s, z, tʃ, dʒ, n, l/.
Examples are:
[t] Which is voiceless, as in *telephone*, *attack*, and *loot*.
[d] Which is voiced, as in *deer*, *radar* and *bleed*.
[s] Which is voiceless, as in *soap*, *assume* and *miss*.
[z] Which is voiced, as in *zipper*, *buzzer*, and *nose*.
[tʃ] Which is voiceless, as in *chop*, *catcher* and *watch*.
[dʒ] Which is voiced, as in *job*, *badge*, and *cage*.
[n] Which is voiced, as in *knob*, *pin* and *thin*.
[l] Which is voiced, as in *late*, *balloon* and *fall*.
- Palatal refers to a consonant composed with the tongue contacting the hard palate, such as /ʃ, ʒ, r, j/.
Examples are:
[ʃ] Which is voiceless, as in *shoe*, *fishing* and *wish*.
[ʒ] Which is voiced, as in *vision*, *beige* and *usually*.
[r] Which is voiced, as in *rope*, *baron* and *far*.
[j] Which is voiced, as in *yellow*, *opinion* and *year*.
- Velar is referred to a consonant articulated with the tongue touching the velum, such as /k/, /g/, and /ŋ/.
Examples are:
[k] Which is voiceless, as in *cow*, *peeking*, and *wake*.
[g] Which is voiced, as in *goose*, *ago* and *flag*.
[ŋ] Which is voiced, as in *singer*, *ring*, and *king*.
- A glottal is a place of articulation referring to a consonant composed by totally or partially tightening the glottis, such as /h/.
Example is:
[h] Which is voiceless, as in *happy*, *greyhound* and *home*.

Manner of articulation

The manner of articulation refers to how the sound is produced and how the airstream is changed as it moves through the vocal tract (Sock & Löfgvist, 1995; Honda, 1996). The manner of articulation classification has to deal with the different kinds of obstruction when the air passes through the vocal folds. It may meet the complete closure (stop), an approximately complete closure (fricative), or the air might escape in more exclusive ways, around the sides of the tongue or through the nasal cavity (nasal) (Forel & Puskás, 2005). These are:

- The stop is a consonant sound characterized by:
 - The total obstruction of the outgoing airstream by articulators.
 - A build-up of intra-oral air pressure, and
 - The release.
 Examples are:
 - [p] Which is a voiceless bilabial, as in *poor*, *happen* and *cup*.
 - [b] Which is a voiced bilabial, as in *black*, *rainbow* and *nub*.
 - [t] Which is a voiceless alveolar, as in *tall*, *attend* and *coat*.
 - [d] Which is a voiced alveolar, as in *dear*, *calendar* and *land*.
 - [k] Which is a voiceless velar, as in *cool*, *cake* and *snack*.
 - [g] Which is a voiced velar, as in *go*, *aggressive* and *bag*.
- Fricative is a consonant sound articulated by forcing the breath stream within a constriction formed by articulators in the vocal tract.
 Examples are:
 - [f] Which is a voiceless labiodental, as in *fog*, *life*, and *leaf*.
 - [v] Which is a voiced labiodental, as in *vice*, *river* and *live*.
 - [θ] Which is a voiceless dental, as in *thin*, *toothbrush* and *breath*.
 - [ð] Which is a voiced dental, as in *this*, *without* and *soothe*.
 - [s] Which is a voiceless alveolar, as in *soon*, *assumption* and *kiss*.
 - [z] Which is a voiced alveolar, as in *zoo*, *bazaar* and *size*.
 - [ʃ] Which is a voiceless palatal, as in *show*, *fish* and *push*.
 - [ʒ] Which is a voiced palatal, as in *garage*, *version* and *usually*.
 - [h] Which is voiceless glottal, as in *have*, *greyhound* and *house*.
- An Affricate refers to a consonant sound characterized as having both a stop and a fricative manner of production (articulation).
 An affricate sound similar to a stop followed by a fricative is mirrored in the symbols. Both contain a stop symbol followed by a fricative symbol as:
 (t+ʃ) and (d+ʒ).
 Examples are:
 - [tʃ] which is a voiceless alveolar, as in *china*, *butcher*, and *catch*.
 - [dʒ] which is voiced alveolar, as in *joke*, *badger* and *page*.
- Nasal is referred to a consonant sound articulated with the complete closure of the oral cavity and a lowered velum (soft palate) to allow airflow through the nasal cavity. All three English nasal sounds are voiced.
 Examples are:
 - [m] Which is a voiced bilabial, as in *mark*, *among* and *ram*.
 - [n] Which is a voiced alveolar, as in *near*, *knife* and *can*.
 - [ŋ] Which is a voiced velar, as in *wing*, *bring* and *training*.

- Liquid refers to a generic label used to classify two English approximant consonant sounds, /l/ and /r/.

Examples are:

[l] Which is a voiced alveolar, as in *look*, *typology*, and *call*.

[r] Which is a voiced palatal, as in *rout*, *carrot*, and *gear*.

- Glide is a consonant sound described by a continued, gliding motion of the articulators through the following vowel, referred to as a semivowel, e.g., /w/ and /j/.

Examples are:

[w] Which is a voiced bilabial, as in *wear*, *two* and *where*.

[j] Which is a voiced palatal, as in *yet*, *youth* and *opinion*.

Table 1
Examines all consonant sounds

NO.	Consonants	Voicing	Place	Manner
1	/p/	Voiceless	Bilabial	Stop
2	/b/	Voiced	Bilabial	Stop
3	/t/	Voiceless	Alveolar	Stop
4	/d/	Voiced	Alveolar	Stop
5	/k/	Voiceless	Velar	Stop
6	/g/	Voiced	Velar	Stop
7	/f/	Voiceless	Labiodental	Fricative
8	/v/	Voiced	Labiodental	Fricative
9	/θ/	Voiceless	Dental	Fricative
10	/ð/	Voiced	Dental	Fricative
11	/s/	Voiceless	Alveolar	Fricative
12	/z/	Voiced	Alveolar	Fricative
13	/ʃ/	Voiceless	Palatal	Fricative
14	/ʒ/	Voiced	Palatal	Fricative
15	/h/	Voiceless	Glottal	Fricative
16	/tʃ/	Voiceless	Alveolar	Affricate
17	/dʒ/	Voiced	Alveolar	Affricate
18	/m/	Voiced	Bilabial	Nasal
19	/n/	Voiced	Alveolar	Nasal
20	/ŋ/	Voiced	Velar	Nasal
21	/l/	Voiced	Alveolar	Liquid
22	/r/	Voiced	Palatal	Liquid
23	/w/	Voiced	Bilabial	Glide
24	/j/	Voiced	Palatal	Glide

Conclusion

The leading purpose of this paper is to draw instructors' attention in the direction of phonetic class in an EFL context on the actual position for the three significant dimensions used to describe the English consonants. It reviews these sounds to guide the students on how to produce them (Venker-van Haagen, 1992; De Houwer et al., 2001). It can be concluded that there are twenty-four (24) consonant sounds in English. These sounds are classified regarding three criteria:

- Voicing.
- Place of Articulation.
- Manner of Articulation.

According to the VPM of the English consonant sounds system, the fundamental answer to the original questions is that there are (24) consonants in English as follows:

- Stops are six as /p, b, t, d, k, g/ (6)
- Fricatives are nine as /f, v, θ, ð, s, z, ʃ, ʒ, h/ (9)
- Affricates are two as: /tʃ, dʒ/ (2)
- Nasals are three as /m, n, ŋ/ (3)
- Liquids are two as : /l, r/ (2)
- Glides are two as /w, j/ (2)

The study of phonetics and phonology is valuable for several reasons. One of them is that all studies of any natural language give insight into the human mind and how it works (Legin et al., 1997; Birch et al., 2002). Moreover, the study of a foreign language gives better ability to know how to correct misspellings that produced or occurred during the processes of speaking or listening to the language, and how to teach pronunciation of a foreign language, especially with giving language (English) to other languages (Giovanni et al., 1999; Erath et al., 2013).

References

- Aitchison, J. (2003). *Linguistics*. McGraw-Hill.
- Birch, P., Gümöes, B., Stavvad, H., Prytz, S., Björkner, E., & Sundberg, J. (2002). Velum behavior in professional classic operatic singing. *Journal of Voice*, 16(1), 61-71. [https://doi.org/10.1016/S0892-1997\(02\)00073-5](https://doi.org/10.1016/S0892-1997(02)00073-5)
- Costanza, R., & Sklar, F. H. (1985). Articulation, accuracy and effectiveness of mathematical models: a review of freshwater wetland applications. *Ecological modelling*, 27(1-2), 45-68. [https://doi.org/10.1016/0304-3800\(85\)90024-9](https://doi.org/10.1016/0304-3800(85)90024-9)
- Crystal, D. (2011). *A dictionary of linguistics and phonetics* (Vol. 30). John Wiley & Sons.
- De Houwer, J., Hermans, D., & Spruyt, A. (2001). Affective priming of pronunciation responses: Effects of target degradation. *Journal of experimental social psychology*, 37(1), 85-91. <https://doi.org/10.1006/jesp.2000.1437>
- Erath, B. D., Zanartu, M., Stewart, K. C., Plesniak, M. W., Sommer, D. E., & Peterson, S. D. (2013). A review of lumped-element models of voiced speech. *Speech Communication*, 55(5), 667-690. <https://doi.org/10.1016/j.specom.2013.02.002>
- Forel, C. A., & Puskás, G. (2005). Phonetics and phonology. *University of Oldenburg*, 10.
- Giovanni, A., Ouaknine, M., Guelfucci, B., Yu, P., Zanaret, M., & Triglia, J. M. (1999). Nonlinear behavior of vocal fold vibration: the role of coupling between the vocal folds. *Journal of Voice*, 13(4), 465-476. [https://doi.org/10.1016/S0892-1997\(99\)80002-2](https://doi.org/10.1016/S0892-1997(99)80002-2)

- Gomi, H., Honda, M., Ito, T., & Murano, E. Z. (2002). Compensatory articulation during bilabial fricative production by regulating muscle stiffness. *Journal of Phonetics*, 30(3), 261-279. <https://doi.org/10.1006/jpho.2002.0173>
- Honda, K. (1996). Organization of tongue articulation for vowels. *Journal of Phonetics*, 24(1), 39-52. <https://doi.org/10.1006/jpho.1996.0004>
- Khasanovna, N. R., & Farkhodovna, F. M. (2021). Integrating literature lessons with the subject of mother tongue teaching. *Linguistics and Culture Review*, 5(S2), 1497-1504. <https://doi.org/10.21744/lingcure.v5nS2.1990>
- Ladefoged, P., & Johnson, K. (2010). *A course in phonetics*. Boston: Thomson Wadsworth.
- Legin, A., Rudnitskaya, A., Vlasov, Y., Di Natale, C., Davide, F., & D'Amico, A. (1997). Tasting of beverages using an electronic tongue. *Sensors and Actuators B: Chemical*, 44(1-3), 291-296. [https://doi.org/10.1016/S0925-4005\(97\)00167-6](https://doi.org/10.1016/S0925-4005(97)00167-6)
- O'Connor, J. D. (1980). *Better English Pronunciation*. Cambridge University Press.
- Rinartha, K., Suryasa, W., & Kartika, L. G. S. (2018). Comparative Analysis of String Similarity on Dynamic Query Suggestions. In 2018 Electrical Power, Electronics, Communications, Controls and Informatics Seminar (EECCIS) (pp. 399-404). IEEE.
- Roach, P. (1983). *English Phonetics and Phonology*.
- Roach, P. (1998). *English Phonetics and Phonology* /Peter Roach. Cambridge: CUP.
- Sock, R., & Löfgvist, A. (1995). Some timing constraints in the production of bilabial stops. *Journal of Phonetics*, 23(1-2), 129-138. [https://doi.org/10.1016/S0095-4470\(95\)80037-9](https://doi.org/10.1016/S0095-4470(95)80037-9)
- Spahiu, I., & Kryeziu, N. (2021). Grammatical mistakes of Albanian students in learning English as a foreign language. *Linguistics and Culture Review*, 5(S3), 814-822. <https://doi.org/10.21744/lingcure.v5nS3.1366>
- Suardiana, I. W. (2016). The language power, acculturation model towards urban society of transmigration region: wayang ménak sasak art studies in lombok. *International Journal of Linguistics, Literature and Culture*, 2(3), 77-86. Retrieved from <https://sloap.org/journals/index.php/ijllc/article/view/120>
- Venker-van Haagen, A. J. (1992). Diseases of the larynx. *Veterinary clinics of North America: Small animal practice*, 22(5), 1155-1172. [https://doi.org/10.1016/S0195-5616\(92\)50307-2](https://doi.org/10.1016/S0195-5616(92)50307-2)
- Vocroix, L. (2021). Morphology in micro linguistics and macro linguistics. *Macrolinguistics and Microlinguistics*, 2(1), 1-20. Retrieved from <https://mami.nyc/index.php/journal/article/view/11>
- Widayati, D. (2016). Vocal and consonant pan features in Nias and Sigulai languages. *International Journal of Linguistics, Literature and Culture*, 2(4), 86-96. Retrieved from <https://sloap.org/journals/index.php/ijllc/article/view/142>