A CONTRASTIVE ANALYSIS OF VOWEL SOUNDS IN ENGLISH AND ARABIC LANGUAGES

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Abstract:
Scholars like Roach (1992) and Abdul-Rauf (1977) state that sounds are generally classified into consonants and vowels. A consonant is identified as a speech sound which blocks the air flow through the vocal tract. While a vowel is seen as the class of sound which makes the least blocks to the air flow. Vowels are nearly ever located at the centre of a syllable, and it uncommon to locate any sound other than a vowel which is able to stand alone as a whole syllable (Roach, 1992). Each vowel has a number of features that realizes it from other vowel sounds. These comprise; the shape of the lips, which could be rounded, neutral, or spread. The second feature is the position of the tongue, which may be front, middle, or back. Finally, the tongue may be raised giving different vowel qualities.

In fact, there are similarities and differences in distribution the vowel sounds in both English and Arabic languages. They differ in number; English has more vowels than Arabic, i.e., Arabic has far fewer vowels and diphthongs than English and articulation is more stressed than English. There is also the use of glottal stops before initial vowels. These languages are also different in distribution; English words can start with vowels, whereas Arabic words can only start with consonants. Both languages have several joint vowels, but in the same respect, there are some vowel sounds that are limited to each one of them.

However, many theoretical and practical contrastive researches have been done on different levels of language by scholars, linguists and psycholinguists in the field of Contrastive Analysis. There are mainly three levels which are made use of in CA studies: 1) lexis 2) grammar 3) phonology. From these three level the level of phonology and in particular the sound systems of English and Arabic are compared and contrasted in the current study. Virtually, this study juxtaposed the vowels of English and Arabic and supplied examples from both languages to draw out the similarities and difference. It also debates the difficulties that Arabs learning English face when learning English. The research will be focused on the comparison between standard American English and standard Arabic which is called Modern Literary Arabic as it is the language of publications in all the Arab states, as well as the oral language of formal occasions.

Keywords: Introduction, Vowels in Standard Arabic, Characterization of Arabic Vowels, Vowels in Standard American English, and Specific comparison and potential problems.

Introduction

Comparative philology or contrastive analysis is a branch of historical linguistic studies. It deals with the comparison of the characteristics of different languages or different states of a language through history. It composes the various forms of related languages and utterance to reconstruct the mother language from which they were developed. It starts with the discovery of the similarities and differences as well between languages or within the same language. However, some linguists and pioneers in the field of "language pedagogy" were well aware of the pull of the mother tongue in leaning a target language, it was Charles Pries (1945) who firmly established contrastive linguistic analysis as an inter component of the method- dology of target language teaching, (Sridhar, 1987:209). For Carl J. (1988:157) "modern CA starts with Lado's linguistics Across Cultures `1957 so, Lado's book has become a classic field manual for practical contrastive studies. "In the heyday of structural linguistics nothing seemed of greater potential value to langue teacher's and learners than a cooperative and contrastive description of the learner's mother tongue and the target language (ibid:iii).

The researcher believes that the importance of CA as a discipline is still great and will continue to be like this as long as foreign language teaching exists. Contrastive analysis of vowels in English and Arabic languages is of vital importance to the teacher as well as to the text-book writers since it helps to identify the similarities and differences between the two languages under study. In short, this study is pedagogical and aimed at surmising and solving the problems that an Arabic learners of English may encounter when learning this language. In this paper, the researcher will discuss the two sound systems of Arabic and English and then compare the results.

- Vowels in Standard Arabic

Unlike English which has a larger vowels containing about nine simple vowels and seven longer vowels, Arabic has just three short vowels known as 'Harakat' and three long vowels (Kara, 1976). In this respect, Bakalla (1982) states that the Arabic vowels are voiced and produced with no obstruction or constriction in the mouth. Like Kara (1976), Ibn Jinni called the vowels huruf madd wa ?istitalah that are served as the sounds of lengthening and prolongation and may be short (harakat) or long (huruf madd). This idea of prolongation points to the fact that Arabic vowels being produced without constriction in the mouth, may further be lengthened, i.e. held, as long as the breath allows, and, a glottal stop begins wherever the vowels end (Fagihi, 2012). Long vowels are also called the sounds of softness. Ibn Jinni in Fagihi (2012) remarks:

When the point of articulation (maxraj-ul-harf) widens (i.e. the vocal tract is not restricted) so as to keep the sound (i.e. the vowel) constantly enunciated and continued until it can no longer be prolonged, it will end by the articulation of the glottal stop (hamza). It will necessarily come to an end at this point… the sounds (huruf) which are produced with open stricture at the places of articulation are three; a, i, and u. However, a is more open (?awsa) and softer (?alyan) than the others and for this reason it is auditorily different from both i and u, and vice versa.

Fagihi (ibid) argues that in Arabic, a long vowel which its function is to slightly lengthen the short vowels, can be heard with further prolongation in three cases; if it is followed by a glottal stop (hamza), if it followed by a geminate (harf mushaddad), and if it is paused upon for the purpose of recollection. On the other hand, long vowels are given alphabetical names, whereas the corresponding short vowels are actually given names that suggest phonetic distinctive features, they are called case markers.

To Ibn Jinni al harakat can be seen as the element which if occurs between two identical consonants it may stop them from being doubled. He also adds that short vowels are in par with consonants in that they are all regarded as elements of speech. To this researcher they are merely oral, and used only in teaching texts for guiding the learner.

According to Abdul-Rauf (1977) in English the full sound of consonant is done by the application of the vowel, but there are only three vowels in Arabic. One has the value of "a" in "bat", or "u" in "but" another has the value of "i" in "fit", and the third has the value of "u" in "put", they are all short. These vowels are not acted by characters following the consonants; but are acted by signs written above or below the consonants; as in: ﹷ /a/ ﹻ /i/ ﹹ /u/.   .

Respectively, Hanna and Greis (1972) believe that one of the major features in Arabic sounds is the use of either short or long vowels that may help the learner (to) differentiate between: singular and plural forms; as in colloquial examples: gamal (s.) and gima:l (pl.) "camal", in formal: musa:firun (s.) musa:firu:n (pl.) "traveler." They also remark that vowels can help to indicate object and absence of object; as in kataba "he wrote" and katabaha or katabahu "he wrote it." Lastly, they realize one meaning from another as in; gamal "camel" and gama:l "beauty".

- Characterization of Arabic   Vowels
As mentioned earlier, Arabic vowels are divided into long and short vowels. In Saleh's view (2008) one can find that in the description of long vowels, the letter (ا) called alif which is a vertical line and represents the vowel a. This a is long unrounded low central vowel and pronounced like "a" as in "father" or "a" as in "dad." The letter (و) is called waw and represents the vowel u. this u is pronounced like the vowel of "moon". When waw is used to represent the long vowel, damma appears above the preceding consonant. The letter (ي) is

called ya' and represents the vowel i. This i is pronounced like the vowel of "sheep". When ya' is used to represent the long vowel, kasra appears above the preceding consonant. Fagihi (ibid) posits that the short vowels were also represented the following pints: first, the diacritic (ﹷ) written on the top of the consonant, represented the vowel a and is pronounced like "a" of "hat." Its usage indicates that such a consonant is followed by the vowel "a". This diacritic is called in Arabic fathah (ﹷ),second, the marker (ﹹ) on the consonants stands for short "u" and indicates that such a consonant is followed by the vowel u. This u is pronounced as the vowel in "pull". This marker is called in Arabic dammah (ﹹ), third, is the diacritic (ﹻ) written below the consonant, stands for short "i" and indicates that such a consonant is followed by the vowel i. this is pronounced like the vowel in "tin". This marker is called in Arabic kasrah. Finally, it was stated that the absence of the vowel is represented by a small circle over the consonant it means that this consonant is not followed by any vowel sound. In Arabic this   sign   or marker is called sukun (Fagihi, 2012).

It was stated that the main lexical contrasts in Arabic are represented via the consonants. This is reflected in the Arabic lettering which is depended on roots of consonants and glides, which introduces short vowels (if necessary) as diacritics above and below the consonant. Thus, Arabic system is a very rich in consonants and a comparatively poor vocalic system (Watson, 2002).

- Vowels in Standard American   English:
Kurath (1977) in his book *A phonology and prosody of modern English* describes English vowels as below:
- /I/ is identified as a lax high-front monophthong vowel. It is impossible to find this vowel in a final position or before vowels. It usually becomes stressed before all consonants, as in s*it, lip, pit*. /I/ can be followed by clusters including a resonant and an obstruent, as in *limp, hint*. It may take place in the final member of complex words, in prefixes

and suffixes, and medially. For examples the words *biscuit*, *benefit*, *infinite.*

- /E/ is a lax front monophthong vowel. It cannot take place at the end of words and morphemes, or before vowels. /E/occurs before all consonants excepting the following sounds: /h, j, w/ as in *pet, let*, *step, set, pepper*. It is unusual to see the vowel /E/ before /z, z, ng/. Like other vowels under study, /E/ precedes /s, m, n, l/ clusters, as in *best, escape* and *escort.*

- /æ/ is a raised low-front monophthong vowel, generally short. Prolongation take places in monosyllables, in particular before voices consonants, as in *man*, *sad,* and *bag*. This phoneme does not come at the end of words and morphemes or precede vowels. /æ / is occurs before all consonants, excepting /th, z, z, h, r, j, w/, as in *hat, lap,* and *latch.* It can also precede all medial consonants, excepting / ng, j, w/, as in *batter, tackle,* and *dapper.* Lastly and medially, / æ / can be preceded clusters consisting of a resonant and an obstruent, as in *ant*, *lamp,* and *hamper.*

-/ ɒ / this vowel can be found mostly in many types or dialects of American English. It is regarded as an unrounded low-central vowel, often prolonged before voiced consonants, as in *bother, rob,* and *nod.* It cannot take place at the end of words and morphemes, or precede vowels. It occurs before all consonants excepting /h, j, w, z/, and rarely proceeds /c, th, s, th/. For examples of the distribution of /a/ see; *lock, proper* and. /a/ also precedes /m, n, l, r/ clusters, as in *font, pomp,* and *monster*, and before /s/ clusters, as in *hospital,* and *mosque.*

- The vowel / ^ / is an unrouded mid-back morpheme, more or less lowered and fronted. It take places before all consonants excepting / /h, z, j, w/ like *supper, cup,* and *nut.* It can be preceded clusters consisting of a resonant and a plosive, such as; *hunt, bundle,* and *punch* , and

by clusters consisting of /s/ and a plosive like *husk* and *lust.*

- /U/ is a short rounded lowered high-back monophthong vowel. It takes place before /d/ such as *stood* and *good*, and precedes /k/ as in *book, hook,* and *look*, and before /l/ as in bull. It can also precedes /t, c, s, z/ but very rare as in *put , foot, butcher.* It comes before bilabials, as in *roof, room, hoop* and also before /n/, like *soon* and *spoon.* /U/ does not takes place before / g, v, th, th, ng/.

- /O/ is slightly rounded mid-back vowel, always short and often ingliding. It contrasts with / U /, as the words stone = *stun, whole = hull.*

- The vowel /i/, being as a free vowel, is pronounced either as upgliding [ij] or as a monophthongal [i.] as in the word *three*. It takes place at the end of words and morphemes like the words *lee* see and *pea,* before a vowel within a morpheme as in *real* and *peon* and it also precedes all consonants excepting /b, h, j, w, ng/ like *beat, seek leap, beat.* The vowel /i/ is hardly comes before /s, z, g/. It can occur before clusters /ld/ and /st/ as in the words *field* and *east.*

- /e/ is a free mid-front vowel. In Fagihi's view (2012:3) it is an upgliding diphthong [eI EI], locating in mid-front position, close or open. It takes place at the end of words and morphemes, as in the words *daily, play, day,* and precedes all consonants excepting the sounds /ng, j, w, h/ as in *late, Asia, tape, shame*. It is unusual to come before /c, s, z/. /e/ takes place also before the clusters /ng , st,/ like *range* and *haste.*

- The free low-to-mid back vowel /c / has rather regional diaphones. It comes at the end of words and morphemes as in *draw, law,* and precede all consonants excepting the sounds / g, v, th/ as in *caught, water, talk, sauce.* It rare comes before / p, b, c, z, m/. It occurs before the clusters as in *salt, false*, *launch,* and *soft*, and occurs after /w/ as in the words *want*. And *wamp.*

- /o/ is mostly a free vowel enunciated as an upgliding [ou] locating in mid-back-close and rather well rounded. It comes at the end of the following words *go* and *toe,* and precedes vowels as in *going* and *poet.* It also take places before all consonants except the sounds /ng, h, j, w/ as in the words *boat* and *hope.*

- /u/ is a free rounded high-back vowel and enunciated either as a monophthongal [u.] or as an upgliding [uw], or after /j/ as in *few, music.* This vowel takes place at the end of words and morphemes such as *few, true* and *do* and before all consonants except the sounds /ng, j, w/ as in *mute* and *droop.* It is rarely occurred before / c, g, g, s, th/.

-The unstressed free vowel / ə / takes place in checked as well as in free position. It comes initially, medially, and finally, but not precedes vowels it is limited to unstressed syllables. / / comes In the Initial position as in the words *arise, account, and again.*

- **Specific comparison and potential problems:**

Although many of the vowel sounds in English and Arabic have similar points of Articulation, but the proper pronunciation of vowels is one of the most difficult aspects of English phonology for the Arabic speaker to learn. This is because English has more vowels, glide, and diphthongs than Arabic, and because the vowels structures of the two languages are quite different (Catford, et al., 1974).

Similarly, some Arabic learners do oddly on a set of experimental tasks which include the discrimination of words. All these tasks include the discriminating of words with corresponding consonant patterns, but differing in their vowels. Some Arabic learners or speakers, to some extent, are prominently inaccurate in treating vowels in English words, and are much more apt to make errors including vowels than subjects of other L1settings.

One potential interpretation for these impacts is that Arabic learners and speakers as well may transmit to English a range of psycholinguistic strategies that are more suitably suffused in handling Arabic words. In Arabic, vowels are of secondary significance both in writing and in word building, and the word discrimination system relies clearly on the tri-consonantal roots which are mostly the principles of the words in Arabic. In Arabic, word groups are made up of sets of words which all partake a common set of three consonants, but differ in the way vowels are occurred within this consonantal scope. Thus, **darasa** *he studied*, **yidrus** *he studies*, **mudaris** *teacher*, **tadriis** *teaching*, **durus** *classes*, **madrasa** *school*, etc, are all variations on a single tri-consonantal theme, D-R-S (Mitchell 1962). To Mitchell (ibid) such a writing system goes quite with Semitic languages, but makes problems for readers when they begin learning a language which follows different structural rules. A system which promotes the reader to concentrate on the consonantal scope of a word does not permit adequate recognition between words when it is transmitted to the lexical system of English, where consonants are not just the major signs for a reader. Thus r-d-r is an unsuitable representation for 'reader', since this consonantal code is parted with several other unrelated words (*raider, rider, rudder, ardour, ordure, order, redraw,* etc...).

Ryan & Meara(1996) state that a large number of Arabic speaking learners of English may be utilizing wrong word discrimination strategies of this type. Most Arabic learners will employ a system of this type in the early stages of learning English, although there is no enough proof to support this claim. It seems that most learners managed in improving a word-handling system that is suitable to English for a long time. But, many learners seem to have difficulties with English words, and continue to make confusions like "dismal numbers" for "decimal numbers". In fact, some learners may never get ride of this problem.

In fact, a difference may arise in comparative force of pronunciation of stressed and unstressed syllables in English and Arabic as one may teach

pronunciation to Arabic-speaking students. In English there is a big difference in force: unstressed syllables can be enunciated very weakly; stressed syllables can be quite enunciated. In Arabic this difference is not nearly so extreme; unstressed syllables can have full vowels and be pronounced fairly clearly.

In the same respect, Wahba (1998) says that sentence stress in Arabic is the same to that in English. Content words are usually stressed, and function words are usually unstressed. However, function words in Arabic do not have two forms. Vowels in words in an unstressed position keep their "full" value, unlike vowels in unstressed words in English, which are reduced to "schwa."

Conclusion:

In English, vowels are different according to: 1) How high is the tongue? 2) What part of the tongue is involved? 3) What is the shape of the lips? 4) How tense are the muscles of the vocal tract?

Likewise, Ladefoged (1975) remarks that vowels can be explained in terms of three elements; the height of the body of the tongue, the front-back position of the tongue and the degree of lip rounding. It is very hard to be percipient of the position of the tongue in vowels, but it is probable to have an idea of the tongue height by watching the position of the jaw while pronouncing the words. While the English vowels have their entire place and autonomous presence in the English alphabet and shape whole parts of the English words, the short vowels in Arabic are just oral. It seems that signs pointing these vowels on top of or below the consonants are found only in teaching texts for leading learners and in major religious texts.

In other words, the results of this pedagogical research, and the information presented in the body of language gathered via the study can help text-book authors, language researchers, educational policy makers, teachers and students as well in their investigation for better understanding and comprehension the method of teaching and learning English as a Foreign Language.

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