A Contrastive Study Of Vowels And Consonants
In Arabic And English
Mohamed Milad Aboubaker*

Abstract
A notable feature that occurs in any foreign language learning situation is that the process of
learning a foreign language is greatly affected by the firmly established linguistic habits of the
learner's native language. There always similarities and differences between the native
language and the target language and interference will always occur from the native language
to the target language. This study shows the similarities and the differences between vowels
and consonants in Arabic and English.

Introduction
A considerable number of studies have
been carried out to investigate the area of
difficulties Arab learners encounter while
learning English. The aim is to point out
those features that are most problematical
and difficult for the learner of English. A
notable feature that occurs in any foreign
language learning situation is that the
process of learning a foreign language is
greatly affected both positively and
adversely, by the firmly established
linguistic habits of the learner's native
language. In other words when the habits
of the first language have been acquired
and established for a longer period, and
consequently practiced longer, they
interfere with the habits of the new
language. There are similarities and
differences between Arabic and English at
all levels. Interference from Arabic to
English occurs where the differences
between the two languages exist.
(Dualy, Burt and Krashen,1981)
referred to interference as it has been used
to refer to two very distinct linguistic
phenomena, one that is essentially
psychological which refers to the influence
of old habits when new ones are being
learned where as the sociolinguistic use of
interference refers to linguistic interactions,
such as linguistic borrowing and language
switching, that occur when two languages
communities are in contact. Then they
divided the term "transfer" into "negative transfer" which refer to those instances of
transfer which result in error because old,
habitual behaviour is different from the
new behaviour that is being learned. In
contrast, a positive "transfer" results in
correct performance because the new
behaviour is the same as the old. In this
paper, the writer will attempt to make a
contrastive study of vowels and consonant
in Arabic and English, and try to identify
the area of difficulty for Arab students
learning English- Libyan learners.
Contrastive analysis is based on the
assumption that interference is always
from the first language to the target
language. Individuals tend to transfer the
forms and meanings and their distribution
and functioning of their native language to
the foreign language to the both
productively when attempting to speak the
language and receptively when attempting
to understand it. In dealing with a foreign
language the learner finds some features of
it quite easy and others extremely difficult.

*Faculty of Arts-University of Sebha
Ease and difficulty in the foreign language are, to some extent determined by the similarities and differences between the learner's native language and the target language. Those elements that are similar to his native language will be simple for him to learn, and those elements that are different will constitute his areas of difficulty and trouble.

"Linguists thought a comparison of a learner's L1 and L2 "contrastive analysis" should reveal areas of difficulty for L2 students, there by providing teachers and developers of L2 materials with specific guidelines for lesson planning." *(Dulay, Burt and Krashen, 1981, P:97)*

From the writer's point of view and as far as Arab students are concerned, it is vital that a foreign language teacher should become aware of the Arabic language nature. Consequently it will make his task easier and use it as a guide to organize and plan his lessons *(Lado, 1957)* argued that:

1) Teaching materials based on contrastive analysis are more effective.
2) Teachers are better trained with the knowledge of techniques of contrastive analysis for:
   a) evaluating materials,
   b) able to prepare materials for their pupils,
   c) sublimenting materials,
   d) contrastive analysis predicts errors.
3) Testing materials, Lado's argument will be more specific, is what you get in your mother tongue is transferred to the target language.
   1) Contrastive analysis is more predictive in pronunciation – syntax errors are less predictable.
   2) Contrastive analysis is based on psychology of learning.

*(S.Pit Corder, 1973)* opposed the idea and he argued that even things are different, the difference doesn't mean difficulty. He added that it is difficult to deal with psychology of learning.

Lado: different = difficult
Corder: difficult ← different
   → Faulty interpretation
   → Imperfect knowledge
   → Similarities

There are strong and weak hypotheses.
1- Strong hypothesis contrastive analysis is predictive.
2- Weak hypothesis contrastive analysis explain in term of interference.

**1-2 Sources of Interlingual Errors**

1) Pressure to perform: A foreign language learner equipped with a few hundred items of vocabulary and few structures is likely to fall back on the mother tongue when attempting to convey a message that is far beyond his or her knowledge of the new language.

2) Limited Second Language Environments:

   A – The absence of people who speak the language natively.
   B – Conditions under which the language is learnt. For extremely two hours a week spent largely on memorizing vocabulary or doing audio-linguistic drills.

   3) They think in the first language and use words from the second language.

Students learning English in Libya already possessed a sound system which is deeply set in their nervous system. Consequently it interferes with their learning English. Because of the many differences between English and Arabic, Arab students may, while learning English find difficulty in a whole variety of areas. Probably the most difficult aspect of new language for a foreigner to learn is the sound system of the language. People acquire the sounds of their mother tongue and use them as a system of automatic habits that become extremely difficult to change.
"The adult speaker of one language cannot easily pronounce language sounds of another even though he has no speech impediment, and what is even more startling, he can not easily hear language sounds other than those of his native language even though he suffers no hearing defect." (Lado, 1957, P:11)

It has been mentioned that people tend to transfer the sound of their native language to the foreign language, especially when attempting to pronounce a sound that has no equivalent in the mother tongue.

1.3 The Consonantal Phonemes:

The following are the Arabic consonants with their phonemic symbols:

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>ب</td>
<td>p,b</td>
</tr>
<tr>
<td>ر</td>
<td>r</td>
</tr>
<tr>
<td>غ</td>
<td>g</td>
</tr>
<tr>
<td>ط</td>
<td>d</td>
</tr>
<tr>
<td>ج</td>
<td>t</td>
</tr>
<tr>
<td>ن</td>
<td>n</td>
</tr>
<tr>
<td>ك</td>
<td>k</td>
</tr>
<tr>
<td>خ</td>
<td>kh</td>
</tr>
<tr>
<td>چ</td>
<td>ç</td>
</tr>
<tr>
<td>ذ</td>
<td>ð</td>
</tr>
<tr>
<td>ذ</td>
<td>ð</td>
</tr>
<tr>
<td>س</td>
<td>s</td>
</tr>
<tr>
<td>ف</td>
<td>f</td>
</tr>
<tr>
<td>م</td>
<td>m</td>
</tr>
<tr>
<td>ل</td>
<td>l</td>
</tr>
<tr>
<td>د</td>
<td>d3</td>
</tr>
<tr>
<td>ت</td>
<td>t</td>
</tr>
<tr>
<td>ز</td>
<td>3</td>
</tr>
<tr>
<td>ع</td>
<td>ñ</td>
</tr>
<tr>
<td>هـ</td>
<td>h</td>
</tr>
</tbody>
</table>

The English consonants are:

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>p</td>
</tr>
<tr>
<td>B</td>
<td>b</td>
</tr>
<tr>
<td>F</td>
<td>f</td>
</tr>
<tr>
<td>V</td>
<td>v</td>
</tr>
<tr>
<td>TJ</td>
<td>tj</td>
</tr>
<tr>
<td>D3</td>
<td>d3</td>
</tr>
<tr>
<td>M</td>
<td>m</td>
</tr>
<tr>
<td>N</td>
<td>n</td>
</tr>
<tr>
<td>L</td>
<td>l</td>
</tr>
<tr>
<td>R</td>
<td>r</td>
</tr>
<tr>
<td>T</td>
<td>t</td>
</tr>
<tr>
<td>D</td>
<td>d</td>
</tr>
<tr>
<td>S</td>
<td>s</td>
</tr>
<tr>
<td>Z</td>
<td>z</td>
</tr>
<tr>
<td>J</td>
<td>j</td>
</tr>
<tr>
<td>K</td>
<td>k</td>
</tr>
<tr>
<td>G</td>
<td>g</td>
</tr>
</tbody>
</table>

English vowels and diphthongs are:

1) iː as in see
2) I as in sit
3) e as in ten
4) Æ as in hat
5) aː as in arm
6) ð as in got
7) ː as in saw
8) ː as in put
9) uː as in too
10) ë as in cup
11) ë as in fur
12) ò as in ago
13) ei as in page
14) ò as in home
15) a as in fire
16) a as in now
17) i as in join
18) õ as in near
19) e as in hair
20) õ as in pure

Despite the fact that the Arabic script does not indicate any vowel letters, Arabic phonology contain vowel and semi-vowel sounds which are indicated by special Arabic signs called "alharakat" (reading aids) placed over or under the consonantal letters to produce vowel sounds.

The four "harakat" of the language can be explained by the following examples.

Mark Name equivalent Examples and comments

<table>
<thead>
<tr>
<th>Mark</th>
<th>Name</th>
<th>Example</th>
<th>comments</th>
</tr>
</thead>
</table>
| ـَ | Fat-hah | a | /ba/ as in English "back"
| ـِ | Kasrah | i | /bi/ as in English "big"
| ـُ | Dammah | u | /bu/ |
| ـْ | Sukoon | ː | /b/ no vowel sound and the consonant stopped as in English "rob" |

The word: resama" (he drew) for example; if written without being marked with vowel or non-vowel marks will have at least three possibilities of being interpreted, each of different meaning:

"resama" – he drew
"rusima" – has been drawn
"rasm" – drawing

These marks are not only significant for phonology and semantics, they are also significant and functional for morphology and syntax as they determine the tense of the verbs and the case for the nouns in the context. The root of the word "rasama" is put into the past tense only by placing the "fathah" over each of the three letters. The same verb can be transferred to the passive form by placing the "dammah" over the first letter, the "kasrah" under the second letter and the "fathah" over the third letter. It can be changed into a noun by placing the "fathah" over the first letter and the
"sukun" over the other two. But, although these marks are essential to correct Arabic speech, they are seldom seen in the written form, for as soon as the learner commands the grammar of the language, he can utter correctly and meaningfully without the trouble of looking for them. In addition to the "harakats" that make short vowels, Arabic has another three long vowels. Three letters of alphabet (ي،و،أ) can be distinguished as long vowels that link one letter to another in orthographic writing. They are the same sounds of the vowel markers, only longer. The qualities of the long vowels cover a wide range of phonetic realisation, and like English vowels, are used in their phonetic function to distinguish words. It has been mentioned that the "haraket" and the three letters of the alphabet (ي،و،أ) are the main source for Arabic speakers to produce vowels and diphthongs. (Sirajeldin, 1981) referred to the following set as the vowels and diphthongs in Arabic.

1) The short vowel /iː/ as in "bi:d/ (sert)
2) The short vowel /æ/ as in "kiteb/ (book)
3) The long vowel /aː/ as in "talaː/ (hills)
4) The long vowel /oː/ as in "waliːd/ (a boy)
5) The short vowel /e/ as in "kə:m/ (quantity)
6) The long vowel /eː/ as in "harː/ (hot)
7) The short vowel /o/ as in "hɔːr/ (dream)
8) The short vowel /uː/ as in "fuː:n/ (arts)
9) The short vowel /ai/ as in "naiː/ (flute)
10) The diphthong /aːu/ as in "taːuː/ (stage)
11) The diphthong /iː/ as in "hiaː/ (she)
12) The diphthong /uː/ as in "huː/ (he)
13) The diphthong /əu/ as in "taːuː/ (table)

(Surajeldin, 1981,P:43-44)

The following English phonemes have no equivalents in colloquial Arabic tj, g, dg, v, 3, y, 0, 0. Owing to this fact, many Arab learners find it difficult to produce these sounds may replace them by sounds found in their native language. θ and ð are separate phonemes in literary Arabic therefore, Arab students who have mastered the sounds of literary Arabic will have no difficulty with θ and ð in English.

There are ten consonant phonemes used in both standard and colloquial Arabic without equivalents in English: J گ, h ح, ظ, خ, ٹ, ض, ع, گ, ٹ, خ, ص.

The following English sounds are absent in Arabic.
1) The short vowel /iː/ as in "got".
2) The short vowel /e/ as in "ten".
3) The long vowel /3ː/ as in "girl".
4) The long vowel /ei/ as in "page".
5) The diphthong /iː/ as in "near".
6) The diphthong /eː/ as in "hair".
7) The diphthong /əu/ as in "purse".

The following diphthongs exist in both languages but with slightly different quality.

a) The English diphthong /əʊ/ as in "home" and the Arabic diphthong /aw/ as in /tawːr/ "stage".
b) The English diphthong /aʊ/ as /haʊ/ and Arabic diphthong /aw/ as in /tawːiː/ "table".

An English native speaker usually knows when the person talking to him is a foreigner, not only from his pronunciation and foreign accent but also by the mother tongue substitutions in his speech. When a learner tries to make utterances in the foreign language the learner is influenced not only by the sounds that exist in his mother tongue but also by their distribution and phonological status. The writer will try to identify the areas of difficulty in pronunciation for Arab students learning English and for the Libyan learner of English in particular in the following chapter. Due to the many differences between English and Arabic, Arab learners of English encounter segmental problems. One can discuss three major areas. These are: consonants, vowels and diphthongs.

2.1: Consonants:
I- stops: Arab students learning English tend to replace the English voiceless
bilabial stop /p/, which is not commonly found in Arabic by /b/. The English word "paper" is likely to be wrongly pronounced /beib/.

The English alveolar stops /t/ and /d/ are in dental position in Arabic. The fact that /t/ and /d/ are not made at the teeth-ridge, but behind the teeth themselves tends to affect the quality of English vowels in their vicinity. It also makes extremely difficult the production of "tr" and "dr" in the English manner.

II – Fricative: The English voiced labio-dental fricative /v/ is not found in Arabic. It is often replaced by /f/. The English alveolar /s/ and /z/ are in Arabic dental /s/ and /z/.

III- Nasals: Another important difference between English and Arabic is the English voiced alveolar nasal /n/ which is close to be dental in Arabic. Moreover, Arabic has no equivalent for the English voiced velar nasal /ŋ/. It is usually followed by /g/ or /k/.

IV- Affricates: The initial sounds in "child" and "job" usually lack the initial /T/ and /d/.

V- Lateral: English clear /l/ occurs mainly before vowels and dark /l/ before consonants or in a word final position. Arabic has similar to the English "clear" /l/ and an emphatic /l/ as in word /All/ (God), /Ulaha/.

VI- Semi vowels: The sound "r" tends to be pronounced whenever it occurs in the spelling of a word. It is pronounced as a tap or roll.

2.2: Vowels and Diphthongs:
I- /i/ is often confused with long /i:/ or /e/.
II- /Ω/ is usually replaced by other, "stronger" vowel sound.
III- /ei/ is usually replaced by a long /e/ and not a diphthong at all.
IV- car and air: these two diphthongs are often confused.

V-hot: usually the lips are much too rounded.

2.3: The following are some general features:
I- Splitting of consonant clusters: groups of three or more consonants are usually divided into two by insertion of an /i/ sounds such as "nekist".
II- Short vowels are often reduced. This upsets the rhythms of English and gives a broken "machine-gun" quality to their speech.
III- Long vowels or diphthongs occurring in final vowel position in utterances tend to be lengthened.

In addition to those that have been mentioned there are other factors that may affect the process of Arab learning of English.

1) English uses the Latin alphabet while Arabic uses the Arabic alphabet which is a completely different system of writing.
2) English is written from left to right while Arabic is written from right to left.
3) English has a wider vowel system, mainly diphthongs than Arabic while Arabic has a wider consonantal system than English.
4) Arabic is believed, by many of its speakers, to be a holy language and, consequently many of them might be unconsciously reluctant to speak other languages.
5) English has a system of capital and small letters where only the small letters can be joined in writing. In Arabic the system of joining the letters depends on whether the letters falls in a front, medial or final position in the word.

2.4: Simplification:
"If a man can save himself some effort in his speech without causing any hindrance to transmission of his message, then he will." (Tech, 1981, P:69)
Simplification is normal in both colloquial and standard Arabic. They occur especially in the Quran. Consequently, a lot of simplification is made. Simplification are normal in colloquial English.

1) Elision (the loss of a sound): In English: when /t/ and /d/ occur at the end of a word and followed by another word begins with another consonant, the /t/ and /d/ are regularly elided in colloquial speech. However, if the following consonant is /h/, elision does not usually take place; and if the following consonant is one of /l,w,r,j/ elision is optional. When two or more fricatives occur together one is lost; /θ/ is lost in asthma /ð/ is lost in "cloths brush".

In Arabic when a word ends with a phoneme and the following word starts with the same phoneme elision take places, e.g."ًن njrƏb/" "شﺮبﻧ" the second /n/ is elided.

2) Assimilation: In English it is the change of one phoneme for another, e.g. /n/of "ten" changes to /m/ in "ten pence" or the addition of phoneme e.g. the /k/ that often appears between /y/and /θ/ in length.

In Arabic: Arabic has what it is called /ًل nwlm/ "اﻟﺘﻨﻮﻳﻦ". Both in colloquial and standard Arabic speakers would add an /n/ sound when a word is written with two "fatha" instead of one, e.g. /jræbn/ "شﺮاﺑﺎً".

Conclusion

Languages differ in one way or another. On the other hand they come to an agreement in others. Both studying and teaching a foreign language are very hard tasks to do. One thinks that knowing the nature of the native language would facilitate our task and lead to a better achievement in the target language. As far as English and Arabic are concerned the writer would argue that a lot of textbooks lead to errors made by Arab students learning English because they have been written without taking into account the nature of the native language – Arabic.

It is clear that the differences are much greater than the similarities, though in my opinion such fact must not be neglected when dealing with Arab learners. A learner has to produce utterances either in written form or speech. So he should be able to produce the new sounds in order to be understood. By making such contrasts we can predict the places where the difficulties are and plan our lessons accordingly.
Bibliography

- Lado, (1957) : *Quoted from Sirajeldin*.