DOUBLETS IN ARABIC: NOTES TOWARDS
A DIACHRONIC PHONOLOGICAL STUDY

RADWAN S. MAHADIN

English Department
Yarmouk University
Irbid, Jordan

ABSTRACT

This article examines doublets in
Arabic, discussing the alternations
between the determinants in the doublets.
Moreover, it shows that the alternations
are the result of phonological changes.
The directions of the phonological
changes are suggested.
The conclusion shows that the phono-
logical changes are in agreement with
the changes that have occurred in other
Semitic languages and in modern Arabic
dialects. Moreover, it shows that the
Classical Arabic is a mixture of
different pre-Islamic dialects and that
modern dialects are an extension of the
old Arabic dialects.
Finally, the article shows the advan-
tage of using the present to explain
the past.

This article examines doublets in Arabic,
discussing the alternations between the
determinants in the doublets. Moreover,
it shows the alternations are the result
of phonological changes, the specific
process being dialect borrowing [5].
Doublets can be defined as two or more
words in the same language, deriving
from the same source and having similar
meanings. They are phonemically ident-
ical except for one sound; that is, the
stems share all sounds except one
consonant. The differing consonant,
called the determinant, could be any of
the consonants in the root, but in a
particular doublet, the determinant
would have to appear in the same position,
i.e. initial, medial, or final. The
following examples illustrate the point:

1. (bakka) -- (makka) "Mecca"

2. (qunfuð) -- (qunfud) "hedgehog"

3. (tuxrūr) -- (tuhrūr) "thin cloud"

In these examples three alternations of
the determinants occur.

1. (b) -- (m) The alternation is
in the initial position. The
determinants differ in the
manner of articulation: (b) is
an oral stop; (m) is a nasal
stop.

2. (ð) -- (d) The alternation is
in the final position. The
determinants differ in both the
place and manner of articulation:
(ð) is an interdental fricative;
(d) is a dental stop.

3. (X) -- (ħ) The alternation is
in the medial position. The
determinants differ in the place
of articulation: (X) is uvular;
(ħ) is pharyngeal.

Is it possible to determine the direction
of the phonological change? To answer
such a question, we need to examine the
source of the doublets, for the source
allows us the possibility of determining
the direction of phonological change.
If the two forms of a certain doublet
were found in two different areas, tribes,
or dialects, then we may say that the two
forms were introduced into Classical
Arabic by the Arab grammarians when they
tried to systematize the Arabic language .
[8]. In other words, the Classical
Arabic is a koine [3]. On the basis of·
this assumption, it is not easy to trace
the development of the two forms,
especially the phonological changes.
On the other hand, we could assume that
we have one form which was borrowed by
another dialect or speaker and which then
underwent the change. Or we could assume
that the change happened within the same
dialect due to the ease of articulation
or to children's mistakes in language
learning or to some other causes of
linguistic change [11].
For example, the deletion of a glottal
stop in Arabic is a very common process
(ra? s → ras "head"), and it is also
common in all Semitic languages [1]. If
this last process is the case, we could
trace the change with a reasonable cer-
tainty.
However, without denying the possibility
of any or all of these processes occurring
my judgment of the direction of the change

is based on the following assumptions:

1. The Semitic languages have a tendency to change in the same direction. For example, dental fricatives have become either stops or alveolar fricatives in most Semitic languages [9]. Consequently, one could assume that similar changes could occur in Arabic.

2. Certain changes are more natural than others. For example, it is more natural for fricatives to become stops than for stops to become fricatives. For example, fricatives emerge after stops in child language [10]. Voiceless obstruents are more natural than voiced obstruents, and consonants with emphatic articulation tend toward plain articulation.

3. Certain assumptions could be deduced by comparing some forms in Modern Standard Arabic with other forms in Modern Colloquial Arabic and, at the same time, with forms which existed in old dialects and in Classical Arabic before Islam. In other words, we can compare forms before Islam with forms after Islam. This can be done by examining written records, i.e. the scattered writings of the Arab grammarians in which they attributed certain forms for certain tribes or dialects. By weighing which dialect was more prestigious or which form was more common (the relative usuage of the forms), we can determine the old form. However, this last method is not always reliable because many of these items were reported on the authority of a number of grammarians and transmitters of poetry. However, we must be very cautious in our use of such testimony. As pre-Islamic literature is mainly poetry and is rather suspect in its authenticity [6].

4. By comparing the distribution of relative frequency of consonants, we can, with the help of other criteria, decide that the sound with a high frequency is more stable and less susceptible to change than the one used less frequently. The following are some representative examples of doublets in Arabic:

[b-m] : [?abada]-[?amada]
         "to linger"
[b-f] : [dabba]-[daffa]
         "to walk slowly"
[ð-d] : [dʒaððafa]-[dʒaddafa]
         "to row"
[ð-z] : [haða]-[haza]
         "to own"
[θ-t] : [raθama]-[ratama]
         "to utter"
[θ-s] : [maraθa]-[marasa]
         "to macerate"
[θ-š] : [nabiθa]-[nabiša]
         "Soil dugout from the earth"
[s-š] : [faqasa]-[faqaša]
         "to break"
[l-n] : [?ismaɣil]-[?ismaɣin]
         "Ishmael"

[l-r] : [sarama]-[salama]
         "to split"
[n-r] : [wakn]-[wakr]
         "nest"
[ɣ-x] : [ɣafir]-[xafir]
         "guard"
[ɣ-ɣ] : [musawwaɣ]-[musawwað]
         "permitted"
[x-ħ] : [tuxrur]-[tuħrur]
         "a thin cloud"
[ɣ-ħ] : [dabaɣa]-[dabaħa]
         "to lower the head in walking"
[t-d-t]: [matta]-[madda]-[matta]
         "to stretch"
[s-z-s]: [basaqa]-[bazaqa]-[basaqa]
         "to spit"
[k-q] : [dakka]-[daqqa]
         "to crush"
[ð-d] : [ðaby]-[daby]
         "gazelle"

On the basis of phonetic similarities and the alterations between consonants in the doublets and on the basis of the assumptions discussed above, the following phonological changes can be suggested:

I. Plain (non-emphatic) consonants:

1. Labial consonants:

$$\begin{matrix} [m] \\ [f] \end{matrix} > [b]$$

2. Front consonants:

$$[ð] > \begin{matrix} [d] \\ [z] \end{matrix}$$

$$[\theta] > \begin{matrix} [t] \\ [s] \\ [š] \end{matrix}$$

$$[š] > [s]$$

3. Alveolar resonants:

$$[l] > \begin{matrix} [n] \\ [r] \end{matrix}$$

$$[r] > [n]$$

4. Back consonants:

$$[ɣ] > \begin{matrix} [x] \\ [ɣ] \end{matrix}$$

$$\begin{matrix} [x] \\ [ɣ] \end{matrix} > [ħ]$$

II. Emphatic consonants:

$$[t] > \begin{matrix} [t] \\ [d] \end{matrix}$$

$$[s] \begin{matrix} [s] \\ [z] \end{matrix}$$

$$[q] > \begin{matrix} [k] \\ [dʒ] \end{matrix}$$

$$[ð] > [d]$$

The conclusion shows that the phonological changes are in agreement with the changes that have occurred in other Semitic languages and in modern Arabic dialects [9, 2]. Moreover, it shows that the Classical Arabic is a mixture of different pre-Islamic dialects and that

modern dialects are an extension of the old Arabic dialects.
Finally, the article shows that the advantage of using the present to explain the past [7, 4].

REFERENCES

[1] Anis, Ibrahim, <<Fi al-Lahjat al-ɣarabiyya>>, Cairo-Egypt, 1978.
[2] Cantineau, Jean, <<Course de phonetique Arabe>>, University of Tunisia-Tunisia, 1966.
[3] Ferguson, Charles, <<The Arabic Koine>>, Language (35), pp. 616-668, 1959.
[4] Greenberg, Joseph, <<Synchronic and Diachronic Universals in Phonology>>, Language (42), pp. 508-517, 1966.
[5] Hoengiswald, Henry, <<Language Change and Linguistic Reconstruction>>, University of Chicago Press-Chicago, 1960.
[6] Hussein, Taha, <<Fi al-Adab al-Jahili>>, Cairo-Egypt, 1952.
[7] Labov, William, <<On the Use of the Present to Explain the Past>>, Proceedings of the Eleventh International Congress of Linguistics, pp. 825-851, 1974.
[8] Mahadin, Radwan, <<The Morpho-phonemics of the Standard Arabic Tri-consonantal Verbs>>, Unpublished Ph.D. Dissertation, University of Pennsylvania, 1982.
[9] Moscati, Sabatino, et. al., <<An Introduction to the Comparative Grammar of the Semitic Languages>>, Otto Harrassawitz-Wiesbaden, 1969.
[10] Schane, Sanford, <<Generative Phonology<<, Englewood Cliffs-New Jersey, 1973.
[11] Weinreich, Uriel, et. al., <<Empirical Foundations for a Theory of Language Change>>, in <<Directions for Historical Linguistics>>, ed. by W.P. Lehmann and Yakov Malkiel, University of Texas Press-Austin, 1968.