I. In 1979 Salman H. Al-Ani edited one of the most comprehensive collections of articles on Arabic linguistics within the structural tradition. This collection, *Readings in Arabic Linguistics*, was reproduced and distributed by the Indiana University Linguistic Club. Some articles contained in this book, including Ferguson (1959), Rabin (1955), Garbell (1958), Blanc (1970) and Bloch (1971), agree on the idea that Classical Arabic (CA), which Ferguson (1959) calls "The Arabiyyah of the grammarians", could not be the origin of the Modern Arabic dialects (M.A.D). Instead, these linguists postulated that the origin of M.A.D was a form of Arabic that they call the Arabic Koine (AK), which was according to Ferguson (1959) "different in many respects from classical Arabic but was used side by side with the classical language during the early centuries of the Muslim era" (p. 49).

What is interesting about the observations of these linguists is that they did not attempt to reconstruct any part of that AK they believed to have developed in the history of Arabic. Instead, they took the lighter burden of showing how much M.A.D are different from CA. Moreover, the approach (es) used by these linguists for ruling out the assumption that CA could be the origin of M.A.D treated the facts as if the latter were real descendents of the former, and then to conclude, sometimes explicitly, other times implicitly, that CA has never been the sole origin of M.A.D.

Ferguson (1959) lists, among some twenty major differences
between CA on the one hand, and M.A.D on the other, the following:

1. The loss the glottal stop

2. The loss of the dual agreement

such differences, Ferguson claims, are indications for the existence of the Ak, and for ruling out the possibility that CA is the origin of M.A.D.

Since the only recorded material in Arabic came to us through CA and not through any other variety of Koine, and since research has shown that any Ak would be very close to CA, it is more reasonable to try to trace the origin of M.A.D in relation to CA. It is the purpose of this paper to attempt to trace just these two differences in 1 & 2 above and to show that they can be accounted for within the various techniques of historical linguistics, and, linguistic change, including sound change, innovations, borrowings, extensions, etc. with the explicit assumption that CA is the origin of M.A.D. We chose these two differences to cover at least two aspects of Arabic phonology, morphology and syntax, hoping that other differences can be dealt with in a similar manner; a task which we hope will concern us in the future. Most of the examples of M.A.D cited below, come from the dialects of Arabic spoken in Jordan.

II. Loss of the glottal stop

Anyone not familiar with Arabic who reads Ferguson (1959) gets the wrong impression that M.A.D have become /r/-less. If this was intended to mean that the glottal stop situation is comparable to that of /l/ in English /l/-less speech, then no misunderstanding would
have happened. However, if this sense were intended, then Ferguson's claim would have been imprecise because the loss of the glottal stop would have been conditioned by some linguistic (phonetic, phonological, morphological, etc.) factors just as the /tr/ loss in some varieties of English is phonetically conditioned by the presences of a following consonant-initial word. Phonetically speaking, no word in either M.A.D or CA begins with a vowel. If the glottal stop is not already at the beginning of a word as a part of that word, and if that word happens to start with a vowel, then a glottal stop is automatically inserted according to the following rule:

$$\emptyset \rightarrow ? / l - v$$

The well established fact that Arabic speakers learning English tend to insert an initial /ʔ/ in vowel-initial words or in English loan words is evidence for the transfer of such a rule from Arabic to English. Besides, both CA and M.A.D are full of words that have /ʔ/ initially:

<table>
<thead>
<tr>
<th>CA</th>
<th>M.A.D</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ʔakala</td>
<td>ʔakal</td>
<td>he, it ate</td>
</tr>
<tr>
<td>ʔismun</td>
<td>ʔisim</td>
<td>name</td>
</tr>
<tr>
<td>ʔana</td>
<td>ʔana</td>
<td>'I'</td>
</tr>
</tbody>
</table>

Moreover /ʔ/ still persists in some archaisms that are found in M.A.D.

- Qurʔa:n 'koran'
- ʔaddan 'called for prayer'
- Israʔil 'Israel'

Hock (1982) mentions, among other weakening processes that /ʔ/ could be reduced to zero through sound change (p. 55). Thus we can expect that some of CA /ʔ/ 's have been weakened into different
reflexes. Whether one believes that CA is or is not the origin of M.A.D, it is plausible to say that any origin of M.A.D should have contained a glottal stop that has undergone weakening. Therefore, the loss of /ʔ/ can, by no means, be taken as evidence to support Ferguson's claim. Furthermore, the weakening process of the glottal stop in certain environments was already established in CA. Therefore, to consider that the more general loss of /ʔ/ in M.A.D an extension of an already existing process in the mother language is not far from usual. Abbud and E. MacCarus (1968) cite examples from CA where /ʔ/ could be "elided":

\[\text{taʔri:x} \quad \text{taːri:x} \quad \text{'History'}\]
\[\text{ʔihmirʔaːr} \quad \text{hmirʔaːr} \quad \text{'redness'}\]
\[\text{maʔismuʔ} \quad \text{maʃmuʔ} \quad \text{'what is your name'}\]

What remains to be dealt with as regards the loss of the glottal stop is the possibility of reinterpreting this loss in terms of the neogrammarians concept of sound change. Garbett (1958) wrote: "/ʔ/ showed a tendency towards weakening. It was frequently reduced to zero in word final and syllable final (positions) with concomitant lengthening of the preceding vowel-a- (ʔC→ːC was already accepted in the classical grammar), and occasionally also as the second member of a consonant cluster before a-. The actualization of the sequence [-ʔaːʔi:] as [-ʔajːi:] is equally of very old date, as well as that of [-ʔaʔi:] and [-ʔaʔi:] as [-ʔajːa] and [-ʔuwaʔa] respectively; all the actualizations are reflected in the traditional consonantal spelling of Arabic" (p. 207). Thus we find the following examples:
loss of [initial]

? → ʔ

daw?  daw.  bari?:  bari

'light'  'innocent

loss of medial /ʔ/ with compensatory lengthening:

? → [V_{αF}] / [V_{αF}] → [segment]

raʔi  ra:i  'opinion'
faʔs  fa:s  'spade'

Assimilation of /ʔ/ to a glide:

The loss with compensatory lengthening dealt with above has the effect of creating extra long vowels (or clusters of long vowels) which is not allowed in Arabic. M.A.D eliminate such long vowels by changing the glottal stop into a glide that is compatible with the preceding vowel. This phenomenon can be separated from that of the loss with compensatory lengthening by making the rule for the former sensitive to the environment that specifies the existence of the glottal stop between two vowels. The following rule captures this generalization:

? → [glide] / [V_{αF}] → v

muɾuʔah  >  muɾu:waɾ  muɾuwwaɾ  'manliness'
bariʔah  >  bari:yaɾ  bariyyaɾ  'innocent fem.sing'

Moreover, since semi-vowels share some features with vowels, it is quite natural that /ʔ/ occurring after /w/ /y/ behaves as if it were occurring after a vowel.
daw?uh-u  dawwu?u  'its high'
fay?atuha  fayyetha  its shade

Thus the rule for the glottal stop assimilation could be generalized in the following rule:

\[ ? \rightarrow \left[ \text{glide} \alpha_F \right] / \left[ -\text{cons} \alpha_F \right] \rightarrow V \]

Elsewhere, Garbell (1958) wrote: "/\?/ showed further evidence of weakening. In initial position it was sometimes replaced by /\w/ as to its replacement by /\y/ in the same position (instances from Eastern Mediterranean Arabic are /\yash\w\w/ and /\yam\w\w\w/ for classical Arabic /\f\asi\w\w/ and /\f\ah\\w\u\\w\n/ meaning 'prisoner of war' and 'enmi seed'; respectively). In any case it is due to Aramaic influence" (p. 109). As for the replacement of the glottal stop in initial position, let us take the following examples that Garbell probably had in mind when talking about this change:

CA  JA
?addan  waddan  'he called for prayer'
axxar  waxxar  'he delayed'

We can deal with this change by looking at the forms in which these two verbs appear. In CA the two verbs in the present tense have the following pronunciation: /yu?addin/ and /yu?axxin/. Through the glottal stop assimilation these two forms must have come into a stage where they were pronounced: /yu?axxin/ and /yu?addin/, and by loss of the first unstressed vowel they become: /yu?addin/ and /yu?axxin/ which is the pronunciation JA has for these two verbs. What happened after this is that the roots for these two
verbs came to be interpreted as \textit{wdn}: 'to call for pray', and \textit{wxr}: 'to delay' instead of CA \textit{2dn}, \textit{2xr} respectively. This reinterpretation has been extended to the past tense form which resulted in the new attested forms in some M.A.D.

Another way of looking at this particular change is through invoking analogy. The language is full of verbs that start with /w/ followed by a vowel followed by a geminate:

\begin{itemize}
  \item \textit{wassa}: he widened
  \item \textit{wajjah}: he directed
  \item \textit{wassal}: he connected/ reached
  \item \textit{wahhal}: he got stuck
  \item \textit{wassax}: he made dirty
\end{itemize}

Thus /?addan/ and /?axxar/ might have been remade on the model of these numerous widely used verbs, due to the similarity in their morphology, all being form II. The following formula may be helpful:

\begin{itemize}
  \item \textit{yuwassi}: \textit{ywass}: 'to make something wide'
  \item \textit{yuwaddin}: \textit{ywaddin}: 'to call for prayer'
  \item \textit{wassa}: 'he made something wide'
  \item \textit{x} \textit{waddan}: 'he called for prayer'
\end{itemize}

As for the replacement of the glottal stop by /y/ it is not unnatural that M.A.D may have been influenced by a neighboring language like Aramaic. The influence of languages upon each other, in addition to causing the affected language to introduce a new rule like that of the Arabic [y] in certain lexical items which could as well be an effect of a vowel harmony rule, it may cause a language to adopt a
completely foreign sound such as the influence of French upon English which has already caused many linguists to include /t/ as one of the English phonemes.

To conclude this section, the loss of the glide stop is a gradual process of weakening and assimilation that has its roots in the mother language, i.e., CA. This weakening process, in most cases, is rule governed and as regular as any other sound change. Therefore, this loss can, by no means, be an argument against the possibility that CA is the origin of M.A.D.

iii. Loss of the dual

Ferguson (1959) asserts: "There are two striking elements of agreement in the details of the loss of the dual in the dialects. One is that the dual forms of adjectives, pronouns, and verbs have disappeared without a trace" (p. 53). Ferguson based this assertion on examples like the following:

<table>
<thead>
<tr>
<th>CA</th>
<th>M.A.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>?alwaladu ?akala</td>
</tr>
<tr>
<td></td>
<td>S</td>
</tr>
<tr>
<td>The boy ate</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>alwalad?:n ?akal:</td>
</tr>
<tr>
<td>3.</td>
<td>al?awladu ?akalu:</td>
</tr>
</tbody>
</table>

1-3 show that, while in CA there is a three way subject/verb number agreement, M.A.D have reduced this to two. While CA has the form /?akala:/ 'they two ate' and /?akalu:/ 'they pl. ate', M.A.D have
/?akalu:/ to mean 'they two/pl. ate'. The data of Arabic in general and of these examples in particular is far more intricate than they might seem to be, but the points that we are illustrating can be easily shown through these examples. Taking Ferguson's argument, superficial as it may be, one can trace back the loss of the dual agreement to the following reasons.

Besides the construction subject-verb (S-V) which was illustrated in 1-3 above, Arabic allows V-S constructions which require no number agreement, thus:

4. ?akala alwaladu
5. ?akala alwalam:n
6. ?akala al?awaladu

have exactly the same meaning as those in 1-3 respectively. Stylistic considerations may contribute to the choice of one version over the other.

What this suggests is that the loss of number agreement has been widely established in CA. We are saying this because it is quite reasonable to speculate that at a certain stage of the development of Arabic, number agreement was required even in the V-S constructions but it was lost in V-S construction, due to the operation of final vowel shortening and some other deletion rules. Thus if we started with the assumption that V-S/S-V were indistinguishable with regard to verb subject number agreement, we would have 7-9 as probable proto-sentences, so to speak, for 4-6 thus:

7. ?akala alwaladu (no change)
8. ?akala alwalad:n* (shortening of the verb's final vowel)
The shortening rule would produce 10-12.

10. ?akala alwaladu.
11. ?akala alwaladarn.
12. ?akalu alawlad.

In fact M.A.D have 13- for CA 12.

13. ?akalu liwla:ed

which is, in so far as the form of the verb (and not word order) is concerned, indistinguishable from the CA. For 10-11 now the two sentences have come to have the same verb. It is unnatural to have a separate form for both singular and dual and another form for plural. Therefore, it seems that the dual has been remade on the model of the plural thus giving in M.A.D.

14. ?akalu liwalad:ed, the two boys ate

which is the form attested in many M.A.D. It is also noteworthy that the effect of the postulated rule of final vowel shortening caused the number agreement to be adopted by M.A.D. with the short forms of the verbs: M.A.D ?akalu vs. CA ?akalu; after this generalization in number agreement has been accepted in the V-S construction it has been generalized in M.A.D to the constructions with S-V order producing what was illustrated by the right side of examples 1-3.

Such a speculation is supported by the fact that the lack of number agreement in CA in V-S constructions as illustrated by 4-9 has not been adopted by M.A.D. If the loss of the dual agreement were an isolated phenomenon, then how could we explain the persistence in M.A.D singular plural agreement in a construction that showed lack of agreement in CA.
Besides, there seems to be another reason that enhanced such a change. Arabic has the following paradigm:

<table>
<thead>
<tr>
<th>CA</th>
<th>M.A.D.</th>
<th>Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. ?akalta</td>
<td>?akalt</td>
<td>'you masc. sg. ate'</td>
</tr>
<tr>
<td>16. ?alaltuma</td>
<td>?akaltu</td>
<td>'you dual ate'</td>
</tr>
<tr>
<td>17. ?kaltum</td>
<td>?akaltu</td>
<td>'you pl. masc. ate'</td>
</tr>
</tbody>
</table>

Due to the final vowel shortening rule, 16 has become /akaltuma/.

There is a phenomenon in CA, due to inflectional endings deletion which is called prepausal pronunciation. Each word in Arabic could be pronounced either pre-pausally or medially. When in prepausal position an inflectional vowel ending is deleted. Thus in ?akala 'he ate' becomes ?akal prepausally or not.

What happened in M.A.D is that the prepausal forms have been generalized and the other forms have been done away with due to a more general change that caused M.A.D to lose case marking.

Returning to 16-17 (16 has already become akaltuma, due to the operation of shortening), the final vowels have been dropped due to the generalization of the prepausal forms. Thus ?akallum, now means you two/plural ate. Therefore, what might look like as if it were levelling is actually the effect of more than one phonological rule plus the effect of analogy or generalization. How we derive the forms that are attested in JA with no /ml/ at the end is quite easy for final nasals are easily deleted by sound change. The form 17 lakallum ?akallu is actually the one that is attested in many M.A.D to address both two or more people. Our argument is that the loss of the dual number agreement has been rule governed and gradual because no
linguist would accept that a linguistic phenomenon could disappear all of a sudden. If we want to agree with Ferguson that the presumed AK did not have the dual vs. other number distinctions, then how are we to explain the persistence of the dual in nouns. It seems safer to assume that M.A.D inherited the number agreement system then to assume that M.A.D have undergone change than to assume that AK did not have the dual agreement and that M.A.D have borrowed the dual distinction in nouns from CA. Otherwise, we have to assume that AK had the same number agreement system as CA, an assumption that would then have little justification.

Similar argument can be drawn with regard to the loss of the dual agreement between a noun and its modifying adjective(s):

C.A. \hspace{1cm} M.A.D.

18. baytun kabi : run \hspace{1cm} beil kabi : r
   'a big house'

19. bayta : n kabi : ra : n \hspace{1cm} be : te : n kbar
   'two big houses'

20. buya : tun kiba : r \hspace{1cm} byu : t kba : r
   'big houses'

What seems to have happened in M.A.D is that the plural agreement has been generalized to the dual noun-adjective construction. This is a logical conclusion because one can hardly expect that the dual be remade on the model of the singular agreement. Most cultures make the distinction between 'one' and 'more than one' rather than between 'one' and 'two' on the one hand, and more than 'two' on the other.

Therefore, if a change has to take place, it has to be the most logical.
Finally, we hope that we have made it clear that if we assumed that CA is the origin of M.A.D we can trace all the changes to linguistic change, but if we adopt the notion of the AK, we have to reconstruct it in order to account for the changes. Moreover, even if we want to reconstruct the AK, it will be very similar to CA.
References Consulted:


