PARADIGMATIC STABILITY AND FINAL LARYNGEALS IN NIGERIAN ARABIC, OR WHY HISTORY REPEATS ITSELF, WITHOUT ACTUALLY DOING SO

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1. Introduction

Arabic presents a rich, if underutilized, domain for examining processes of linguistic change. At one extreme are the challenges presented by the rapid and dramatic restructuring witnessed in the Creole Arabic varieties of the southern Sudan and East Africa (Versteegh 1984, 2004). At the other are the mundane, day-to-day, decade to decade, century to century processes which move slowly through the different varieties, sometimes leading to marked changes, sometimes not. In this paper I would like to document one such change, which has happened not once, but a number of times in the history of Arabic, and relate the phenomenon to a more global interpretation of Arabic language history.

At issue is the conceptualization of Arabic language history. The reigning paradigm today, indeed one established some 150 years ago, is that a classical language, or Old Arabic, by various processes of simplification passed into the modern dialects, or Neo Arabic. One of a number of problems with this model is that it leads one to collapse what are often internally differentiated developments into a common mold, which are then assumed to substantiate the Old Arabic/Neo Arabic dichotomy. Why this militates against a properly nuanced reading of Arabic language history is that what may lie behind linguistic changes are a combination of diverse local developments and fundamental linguistic principles. There have indeed been many changes in the many varieties of Arabic spoken throughout Asia, Africa and in former times, Spain. The fact of change in one variety, however, does not justify an historical model based on the Old/New split.

This point will be illustrated on the basis of verbs ending in a glottal stop, or in some cases, a final voiceless glottal fricative /h/. Classical Arabic, of course, has a glottal stop, whereas nearly all modern dialects do not.
Thus, in Classical Arabic forms such as bada’ ‘begin’ and jā’a ‘come’ appear in most dialects as bada and jā. For purposes of this paper I will assume that there has been a change of ʾ → ∅, whereby verbs such as bada’ fell together with verbs like banā ‘he built’. In contemporary dialects these will typically belong to the same class of weak-final verbs, as the following sampling indicates:

(1) Algerian bdī-t, bni-t ‘I began’, ‘I built’, Nigerian badē-t/banē-t, Eastern Libyan bidē-t/binē-t, Mardin (Turkey) baday-t/banay-t, etc.  

A related development is attested in contemporary Western Sudanic Arabic comprising NE Nigeria, northern Cameroon, Chad and the western part of the Sudan (see Owens 2006, chapter 5). In the rest of the paper I will describe the development in the western Sudanic area on the basis of a relatively detailed corpus-based analysis of Arabic from Maiduguri in NE Nigeria, and then address the question of its significance for the history of Arabic.

2. Nigerian Arabic

Nigerian Arabic is unremarkable vis à vis other Arabic dialects in its verbal structure. Like all other varieties of Arabic it has two basic verb forms, perfect and imperfect. The perfect stem is marked by suffixes indicating person, number and gender, in the imperfect these being indicated by suffixes and prefixes. Both perfect and imperfect stems have two conjugations based on whether the stem vowel is high or low. In (2) strong verbs are illustrated, with the verbs katab ‘write’ and libis

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1 The proviso ‘for purposes . . . ’ leaves open the possibility that the modern glottal (stop)-less dialects go back to original glottal-less dialects in Old Arabic (see Rabin 1951). Certainly the glottal-stop-less varieties go back to pre-diasporic Arabic, as attested in their widespread distribution across the Arabic-speaking world, and their attestation in Old Arabic sources. If there are proto-forms of Arabic without the glottal stop, the thrust of the paper would need to be reorientated. A few Yemeni dialects have a glottal stop (Behnstedt 1985, 43).

Even in classical times, there was a variety without the glottal stop that a glottal stop-less variant which was prominent enough that in the Koranic reading tradition (qirāʾ āt) recitations are fully allowed without the phoneme (Ibn Mujahid).

2 The value of the suffix, -īt, -ēt, -ayt is an issue independent of the status of the glottal stop.

3 Research support for this work was provided by the German Research Council (DFG).
‘wear’, which belong to opposite conjugations in both the perfect and imperfect:

(2) Low stem vowels: perfect /a/ katab; imperfect /a/ bi-lbas ‘he dresses’
High stem vowels: perfect /i/ libis; imperfect /u/ bu-ktub ‘he writes’

By and large the assignment of verb stems in imperfect and perfect to the two classes is lexically determined, and as seen in the example, one and the same verb stem can, indeed as a rule is, assigned to a different class in the perfect and imperfect tenses.

Final weak verbs in Nigerian Arabic also follow the same classificatory schema, as can be seen in the following examples in (3):

(3) Low stem vowels: bana ‘he built’, bi-lga ‘he finds’
High stem vowels: ligi ‘he found’, bi-bni ‘he builds’

2.1 Final laryngeals /ʾ/ , /h/ in Nigerian Arabic, some data

So far as the basic paradigmatic facts go, Nigerian Arabic is fundamentally identical to other Arabic dialects, and broadly similar to classical Arabic. One phonological change involving two sounds has, however, complicated the distribution of lexical forms.

The two sounds are ʾ and h. Historically speaking, NA ʾ has two sources, OA (or pre-diasporic), /h/ as in šahar ‘month’ < OA *šahar, and OA ʾ as in hilim ‘dream’, < hilim. NA /ʾ/ derives from /ʾ/, as in ʾirif ‘he knew’, < OA ʾarifa. The change of OA /ʾ/ and /h/ to /ʾ/ and /h/ is one common to Arabic in Chad, Nigeria and parts of the western Sudan. It happens, however, that /ʾ/ and /h/ themselves are ‘weak’ sounds, and liable to variation of different kinds. The range of variants includes the following:

They may be kept: biʾarif ‘he knows’, šahar ‘month’, wāhid ‘one’ and ahamar ‘red’.

They may change to the semivowel /y/ next to an /i/: biyarif, wāyid.

Lastly, they may be deleted altogether: biarif, shār, wāid.

As in many dialects, there is no phonemic contrast between short high front and back vowels. In this dialect, however, /i/ and /u/ must be lexically specified, as they are unpredictable. As far as verbs go, given a lexical stem specification, the pre-formative vowel is usually determined by vowel harmony rules: if the stem vowel is /u/, the prefix vowel is /i/. Otherwise it is /i/.

Via the so-called ‘gahawa-complex’, whereby an /a/ is inserted in the sequence of guttural C + C, in this case *ahmar < ahmar.
The variation spoken of here is at the individual level, determined by contextual and socio-linguistic factors (see Owens 2006, 242 for statistical treatment); one and the same speaker may in one place for ‘month’ give šahar, and in another šār.

The question I will investigate in this paper is what happens to verbs like simiʾ ‘hear’, gaɗaʾ ʾ ‘cut’ and karah ʾ ‘hate’, verbs with final /h/. There are two reasons for concentrating on the laryngeals in this position. First it is only in this position that a change in the laryngeals is nearly categorical, as will be explained. Secondly, it is here that the phonological change has direct morphological consequences. If they are deleted in final position, what effects, if any, the deletion has on the morphological structure of the language need to be specified. Given a form such as tismaʾ o you.M.PL hear, if the final glottal stop is deleted, the form tismoʾ would automatically arise. Tismaʾ-o, with final V-V is not a paradigm otherwise attested in the dialect, however. Alternatively, it could collapse with the already existent weak final paradigm, tilgaʾ you get, tilg-o ’they get’ (see (3) above), which would yield tism-o. Which alternative emerges is described in this section.

The data for addressing this question is of two types. One is textual data, which will be summarized in 2.2 below. First I present the results of a test in which 8 Arabs from Maiduguri were presented orally with a series of test sentences in which one word was left out. The respondents had to complete the sentence with the ‘correct’ form. All of the answers involved verbs with a final /h/ or /h/, the purpose of the test being to see in which contexts the final laryngeals were kept or deleted. A sample question was the following, involving the verb simiʾ ’hear’, the first sentence requiring a perfect verb, the second an imperfect:

(4) hu simiʾ an-nādim haw ana kula ………….
   he heard the man and I also

   hi tismaʾ l-kalām haw hima kula ………….
   she hears the sentence/matter and they F also

6 The /ɗ/ is emphatic and implosive.
7 It is my impression that the deletion in this position is statistically more common than in word initial or medial position, though I have not checked this.
The most obvious response for the first was 'heard him', the Arabic for this being either \textit{simī-t-a} 'heard-I-him' if the final /\textipa{a}/ is deleted, or \textit{simī'-t-a} if it is kept, while for the second either \textit{b-isma'-ann-a} '3-hear-FPL-it' (if kept) or \textit{bism-ann-a} (if deleted). Note that in the imperfect a final V-initial suffix (-\textipa{an} FPL in the second example) replaces the final stem vowel if the final laryngeal is deleted.

The respondents were all under 30 and most are educated. It was found that those older than 30 had trouble concentrating on the questions, so unfortunately age differential could not be taken into account.

A total of 16 sentences were asked. The anticipated 'responses' were distributed among different morphological classes of verbs, both basic and derived verbs for example, and among different inflectional contexts, though only subject suffixes were tested for.

Questions were asked for both perfect and imperfect verbs, as illustrated in (4) above. Two types of suffixes can be distinguished here, those that begin with a C (e.g. 1SG -t) and those that begin with a V (e.g. FPL -\textipa{an}). In the 16 test sentences, the answers divided into forms involving the following suffixes:

(5) \textbf{Perfect}

\begin{itemize}
  \item verbs with subject person suffix -t N = 5
  \item 3MPL -o N = 3
  \item 3FSG -at N = 1
\end{itemize}

\textbf{Imperfect}

\begin{itemize}
  \item 3 MPL -u/o\textipa{-a} N = 5 (3FPL -\textipa{an}, N = 2)
  \item total N = 16
\end{itemize}

There were 128 total responses (16 \times 8). In all but 2 cases the responses conformed to the anticipated answers. The two 'deviant' answers are ignored here, so in all there are 126 responses. The results are summarized in (6). In (7) three typical responses are given.

(6) Stems appearing with:

\begin{itemize}
  \item \textit{simī-t-a} 'I heard', \textit{simī-ti} 'you F heard' and \textit{manē-tu} 'you MPL prevented'.
  \item \textit{bimš-u} 'they go' from the stem \textit{bimši}, and \textit{bilb-o} 'they find', from the stem \textit{bilgə}.
\end{itemize}
(6) Stems appearing with

<table>
<thead>
<tr>
<th></th>
<th>(a) /\h = \Ø</th>
<th>(b) \Ø, stem vowel kept</th>
<th>(c) /\h kept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(= weak verbs)</td>
<td>(mixed stems)</td>
<td>(= strong verbs)</td>
</tr>
<tr>
<td>Perfect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-t</td>
<td>36</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>-o</td>
<td>11</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>-at</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Imperfect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-u/o</td>
<td>14</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>-an</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>2</td>
<td>53</td>
</tr>
<tr>
<td>before C-initial suffixes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>before V-initial suffixes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>2</td>
<td>51</td>
</tr>
</tbody>
</table>

(7) /\h = \Ø mixed stem /\h kept

Perfect
- t  
  gādē-t 'I cut'
  Cf. weak verb mašē-t 'I went'
  gada'-t
  cf. strong verb katab-t
- o  
  sim-o 'they heard'
  dabā-o 'they killed'
  sin- o 'they heard'
  cf. maš-o 'they went'

Imperfect
- u/o  
  bism-o 'they hear'
  bisma-o
  bisam'-o
  cf. bilg-o 'they get'

The verbs in column (a) behave like weak-final verbs, examples of which are given in brackets in (7). The verbs in column (c) behave like strong verbs, verbs with 3 consonantal roots. The mixed stem in column (b) has attributes both of stems with deleted final laryngeal and of those with the laryngeal maintained. Like the former the laryngeal is deleted; like the latter the final stem vowel is maintained.

There is a fundamental contrast defined by the variable C- or V-initial suffix.

Final /\h disappear almost categorically before a C-initial subject suffix (36 cases where /\h = \Ø (column a), 2 where they are kept (column c)). The verbs are then conjugated like weak-final verbs, that is, verbs with a CVCC stem, e.g. gādē-t 'I cut' < *gada'-t, cf. mašē-t 'I walked'. Otherwise the maintenance of /\h is slightly dominant statistically, though only in one instance is the dominance overwhelming, namely in the form bā'-at 'she sold' with the 3 FSG suffix -at. Whether the conditioning factor here
is the suffix itself or the verb stem (CāC-, which I suspect is the case) is not apparent in the data since only one -at frame was used.

As with C-initial suffixes, usually before a V-initial suffix if /h are not used, the stem is shifted to the weak-final class, e.g. gad-o 'they cut', budāb-o 'they M slaughter'. In two cases, however the stem vowel was kept: daba-o 'they m slaughtered', bitøba-o 'they M follow'. Also, in three cases where /h are not used, stress was irregularly shifted to the penultimate syllable, bukār-u 'they M hate'.

None of the respondents categorically used or disposed of the final /h, even in a discrete sub-class of forms (e.g. perfect stems, excepting the C-initial conditioning factor). Table 1 summarizes the global scores for individuals.

<table>
<thead>
<tr>
<th>Respondent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>/h kept</td>
<td>4</td>
<td>2</td>
<td>9</td>
<td>2</td>
<td>9</td>
<td>13</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>/h dropped</td>
<td>12</td>
<td>14</td>
<td>7</td>
<td>14</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>11</td>
</tr>
</tbody>
</table>

For 6 of the respondents there is textual material against which their test scores can be compared. These texts include standard interviews as well as less formal situations. Of the six, one has no tokens of final /h in his text, and one has only 1. The total scores from the texts, classified into morphological context, are given in Table 2.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
<th>AP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>-t/n</td>
<td>-o</td>
<td>-at</td>
<td></td>
</tr>
<tr>
<td>/h</td>
<td>0</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>0</td>
<td>10</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>ø</td>
<td>10</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
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<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

The contexts are the following; in the perfect: suffix -t/n 1 SG, 2, 1PL, MPL -o, FSG -at, in imperfect MPL -u/o, FPL -an, 3 MSG with object suffix, AP with plural suffix. An example of each (taken from texts) is as follows, where relevant giving one example with the final laryngeal kept, one with it absent.

dabēt 'I slaughtered', daboh-o 'they slaughtered', dabō-a 'they M slaughtered it F' (these 2 tokens from same speaker); wagat 'she fell'; simata 'she heard him', bisām'-o 'they M hear'; tugo 'you M fall'; bimbāa'-an
‘they are sold’; basemá ‘I hear him’; tābin (AP, active participle) ‘following-MPL’ (<tābi’). Note that the AP and object-suffix contexts were not used in the test frames.

In two cases the sample in the textual material is not very representative. The FSG -at suffix is represented only on two lexemes, one speaker with five tokens of waga at ‘she fell’, another with five of sim-at ‘she heard’ (etc.). Also, the FPL -an occurs only in one speaker’s text.

In most respects the textual and test material agree: in texts /h/ are categorically dropped before the subject suffixes beginning with -t/n, and they are similarly nearly categorically absent in the test. In both sets of data the stems shift to the weak-final class. Similarly, in both there is a greater degree of variability before the MPL suffix (-u/o) in both perfect and imperfect verbs, the ratios of kept/dropped tokens being roughly the same. In Table 3 the percentages are calculated by dividing the total tokens of stems where /h/ are kept by the total of laryngeal stems with a MPL suffix. The token count is given before the percentage.

| TABLE 3 TEXT COUNT: /h KEPT BEFORE MPL SUFFIX/DROPPED, % KEPT |
|---|---|---|---|
|   | perfect kept | dropped % | imperfect kept | dropped % |
| test | 11 | 12 | 48 | 14 | 25 | 64 |
| text | 7 | 6 | 55 | 10 | 5 | 66 |

The texts also indicate that before object suffixes there is a categorical shift to the weak-final paradigm, regardless of whether or not the suffix begins with a V or C; thus dabāa-hin ‘he slaughtered them F’, budbā ‘he slaughters it M’, rather than dabah-hin/budbaha.10

There is also a fair degree of agreement between the test scores of individual speakers and their treatment of /h in natural speech. Speaker 4, for instance has the lowest percentage retention of /h in the test, and is also lowest in the text count, while speaker 6 has the highest percentage retention in both. Only speaker 7 has a lower percentage retention in the text than in the test.

10 After strong verbs object suffixes are suffixed directly to the final -C, with no other changes occurring, e.g. katab-a ‘he wrote-it’, katab-hin ‘he wrote-them’. After verbs ending in a final -V the final vowel lengthens before a suffix, ligi-hin → līgi-hin ‘he found them’. Before object suffixes (which were not tested in the frames like (4)) the laryngeal-final verbs shift to the weak-final class.
PARADIGMATIC STABILITY AND FINAL LARYNGEALS

TABLE 4 TOTAL RETENTION/DELETION OF FINAL ’/H IN TEXTS OF 5 SPEAKERS

<table>
<thead>
<tr>
<th>Speaker</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>/h kept</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>deleted</td>
<td>1</td>
<td>11</td>
<td>2</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

For the present sample of speakers it can then be said that verbs with final ’/h belong to a mixed paradigm: before C-initial subject suffixes they belong to the paradigm of weak-final verbs; before V-initial subject suffixes they are treated variably, in cases even by the same speaker, sometimes as CVCVC stems, sometimes as CVCV, weak-final stems.

2.2 Larger sample

Looking at the larger sample of texts, as summarized in Owens (1998), the extent of deletion in the pre-vocalic context was indicized over three sample groups, Maiduguri interviews (N = 58), Maiduguri group conversations (N = 61) and village interviews (N = 52). Aspects of the corpus can be briefly summarized here. In the following, an index of 0% means that the laryngeal is never deleted, of 100% that it always is. Table 5 groups all speakers together, while Table 6 divides them according to place and sex. The following indices pertain only to the context V’/h-V, i.e. V-initial suffixes.

TABLE 5 TOTAL SAMPLE

<table>
<thead>
<tr>
<th>Table 5a: Place</th>
<th>Table 5b: Sex</th>
<th>Table 5c: Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village 71%</td>
<td>Male 79%</td>
<td>&lt;32 83%</td>
</tr>
<tr>
<td>Maiduguri 79%</td>
<td>Female 71%</td>
<td>32–49 83%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;49 61%</td>
</tr>
</tbody>
</table>

TABLE 6 PLACE X SEX

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maid</td>
<td>81%</td>
</tr>
<tr>
<td>Villages</td>
<td>74%</td>
</tr>
</tbody>
</table>

More so than the data examined thus far, the overall scores point to a loss of final laryngeals in pre-vocalic position, the loss being most pronounced...
among younger, male residents of Maiduguri, with Maiduguri well ahead of the village overall among both males and females. The text scores show a higher degree of deletion overall than do the test scores described above. This is interesting, if the test scores indicate a higher degree of monitoring (the ‘reading list effect’ in the classical, early sociolinguistic studies), it would indicate that the laryngeals are somehow ‘there’ to a higher degree than the test scores would show. The lower female scores would deserve comment, if adequate comparative data were available, which it is not. In western studies, females have consistently been shown to ‘lead’ changes. However, even if western sociolinguistics attempts to draw far-reaching conclusions from such tendencies (Chambers 1995, 139), the present data cautions against overgeneralizing, to say the least.

Looking at the data overall, a change can be said to have occurred in the apportionment of final verbal /\h verbs: before C-initial suffixes they merge with weak final verbs whereas before V-initial suffixes they variably merge with weak-final verbs. Factors speak both for and against the variable merger going to completion. In favor thereof, urban dwellers, especially younger ones, have the highest degree of merger. Rural dwellers, however, have a lower degree, and at this point in the history of Arabic in Nigeria, they constitute the overwhelming majority. Moreover, there are structural factors favoring retention: in explicit tests the final laryngeal was retained more often than in spontaneous speech. Moreover, in other positions, V-\h-V sequences, such as word-internally (šahar ‘month’), are generally maintained, so at this point at least, the high degree of variability is most marked at the right morphological edge. Moving to the next section, the current situation will be represented as having a split paradigm, with the possibility, that in the future laryngeal-final verbs will merge completely with weak-final ones.

Before proceeding to the final section, it is relevant to note that an identical treatment of laryngeal-final verbs is found in Abbeche Arabic in eastern Chad (Roth-Laly 1979, 8–10). This shows that the split of laryngeal-final verbs into two morpho-phonological classes is old enough to be a pan-western Sudanic Arabic trait. Again, however, without more detailed study of the situation in eastern Chad it is not possible to say more than that. If the loss of laryngeals is more advanced in Chad than in Nigeria, one would predict that they would also be lost eventually in Nigeria. If, on the other hand, the same complementary treatment of final laryngeals is found as in Nigeria (governed by form of suffix), one would rather see the split as stabilized.
3. Morphological Regularity, paradigmatic stability

Before continuing, it is relevant to examine the manner in which the laryngeal-final verbs have split into two classes. As seen in (7), the laryngeal-final verbs either end in a laryngeal (column c in (7)) or in a vowel (column a). They thus either remain in the class of C-final verbs or they shift to the class of weak-final verbs:

(8) strong verb (C-final) weak verb (V-final)
    gaɗa’an ‘they F cut’
    cf. katab-an ‘they F write’
    gadēti ‘you FSG cut’
    cf. mašē-ti ‘you FSG went’

What happens only rarely is that a new morphological class is created, one with properties of both the strong and weak verbs. In (6) there are two such tokens, attesting to the fact that such forms do in fact occur.\(^{11}\) They are given in column b; both tokens occur before V-initial suffixes. A form like daba-o ‘they M killed’ derives from dabah-o with deletion of the final laryngeal. Rather than switch to another stem class, which is what usually happens when the final laryngeal is deleted (dab-o), the final stem vowel has been maintained. In essence, a new morphological class has been created. This class, however, has not become widespread or established in the speech community.

Looking at the development structurally, the deletion of the final laryngeal leads to the splitting of /h-final verb stems into two pre-existing morphological classes, the distribution of these being broadly defined by morpho-phonological context. What did not happen is that the loss of the final laryngeal in one context led to the development of a new morphological class based on the stem CVCV-suffix. Morphological stability takes precedence over forms, which would be derived by the logic of phonological rules.

The WSA developments would ostensibly appear to support the idea of linguistic history repeating itself: final laryngeals in Arabic verbs tend to ‘drift’ into weak-final ones. This repeats a similar process, which occurred in pre-diasporic Arabic, as illustrated in (1) in section one (bada’-t/badē-t). Under one interpretation of Arabic language history, one could this add drift to the catalogue of features characteristic of New Arabic (allowing for the cautionary note 1 above).

\(^{11}\) In the texts from speakers from the present sample no mixed forms occur. In other texts, however, they are attested.
However, the data allows for a more nuanced description. The change described for WSA can be broken down into two parts. On the one hand, what may be termed a principle of paradigmatic stability, one aspect of morphological stability, can be invoked:

(9) Principle of paradigmatic stability: do not create new paradigms

In its categoricity this statement is clearly too strong, and one can imagine adding many conditions to it, but it serves present purposes. Both the Old Arabic and the WSA data obey the principle: the loss of a final laryngeal in both cases did not lead to the creation of a new paradigm. Rather, the laryngeal-less forms simply collapsed, or in the case of WSA, are still in the process of collapsing, into already-existing paradigms.

The other part is the phonological change that creates the condition for the collapse into pre-existing paradigms. This change is one of happenstance. In WSA, /h/ became /h/ and /h/ became /h/. This type of change is not unique among varieties of Arabic. /h/ has moved to /h/ in the Tihama, /q/ appears as /h/ in Cairene, Damascene, as well as elsewhere. Maltese presents a complicated picture of its own. γ and /h/ merged in /h/, which in turn was lost, leading, as in WSA, to the merger of *h/-final verbs with weak finals.12

(10)  

sm-ayt  'I heard'

tf-ayna  'we threw' (< df

Why the changes occurred in WSA is, frankly, not clear at this point, as is the question, why in some dialects /h/ and/or h continue on to Ø. One

12 In Maltese the final -a of the suffix is conditioned by the historical pharyngeal, and hence contrasts with, say, bn-eyt 'I built,' where the suffix goes back to the diphthong *ay-t.

In fact, the historical phonology of Maltese remains to be worked out in detail. Not least is the problem of a not inconsiderable dialect variability, with its potential importance for historical reconstruction (cf. Owens 2006, chapter 7 on imāla in Maltese). Mifsud (1995, 308-9) explains the final /h/ in sm-ayt etc. as a change of the historical pharyngeal trace to /h/. This analysis is interesting in and of itself, but probably deserves an article of its own. Briefly, while Mifsud's analysis still maintains the paradigmatic stability principle, it is on an a priori basis more complicated than the treatment offered here. Mifsud notes that in general verbs with historical final voiced pharyngeals merge with weak-final verbs (e.g. nitfa 'we throw', like ninsa 'we forget'). The current analysis sees the merger as having occurred throughout all inflectional paradigm members, allowing for the underlying phonetic conditioning of [a] due to the pharyngeal trace. Mifsud's analysis would split the paradigm of voiced pharyngeal-final verbs. In the process this creates an otherwise unattested CCay-C stem, where the /a/ represents C, of the root, and hence would contrast with the split paradigms-analysis offered above for WSA, since in the present analysis laryngeal-final verbs split into two existent paradigms.
can, of course, appeal to sub-stratal influence. This is quite plausible in the case of WSA. However, why should the shift have occurred in WSA, but not in another notable Sprachinsel where Arabic is a remarkable minority language, Uzbekistan? In short, the phonological shift to /h/ and /ʾ/ and the further loss of these sounds, is history in its truest sense, contingent on particular developments in particular places, in particular times. This contingency is in evidence in WSA in the very variability of the process. It is unfortunate that longer term trend studies cannot be followed through on to trace the further development of this phenomenon. At what point, if ever, does the change go to completion, and why?

In any case, once these sounds are given up, the paradigmatic stability principle takes over. This obtains in all varieties of Arabic that have (1) above, in WSA, as described here, and in Maltese as well, as suggested around the discussion of (10) above.

In short then, the ‘sequence’ of developments is as follows:

(11) loss of final laryngeal
(12) obeisance of the paradigmatic stability principle (see (9) above)

In other words, given the loss of the laryngeal, collapsing into the weak-final paradigm follows automatically. In the current framework, only (11) is history proper. (12) is suggested to be the instantiation of a general linguistic principle in Arabic verbal morphology. In a sense, so long as Arabic exists, (12) will be operative in the way described here. Its reappearance at different points in the history of Arabic, however, is not compatible with a conceptualization of Arabic as having changed from and Old type to a New type. To the contrary, because the same structural forces are at work in pre-diasporic times as are at work in 2006, no change has occurred.

4. Appendix

Verbs used in test frames (given in the form of a possible answer): dábahó ‘they slaughtered’; sínít ‘I heard’; wájét ‘I faced’; karáho ‘they hate’; gádét ‘I cut’; gáréti ‘you FSG stopped’; máñetu ‘you MPL prevented’; bínfaʾan ‘they F are useful’; budábáho ‘they M slaughter’; bisám’an ‘they F hear’;

Moreover, in WSA emphatic sounds are fully maintained, but they are lost in Uzbekistan Arabic.
tuwājjuhu 'you MPL face'; bikərəhu 'they M hate'; bitbaʾo 'they M follow'; bāʾat 'she sold'; bibiʾu 'they M sell'; gadaʾo 'they M cut'.

5. References