CHAPTER 5

Some issues for an analysis of the templatic comparative in Arabic with a focus on the Egyptian dialect

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The comparative in Arabic appears to be a quintessential case of templatic morphology. In most Arabic dialects, the comparative seems to be formed by taking the base adjective and matching it to the templatic shape aCCaC. For example, [kibiːr] 'big' has the comparative [akbar]. However, when the details of comparative formation are taken into consideration, various issues arise concerning morphology, syntax, semantics, and phonology. This paper identifies and discusses several of these issues regarding the Arabic comparative, with a primary focus on the Egyptian dialect. Among several novel observations, this study demonstrates that the Arabic comparative reflects a root-based process. This finding offers important support for the consonantal-root-based view of Arabic word formation and, consequently, argues against a strictly stem- or word-based view of Arabic morphology.

Keywords: Egyptian Arabic, comparative, allomorphy, root-based morphology, color terms

1. Introduction

The comparative in Arabic appears to be a quintessential case of templatic morphology. In most dialects of Arabic, the comparative seems to be formed by matching the base adjective to the templatic shape aCCaC. For example, the adjective [kibiːr] 'big' has the comparative form [akbar] 'bigger/biggest'. However, closer consideration of the details of comparative formation raises a number of interesting issues, including: (i) syntactic issues of word order and agreement; (ii) morphological issues of templatic allomorphy; (iii) potential semantic issues related to the occurrence of gaps (i.e. adjectives that do not take a templatic comparative); (iv) phonological issues concerning the status of the templatic comparative as a derivational or inflectional
process; (v) a broader theoretical issue concerning the word-formation process that produces the templatic comparative as being root-based, not word-based. Typological literature on the comparative, such as Bobaljik (2012) and Grano (2012), suggests that a comparative always has an occurring adjective as its base, in turn implying that the comparative is a word-based word-formation process. On the other hand, standard evidence from Arabic is more consistent with a root-based process.

This paper addresses some of these linguistic issues related to comparative formation in Arabic. The discussion presented here is based largely, though not exclusively, on Egyptian Arabic, with data drawn from Lehn & Abboud (1965), Hassanein & Kamel (1980), Badawi & Hinds (1986), Youssef (2013), and consultation with several native speakers of Egyptian Arabic. In Section 2, I present the data that motivate postulation of the morphological template aCCaC. In Section 3, I review issues of word order and morphosyntactic agreement involving comparatives, showing that the Egyptian Arabic templatic comparative is invariant, in that (unlike other adjectives), it does not inflect for gender and number. In periphrastic comparatives, by contrast, the adjective does inflect. Section 4 presents data from Egyptian Arabic showing two templatic allomorphs: aCCCa and aCaCC. I show that these allomorphs surface, respectively, when the final root consonant of the base adjectival form is a glide or when the last two root consonants are identical. I also briefly document a third allomorph containing four consonantal slots that occurs in a limited number of other dialects. In Section 5, I examine gaps in the application of the templatic comparative by identifying adjectives that are resistant to this comparative form. This section also includes a discussion on the somewhat complicated problem of whether basic color terms in Egyptian Arabic can take a templatic comparative, given that the phonological shape of basic color terms (at least in the masculine singular form) is typically identical to the templatic comparative shape. In Section 6, I briefly discuss the comparative’s status as a derivational or inflectional form. I make clear its derivational status, based not only on the existence of the gaps discussed in Section 5, but also the phonological process of R-depharyngealization. Finally, in Section 7, I present evidence that the templatic comparative is a word formation process that is root-based, not word-based, and thus presents a challenge for exclusively word-based models. Section 8 concludes the paper.

2. The canonical templatic comparative

Arabic and other Semitic languages are characterized by templatic morphology, whereby an invariant word shape expresses the exponence of a category (see Davis & Tsujimura 2014 for a general overview discussion on the nature of templatic morphology). While the theoretical status of templates has been the subject of some debate in recent phonological theory (see, for example, McCarthy & Prince 1998; Downing
2006; McCarthy et al. 2012), there is little question about the descriptive adequacy of templates for capturing morphological patterns in various Semitic languages (Bat-El 2011). For example, for Arabic, morphological templates have been proposed to capture a variety of different phenomena, ranging from the distinct patterns of the verbal classes (e.g. McCarthy 1981), to the broken plural (McCarthy & Prince 1990), and to the various patterns of hypocoristic formation (e.g. Davis & Zawaydeh 1999). One understudied area in Arabic templatic morphology is the formation of adjectival comparative; indeed, the Arabic comparative is so obviously templatic that there has perhaps been little reason to consider its form in detail. To see the regularity of the templatic comparative, consider the Egyptian Arabic data in (1). (Note that the initial epenthetic glottal stop of the comparative is not transcribed.)

(1) The Templatic Comparative – Egyptian Arabic (Data sources: Lehn & Abboud 1965; Hassanein & Kamel 1980; Badawi & Hinds 1986; Youssef 2013; plus native speaker consultation)

<table>
<thead>
<tr>
<th>Adj. (m.sg)</th>
<th>Comparative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. kibir</td>
<td>akbar</td>
<td>big</td>
</tr>
<tr>
<td>b. fakir</td>
<td>afl'ar</td>
<td>clever</td>
</tr>
<tr>
<td>c. wihiif</td>
<td>awhaf</td>
<td>bad</td>
</tr>
<tr>
<td>d. wasis</td>
<td>awsas</td>
<td>wide</td>
</tr>
<tr>
<td>e. ooji2</td>
<td>adj2</td>
<td>narrow</td>
</tr>
<tr>
<td>f. t'xin</td>
<td>atxan</td>
<td>fat</td>
</tr>
<tr>
<td>g. t'awis</td>
<td>at'wal</td>
<td>long</td>
</tr>
<tr>
<td>h. s'atb</td>
<td>as'sab</td>
<td>difficult</td>
</tr>
<tr>
<td>i. faqir</td>
<td>afjar</td>
<td>poor</td>
</tr>
<tr>
<td>j. bit'id</td>
<td>ab'tad</td>
<td>far</td>
</tr>
<tr>
<td>k. lat'id</td>
<td>al'taf</td>
<td>pleasant</td>
</tr>
<tr>
<td>l. naqif</td>
<td>anfaj</td>
<td>dry</td>
</tr>
<tr>
<td>m. gamis</td>
<td>agnal</td>
<td>beautiful</td>
</tr>
<tr>
<td>n. rixis'</td>
<td>arxas'</td>
<td>cheap</td>
</tr>
<tr>
<td>o. sirid'</td>
<td>a'rad'</td>
<td>broad</td>
</tr>
<tr>
<td>p. sires</td>
<td>asras</td>
<td>quick</td>
</tr>
<tr>
<td>q. gadi:m</td>
<td>agdam</td>
<td>old</td>
</tr>
<tr>
<td>r. sahl</td>
<td>ashal</td>
<td>easy</td>
</tr>
<tr>
<td>s. ridif</td>
<td>andaf</td>
<td>clean</td>
</tr>
<tr>
<td>t. wisix</td>
<td>awsax</td>
<td>dirty</td>
</tr>
<tr>
<td>u. zahma</td>
<td>azham</td>
<td>crowded</td>
</tr>
<tr>
<td>v. farid</td>
<td>a'raf</td>
<td>honorable</td>
</tr>
<tr>
<td>w. zaqid</td>
<td>azjad</td>
<td>excessive</td>
</tr>
<tr>
<td>x. lattis</td>
<td>ab'ta2</td>
<td>slow</td>
</tr>
<tr>
<td>y. jashir</td>
<td>a'isar</td>
<td>easy</td>
</tr>
<tr>
<td>z. gadir</td>
<td>agdar</td>
<td>worthy</td>
</tr>
</tbody>
</table>
The data in (1) show the typical pattern of comparative formation in Arabic. The formation of the comparative seems rather straightforward. For the many Arabic words that consist of three (root) consonants – as attested by the adjectival forms in the left-hand column of (1) – the corresponding comparative in the middle column is formed by extracting the three consonants of the base adjective and putting them into the templatic frame aCCaC, where the three C-slots correspond to the three consonants of the base. The stress falls on the initial syllable of the comparative in (1), in accordance with the well-known stress pattern of Cairene Arabic (e.g. Hayes 1995). The vowel pattern and syllable structure of the base adjective are irrelevant in determining the form of the comparative. (1) presents only a limited number of examples; many more such examples can be found in Badawi & Hinds (1986). What (1) clearly establishes, however, is that Arabic does indeed have a morphological comparative that is templatic, with the shape aCCaC. Based on (1), it can be argued that this templatic shape itself expresses the exponent of the comparative; in other words, the template aCCaC is the sole expression of the comparative morpheme in Egyptian Arabic. Based on this starting point, I will consider in the following sections a wide variety of linguistic issues that a closer examination of the comparative reveals. Although some of these issues, which pertain to syntax, morphology, semantics, and phonology, have been discussed in descriptive works, this paper introduces several original observations and makes a novel contribution by consolidating in one article a wide variety of issues that emerge from the examination of the comparative in Egyptian Arabic.

3. Issues of agreement and word order

Using the comparative formation exemplified in (1) as a baseline, in this section, I first discuss the lack of morphosyntactic agreement on Egyptian Arabic comparative forms (which I assume to be adjectives) and then discuss the syntactic frame of the sentences in which templatic (morphological) comparatives occur. This discussion will help us to distinguish the morphological comparative construction from the periphrastic comparative construction. As a note, I will use the terms ‘morphological comparative’ and ‘templatic comparative’ interchangeably in this paper to refer to the type of comparative forms shown in (1). This ‘templatic/morphological comparative’ stands in contrast to the periphrastic comparative construction. The difference between a morphological comparative and a periphrastic comparative is exemplified in English by the contrast between ‘simpler’ (morphological) vs. ‘more simple’ (periphrastic).

An important observation regarding the Egyptian Arabic comparative in (1) is that, unlike other adjectives, it does not inflect for gender or person. Consider the
inflection for gender and number on the positive (i.e. non-comparative) adjectives in (2) versus the lack of such inflection on the comparative adjectives in (3).

(2) Agreement on adjectives
   a. *ta:līb kibī:r
      student big
      'a big student-M'
   b. *ta:līb-a kibī:r-a
      student-F big-F
      'a big student-F'
   c. *ṭulla:b kubār
      students big-PL
      'big students'

(3) Lack of agreement on comparatives (post-nominal)
   a. *i⃗* *ta:līb akbar min il- mudarris
      the student bigger from the teacher
      'The student (m.) is bigger than the teacher'
   b. *i⃗* *ta:līb-a akbar min il- mudarris
      tae student-F bigger from the teacher
      'The student (f.) is bigger than the teacher'
   c. *i⃗* *ṭulla:b akbar min il- mudarris
      tae students bigger from the teacher
      'The students are bigger than the teacher'

The invariant nature of the comparative is unusual for an adjective. Moreover, while adjectives are typically post-nominal in Arabic, the comparative can occur (un-inflected) in prenominal position. When it does so, the meaning of the phrase is understood as superlative. Examples are given in (4).

(4) The comparative in pre-nominal position (Egyptian Arabic)

   *huwwa akbar walad
   he bigger boy
   'He is the biggest boy'

   *hiyya akbar bint
   she bigger girl
   'She is the biggest girl'

Let us now consider the syntactic frame found in comparative sentences. When two items are being compared in Egyptian Arabic using a templatic comparative, the standard of comparison is marked by the preposition [min] 'from'. This is shown in
(5a), repeated from (3a). Compare this structure to the one in (5b), where the use of the preposition ['an] after the comparative results in an ungrammatical sentence. I loosely translate ['an] with the English phrase 'with respect to' (abbreviated for convenience as wrt).

(5) [min 'from' as the standard of comparison
   a. if- f'iilib akbar min il- mudarris
      the student bigger from the teacher
      'The student is bigger than the teacher'
   b. *if- f'iilib akbar san il- mudarris
      the student bigger wrt. the teacher

The choice of preposition in this sentence becomes relevant when we turn to the periphrastic comparative in Egyptian Arabic, which has a different structure from the morphological comparative. An example is shown in (6a), taken from Badawi & Hinds (1986); compare this sentence to the ungrammatical (6b).

(6) The periphrastic comparative
   a. il- sib-a di kibitr-a san di
      the box-f this-f big-f wrt. this-f
      'this box is bigger than that one'
      (Literally: 'This box is bigger with respect to that one')
   b. *il- sib-a di kibitr-a min di
      the box-f this-f big-f from this-f

The periphrastic comparative construction in (6a) differs from the morphological comparative construction in (3) and (5a) in several ways. First, the periphrastic construction in (6a) includes the positive form of the adjective ([kibitr-a]); second, the adjective shows agreement with the noun that it modifies; third, the preposition that acts as the standard of comparison is ['an] rather than [min]. It should be noted that Egyptian Arabic displays another type of comparative construction, as shown in (7), where the word [aktar] 'more' – itself a morphological comparative – is placed immediately after the adjective that modifies the noun. For example, the sentence in (6a) has the alternative periphrastic structure shown in (7).

(7) Alternative periphrastic comparative
   a. il- sib-a di kibitr-a aktar min di
      the box-f this-f big-f more from this-f
      'This box is bigger than that one'
      (Literally: 'This box is big more than that one')
The differences between the periphrastic comparative and the morphological comparative will become important in Section 5, when I consider the somewhat complicated issue of whether the basic color adjectives in Egyptian Arabic take a templatic comparative. Before discussing that issue, I first turn to the issue of templatic allomorphy that occurs with the morphological comparative.

4. Templatic allomorphy

As illustrated by the data in (1), the morphological comparative in Arabic has the standard templatic shape aCCaC. In this section, I describe two patterns of templatic allomorphy based on data from Egyptian Arabic: aCCa and aCaCC. The allomorph aCCa occurs when the last root consonant of the base adjective is a glide, while the allomorph aCaCC occurs when the second and third root consonants are identical (so-called double roots). I first present data showing the aCCa allomorph of the comparative. In presenting the data, I include the feminine form of the adjective in addition to the masculine, since it is often the case that the final glide surfaces in the feminine but not the masculine form.

(8) Comparatives of adjectives with final glides (Egyptian Arabic)

<table>
<thead>
<tr>
<th>Adj. (m.sc)</th>
<th>Adj. (r.sc)</th>
<th>Comparative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ḥilw</td>
<td>ḥilw-a</td>
<td>ahla (*ahlaw)</td>
<td>sweet</td>
</tr>
<tr>
<td>b. waṭṭi</td>
<td>waṭṭ-j-a</td>
<td>awṭṭa (*awṭṭaj)</td>
<td>low</td>
</tr>
<tr>
<td>c. ᵣaḥi</td>
<td>ᵣaḥ-j-a</td>
<td>ᵣaḥla (*ᵃᵃˡᵃˡᵃჳ)</td>
<td>high</td>
</tr>
<tr>
<td>d. ḍaki</td>
<td>ḍakijja</td>
<td>azka (*azkaj)</td>
<td>intelligent</td>
</tr>
<tr>
<td>e. ḥadī</td>
<td>ḥadja</td>
<td>ahḍa (*ahḍaj)</td>
<td>calm</td>
</tr>
<tr>
<td>f. Ḧawi</td>
<td>Ḧawijja</td>
<td>aẓwa (*aẓwaj)</td>
<td>strong</td>
</tr>
</tbody>
</table>

In the adjective in (8a), the final glide, [w], is present but does not surface in the comparative. In the masculine forms in (8b) and (8c), we expect to observe the root-final glide consonant, /j/, since these masculine forms are underlyingly /watṭij/ and /haṭlij/, respectively; however, this final glide undergoes deletion in (8b) and (8c), resulting in the forms [waṭṭi] and [haṭli], respectively. We can understand the lack of a final surfacing glide in the comparative data in (8) ([ahla] instead of *ahlawa] 'sweeter'; [awṭṭa] instead of *awṭṭaj] 'lower') as a phonological effect, since, as observed by Broselow (1976) and Youssef (2013), content words in Egyptian Arabic do not have vowel-glide sequences in word-final position. As a result, comparatives of adjectives with a root-final glide consonant, such as the one in (8), delete the final glide and the templatic shape of the comparative appears as aCCa rather than the expected aCCaC. Thus, the comparative templatic shape aCCa in
(8) is a phonologically predictable allomorph of the aCCaC template that arises following deletion of a word-final glide when preceded by a vowel.

The more complicated allomorph of the templatic comparative in Egyptian Arabic occurs when the adjectival form ends in two identical root consonants (or when the final root consonant is a geminate). Here, the comparative typically takes the pattern aCaCC, where the last two consonant slots comprise a geminate and word stress falls on the final syllable in compliance with the regular Egyptian Arabic stress rules. Sample data are in (9).

(9) Comparatives of adjectives ending in two identical consonants: aCaC1C1

<table>
<thead>
<tr>
<th>Adj.</th>
<th>Comparative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>fjadd</td>
<td>strong</td>
</tr>
<tr>
<td>b.</td>
<td>xaff</td>
<td>light</td>
</tr>
<tr>
<td>c.</td>
<td>lazz</td>
<td>pleasant</td>
</tr>
<tr>
<td>d.</td>
<td>widi</td>
<td>desirable</td>
</tr>
<tr>
<td>e.</td>
<td>gidiːd</td>
<td>agdad/agadd</td>
</tr>
</tbody>
</table>

In the base adjectives of (9a–c), the last two consonants are identical but separated by a long vowel, whereas in (9d), the last two consonants of the base adjective comprise a geminate consonant. In all these cases, the comparative form of the adjective shows gemination of the final two consonants, yielding the templatic pattern aCaCC (where the final CC is the geminate). They do not form the canonical templatic pattern aCCaC (e.g., *[axaff] instead of [axaff] for (9b)). Thus, the data in (9a–d) demonstrate that when the base adjective has an identical second and third root consonant, the comparative shows templatic allomorphy: a form with a final geminate is produced (aCaCC) regardless of the internal structure of the base adjective.

In light of this discussion, the variation in Egyptian Arabic for the data item in (9e) ([agdad] ~ [agadd]) ‘newer’ is interesting. The expected form, given our discussion above, is [agadd], yet both [agdad] and [agadd] are given in Badawi & Hinds (1986), who do not distinguish a meaning difference. However, consultation with several native speakers of Egyptian Arabic indicates that, at least for some speakers, the two forms do not have identical meanings. For such speakers, [agadd] can only be used with a temporal connotation: ‘newer’ in the sense of ‘more recent’. On the other hand, [agdad] does not seem to be so restricted and can mean ‘newer’ both in the temporal sense and in the sense of an object being newer. I would hypothesize that, since the form [agadd] is consistent with Classical Arabic, the variant form [agdad] is an innovation, although it has come to be the more common of the two forms in Egyptian Arabic. It would be interesting to investigate the use of [agdad] vs. [agadd] over the last century to see if this division between the two forms is recent or whether it is already present in earlier attestations of Egyptian Arabic.
An additional consideration is that, for some speakers, [agadd] can also have the meaning 'more serious', based on [gadd] 'serious'. This semantic confusion may have been a factor in the emergent use of [agdad] for 'newer'. The two templatic allomorphs of the comparative discussed above, aCCa and aCaCC, are found in a wide variety of Arabic dialects beyond Egyptian. In some of these other dialects (but not in Egyptian), a much less common templatic allomorph is also attested that is used to form the comparative of an adjective with four consonant slots. This templatic allomorph has the pattern $aC_1aC_2C_3aC_4$; three syllables instead of two. This templatic form is apparently impossible in Egyptian Arabic, but the following examples are acceptable in some rural Levantine dialects, such as northern rural Jordanian (Basem Al-Raba’a, personal communication), and northern rural Israeli Palestinian (Duaa Abu Elhija, personal communication):

(10) Four-consonant comparative template in Rural Levantine Arabic: aCaCCaC

<table>
<thead>
<tr>
<th>Adj. (m.sg)</th>
<th>Comparative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. maskin</td>
<td>amaskan</td>
<td>unfortunate</td>
</tr>
<tr>
<td>b. mzarbar</td>
<td>azarbar</td>
<td>talkative</td>
</tr>
<tr>
<td>c. madżum:maznum</td>
<td>amadżan/amaznan</td>
<td>crazy</td>
</tr>
<tr>
<td>d. sanš:uri</td>
<td>aans:ar</td>
<td>prejudiced</td>
</tr>
<tr>
<td>e. mxarbat</td>
<td>axarbat:</td>
<td>messy</td>
</tr>
<tr>
<td>f. mfarqaš</td>
<td>afaqas:</td>
<td>cracking [describing sound]</td>
</tr>
</tbody>
</table>

Some example sentences illustrating these comparative forms are provided in (11). The example in (11a) is based on northern rural Israeli Palestinian (Duaa Abu Elhija, personal communication) while the example in (11b) is based on rural Jordanian (Basem Al-Raba’a, personal communication):

(11) The aCaCCaC templatic allomorph in rural Levantine Arabic:

a. naʃif amaskan min-hin
   'There isn't more unfortunate from her
   'There is nobody more unfortunate than her'
   (said of someone who thinks wrongly that nobody is as unfortunate as she is)

b. huwwa amaznan min-ha
   'He crazier from her
   'He is crazier than her'

The use of the preposition [min] in the sentences in (11) as a standard of comparison makes clear that these examples are comparative constructions, syntactically speaking. What remains to be determined is which words with four consonants take the comparative form shown in (10) and which resist it. In fact, the comparative allomorph in (10) is quite restricted; this form occurs with only a handful of words,
excluding, for example, [munāsib] ‘appropriate’ or [kasla:n] ‘lazy’ (e.g. *[amansab], *[akaslan]). It goes without saying that the occurrence of comparatives with the shape aCaCCaC requires further investigation, especially to observe whether this comparative templatic allomorph is restricted to rural Levantine varieties or is more widespread throughout the Arabic speaking world. I am unaware of previous discussion of this templatic comparative in the literature.

Having presented in this section the different templatic allomorphs of the comparative form of the Arabic adjective, in the next section I will consider the issue of gaps – that is, adjectives that do not take a templatic comparative form.

5. Gaps

The data presented so far in (1), (8), and (9) have shown that the templatic comparative occurs with a variety of base forms and with adjectives of different meanings. In this section, I identify certain adjective types that fail to take the templatic comparative at all. These gaps in the comparative construction include adjectives whose meanings are not gradable, those derived by the adjectival suffix [-i] (referred to by the Arabic term nisha), color terms, and arbitrary gaps.

For most languages, an important semantic constraint on the formation of morphological comparatives is that the adjectives on which they are based must be gradable (see, for example, Kennedy & McNally 2010 and Grano 2012). An adjective is “gradable” if its quality can be possessed to different degrees. For example, consider the English adjective ‘funny’: something or someone can be somewhat funny, very funny, or extremely funny. Consequently, it is meaningful to describe one joke as being funnier than another – thus, the adjective ‘funny’ is gradable. On the other hand, nongradable adjectives express only one degree. Consider the adjective ‘absent’, for example. A person or object must be absent or not; one cannot say (in a non-joking sense) that a student is ‘somewhat absent’, ‘very absent’, or ‘extremely absent’. Consequently, it would be odd to compare degrees of absentness: one student cannot be ‘more absent’ (or ‘absenter’) than another. Similarly, a comparative like ‘uniquer’ is odd because ‘unique’ does not entail a meaning that is gradable.

Turning to Arabic, the same observation pertains. Since comparative adjectives must be gradable, one would not expect that (templatic) comparative forms would be attested for nongradable adjectives. And, indeed, adjectives such as [ya:jib] ‘absent’, [ma:jil] ‘dead’ or [mi:twi:l] ‘married’ do not have a templatic comparative. While it is possible to express the notion of ‘more’ with a nongradable adjective using a periphrastic construction (as shown in (12) for [ya:jib]), the lack of a templatic comparative for nongradable adjectives should not be considered accidental.
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(12) Expected gap: nongradable adjectives like [ya:jib] ‘absent’ do not have a
    templatc comparative.
     a. huwwa yajib aktar min-ni
        He absent more from me
        ‘He is more (often) absent than me.’ (frequency reading)
     b. huwwa ayjab min-ni
        He absenter from me
        *He is absenter than me

Another largely systematic restriction on the use of the templatc comparative
is found with adjectives formed with the derivational suffix -i (the so-called “nisba
form”). These adjectives typically do not have a templatc comparative, though there
may be some exceptions (such as [widd-i] ‘desirable’ in (9d)). Nationalities such as
‘Egyptian’ or American, for instance, are formed with the nisba suffix and thus
precluded from having a templatc comparative. Consider the word [masr-i] ‘Egyptian’,
which takes the nisba adjectival suffix -i. One cannot say *[amsar] ‘more Egyptian’;
instead, one must use the periphrastic construction [masri aktar (minni)] ‘more
Egyptian (than me)’. Along these lines, Wright (1896/1974, pp. 141) specifically
mentions that, according to the traditional Arabic grammarians, it is incorrect to
form a templatc comparative (termcd nism ilta<di:i) on an adjective derived from a
verb (such as a passive participle), although exceptions are noted. As I will show in
Section 7, such forms do occasionally occur in Egyptian Arabic. Examples include
[ansab] and [agann], which are understood by speakers to be based on the verbal

Also related to the occurrence of gaps in the templatc comparative paradigm
is the productivity of this form. It is likely that, in any dialect, there will be many
arbitrary gaps; thus, what may be an acceptable templatc comparative in one
dialect will not occur in a different dialect. In (13), I present three adjectives whose
templatic comparatives are not accepted by most Egyptian speakers (and are not
given entries in Badawi & Hinds 1986), although speakers of other dialects may
readily accept them. I treat these omissions as arbitrary gaps in Egyptian Arabic.

(13) Adjectives lacking templatc comparatives in Egyptian Arabic
    a. [ha:zn] ‘sad’    *[ahzan]
    b. [marid] ‘sick’  *[amrad]
    c. [uf:am] ‘thirsty’  *[attaf]

An important facet of productivity concerns whether or not a given form can be
applied to loanwords. In the case of the templatc comparative, I suspect that, if a
borrowed adjective happens to be analyzable as consisting of three root consonants

2nd proofs
and if it has a phonological shape that can be considered canonical in Arabic, then a templatic comparative may be possible. One common example of a morphological comparative based on a loanword in Egyptian Arabic is found in Badawi & Hinds (1986): [afjik] 'more elegant', from French chic 'elegant', rendered as [fiʃk] in the dialect. The French word seems to have been analyzed as consisting of the root consonants fjk; this is evidenced by the verb form [fajjik] 'to make elegant', where the occurrence of the geminate glide indicates that the borrowed noun [fiʃk] is analyzed with an underlying form /fiʃk/, which contains the root consonants fjk. While I am not aware of other loanwords that commonly take a templatic comparative in Egyptian Arabic, a form like [anjas] 'nicer' (based on English nice) is acceptable in a playful sense for some native Egyptian speakers. Another example of a comparative based on a loanword is found in an Israeli Palestinian variety in which the borrowed word [filim] (from English 'film') can have the slang meaning 'a funny character'; on this interpretation, [filim] can take the templatic comparative [aflam] (Duaa Abu Elhija, personal communication).

On the other hand, a borrowed adjective that has a phonologically non-canonical shape would probably not take a templatic comparative. For example, if the English word intelligent were borrowed into Egyptian Arabic, it would almost certainly not take a morphological comparative, given its noncanonical phonological shape with six pronounced consonants. A hypothetical comparative for intelligent in Egyptian Arabic, [antlצjant], would be unacceptable. The issue of noncanonical phonological shape perhaps explains why the common Egyptian Arabic adjective [kwajjis] 'good' - a phonologically exceptional word beginning with a consonant cluster - takes the suppletive comparative [aḥsan] 'better' (Hassanein & Kamel 1980, p. 91), rather than the morphologically regular comparative [akwas]. [akwas] is typically rejected by native speakers (although an anonymous reviewer points out that the adjective meaning 'good' has a suppletive comparative in other languages besides Arabic).

An intriguing systematic gap in the formation of templatic adjectives involves color terms. According to Hassanein & Kamel (1980, p. 96), comparatives of color terms should be expressed periphrastically rather than morphologically. The data in (14) show the basic color terms in Egyptian Arabic in their masculine, feminine, and plural forms.

(14) Basic color terms

<table>
<thead>
<tr>
<th>Masculine</th>
<th>Feminine</th>
<th>Plural</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. abjad</td>
<td>beda</td>
<td>bid</td>
<td>white</td>
</tr>
<tr>
<td>b. azdar</td>
<td>xadra</td>
<td>xadrer</td>
<td>green</td>
</tr>
<tr>
<td>c. ahlmar</td>
<td>hamra</td>
<td>hummar</td>
<td>red</td>
</tr>
<tr>
<td>d. iswid</td>
<td>sooda</td>
<td>sud</td>
<td>black</td>
</tr>
<tr>
<td>e. azrar</td>
<td>zarra</td>
<td>zur</td>
<td>blue</td>
</tr>
<tr>
<td>f. afjar</td>
<td>safora</td>
<td>sufur</td>
<td>yellow</td>
</tr>
</tbody>
</table>
The paradigm in (14) displays partial suppletion, in the sense of Haspelmah & Sims (2015). From a synchronic perspective, the feminine (and plural) color terms are formed based on a non-occurring masculine. The left-hand column of (15) shows the non-occurring masculine forms upon which the feminine forms of the color terms seem to be based.

(15) (non-occurring) Masculine | Feminine | Gloss
--- | --- | ---
a. *bedˤ | *bedˤ-a | white
b. *xadrˤ | *xadrˤ-a | green
c. *hamr | *hamr-a | red
d. *sәd | *sәd-a | black
e. *zarʔ | *zarʔ-a | blue
f. *sәfr | *sәfr-a | yellow

A comparison of the non-occurring masculine forms in (15) with the actual masculine forms in (14) makes it clear that the masculine singular form of the color adjective is synchronically partially suppletive. Only a single consonantal root is shared between the masculine and feminine forms in (14). Typologically, the partial suppletion revealed here seems unusual, since it is the morphologically unmarked masculine singular that is suppletive within the paradigm.

The data in (16) below present the non-basic color terms of Egyptian Arabic. These terms are invariant in the dialect, in the sense that they only have one form regardless of what they are modifying.

(16) Non-basic color terms – Cairene Arabic (Hassanein & Kamel 1980, p. 95)

<table>
<thead>
<tr>
<th>Masculine</th>
<th>Feminine</th>
<th>Plural</th>
<th>Gloss</th>
<th>Non-occurring comparative</th>
</tr>
</thead>
</table>
a. rumadˤi | *rumadˤi | grey | *armadˤi |
b. banafisgˤi | *banafisgˤi | purple | *banafisgˤi |
c. bamba/bambi | *bamba/bambi | pink | *abma/bambi |
d. banni | *banni | brown | *abann |
e. kahli | *kahli | dark blue | *kahli |
f. nibiti | *nibiti | wine-red | *nibat |
g. burturaːni | *burturaːni | orange | *burturaːni |

According to Hassanein & Kamel (1980), neither basic nor non-basic color terms have templatic comparatives. Given the data on color terms in (14) and (16), how can we explain this observation? Let us consider the color terms in (16) first. Here, the lack of a comparative form can be explained in every case by one of two observations: first, many non-basic color words end in the adjectival suffixed -i (nisba); second, those non-basic color words that do not end in -i display non-canonical phonology. Even the form in (16c), [bamba] 'pink', despite having three consonants and not ending in -i, is nonetheless phonologically peculiar in that all three consonants that comprise the word are [+labial, +consonantal]. As has been known
since the work of Greenberg (1950), it is highly unusual for Arabic words to consist of three (true) consonants that all share the exact same place of articulation. The other instances of non-canonical phonology are even clearer: the color terms in (16b) and (16g) have more than four consonants and so would be unlikely to have a templatic comparative even if they did not have the adjectival suffix. (Possible comparative forms such as [abnæsag] 'more purple' and [abraṭan] 'more orange' for (16b) and (16g), respectively, would be unacceptable in Egyptian Arabic.) An interesting peculiarity of the non-basic color terms in (16) is that they do not inflect for gender or number in Egyptian Arabic (although they may do so in other dialects). One may therefore posit that the invariant nature of the non-basic color terms in (16) is consistent with their inability to form a comparative templatically.

Let us now turn to the basic color terms in (14). Even though these terms do have feminine and plural forms, they do not take a templatic comparative according to Hassanein & Kamel (1980). A similar observation has been reported for Classical Arabic by Wright (1896/1974, p. 141). (Wright also mentions that forms expressing bodily defects, such as the word meaning 'blind', do not have a templatic comparative, nisw iltafdīt; for space reasons, I do not address such cases in Egyptian Arabic). A salient observation regarding the basic color terms in (14) is that the masculine form seems to already have the phonological shape of the comparative (aCCaC), although I observe that the Egyptian Arabic word meaning 'black' in (14d) has the masculine form [iswâd] and not [aswâd]. However, in order to really know whether one of the masculine color terms in (14) can also be used as a comparative, one must consider the syntactic frame of the sentence; recall from the discussion above that the templatic comparative takes the preposition [min] 'from' and does not agree with the noun that it refers to. Consider the examples in (17a) and (17b) below, taken from Hassanein & Kamel (1980, p. 96), for the sentence meaning, "This orange [fruit] is greener than that one." Hassanein & Kamel provide the periphrastic examples in (17a) and (17b); I provide the hypothetical example in (17c), where the color word is meant to be used as a templatic comparative.

(17) Periphrastic and templatic comparative constructions for color terms

a. **ii-burtuzan-a di xad'ra san di**
   the orange-F this-F green-F wrt. this

b. **ii-burtuzan-a di xad'ra aktar min di**
   the orange-F this-F green-F more from this

c. **ii-burtuzan-a di xad'ar min di**
   the orange-F this-F greener from this

(17a) and (17b) are periphrastic comparatives built on the pattern shown earlier in (6) and (7). We can tell they are periphrastic because each adjective agrees with the noun that it modifies; furthermore, in (17a), the preposition [san] is used rather
than [min]. The example in (17c) shows the use of the basic color term as a templatic comparative. The occurrence of the preposition [min] with [axd'ar] makes it clear that a comparative construction is intended. For some speakers, the sentence in (17c) is ungrammatical; for some, it is marginal. Regardless of speakers’ willingness to accept (17c), however, either (17a) or (17b) is generally regarded as preferable. Furthermore, (17c)’s marginal status is made significantly worse when the comparative modifies a noun that is masculine; in this case, the templatic comparative is regarded as ungrammatical and the periphrastic form is clearly preferable. This situation is shown in (18), where the periphrastic comparative construction is contrasted with the templatic comparative for the sentence meaning, “This house is greener than that one.”

(18) Periphrastic and templatic comparative constructions for color terms

a. il- beet da axd'ar san da
   the house this-M green over this-M

b. il- beet da axd'ar min da
   the house this-M greener from this

The preference for [axd'ar san] in (18a) over [axd'ar min] in (18b) makes it clear that, despite the potential homophony between [axd'ar] as a color adjective ‘green (m.s.)’ and the morphological comparative ‘greener’, the word [axd'ar] in the acceptable (18a) is not being used as a templatic comparative.

While I basically agree with the sentiment of Hassanein & Kamel (1980) that the use of a color term as a templatic comparative is (or should be) avoided in Egyptian Arabic, the issue is made more complicated by the existence of expressions like (19), in which the color comparative [aswd] ‘blacker’ is used in a figurative sense (Marwa Ragheb, personal communication).

(19) yom aswd min zarn il-xarrub
   day blacker from pod the carob
   ‘a day blacker than a carob pod’ (i.e. “a terrible day”)

Additionally, for many speakers, the words [aswd] and [abjad] can be used in a comparative sense when referring to skin color. While this use may also be viewed as figurative, the issue may also relate to the notion of gradability discussed at the very beginning of this section. Kennedy & McNally (2010) point out that the gradability of color adjectives is somewhat vague. It could be that, in most circumstances, Egyptian Arabic treats color adjectives as nongradable (and thus resistant to use in a syntactic frame in which a morphological comparative interpretation surfaces), but that, in some domains such as skin color, the color adjective may have a fine gradable sense, thus allowing for the comparative use. This issue, like other issues related to gaps discussed in this section, is in need of further investigation, with the understanding that specific details may vary significantly between dialects.
6. The comparative as a derivational process: Evidence from [R]-depharyngealization

Any serious discussion of the morphological (templatic) comparative in Egyptian Arabic must consider the nature of comparative formation itself: is this a derivational process or an inflectional process? While the distinction between derivational and inflectional morphology is not always clear, in this section I offer two pieces of evidence demonstrating that the Cairene Arabic templatic comparative is consistent with a derivational process: (i) the existence of arbitrary gaps and (ii) the phonological alternation between pharyngealized [rʰ] and plain [r] which occurs between a comparative and its base.

Haspelmath & Sims (2013) provide eleven criteria distinguishing derivation from inflection; however, not all these criteria are definitive, and it is not entirely clear to what extent the typical criteria that distinguish derivation from inflection apply to templatic morphology. Nonetheless, one important criterion that is strongly diagnostic of derivational processes is the existence of gaps. Haspelmath & Sims observe that inflection applies to bases without arbitrary restrictions, while derivation may have arbitrary restrictions or gaps. As was discussed in detail in Section 5 above, Egyptian Arabic shows a number of gaps in the list of adjectives that can form templatic comparatives. While some of these gaps may be systematic (cf., for instance, the lack of application to nongradable adjectives), there do seem to be cases where the gaps are arbitrary. As observed in Section 5 for Egyptian Arabic, a number of adjectives, such as [hazi:n] ‘sad’, [mar:iːd] ‘sick’, and [satʃa:n] ‘thirsty’ do not have templatic comparatives. These gaps suggest that the comparative-formation process is indeed derivational. Further, we have seen that adjectives derived with the productive adjective-forming derivational suffix -i do not typically take a templatic comparative. This gap would be surprising if the comparative were an inflectional process (given that inflection should occur “outside” of derivation), but is consistent with its being a derivational process.

Perhaps the more interesting argument for the derivational nature of the comparative formation process is the allophony that can occur between [r] and its pharyngealized counterpart [rʰ]. (Note that I have not previously indicated this variation in my transcriptions of Egyptian Arabic; as Youssef (2013) demonstrates, the occurrence of [rʰ] is largely predictable). Youssef (2013) convincingly shows that the process of R-depharyngealization in Egyptian Arabic – in which a rhotic sound loses its pharyngeal character either immediately before or after a high front vowel – does not apply when the high vowel is part of an inflectional suffix, but does apply when the high vowel is part of a derivational suffix. This pattern is shown by the data in (20), where [rʰ] indicates an allophonic pharyngealized rhotic and [r] indicates its non-pharyngealized realization.
(20) Depharyngealization in derived words

<table>
<thead>
<tr>
<th>Noun</th>
<th>[r]- occurrence</th>
<th>[r] occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. baṭr+</td>
<td>baṭr-i</td>
<td>baṭr-i</td>
</tr>
<tr>
<td>'cow'</td>
<td>'my cow'</td>
<td>'bovine'</td>
</tr>
<tr>
<td>b. bar+r</td>
<td>bar+r-i</td>
<td>bar-r-i</td>
</tr>
<tr>
<td>'land'</td>
<td>'my land'</td>
<td>'land-related'</td>
</tr>
<tr>
<td>c. ḥagār+</td>
<td>ḥagār-i</td>
<td>ḥagār-</td>
</tr>
<tr>
<td>'stone'</td>
<td>'my stone'</td>
<td>'stone-related'</td>
</tr>
<tr>
<td>d. naṣr+</td>
<td>naṣr-i</td>
<td>naṣr-i</td>
</tr>
<tr>
<td>'fire'</td>
<td>'my fire'</td>
<td>'fire-related'</td>
</tr>
<tr>
<td>e. nahr+</td>
<td>nahr-i</td>
<td>nahr-i</td>
</tr>
<tr>
<td>'river'</td>
<td>'my river'</td>
<td>'river-related'</td>
</tr>
<tr>
<td>f. faṣr+</td>
<td>faṣr-i</td>
<td>faṣr-i</td>
</tr>
<tr>
<td>'poverty'</td>
<td>'my poverty'</td>
<td>'jinxing'</td>
</tr>
</tbody>
</table>

As the right-hand column of (20) shows, when a rhotic phoneme occurs before the derivational adjective-forming suffix /-i/, it is realized as [r] (without pharyngealization), but when it occurs before the inflectional 1st-person-singular possessive suffix /-i/, it fails to depharyngealize, surfaceing as [r]-. Given this pattern, any alternation between [r'] and [r] in two related words indicates that the words are in a derivational relationship, whereas a lack of such alternation indicates that the two words are inflectionally related. This is consistent with the observation of Haspelmath & Sims (2013) that a derivational affix is much more likely to trigger an alternation on a base phoneme than an inflectional one. Given this prediction, consider the adjetival base and the templatic comparative forms in (21), where the rhotic is transcribed phonetically.

(21) [r]-[r] alternations in the comparative and related adjective

<table>
<thead>
<tr>
<th>Adj. (m. sg)</th>
<th>Comparative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. kibīr</td>
<td>akbar+</td>
<td>big</td>
</tr>
<tr>
<td>b. kītīr</td>
<td>aktar+</td>
<td>many/much</td>
</tr>
<tr>
<td>c. gaddīr</td>
<td>agdar+</td>
<td>worthy</td>
</tr>
</tbody>
</table>

In (21), an alternation occurs between plain [r] and pharyngealized [r'] in the templatic comparative and its related adjective. I take the existence of this alternation as strong evidence that the templatic comparative reflects a derivational process. That said, the issue of R-depharyngealization and its relation to morphology needs to be investigated in more detail.
7. The comparative as a root-based word formation process

One of the most interesting aspects of the Egyptian Arabic templatic comparative is its clear reflection of a root-based word-formation process. Since all the consonants that appear in the templatic comparative are the underlying root consonants, no affixal consonants can map onto the consonantal slots of the comparative template aCCaC (or its templatic allomorphs). Examples of adjectival comparatives with affixal consonants are provided in (22); affixal consonants are underlined.

(22) Comparatives of adjectives with affixal consonants

<table>
<thead>
<tr>
<th>Adj. (m.sg)</th>
<th>Comparative</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ṭu-nasib</td>
<td>ansab</td>
<td>appropriate</td>
</tr>
<tr>
<td>b. ṭu-himm</td>
<td>ahamm</td>
<td>important</td>
</tr>
<tr>
<td>c. ṭa-gnum</td>
<td>agann</td>
<td>crazy</td>
</tr>
<tr>
<td>d. ḫalasa:n</td>
<td>aksal</td>
<td>lazy</td>
</tr>
<tr>
<td>e. ta'ba:n</td>
<td>at'ab</td>
<td>tired</td>
</tr>
<tr>
<td>f. ruṣajja:s</td>
<td>arfas</td>
<td>thin</td>
</tr>
<tr>
<td>g. ruṣajjar</td>
<td>arṣar</td>
<td>short</td>
</tr>
<tr>
<td>i. ruṣajja:b</td>
<td>arṣab</td>
<td>near</td>
</tr>
<tr>
<td>j. ṭalajja:j</td>
<td>arall</td>
<td>few</td>
</tr>
<tr>
<td>k. ḥinajjja:n</td>
<td>aḥann</td>
<td>kind</td>
</tr>
</tbody>
</table>

The adjectives in (22a–c) have a derivational prefix, while the adjectives in (22d–e) have a derivational suffix. The adjectival bases in (22f–k) arguably have the shape of a templatic diminutive, characterized by the infinal geminate glide [-jj-] between the second and third root consonants. All these affixal consonants are ignored in the formation of the comparative: we see in the middle column of (22) that the comparative template (aCCaC/aCaC) takes only the three root consonants of the base, regardless of affixal material.

A further observation that supports the root-based nature of the Arabic comparative word-formation process is that, in adjectives where a root glide has undergone some phonological change at the surface level, the underlying form of that root nonetheless appears in the templatic comparative. Consider the four forms in (23), all of which contain an underlying root glide that does not surface faithfully in the positive adjective. (The underlying root consonants for each form are noted in the third column).

(23) Comparatives with root glides that undergo change

<table>
<thead>
<tr>
<th>Adj. (m.sg)</th>
<th>Comparative</th>
<th>Underlying root</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ṭu-fid</td>
<td>afjad (*[afjād])</td>
<td>ǧid</td>
<td>beneficial</td>
</tr>
<tr>
<td>b. ba:ji:rabz</td>
<td>abwa:rabz</td>
<td>bwa:rabz</td>
<td>spoiled</td>
</tr>
<tr>
<td>c. ba:ji:rab</td>
<td>abwa:rab ([abja:x])</td>
<td>bwa:rab</td>
<td>unpleasant</td>
</tr>
<tr>
<td>d. ba:ji:fan</td>
<td>abwa:fan</td>
<td>bwa:fan</td>
<td>trivial</td>
</tr>
</tbody>
</table>
As can be clearly seen from (23), the root consonants that appear in the templatic comparative match the underlying forms, even when those underlying forms are not manifested in the adjectival base. Consider, for instance, the first adjectival form (23a). Here, the underlying form of the adjective is */mu-fjîd/ where */mu/ is a derivational prefix. A regular phonological rule that assimilates the glide /j/ to a front vowel converts underlying */mu-fjîd/ to [mu-fi:d]. Thus, [j] does not surface in the base adjective [mu-fi:d]. Nonetheless, the comparative, [afi:ad], retains the [j] in its consonantal template, reflecting the underlying root (jîd); we never see an alternative version like */afi:da/ or */amfi:ad/, for instance. Similarly, in (23b), the underlying form of the adjective [ba:jîz’] ‘spoiled’ is /ba:wi’e/. (Note that the root glide must be underlyingly /w/ and not /j/ because of the verbal form [bawwaz’] ‘to spoil.’) The underlying form /ba:wi’e/ is, grammatically, an active participle of the Form 1 Arabic verb. As such, it is subject to a morphophonological rule that converts /w/ to [y] before /i/ (this rule also applies to (23c–d)). The comparative form, however, does not reflect this surface [j], although the hypothetical outcome [abjaz’] is certainly phonologically possible. Instead, the comparative [abwaz’] is used, reflecting the underlying /w/ in the consonantal root.

Overall, the examples in (23) demonstrate that the templatic comparative is built on the underlying root consonants of the positive adjective, rather than its surface form. Based on this observation, we can argue strongly that comparative formation in Egyptian Arabic is a morpheme-based process that relies on underlying consonantal roots as a base for word formation.

A third argument for the root-based nature of the Arabic comparative comes from a set of comparatives whose corresponding adjectival forms are not clear. Three examples are given in (24), with an explanation after each example as to why it does not seem to have a clear adjectival base:

(24) Comparatives where the base does not seem to be clear

a. [as’wab] ‘more correct’
   The base should be [s’ajib], but speakers do not seem to have this word in the dialect.

b. [azwa:z] ‘more polite’
   The suggested base is [zo:z], but [zo:z] is a noun.

c. [ahaz’] ‘more entitled’
   The base is not clear. One possible base is the adjective [haz:ni] ‘genuine’, but the meaning of the comparative does not match the meaning of the possible base.

Base-less comparatives like those in (24) present an apparent counterexample to some recent work focusing on the semantics and syntax of comparatives. Gran(2012), for instance, explicitly maintains that (p. 515), “Universally, the morphological form of a comparative is derived from (or identical to) its morphological
positive form.” For this claim to hold true, every morphologically marked comparative must have a precise base adjective. Thus, we should not expect a comparative like “taller” without the base “tall” (ignoring cases of suppletion like better/good). The Arabic examples in (23) and (24) seem to pose a problem for the universal claim cited in Grano (2012).

Overall, the evidence presented in this section suggests strongly that comparative formation in Arabic is a morpheme-based process. This conclusion, in turn, contradicts the strictly word-based (or stem-based) view of Arabic morphology put forward in McOmber (1995), Ratcliffe (1997, 1998) and Benamoun (1999). (I refer the reader to these works for the details of arguments in favor of the word-based position). While I certainly do not claim that all templatic morphology in Arabic is morpheme-based (see, e.g., McCarthy & Prince’s insightful (1990) analysis of the broken plural (and diminutive) for a clear example of word-based morphology), the evidence does strongly suggest the availability of both morpheme-based and word-based templatic morphology in Arabic. This conclusion coincides with the work of, e.g., Watson (2006); Idrissi et al. (2008). I leave for future research further investigation of the implications of this finding for Arabic morphology and the typology of comparatives.

8. Conclusion

This paper constitutes a first attempt at addressing a wide variety of issues involving the (morphological) templatic comparative in Egyptian Arabic. These issues include matters of morphosyntactic agreement and word order (especially in cases where the templatic comparative contrasts with the periphrastic comparative), templatic allomorphy, the nature of the gaps in adjectival forms (including the matter of color comparatives), the question of the comparative’s inflectional or derivational nature, and the issue of morpheme-versus word-based word-formation processes. There is nothing definitive about the conclusions reached in the current paper, and almost every issue raised in this paper is in need of further research. The extensibility of the preliminary findings in this paper to other dialects of Arabic also remains to be established. Further, note that the Arabic templatic comparative data discussed in this paper bear on larger morphological issues such as the nature of (word-based versus root-based) morphology and the functionality of the distinction between derivation and inflection in cases of where a morphological template is the sole indicator of morphological exponence. I leave these matters for future research.
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