To summarize, there are three kinds of variation in Arabic script

1. Calligraphic: free alternation, e.g., the qusayr or subscript alef as a random

variation for kasra in Mamluk calligraphy

2. Allographic: contextually conditioned, e.g., the qusayr or subscript alef

domesticed by Ottoman calligraphy as an obligatory replacement

of kasra when followed by (Farsi) Yeh

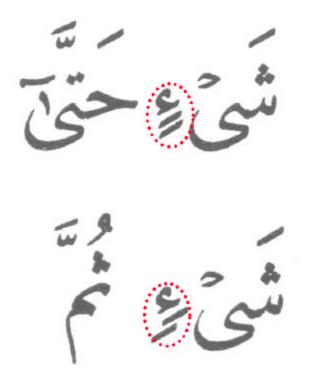
3. Graphemic: the variation is totally functional, e.g., the qusayr or subscript alef

to express a grapheme that differs from a kasra in the same

position, as Roozbeh argues is the case in Persian.

The proposed additions are not exhaustive. We still need to do some more work on Arabic encoding. The King Fuad Qur'an, commissioned by king Fuad of Egypt in 1923 constitutes an attempt to nullify the changes that had gradually crept into the Qur'an. This first typeset edition of the Qur'an introduces a number of orthographical peculiarities that need to be addressed, simply because this is the most widespread and widely quoted Mushaf in the Arab Islamic world.

A few examples:



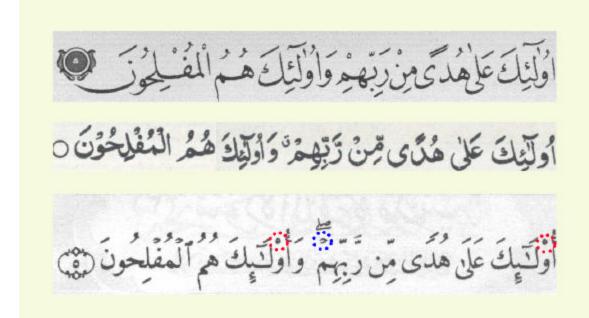


shape variation of the tanwiin (fathatan 064b, dammatan 064c, kasratan 064d) to transcribe phonetic variation the /n/ of the tanwîn, conditioned by the following consonant. This is old Andalusian practice reintroduced by the editors of the Fuad

Qur'an. It concerns not a phonetic but a a morpho-phonological alternation and therefore it is not easily predictable from the sound system, apart from the question whether phonetic rules should be built into script system at all. In other words: we need a double set of tanwiin signs.



The same Qur'an edition uses several functionally distinct signs for SUKUN 0652. Two of them are illustrated in the sample below.



- 1. The textbook sukun means: pronounce this consonant without a vowel (in the FQ it looks like a truncated letter jeem for jezm).
- 2. The second sukun means ignore this consonant! A totally different graphemic message to indicate "redundant" letters (the example shows /'ulaa'ika/ with short /u/ but spelled with a "redundant" waw).

These are graphemically distinct matters and therefore the second sukun should have a separate code point.

