Opposition about encode Coptic Epact numeral system in the Unicode Standard and ISO/IEC10646

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In RESOLUTION M57.16, WG2 accepts to encode 28 Coptic Numbers, in code positions 102E0 to 102FB: 27 numbers and 1 mark.

1. Numbers

In my opinion, the two sets, Rumi and Coptic, are the same numeral system. Only the shapes differ between them, which was mentioned previously in proposal for Rumi.

We are faced here with a numeral system used by many nations with variant names and shapes. In accordance with the Unicode principle that encodes characters and not shapes, with well-defined semantics, this system must be encoded only once, which has already been done. Encoding it only once will avoid any ambiguity in search engines and other automatic treatments. Indeed, smart fonts could offer many glyph variants adequate for any situation.

When the Rumi characters were encoded the first time, the chosen set of shapes was representative enough, even taking into account some "normal" differentiation in the glyphs, and the chosen name Rumi - which means 'foreign', is enough neutral enough to encompass the other localised names (Al-Andalus, Copt, Fes, Greek, ...). I think there is no problem with regard to the name, shape and properties. However, there is sincerely a big problem to encode it twice.

By the same principle, I personally don't accept the request to encode some characters/glyphs twice. With all due respect, there are many characters/glyphs that have been encoded twice and this has caused a serious problem for the automatic treatment of these characters.

2. Mark

In Arabic, two number mark-ups are used as shown in the following samples:

- 1. Mark over number, as is proposed in Coptic (See Figure 1).
- 2. Mark under number, as is U+0600 (See Figure 2).

Figure 1: Mark over number, as is proposed in Coptic
Abu al-Hasan al-Uqlidisi (920-980, Iraq-Iran), The Arithmetic of al-Uqlidisi
Mentioned in page 37 of: J. Lennart Berggren, Episodes in the Mathematics of Medieval
Islam, Springer-Verlag, New York, 1986, ISBN 0-387-96318-9

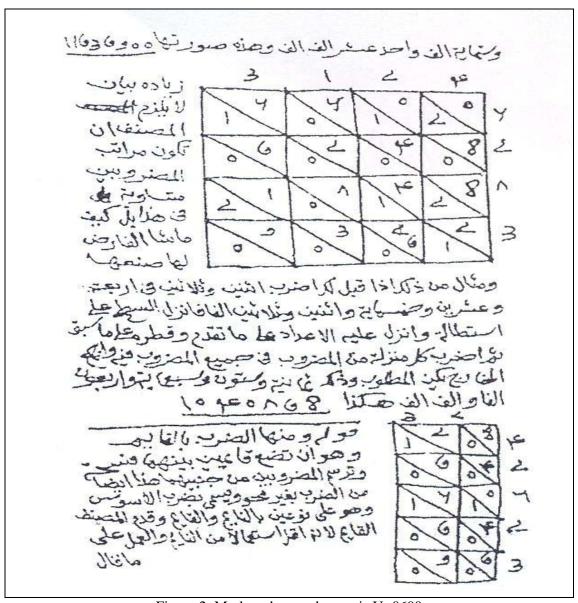


Figure 2: Mark under number, as is U+0600

Ali Ben Mohamed al-Qurayshi al-Qalasadi (about 1412-1486, Tunisia - Grenade), Sharh attalkhis, Manuscript Number 1477, Folio 29r, Ghotha Bibliotheca, Germany.

Mentioned in page 63 of: Abdeljaouad Mahdi, Les arithmétiques arabes (9e – 15e siècles), Editions Ibn Zeidoun, 2005, ISBN 7993-52-005-X

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