# **Proposal to encode three Arabic symbols**

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Date: September 9, 2020

## **Background**

We found three textual symbols commonly used in Arabic script that are not yet encoded in Unicode. One marks the end of texts, and the two others denote prices in Egyptian pounds or in its subdivision, in piastres. Encoding these will help with digitizing existing texts, as well as typesetting future material.

### **Proposal**

Encode the following three characters in the Unicode Standard:

Glyph	Code	Name
ς.	061D	ARABIC END OF TEXT MARK
4	0890	ARABIC POUND MARK ABOVE
	0891	ARABIC PIASTRE MARK ABOVE

## **Proposed properties**

#### UnicodeData.txt:

```
061D;ARABIC END OF TEXT MARK;Po;0;AL;;;;N;;;;
0890;ARABIC POUND MARK ABOVE;Cf;0;AN;;;;N;;;;
0891;ARABIC PIASTRE MARK ABOVE;Cf;0;AN;;;;N;;;;
```

### ArabicShaping.txt:

```
0890; ARABIC POUND MARK ABOVE; U; No_Joining_Group 0891; ARABIC PIASTRE MARK ABOVE; U; No Joining Group
```

#### SentenceBreakProperty.txt:

```
061D ; STerm # Po ARABIC END OF TEXT MARK
0890..0891 ; Format # Cf [2] ARABIC POUND MARK ABOVE..ARABIC PIASTRE MARK ABOVE
```

#### **Proplist.txt**:

```
0890..0891 ; Prepended_Concatenation_Mark # Cf [2] ARABIC POUND MARK ABOVE..

ARABIC PIASTRE MARK ABOVE
```

### The end of the text symbol

The end of the text symbol (علامة ختام الخطاب in Arabic, literally "end of speech sign") is used at the end of texts where a period would typically go. It is added after the last sentence.

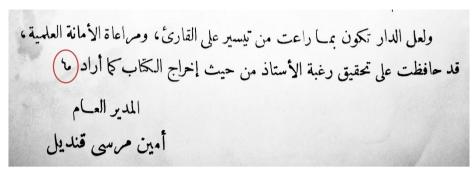


Figure 1. Diwan of Sahīm, Egyptian National Library printing press, 1950. (ديوان سحيم، مطبعة دار الكتب المصرية، ١٣٩٦هـ، ١٩٥٠م)

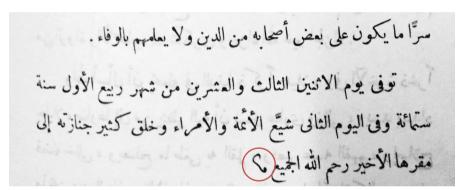


Figure 2

نيل المرام: التعليق على عمدة الأحكام لتقي الدين أبي محمد عبد الغني المقدسي الجماعيلي الحنبلي، حسن سليمان النوري وعلوي عباس المالكي، مطبعة مصحف مكة.



Figure 3. Handwritten sign, Cairo, Egypt, 2018.

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Figure 4. Arabic type case without marks, al-Amiria Printing Press, the composition workshop. (صورة صندوق جمع الحروف العربية غير المشكولة، الهيئة العامة لشئون المطابع الأميرية، ورشة الجمع)

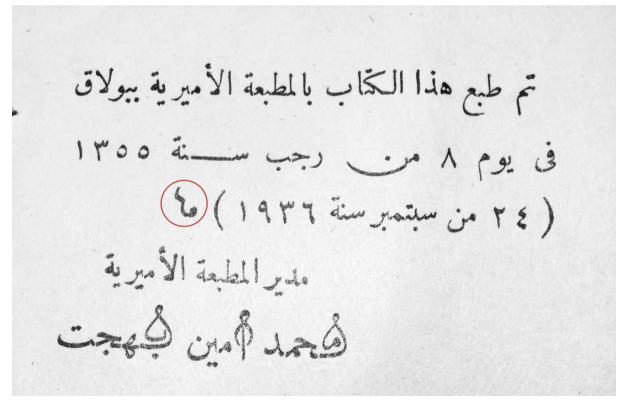


Figure 5. Arabic grammar, part two, Ministry of Public Knowledge, 1936. (كتاب قواعد اللغة العربية، الجزء الثاني، وزارة المعارف العمومية، ١٣٥٥هـ، ١٩٣٦م)

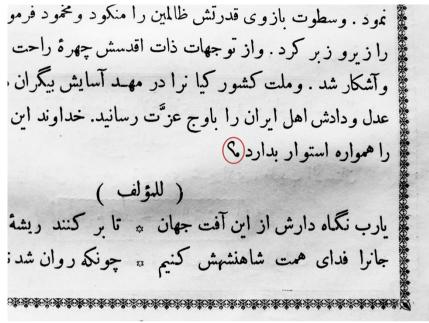


Figure 6. A rare example of the character appearing in Persian text in a book published in Egypt. Courtesy of Borna Izadpanah. From Mirza Fazlullah Rahbar, *Hakim Rahbar Book*, Cairo, probably 1930s. (كتاب حكيم رهبر، ميرزا فضل الله رهبر نيربزي شيرازي، المطبعة العصرية بمصر، قاهره، احتمالاً دههُ ١٩٣٠ م.)

### **Egyptian currency signs**

Egyptian pound (جنية مصرى) is informally written in Arabic as a usually dotless (but occasionally dotted) head of *jeem* above the amount, in a manner similar to other existing Arabic subtending or supertending marks at U+0600..U+0605. Egyptian piastre (قرش مصرى) is written using a mirrored version of the same symbols. Both symbols are commonly used in advertising and price tags, as well as in handwritten texts, but to the best of our knowledge they are not used in official material.



Figure 7. Handwritten sign using Egyptian pound symbol, Cairo, Egypt, 2019.











Figure 8. Various examples of the currency symbols seen in advertisement or price tags.



Figure 9. Fruit vendor in Cairo. Photographed by Tinou Bao in 2007. Source:

https://www.flickr.com/photos/57621379@N00/2066076908



Figure 10. Bookstore in Cairo. Photographed by Hatem Moushir in 2017. Source: <a href="https://commons.wikimedia.org/wiki/File:Soor\_el Azbakeya">https://commons.wikimedia.org/wiki/File:Soor\_el Azbakeya</a>, photo by Hatem Moushir 1.jpg

#### ISO/IEC JTC 1/SC 2/WG 2

# PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646.1.

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html</a> for guidelines and details before filling this form.

Please ensure you are using the latest Form from .http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.

See also .http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps.

A. Administrative	
1. Title: Proposal to encode three Arabic symbols	
2. Requester's name: Khaled Hosny and Roozbeh Pournader	
3. Requester type (Member body/Liaison/Individual contribution): Liaison co.	ntribution
4. Submission date:  5. Requester's reference (if applicable):	2, 2020
6. Choose one of the following:	
This is a complete proposal:	Yes
(or) More information will be provided later:	
B. Technical – General	
1. Choose one of the following:	
a. This proposal is for a new script (set of characters):	No
Proposed name of script:	
a. This proposal is for a new script (set of characters):  Proposed name of script:  b. The proposal is for addition of character(s) to an existing block:  Name of the existing block:  "Arabic" and "Arabic Extended in the existing block:	Yes
2. Number of characters in proposal:	3
3. Proposed category (select one from below - see section 2.2 of P&P document):	114:)
A-Contemporary X B.1-Specialized (small collection) B.2-Specialized (large C-Major extinct D-Attested extinct E-Minor extinct	collection)
C-Major extinct D-Attested extinct E-Minor extinct F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usa	ige symbols
4. Is a repertoire including character names provided?	Yes
a. If YES, are the names in accordance with the "character naming guidelines"	100
in Annex L of P&P document?	Yes
b. Are the character shapes attached in a legible form suitable for review?	Yes
5. Fonts related:	
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publish	ning the standard?
<ul><li>Khaled Hosny</li><li>b. Identify the party granting a license for use of the font by the editors (include address, e-mail.</li></ul>	Am site etc.)
b. Identify the party granting a license for use of the folio by the editors (include address, e-mail,  Khaled Hosny	, rip-site, etc.):
6. References:	
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?	Yes
b. Are published examples of use (such as samples from newspapers, magazines, or other source	es)
of proposed characters attached? Yes	
7. Special encoding issues:	
Does the proposal address other aspects of character data processing (if applicable) such as input	
presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)	? Yes
Character properties are provided	
8. Additional Information:	() 0 1 4 1 4 11 14
Submitters are invited to provide any additional information about Properties of the proposed Character in correct understanding of and correct linguistic processing of the proposed character(s) or script. Ex	
are: Casing information, Numeric information, Currency information, Display behaviour information s	such as line breaks, widths
etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, re	
contexts, Compatibility equivalence and other Unicode normalization related information. See the Un	nicode standard at
http://www.unicode.org for such information on other scripts. Also see Unicode Character Database	(
http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information need Unicode Technical Committee for inclusion in the Unicode Standard.	ted for consideration by the

<sup>.</sup>¹. Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

### C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
2. Has contact been made to members of the user community (for example: National Body,	
user groups of the script or characters, other experts, etc.)?	Yes
If YES, with whom? Khaled Hosny, one of the authors, is an expert living among the	user community
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	Yes
Reference:	
4. The context of use for the proposed characters (type of use; common or rare)	Common
Reference:	
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference: In Egypt and other Arabic-speaking countries	5
6. After giving due considerations to the principles in the P&P document must the proposed characters be ent	irely
in the BMP?	No
If YES, is a rationale provided?	
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	No
8. Can any of the proposed characters be considered a presentation form of an existing	
character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either	
existing characters or other proposed characters?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)	
to, or could be confused with, an existing character?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	Yes
If YES, is a rationale for such use provided?	Yes
If YES, reference: Similarity to existing character at U+0600U+0	0605
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	No
If YES, reference:	
12. Does the proposal contain characters with any special properties such as	
control function or similar semantics?	Yes
If YES, describe in detail (include attachment if necessary)	
See proposal	
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	
***************************************	