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Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation Internationale de Normalisation
Международная организация по стандартизации

Doc Type: **Working Group Document**
Title: **Preliminary proposal to encode the Bagam script in the UCS**
Source: **UC Berkeley Script Encoding Initiative (Universal Scripts Project)**
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Date: **2012-07-24**

This proposal gives preliminary information towards the encoding of an African script related to Bamum, known as the Bagam or Eghap script. This script was first described in 1921 by British military officer Louis William Gordon Malcolm, but the details of his description were lost until re-discovered in 1999 by Konrad Tuchscherer.

The Bagam script is named for Bagam, a town in the Western Province of Cameroon, about 70 km west of Foumban, the centre of the Bamoum kingdom. It was used for the Mengaka language (also known as Ghap, Benzing, and Megaka), spoken by a people who call themselves the Eghap, but who are called Bagam by outsiders. One issue is whether the name of the script should be Bagam or Eghap.

The Bagam script shows some influences from the Bamum script, and was itself devised around 1910; the Bamum script was devised around 1896 by Sultan Njoya and his scribes.

Bagam script has not been completely deciphered. Only one manuscript, deposited by Malcolm in the Haddon Library of Cambridge University, is known. This material, however, published by Tuchscherer (1999), gives values for a significant percentage of the Bagam characters. As with Bamum, the script consists of both logographic and phonetic characters. Rovenchak (2009) suggests that the former are native to the script, and the latter borrowed from Bagam. Malcolm's informant in 1921 made the same observation. Identification of the characters is problematic because of evident transcription errors made by Malcolm, who was not a linguist. Further study and comparison with the modern Mengaka lexicon are required.

In the charts, the first set of characters given are the logograms. Then follows a short set of numbers (evidently similar in structure to the Bamum numbers), and finally the syllables. Each character is named with the catalogue number assigned in Rovenchak 2009 and 2011. The logograms and numbers are followed by their readings, which derive from Malcom's manuscript; in these, ω is written oo and the apostrophe marking a glottal stop is represented by a hyphen. Since the decipherment of the script is incomplete, readings have only been given in informative notes in the syllables.

Bibliography.

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Rovenchak, Andrij. 2009. “Towards the decipherment of the Bagam script”, in *Afrikanistik online 2009*. http://www.afrikanistik-online.de/archiv/2009/1912/

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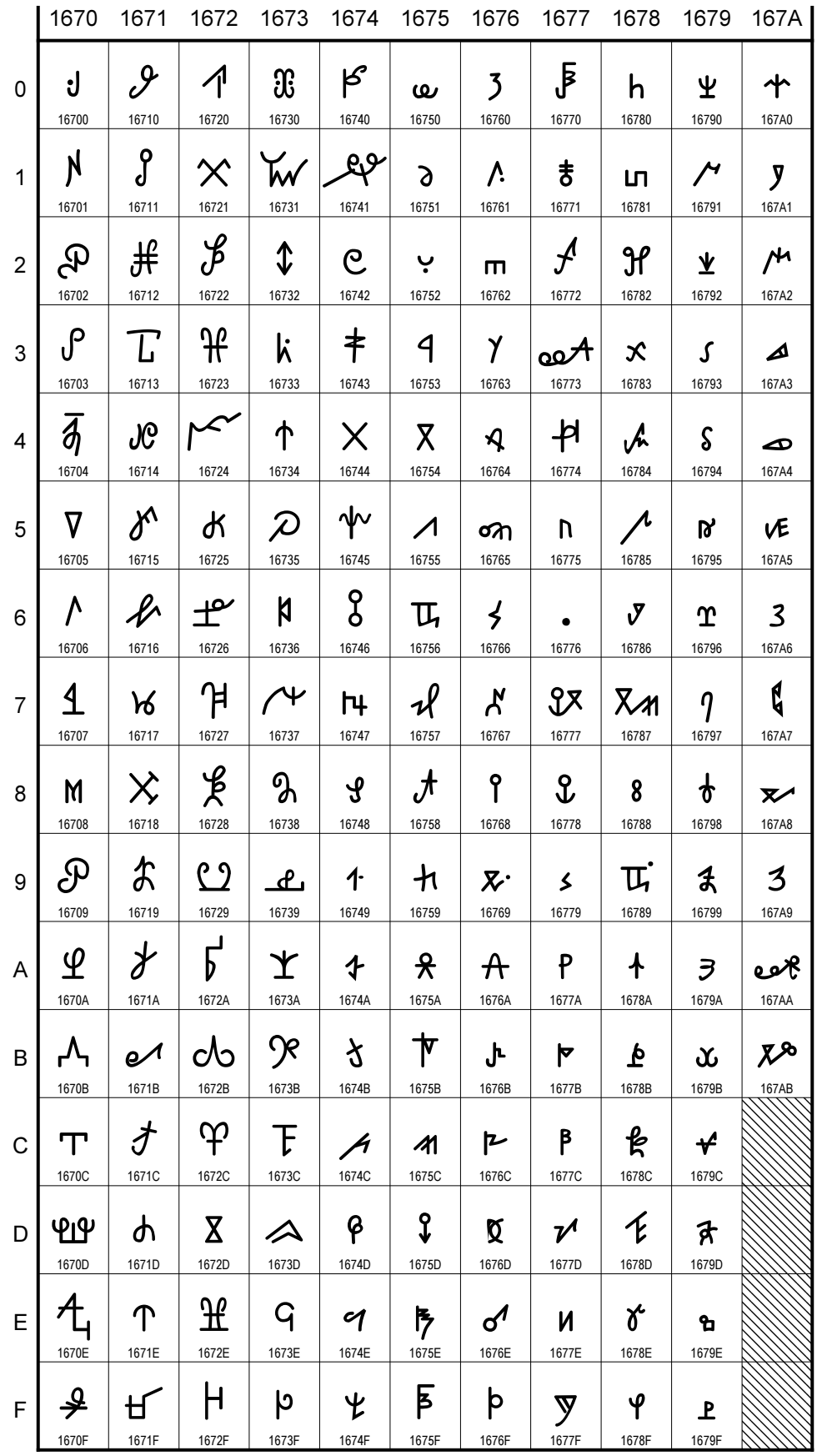
1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 167A
0 16700 16710 16720 16730 16740 16750 16760 16770 16780 16790 167A0
1 16701 16711 16721 16731 16741 16751 16761 16771 16781 16791 167A1
2 16702 16712 16722 16732 16742 16752 16762 16772 16782 16792 167A2
3 16703 16713 16723 16733 16743 16753 16763 16773 16783 16793 167A3
4 16704 16714 16724 16734 16744 16754 16764 16774 16784 16794 167A4
5 16705 16715 16725 16735 16745 16755 16765 16775 16785 16795 167A5
6 16706 16716 16726 16736 16746 16756 16766 16776 16786 16796 167A6
7 16707 16717 16727 16737 16747 16757 16767 16777 16787 16797 167A7
8 16708 16718 16728 16738 16748 16758 16768 16778 16788 16798 167A8
9 16709 16719 16729 16739 16749 16759 16769 16779 16789 16799 167A9
A 1670A 1671A 1672A 1673A 1674A 1675A 1676A 1677A 1678A 1679A 167AA
B 1670B 1671B 1672B 1673B 1674B 1675B 1676B 1677B 1678B 1679B 167AB
C 1670C 1671C 1672C 1673C 1674C 1675C 1676C 1677C 1678C 1679C
D 1670D 1671D 1672D 1673D 1674D 1675D 1676D 1677D 1678D 1679D
E 1670E 1671E 1672E 1673E 1674E 1675E 1676E 1677E 1678E 1679E
F 1670F 1671F 1672F 1673F 1674F 1675F 1676F 1677F 1678F 1679F

Logograms

16700 BAGAM LETTER B001 TI-I
16701 BAGAM LETTER B002 M-VE
16702 BAGAM LETTER B003 U-U
= w(oo)
16703 BAGAM LETTER B004 A-A
16704 BAGAM LETTER B005 GYIE
16705 BAGAM LETTER B006 HO-OH
= -o
16706 BAGAM LETTER B007 I-I
16707 BAGAM LETTER B008 TUNGOO
16708 BAGAM LETTER B009 PA-AP
16709 BAGAM LETTER B010 MUOO
1670A BAGAM LETTER B011 UNG
= -p
1670B BAGAM LETTER B012 N-DE
1670C BAGAM LETTER B013 UWAT
1670D BAGAM LETTER B014 SHE
1670E BAGAM LETTER B015 IYA-A
1670F BAGAM LETTER B016 TE
16710 BAGAM LETTER B017 OHRO
16711 BAGAM LETTER B018 LAN
16712 BAGAM LETTER B019 KU-UNG
= (ng)g/k-
16713 BAGAM LETTER B020 TE
16714 BAGAM LETTER B021 N-GA-A
16715 BAGAM LETTER B022 GE-ET
16716 BAGAM LETTER B023 YU-UH
16717 BAGAM LETTER B024 IYUNG
16718 BAGAM LETTER B025 IGHU-UNG
16719 BAGAM LETTER B026 IDZI-I
1671A BAGAM LETTER B027 N-GA
1671B BAGAM LETTER B028 IYA-A
1671C BAGAM LETTER B029 MOO-OO
1671D BAGAM LETTER B030 DZOO-OO
1671E BAGAM LETTER B031 N-TSEH
1671F BAGAM LETTER B032 M-BE
16720 BAGAM LETTER B033 NI-I
16721 BAGAM LETTER B034 N-DZOH
16722 BAGAM LETTER B035 IYE
16723 BAGAM LETTER B036 ME
16724 BAGAM LETTER B037 SOO
16725 BAGAM LETTER B038 IGHAT
16726 BAGAM LETTER B039 TSOO-OO
16727 BAGAM LETTER B040 N-NOO
16728 BAGAM LETTER B041 ME
16729 BAGAM LETTER B042 NOO
1672A BAGAM LETTER B043 POO-OO
1672B BAGAM LETTER B044 M-BEI
1672C BAGAM LETTER B045 PUOO
1672D BAGAM LETTER B046 N-DAP
= gw-
1672E BAGAM LETTER B047 TSEI
1672F BAGAM LETTER B048 NGGOO
16730 BAGAM LETTER B049 NE
= n(e)-
16731 BAGAM LETTER B050 KYI-I
16732 BAGAM LETTER B051 PI-I
16733 BAGAM LETTER B052 IYONG
16734 BAGAM LETTER B053 IYOO
16735 BAGAM LETTER B054 FA-A
16736 BAGAM LETTER B055 IZA-A
= v/f-
16737 BAGAM LETTER B056 FONG
16738 BAGAM LETTER B057 NGKA-A
16739 BAGAM LETTER B058 N-NAP
1673A BAGAM LETTER B059 UWA-A
1673B BAGAM LETTER B060 TINGGOO
1673C BAGAM LETTER B061 PI-I
1673D BAGAM LETTER B062 MI-I
1673E BAGAM LETTER B063 T-SE
1673F BAGAM LETTER B064 PEP
16740 BAGAM LETTER B065 ME
16741 BAGAM LETTER B066 NE
16742 BAGAM LETTER B067 M-BU
= l/r-
16743 BAGAM LETTER B068 NDZE
16744 BAGAM LETTER B069 KOO
16745 BAGAM LETTER B070 KU-UP
16746 BAGAM LETTER B071 MOO-OO
16747 BAGAM LETTER B072 SHHI

Numbers

16748 BAGAM LETTER B073 MOOOO
• used for digit one
16749 BAGAM LETTER B074 YE-PA
• used for digit two
1674A BAGAM LETTER B075 KYET
• used for digit three
1674B BAGAM LETTER B076 KUA
• used for digit four
1674C BAGAM LETTER B077 TANG
• used for digit five
1674D BAGAM LETTER B078 NTO
• used for digit six
1674E BAGAM LETTER B079 SEMBA
• used for digit seven
1674F BAGAM LETTER B080 FOO-OO
• used for digit eight
16750 BAGAM LETTER B081 PFOO-OO
• used for digit nine
16751 BAGAM LETTER B082 VUE
• used for number ten

Syllables

16752 BAGAM LETTER B083
16753 BAGAM LETTER B084
16754 BAGAM LETTER B085
= -o
16755 BAGAM LETTER B086
= ts-, dz-, dzh-, s-?
→ 16706 bagam letter b007 i-i
16756 BAGAM LETTER B087
= n-, m-?
16757 BAGAM LETTER B088
= ts-
16758 BAGAM LETTER B089
= -a
16759 BAGAM LETTER B090
= ts-

1675A BAGAM LETTER B091
= -e, -i, ye, yi
1675B BAGAM LETTER B092
= f(oo)-
1675C BAGAM LETTER B093
= -p
1675D BAGAM LETTER B094
= mw-
1675E BAGAM LETTER B095
= ye
1675F BAGAM LETTER B096
= m(e)-
16760 BAGAM LETTER B097
= -i
16761 BAGAM LETTER B098
= n-
16762 BAGAM LETTER B099
= n(a)-
16763 BAGAM LETTER B100
= -t
16764 BAGAM LETTER B101
= ku-
16765 BAGAM LETTER B102
= (m)b-
16766 BAGAM LETTER B103
= -u
16767 BAGAM LETTER B104
= -u
16768 BAGAM LETTER B105
= t(u)-
16769 BAGAM LETTER B106
= ng-
1676A BAGAM LETTER B107
= m(ii)-
1676B BAGAM LETTER B108
= -i
1676C BAGAM LETTER B109
1676D BAGAM LETTER B110
1676E BAGAM LETTER B111
= s-
1676F BAGAM LETTER B112
= t-
16770 BAGAM LETTER B113
= m(i)-
16771 BAGAM LETTER B114
= k(i)-
16772 BAGAM LETTER B115
= gy
16773 BAGAM LETTER B116
16774 BAGAM LETTER B117
16775 BAGAM LETTER B118
16776 BAGAM LETTER B119
= k-
16777 BAGAM LETTER B120
= mong
16778 BAGAM LETTER B121
= m(o)-
16779 BAGAM LETTER B122
= -i
1677A BAGAM LETTER B123
= nd-
1677B BAGAM LETTER B124
1677C BAGAM LETTER B125
1677D BAGAM LETTER B126
= dz-
1677E BAGAM LETTER B127
1677F BAGAM LETTER B128
= ts-
16780 BAGAM LETTER B129
16781 BAGAM LETTER B130
= ndz-, ndzh-
16782 BAGAM LETTER B131
16783 BAGAM LETTER B132
= (ng)g-
16784 BAGAM LETTER B133
= m(a)-
16785 BAGAM LETTER B134
16786 BAGAM LETTER B135
= iy
16787 BAGAM LETTER B136
= -op
16788 BAGAM LETTER B137
16789 BAGAM LETTER B138
= -ng
1678A BAGAM LETTER B139
= hin
1678B BAGAM LETTER B140
1678C BAGAM LETTER B141
1678D BAGAM LETTER B142
1678E BAGAM LETTER B143
1678F BAGAM LETTER B144
16790 BAGAM LETTER B145
16791 BAGAM LETTER B146
= f(a)-
16792 BAGAM LETTER B147
= -a?
→ 1673A bagam letter b059 uwa-a
16793 BAGAM LETTER B148
= -a
16794 BAGAM LETTER B149
= -a
16795 BAGAM LETTER B150
= -i
16796 BAGAM LETTER B151
= s(i)-
16797 BAGAM LETTER B152
= m(oo)-
16798 BAGAM LETTER B153
= -(ng)g-?
→ 1671A bagam letter b027 n-ga
16799 BAGAM LETTER B154
= iy
1679A BAGAM LETTER B155
1679B BAGAM LETTER B156
= k(a)-
1679C BAGAM LETTER B157
= s(a)-
1679D BAGAM LETTER B158
1679E BAGAM LETTER B159
1679F BAGAM LETTER B160
167A0 BAGAM LETTER B161
167A1 BAGAM LETTER B162
167A2 BAGAM LETTER B163
167A3 BAGAM LETTER B164
167A4 BAGAM LETTER B165

167A5 BAGAM LETTER B166
= k(a)-
167A6 BAGAM LETTER B167
= shi-
167A7 BAGAM LETTER B168
= ng-
167A8 BAGAM LETTER B169
= ko-
167A9 BAGAM LETTER B180
167AA BAGAM LETTER B181
= pi
167AB BAGAM LETTER B182
= kopi

A. Administrative

1. Title

Preliminary proposal to encode the Bagam script in the UCS

2. Requester's name

Michael Everson

3. Requester type (Member body/Liaison/Individual contribution)

Individual contribution.

4. Submission date

2012-07-24

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

No.

6b. More information will be provided later

Yes.

B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

Yes.

1b. Proposed name of script

Bagam.

1c. The proposal is for addition of character(s) to an existing block

No.

1d. Name of the existing block

2. Number of characters in proposal

172.

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

Category B-2.

4a. Is a repertoire including character names provided?

Yes.

4b. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?

Yes.

4c. Are the character shapes attached in a legible form suitable for review?

Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Andrij Rovenchak and Michael Everson.

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Michael Everson, Fontographer.

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes.

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

No.

7. 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)?

No.

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

See above.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No.

2a. 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.

2b. If YES, with whom?

Konrad Tuchscherer, Andrij Rovenchak.

2c. 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?
Africanists and Bantuists.
4a. The context of use for the proposed characters (type of use; common or rare)
Used historically; rare.
4b. Reference
5a. Are the proposed characters in current use by the user community?
No.
5b. If YES, where?
6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?
No.
6b. If YES, is a rationale provided?
6c. If YES, reference
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?
Yes.
8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?
No. Genetic similarities to Bamum are apparent, however.
8b. If YES, is a rationale for its inclusion provided?
8c. If YES, reference
9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?
No.
9b. If YES, is a rationale for its inclusion provided?
9c. If YES, reference
10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?
No.
10b. If YES, is a rationale for its inclusion provided?
10c. If YES, reference
11a. Does the proposal include use of combining characters and/or use of composite sequences?
No.
11b. If YES, is a rationale for such use provided?
11c. If YES, reference
11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
No.
11e. If YES, reference
12a. Does the proposal contain characters with any special properties such as control function or similar semantics?
No.
12b. If YES, describe in detail (include attachment if necessary)
13a. Does the proposal contain any Ideographic compatibility character(s)?
No.
13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?