

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 for encoding the Meroitic script in the SMP of the UCS

**Source:** Michael Everson

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**Date:** 2008-08-04

This document replaces N2134 (1999-10-02), N1638 (1997-09-18), and contains the proposal summary form.

**1. Introduction.** The Meroitic script appeared with the rise of the Meroitic Kingdom in the third century BCE, though Egyptian writing (both hieroglyphic and demotic) would certainly have been known and was used previously in the Nubian city of Meroë, a city which is about 6 km north-east of the modern Kabushiya station near Shendi, Sudan, about 200 km north-east of modern Khartoum. Meroitic was used until some time after the fall of the Meroitic Empire in the first half of the fourth century CE. The values of the script's characters are known, but the language itself remains unknown, apart from names and a few other words.

**2. Structure.** The script has a monumental form, derived from Egyptian Hieroglyphs, and a cursive form, derived from Egyptian Demotic, which was used considerably more frequently than the monumental form. Although there is a one-to-one relationship between Hieroglyphic Meroitic and Demotic Meroitic, the argument that the two should be treated as font variants is not compelling. Publications which cite Meroitic in the original script rather than in transliteration regularly preserve the distinction between Hieroglyphic and Demotic.

It is worth noting that while Hieroglyphic Egyptian and Hieratic Egyptian are unifiable with one another, Demotic Egyptian is not unifiable with either. Meroitic is *typically* written in its Demotic form. Not a single glyph between Hieroglyphic Meroitic and Demotic Meroitic is similar enough to its counterpart to indicate a “glyph variation” relationship as such a relationship is typically understood. Again, the Hieratic vs. Demotic distinction applies. Like Old Nuskhuri Georgian and modern Mkhedruli Georgian, the Meroitic script is really two scripts used for the same language. Scholars need to be able to distinguish, in plain text, Hieroglyphic Meroitic from Demotic Meroitic.

**3. Directionality.** The primary direction of writing is right-to-left as for Egyptian texts, though (as for Egyptian) left-to-right is used decoratively in hieroglyphic columns. Egyptian has both right-to-left and left-to-right directionality; Egyptian has been encoded with left-to-right directionality as this is the predominant modern usage for Egyptian text—but for Meroitic right-to-left directionality is preferred, in part because no bilingual texts have come to light. Unlike Egyptian, where one reads into the faces of the people and animals, in Meroitic, the reading direction follows the way the people and animals are looking.

**4. Punctuation.** Word dividers are employed more or less regularly. [TO BE DESCRIBED AND ENUMERATED.]

**5. Numbers.** Meroitic numbers are fairly well known. Ones, tens, hundreds, and thousands are known; characters for 60, 90, and 900 are not yet known; neither are the numbers for 4,000, 6,000, 7,000, 8,000, and 9,000, though the number for 10,000 is cited in secondary literature (a number chart, see Figure 4). There is a system to the number shapes, as there are in Egyptian Hieratic, so gaps have been left in the code table for the numbers as yet unattested.

**6. Names and ordering.** Most of the Meroitic letters have readings with an inherent -*a* (unless a vowel follows the consonant), though those letters may also represent their consonant without the -*a* vowel.

**7. Issues.** Twenty-four symbols are given in the attached code table. A number of these are known to be used in conjunction with numbers and are perhaps determinatives of different types of goods. A number of these with very similar glyphs may not be unique characters at all. Further study of these is required.

## 8. Unicode Character Properties.

10980;MEROITIC HIEROGLYPHIC LETTER A;Lo;0;R;;;;;N;;;;;  
10981;MEROITIC HIEROGLYPHIC LETTER E;Lo;0;R;;;;;N;;;;;  
10982;MEROITIC HIEROGLYPHIC LETTER I;Lo;0;R;;;;;N;;;;;  
10983;MEROITIC HIEROGLYPHIC LETTER O;Lo;0;R;;;;;N;;;;;  
10984;MEROITIC HIEROGLYPHIC LETTER YA;Lo;0;R;;;;;N;;;;;  
10985;MEROITIC HIEROGLYPHIC LETTER WA;Lo;0;R;;;;;N;;;;;  
10986;MEROITIC HIEROGLYPHIC LETTER BA;Lo;0;R;;;;;N;;;;;  
10987;MEROITIC HIEROGLYPHIC LETTER BA-2;Lo;0;R;;;;;N;;;;;  
10988;MEROITIC HIEROGLYPHIC LETTER PA;Lo;0;R;;;;;N;;;;;  
10989;MEROITIC HIEROGLYPHIC LETTER MA;Lo;0;R;;;;;N;;;;;  
1098A;MEROITIC HIEROGLYPHIC LETTER NA;Lo;0;R;;;;;N;;;;;  
1098B;MEROITIC HIEROGLYPHIC LETTER NA-2;Lo;0;R;;;;;N;;;;;  
1098C;MEROITIC HIEROGLYPHIC LETTER NE;Lo;0;R;;;;;N;;;;;  
1098D;MEROITIC HIEROGLYPHIC LETTER NE-2;Lo;0;R;;;;;N;;;;;  
1098E;MEROITIC HIEROGLYPHIC LETTER RA;Lo;0;R;;;;;N;;;;;  
1098F;MEROITIC HIEROGLYPHIC LETTER RA-2;Lo;0;R;;;;;N;;;;;  
10990;MEROITIC HIEROGLYPHIC LETTER LA;Lo;0;R;;;;;N;;;;;  
10991;MEROITIC HIEROGLYPHIC LETTER KHA;Lo;0;R;;;;;N;;;;;  
10992;MEROITIC HIEROGLYPHIC LETTER HHA;Lo;0;R;;;;;N;;;;;  
10993;MEROITIC HIEROGLYPHIC LETTER SA;Lo;0;R;;;;;N;;;;;  
10994;MEROITIC HIEROGLYPHIC LETTER SA-2;Lo;0;R;;;;;N;;;;;  
10995;MEROITIC HIEROGLYPHIC LETTER SE;Lo;0;R;;;;;N;;;;;  
10996;MEROITIC HIEROGLYPHIC LETTER KA;Lo;0;R;;;;;N;;;;;  
10997;MEROITIC HIEROGLYPHIC LETTER QA;Lo;0;R;;;;;N;;;;;  
10998;MEROITIC HIEROGLYPHIC LETTER TA;Lo;0;R;;;;;N;;;;;  
10999;MEROITIC HIEROGLYPHIC LETTER TA-2;Lo;0;R;;;;;N;;;;;  
1099A;MEROITIC HIEROGLYPHIC LETTER TE;Lo;0;R;;;;;N;;;;;  
1099B;MEROITIC HIEROGLYPHIC LETTER TE-2;Lo;0;R;;;;;N;;;;;  
1099C;MEROITIC HIEROGLYPHIC LETTER TO;Lo;0;R;;;;;N;;;;;  
1099D;MEROITIC HIEROGLYPHIC LETTER DA;Lo;0;R;;;;;N;;;;;  
1099E;MEROITIC DEMOTIC LETTER A;Lo;0;R;;;;;N;;;;;  
1099F;MEROITIC DEMOTIC LETTER E;Lo;0;R;;;;;N;;;;;  
109A0;MEROITIC DEMOTIC LETTER I;Lo;0;R;;;;;N;;;;;  
109A1;MEROITIC DEMOTIC LETTER O;Lo;0;R;;;;;N;;;;;  
109A2;MEROITIC DEMOTIC LETTER YA;Lo;0;R;;;;;N;;;;;  
109A3;MEROITIC DEMOTIC LETTER WA;Lo;0;R;;;;;N;;;;;  
109A4;MEROITIC DEMOTIC LETTER BA;Lo;0;R;;;;;N;;;;;  
109A5;MEROITIC DEMOTIC LETTER PA;Lo;0;R;;;;;N;;;;;  
109A6;MEROITIC DEMOTIC LETTER MA;Lo;0;R;;;;;N;;;;;  
109A7;MEROITIC DEMOTIC LETTER NA;Lo;0;R;;;;;N;;;;;  
109A8;MEROITIC DEMOTIC LETTER NE;Lo;0;R;;;;;N;;;;;  
109A9;MEROITIC DEMOTIC LETTER RA;Lo;0;R;;;;;N;;;;;  
109AA;MEROITIC DEMOTIC LETTER LA;Lo;0;R;;;;;N;;;;;  
109AB;MEROITIC DEMOTIC LETTER KHA;Lo;0;R;;;;;N;;;;;  
109AC;MEROITIC DEMOTIC LETTER HHA;Lo;0;R;;;;;N;;;;;

109AD;MEROITIC DEMOTIC LETTER SA;Lo;0;R;;;;N;;;;  
109AE;MEROITIC DEMOTIC LETTER SE;Lo;0;R;;;;N;;;;  
109AF;MEROITIC DEMOTIC LETTER KA;Lo;0;R;;;;N;;;;  
109B0;MEROITIC DEMOTIC LETTER QA;Lo;0;R;;;;N;;;;  
109B1;MEROITIC DEMOTIC LETTER TA;Lo;0;R;;;;N;;;;  
109B2;MEROITIC DEMOTIC LETTER TE;Lo;0;R;;;;N;;;;  
109B3;MEROITIC DEMOTIC LETTER TO;Lo;0;R;;;;N;;;;  
109B4;MEROITIC DEMOTIC LETTER DA;Lo;0;R;;;;N;;;;  
109B5;MEROITIC FRACTION ONE HALF;No;0;R;;;;1/2;N;;;;  
109B6;MEROITIC FRACTION ONE TENTH;No;0;R;;;;1/10;N;;;;  
109B7;MEROITIC FRACTION TWO TENTHS;No;0;R;;;;2/10;N;;;;  
109B8;MEROITIC FRACTION THREE TENTHS;No;0;R;;;;3/10;N;;;;  
109B9;MEROITIC FRACTION FOUR TENTHS;No;0;R;;;;4/10;N;;;;  
109BA;MEROITIC FRACTION FIVE TENTHS;No;0;R;;;;5/10;N;;;;  
109BB;MEROITIC FRACTION SIX TENTHS;No;0;R;;;;6/10;N;;;;  
109BC;MEROITIC FRACTION SEVEN TENTHS;No;0;R;;;;7/10;N;;;;  
109BD;MEROITIC FRACTION EIGHT TENTHS;No;0;R;;;;8/10;N;;;;  
109BE;MEROITIC FRACTION NINE TENTHS;No;0;R;;;;9/10;N;;;;  
109BF;MEROITIC NUMBER ONE;No;0;R;;;;1;N;;;;  
109C0;MEROITIC NUMBER TWO;No;0;R;;;;2;N;;;;  
109C1;MEROITIC NUMBER THREE;No;0;R;;;;3;N;;;;  
109C2;MEROITIC NUMBER FOUR;No;0;R;;;;4;N;;;;  
109C3;MEROITIC NUMBER FIVE;No;0;R;;;;5;N;;;;  
109C4;MEROITIC NUMBER SIX;No;0;R;;;;6;N;;;;  
109C5;MEROITIC NUMBER SEVEN;No;0;R;;;;7;N;;;;  
109C6;MEROITIC NUMBER EIGHT;No;0;R;;;;8;N;;;;  
109C7;MEROITIC NUMBER NINE;No;0;R;;;;9;N;;;;  
109C8;MEROITIC NUMBER TEN;No;0;R;;;;10;N;;;;  
109C9;MEROITIC NUMBER TWENTY;No;0;R;;;;20;N;;;;  
109CA;MEROITIC NUMBER THIRTY;No;0;R;;;;30;N;;;;  
109CB;MEROITIC NUMBER FORTY;No;0;R;;;;40;N;;;;  
109CC;MEROITIC NUMBER FIFTY;No;0;R;;;;50;N;;;;  
109CE;MEROITIC NUMBER SEVENTY;No;0;R;;;;70;N;;;;  
109CF;MEROITIC NUMBER EIGHTY;No;0;R;;;;80;N;;;;  
109D1;MEROITIC NUMBER ONE HUNDRED;No;0;R;;;;100;N;;;;  
109D2;MEROITIC NUMBER TWO HUNDRED;No;0;R;;;;200;N;;;;  
109D3;MEROITIC NUMBER THREE HUNDRED;No;0;R;;;;300;N;;;;  
109D4;MEROITIC NUMBER FOUR HUNDRED;No;0;R;;;;400;N;;;;  
109D5;MEROITIC NUMBER FIVE HUNDRED;No;0;R;;;;500;N;;;;  
109D6;MEROITIC NUMBER SIX HUNDRED;No;0;R;;;;600;N;;;;  
109D7;MEROITIC NUMBER SEVEN HUNDRED;No;0;R;;;;700;N;;;;  
109D8;MEROITIC NUMBER EIGHT HUNDRED;No;0;R;;;;800;N;;;;  
109DA;MEROITIC NUMBER ONE THOUSAND;No;0;R;;;;1000;N;;;;  
109DB;MEROITIC NUMBER TWO THOUSAND;No;0;R;;;;2000;N;;;;  
109DC;MEROITIC NUMBER THREE THOUSAND;No;0;R;;;;3000;N;;;;  
109DE;MEROITIC NUMBER FIVE THOUSAND;No;0;R;;;;5000;N;;;;  
109E3;MEROITIC NUMBER TEN THOUSAND;No;0;R;;;;10000;N;;;;  
109E4;MEROITIC LOGOGRAM RMT;Lo;0;R;;;;N;;;;  
109E5;MEROITIC LOGOGRAM IMN;Lo;0;R;;;;N;;;;  
109E6;MEROITIC SYMBOL VIDJ;So;0;R;;;;N;;;;  
109E7;MEROITIC SYMBOL VIDJ-2;So;0;R;;;;N;;;;  
109E8;MEROITIC SYMBOL FLAG;So;0;R;;;;N;;;;  
109E9;MEROITIC SYMBOL FLAG-2;So;0;R;;;;N;;;;  
109EA;MEROITIC SYMBOL SKEIN;So;0;R;;;;N;;;;  
109EB;MEROITIC SYMBOL GOURD;So;0;R;;;;N;;;;  
109EC;MEROITIC SYMBOL CURL;So;0;R;;;;N;;;;  
109ED;MEROITIC SYMBOL EAR OF MAIZE;So;0;R;;;;N;;;;  
109EE;MEROITIC SYMBOL ARROW;So;0;R;;;;N;;;;  
109EF;MEROITIC SYMBOL ARROW-2;So;0;R;;;;N;;;;  
109F0;MEROITIC SYMBOL ARROW-3;So;0;R;;;;N;;;;  
109F1;MEROITIC SYMBOL LEFT FORK;So;0;R;;;;N;;;;  
109F2;MEROITIC SYMBOL RIGHT FORK;So;0;R;;;;N;;;;  
109F3;MEROITIC SYMBOL SYMMETRICAL FORK;So;0;R;;;;N;;;;  
109F4;MEROITIC SYMBOL SYMMETRICAL FORK WITH HAT;So;0;R;;;;N;;;;  
109F5;MEROITIC SYMBOL SYMMETRICAL FORK WITH INVERTED HAT;So;0;R;;;;N;;;;  
109F6;MEROITIC SYMBOL BEAN;So;0;R;;;;N;;;;  
109F7;MEROITIC SYMBOL BEAN-2;So;0;R;;;;N;;;;  
109F8;MEROITIC SYMBOL BEAN-3;So;0;R;;;;N;;;;  
109F9;MEROITIC SYMBOL HAMMER;So;0;R;;;;N;;;;  
109FA;MEROITIC SYMBOL FENCED LETTER NE;So;0;R;;;;N;;;;

109FB;MEROITIC SYMBOL JAR;So;0;R;;;;N;;;;  
109FC;MEROITIC SYMBOL OFFERING TABLE;So;0;R;;;;N;;;;

## 9. Bibliography.

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	1098	1099	109A	109B	109C	109D	109E	109F
0								
1								
2								
3								
4								
5								
6								
7								
8								
9								
A								
B								
C								
D								
E								
F								

**Hieroglyphic alphabet**

- 10980 ⲁ MEROITIC HIEROGLYPHIC LETTER A  
→ 13000 ⲁ egyptian hieroglyph a001
- 10981 Ⲃ MEROITIC HIEROGLYPHIC LETTER E  
→ 13184 Ⲃ egyptian hieroglyph h006
- 10982 ⲃ MEROITIC HIEROGLYPHIC LETTER I  
→ 1301E ⲃ egyptian hieroglyph a026
- 10983 Ⲅ MEROITIC HIEROGLYPHIC LETTER O  
→ 130FE Ⲅ egyptian hieroglyph f001
- 10984 ⲅ MEROITIC HIEROGLYPHIC LETTER YA  
→ 131CC ⲅ egyptian hieroglyph m017a
- 10985 Ⲇ MEROITIC HIEROGLYPHIC LETTER WA  
→ 1336F Ⲇ egyptian hieroglyph v004
- 10986 ⲇ MEROITIC HIEROGLYPHIC LETTER BA  
→ 130DE ⲇ egyptian hieroglyph e011
- 10987 Ⲉ MEROITIC HIEROGLYPHIC LETTER BA-2  
→ 130C0 Ⲉ egyptian hieroglyph d058
- 10988 ⲉ MEROITIC HIEROGLYPHIC LETTER PA  
→ 132AA □ egyptian hieroglyph q003
- 10989 Ⲋ MEROITIC HIEROGLYPHIC LETTER MA  
→ 13153 Ⲋ egyptian hieroglyph g017
- 1098A ⲋ MEROITIC HIEROGLYPHIC LETTER NA  
→ 13217 ⲋ egyptian hieroglyph n035a
- 1098B Ⲍ MEROITIC HIEROGLYPHIC LETTER NA-2  
→ 13216 Ⲍ egyptian hieroglyph n035
- 1098C ⲍ MEROITIC HIEROGLYPHIC LETTER NE  
→ 131D2 ⲍ egyptian hieroglyph m022a
- 1098D Ⲏ MEROITIC HIEROGLYPHIC LETTER NE-2
- 1098E ⲏ MEROITIC HIEROGLYPHIC LETTER RA  
→ 1308B ⲏ egyptian hieroglyph d021
- 1098F Ⲑ MEROITIC HIEROGLYPHIC LETTER RA-2
- 10990 ⲑ MEROITIC HIEROGLYPHIC LETTER LA  
→ 130ED ⲑ egyptian hieroglyph e023
- 10991 Ⲓ MEROITIC HIEROGLYPHIC LETTER KHA  
→ 1340D Ⲓ egyptian hieroglyph aa001
- 10992 ⲓ MEROITIC HIEROGLYPHIC LETTER HHA  
→ 131BC ⲓ egyptian hieroglyph m012
- 10993 Ⲕ MEROITIC HIEROGLYPHIC LETTER SA  
→ 131B7 Ⲕ egyptian hieroglyph m008
- 10994 ⲕ MEROITIC HIEROGLYPHIC LETTER SA-2  
→ 13283 ⲕ egyptian hieroglyph o034
- 10995 Ⲗ MEROITIC HIEROGLYPHIC LETTER SE  
→ 133DB Ⲗ egyptian hieroglyph y001
- 10996 ⲗ MEROITIC HIEROGLYPHIC LETTER KA  
→ 1316C ⲗ egyptian hieroglyph g038
- 10997 Ⲙ MEROITIC HIEROGLYPHIC LETTER QA  
→ 1320E Ⲙ egyptian hieroglyph n029
- 10998 ⲙ MEROITIC HIEROGLYPHIC LETTER QA-2  
→ 1320E ⲙ egyptian hieroglyph n029
- 10999 Ⲛ MEROITIC HIEROGLYPHIC LETTER TA  
→ 1337F Ⲛ egyptian hieroglyph v013
- 1099A ⲛ MEROITIC HIEROGLYPHIC LETTER TA-2  
→ 1337F ⲛ egyptian hieroglyph v013
- 1099B Ⲝ MEROITIC HIEROGLYPHIC LETTER TA-3  
→ 131FE Ⲝ egyptian hieroglyph n016
- 1099C ⲝ MEROITIC HIEROGLYPHIC LETTER TE  
→ 131FE ⲝ egyptian hieroglyph n016  
→ 13254 □ egyptian hieroglyph o004

- 1099D ⲟ MEROITIC HIEROGLYPHIC LETTER TE-2  
→ 13254 □ egyptian hieroglyph o004
- 1099E Ⲡ MEROITIC HIEROGLYPHIC LETTER TO  
→ 13111 Ⲡ egyptian hieroglyph f018
- 1099F ⲡ MEROITIC HIEROGLYPHIC LETTER DA  
→ 13080 ⲡ egyptian hieroglyph d010

**Demotic alphabet**

- 109A0 ⲢⲢ MEROITIC DEMOTIC LETTER A
- 109A1 Ⲣ MEROITIC DEMOTIC LETTER E
- 109A2 Ⲣⲣ MEROITIC DEMOTIC LETTER I
- 109A3 ⲢⲤ MEROITIC DEMOTIC LETTER O
- 109A4 Ⲣⲥ MEROITIC DEMOTIC LETTER YA
- 109A5 ⲢⲦ MEROITIC DEMOTIC LETTER WA
- 109A6 Ⲣⲧ MEROITIC DEMOTIC LETTER BA
- 109A7 ⲢⲨ MEROITIC DEMOTIC LETTER PA
- 109A8 Ⲣⲩ MEROITIC DEMOTIC LETTER MA
- 109A9 ⲢⲪ MEROITIC DEMOTIC LETTER NA
- 109AA Ⲣⲫ MEROITIC DEMOTIC LETTER NE
- 109AB ⲢⲬ MEROITIC DEMOTIC LETTER RA
- 109AC Ⲣⲭ MEROITIC DEMOTIC LETTER LA
- 109AD ⲢⲮ MEROITIC DEMOTIC LETTER KHA
- 109AE Ⲣⲯ MEROITIC DEMOTIC LETTER HHA
- 109AF ⲢⲰ MEROITIC DEMOTIC LETTER SA
- 109B0 Ⲣⲱ MEROITIC DEMOTIC LETTER SE
- 109B1 ⲢⲲ MEROITIC DEMOTIC LETTER KA
- 109B2 Ⲣⲳ MEROITIC DEMOTIC LETTER QA
- 109B3 ⲢⲴ MEROITIC DEMOTIC LETTER TA
- 109B4 Ⲣⲵ MEROITIC DEMOTIC LETTER TE
- 109B5 ⲢⲶ MEROITIC DEMOTIC LETTER TO
- 109B6 Ⲣⲷ MEROITIC DEMOTIC LETTER DA

**Logograms**

- 109B7 ⲢⲸ MEROITIC LOGOGRAM RMT
- 109B8 Ⲣⲹ MEROITIC LOGOGRAM IMN

**Symbols**

- 109B9 Ⲣⲻ MEROITIC SYMBOL FLAG
- 109BA Ⲣⲻ MEROITIC SYMBOL FLAG-2
- 109BB Ⲣⲻ MEROITIC SYMBOL SKEIN
- 109BC Ⲣⲻ MEROITIC SYMBOL GOURD
- 109BD Ⲣⲻ MEROITIC SYMBOL CURL
- 109BE Ⲣⲻ MEROITIC SYMBOL EAR OF MAIZE
- 109BF Ⲣⲻ MEROITIC SYMBOL ARROW
- 109C0 Ⲣⲻ MEROITIC SYMBOL ARROW-2
- 109C1 Ⲣⲻ MEROITIC SYMBOL ARROW-3
- 109C2 Ⲣⲻ MEROITIC SYMBOL LEFT FORK
- 109C3 Ⲣⲻ MEROITIC SYMBOL RIGHT FORK
- 109C4 Ⲣⲻ MEROITIC SYMBOL SYMMETRICAL FORK
- 109C5 Ⲣⲻ MEROITIC SYMBOL SYMMETRICAL FORK WITH HAT
- 109C6 Ⲣⲻ MEROITIC SYMBOL SYMMETRICAL FORK WITH INVERTED HAT
- 109C7 Ⲣⲻ MEROITIC SYMBOL BEAN  
→ 132F4 ⲻ egyptian hieroglyph s029  
logogram s
- 109C8 Ⲣⲻ MEROITIC SYMBOL BEAN-2
- 109C9 Ⲣⲻ MEROITIC SYMBOL BEAN-3
- 109CA Ⲣⲻ MEROITIC SYMBOL HAMMER
- 109CB Ⲣⲻ MEROITIC SYMBOL FENCED LETTER NE
- 109CC Ⲣⲻ MEROITIC SYMBOL JAR

- 109CD ☐ MEROITIC SYMBOL OFFERING TABLE  
 109CE ☿ MEROITIC SYMBOL VIDJ  
 109CF ☾ MEROITIC SYMBOL VIDJ-2

## Fractions

- 109D0 ~ MEROITIC FRACTION ONE HALF  
 109D1 · MEROITIC FRACTION ONE TENTH  
 109D2 .. MEROITIC FRACTION TWO TENTHS  
 109D3 ... MEROITIC FRACTION THREE TENTHS  
 109D4 :: MEROITIC FRACTION FOUR TENTHS  
 109D5 ::: MEROITIC FRACTION FIVE TENTHS  
 109D6 :::: MEROITIC FRACTION SIX TENTHS  
 109D7 ::::: MEROITIC FRACTION SEVEN TENTHS  
 109D8 ::::: MEROITIC FRACTION EIGHT TENTHS  
 109D9 ::::: MEROITIC FRACTION NINE TENTHS

## Numbers

### Ones

- 109DA I MEROITIC NUMBER ONE  
 109DB II MEROITIC NUMBER TWO  
 109DC III MEROITIC NUMBER THREE  
 109DD IIII MEROITIC NUMBER FOUR  
 109DE ፩ MEROITIC NUMBER FIVE  
 109DF ፪ MEROITIC NUMBER SIX  
 109E0 // MEROITIC NUMBER SEVEN  
 109E1 ፲ MEROITIC NUMBER EIGHT  
 109E2 ፳ MEROITIC NUMBER NINE

### Tens

- 109E3 → MEROITIC NUMBER TEN  
 109E4 ← MEROITIC NUMBER TWENTY  
 109E5 × MEROITIC NUMBER THIRTY  
 109E6 ↙ MEROITIC NUMBER FORTY  
 109E7 ↘ MEROITIC NUMBER FIFTY  
 109E8 ☐ <reserved>  
 109E9 ↗ MEROITIC NUMBER SEVENTY  
 109EA ↖ MEROITIC NUMBER EIGHTY

### Hundreds

- 109EC ↛ MEROITIC NUMBER ONE HUNDRED  
 109ED ↛ MEROITIC NUMBER TWO HUNDRED  
 109EE ↛ MEROITIC NUMBER THREE HUNDRED  
 109EF ↛ MEROITIC NUMBER FOUR HUNDRED  
 109F0 ↛ MEROITIC NUMBER FIVE HUNDRED  
 109F1 ↛ MEROITIC NUMBER SIX HUNDRED  
 109F2 ↛ MEROITIC NUMBER SEVEN HUNDRED  
 109F3 ↛ MEROITIC NUMBER EIGHT HUNDRED

### Thousands

- 109F4 ↜ MEROITIC NUMBER ONE THOUSAND  
 109F5 ↜ MEROITIC NUMBER TWO THOUSAND  
 109F6 ↜ MEROITIC NUMBER THREE THOUSAND  
 109F7 ☐ <reserved>  
 109F8 ↙ MEROITIC NUMBER FIVE THOUSAND  
 109F9 ☐ <reserved>  
 109FA ☐ <reserved>  
 109FB ☐ <reserved>  
 109FC ☐ <reserved>  
 109FD ↝ MEROITIC NUMBER TEN THOUSAND

## Figures

435 { 013 : 1135 / 1143 : 5 / 116 : 113  
110 527 523 : 5111 7 4115 W 113 : 5111  
115707 9 5111 113113 5 { 93 163  
5115113 1145 { 5 / 11112 14 51113  
REM 0089

5C 7 14 113 : 481553 4W115 3W3 4113 : 48 113 43 5 / 115  
5W5 111 W 1143 452 113 115 { 48 115 813 : 4116 : 435 111 { 48 113  
11355 { 527 113 113 : 48 15 113 55 5 111 : 113 C 111 113 113 113  
REM 0088

: 455 9 / 3 8 4 / 11 8 / 9 53 : 3 / 18  
: 4444 44.3 53 : 44413  
: 43 113 115 / 1143 : 48 1513 : 113  
REM 0133

**Figure 1.** Text in Demotic Meroitic from Hofmann 1991.

**Figure 2.** Text in Demotic Meroitic from 'Abd Allāh 1986.

مفردات من اللغات القديمة مكتوبة كتابة تصويرية (هيروغليفية): المروية

٢٥١  ( = أقديس ) ،  ( = أقدسلاو ) ( = اسم خنس ؟ )	<b>سادساً (١) :</b> <u>العروبة الهيروغليفية</u> <u>(حسب الترتيب الهجائي المروي)</u> (الهمزة)
٢٥٢  ( = أتّختملاو )	٢٠٣، ١٢٩، ١٢٨، ١٢٦، ١٢٥ ، ٢١٩، ٢٠٤ <u>أمني</u> (اسم أمنون) ، ٢٣٦
٢٥٣	٢٠٤ ، ٢١٩ <u>أمني</u> : <u>أرميتشل</u> : <u>تولكينيل</u> : <u>آمون</u> <u>أرميتشل</u> <u>النادي</u> بالنقمة ، ٢٠٤ <u>آمني</u> : <u>توبيت</u> ٢٠٤ ، ٢١٩ ، ٢٠٤ ( = أمنون ) <u>توبيت</u> ، وانظر  (مني).
٢٥٤	٢٣٨  "اسم <u>أرميتشل</u> " ٢٣٨
٢٥٥	٢١٩، ٢٠٧، ٢١٦، ٢٠٢ ٢٥١، ٢٠٢  "أميري"

- ٥٠٩ -

Figure 3. Text in Hieroglyphic Meroitic from 'Abd Allāh 1986.

Hierogl. Units	Late hieratic cent. IX-III.	Abnorm. hierat. cent. IX-VI	Early demotic cent. VIII-VI	Later dem. cent. IV-I	Meroitic (suggested)	Hierogl. Hundreds	Late hieratic	Abnorm. hier.	Early demotic	Later demotic	Meroitic (suggested)
I	I	I	I	I	I	9	I	I	I	I	I
II	4	II	II	4	II	22	"	- II	II	"	"
III	III	III	III	V	III	999	III	III	III	III	"
III	III	III	III	VII	III	etc.	III	III	III	III	"
II	7	7	7	9	X	500	X	X	X	X	obelisk
III	6	6	6	6, 5	6, 5	600	6	6	6	6	6 obelisk
III	5	5	5	5	X, II	700	5	5	5	5	"
III	4	4	4	4	X, II	800	4	4	4	4	Inscr. 86
III	3	3	3	3	X	900	3	3	3	3	"
Tens						Thousands					
0	A	1, 1, 1	1	A, A	A, A	1	1	1	1	1	Ak. 26
00	3 <sup>Pyramids</sup>	1, 1, 1	5, 5	S	X, T	11	4	4	4	4	3 <sup>ob</sup> Ak. 25
000	X, X	X	X, X	X, X	X	111					3 Inscr. 86
etc	-	-	-	-	X	etc					
50	7	3, 3, 3	7, 7	3, 3	3, 3	3, 3					
60	III			2, 2	2, 2						
70	7, 7		2, 2	2, 2	2, 2						
80	III		2, 2	2, 2	2, 2						
90	III		K, I	K, I	K, I						
Groups of Meroitic numerals											
II → Inscr. 101 = 12											
III X Inscr. 89 = 34											
III T Inscr. 70 = 24											
K X Stela Ak 5 = 135											
Miscellaneous											
11, 7, 3, 2 St. Ak. 26 = 1776											
4, 4, 4, 4 St. Ak. 42 = 10320											
2, 2, 11, 3 St. Ak. 25 = 2348											
from ostraca											
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## A. Administrative

1. Title

**Preliminary proposal for encoding the Meroitic script in the SMP of the UCS**

2. Requester's name

**Michael Everson**

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

**Individual contribution.**

4. Submission date

**2008-08-04**

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

**Meroitic.**

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

**30.**

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 E.**

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?

**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?

**Yes.**

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)?

**Yes.**

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?

**Richard Lobban, Reginald Smith, Michael Zach**

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?

**Small community, scholars and historians.**

4a. The context of use for the proposed characters (type of use; common or rare)

**Scholarly use.**

4b. Reference

5a. Are the proposed characters in current use by the user community?

**Yes.**

5b. If YES, where?

**Worldwide.**

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.**

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?

**Yes.**

10b. If YES, is a rationale for its inclusion provided?

**Yes.**

10c. If YES, reference

**Similarity to Egyptian hieroglyphs is genetic but superficial.**

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

**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?