

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

**Doc Type: Working Group Document****Title: Proposal for encoding the Meroitic script in the SMP of the UCS****Source: UC Berkeley Script Encoding Initiative (Universal Scripts Project)****Authors: Michael Everson****Status: Individual Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Date: 2009-05-06**



This document replaces N3484 (2008-08-04), 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 relationship between Hieroglyphic Meroitic (*l'écriture hiéroglyphique méroïtique*) and Cursive Meroitic (*l'écriture cursive méroïtique*), 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 Cursive script forms. Essentially, there is no usage requirement where any text written in Hieroglyphic Meroitic would be converted into Cursive, or vice versa. Hieroglyphic Meroitic is only used to write texts which were written in Hieroglyphic Meroitic, and Cursive Meroitic is only used to write texts which were written in Cursive Meroitic. The Meroitic script is essentially two script forms used concurrently, but not interchangeably, for the same language. Scholars distinguish, and need to be able to distinguish, in plain text, Hieroglyphic Meroitic from Cursive Meroitic.

Moreover, in origin the two script forms differ historically. Cursive Meroitic developed over a period of time. Most of its characters are very close to the old Ptolemaic demotic of Upper Egypt (332-186 BCE), in particular / O, // YA, X PA, ω RA, ʒ KHA *ha*, ʒ SA, ʒ QA, and the numbers 6, 8, 9, 20, 50, 70, 80, 100, 200, 300, and 800. Rilly 2007:247-262 gives a complete discussion of the origin of each individual Cursive character.

Like Cursive Meroitic, Hieroglyphic Meroitic is first known in various forms dating to the reign of Taneyidamani, at the end of the 2nd century BCE. But whilst the goal of Cursive writing was practical, it appears that the development of the Hieroglyphic form was based in the desire to possess a monumental and decorative version of the Cursive form, and also to participate in the magic power attributed to

Egyptian Hieroglyphs. The set of characters devised for Hieroglyphic all have direct parallels with Egyptian Hieroglyphs, and is larger than that of Cursive Meroitic, which relates not to Egyptian Hieroglyphs, but to the demotic script which is not unified with the Hieroglyphs. One of the reasons Hieroglyphic Meroitic is larger is an evident uncertainty in which Egyptian characters were to be used for various sounds; both  and  are used for *b*—the former (the ram) having the value *b*ᶜ in Egyptian, the latter (the foot) simply *b*. These are also distinguished in current fonts. There is no purely one-to-one relationship between Cursive and Hieroglyphic Meroitic. Hieroglyphic Meroitic is used only for formal inscriptions. There are no private documents written in it.





















































An analysis which treats the two script forms as two *separate* scripts is possible, but from a practical point of view, *vis à vis* formal Script Properties, there does not appear to be an advantage to treating them separately in that way.

**3. Directionality.** The direction of writing is right-to-left, evidently with no exceptions. 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. Thus, using arrows to indicate the reading direction, the name *Amūn* (*Imn*, god of Thebes) would be written as *amana* in Meroitic  ← *na-ma-a* ←; in Egyptian Hieroglyphs this would be written  ← with right-to-left directionality, →  with left-to-right directionality. Another way of visualizing this would be that if the *cognate* Egyptian characters were written with right-to-left directionality, they would appear reversed from the Meroitic point of view, thus: Meroitic  ←, Egyptian \* ←.

**4. Punctuation.** Word dividers are employed more or less regularly, to isolate not separate words, but basic elements of sentences—nominal phrases (noun and article, noun and adjective and article, etc) verbal forms, and so on. Three vertical dots are used in Hieroglyphs and early Cursive, though when the Hieroglyphs are set in vertical columns, three horizontal dots are used. It would seem that U+205D TRICOLON ∴ and U+2026 HORIZONTAL ELLIPSIS … can serve this function. In later Cursive texts this became reduced to a COLON :, used with some irregularity.

**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. Ordering.** Meroitic ordering interfiles the Cursive and Hieroglyphic script forms as well as the encoded variants:

 *a*<sup>c</sup> >>  *a*<sup>h</sup> >  *e*<sup>c</sup> >>  *e*<sup>h</sup> >  *o*<sup>c</sup> >>  *o*<sup>h</sup> >  *i* >>  *i* >  *y*<sup>a</sup> >>  *y*<sup>h</sup> >  
 *w*<sup>a</sup> >>  *w*<sup>h</sup> >  *b*<sup>a</sup> >>  *b*<sup>h</sup> >>  *p*<sup>a</sup> >>  *p*<sup>h</sup> >  *m*<sup>a</sup> >>  *m*<sup>h</sup> >  
 *n*<sup>a</sup> >>  *n*<sup>h</sup> >>  *n*<sup>h2</sup> >  *ne*<sup>c</sup> >>  *ne*<sup>h</sup> >>  *ne*<sup>h2</sup> >  *r*<sup>a</sup> >>  *r*<sup>h</sup> >>  *r*<sup>h2</sup> >  
 *l*<sup>a</sup> >>  *l*<sup>h</sup> > <  *h*<sup>a</sup> >>  *h*<sup>h</sup> >  *h*<sup>a</sup> >>  *s*<sup>a</sup> >>  *s*<sup>a2</sup> >>  *s*<sup>h</sup> >>  *s*<sup>h2</sup> >  
 *se*<sup>c</sup> >>  *se*<sup>h</sup> >  *k*<sup>a</sup> >>  *k*<sup>h</sup> >  *q*<sup>a</sup> >>  *q*<sup>h</sup> >  *t*<sup>a</sup> >>  *t*<sup>h</sup> >>  *t*<sup>h2</sup> >  
 *te*<sup>c</sup> >>  *te*<sup>h</sup> >>  *te*<sup>h2</sup> > <  *to*<sup>c</sup> >>  *to*<sup>h</sup> >  *d*<sup>a</sup> >>  *d*<sup>h</sup>

**7. Names.** Meroitic has four vowels, namely *a*, *e*, *i* and *o* and a semivowel *y*. The vowel *a* is only written when it is an initial; *e*, *i*, and *o* are also written within words. Meroitic has two types of consonants. A few consonants are combined with a vowel, namely *ne*, *se*, *te*, and *to*; the other consonants are single consonants, each of which is followed by a vowel (*e*, *i*, *o*) in the inscriptional records. If there is no vowel inserted between two consonants, the consonant is read with an inherent *a*. For example, the Meroitic

royal title is *qore*, written  $\epsilon\omega\iota\upsilon$  or  $\beta\text{-}\ominus\gamma\Delta$  ( $q + o + r + e$ ); the title of the supreme commander of the army is *paqara*, written  $\omega\iota\upsilon\zeta$  or  $\text{-}\ominus\Delta\text{𐎧}$  ( $p + q + r$ ). In the character names, the inherent *-a* is used for the consonants and the rest of the names follow the usual UCS conventions.

**8. Issues.** At least twenty-four symbols are known, many 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. They are left for future standardization.

**9. Unicode Character Properties.**

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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;;;;;
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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 CURSIVE LETTER A;Lo;0;R;;;;N;;;;;
1099F;MEROITIC CURSIVE LETTER E;Lo;0;R;;;;N;;;;;
109A0;MEROITIC CURSIVE LETTER I;Lo;0;R;;;;N;;;;;
109A1;MEROITIC CURSIVE LETTER O;Lo;0;R;;;;N;;;;;
109A2;MEROITIC CURSIVE LETTER YA;Lo;0;R;;;;N;;;;;
109A3;MEROITIC CURSIVE LETTER WA;Lo;0;R;;;;N;;;;;
109A4;MEROITIC CURSIVE LETTER BA;Lo;0;R;;;;N;;;;;
109A5;MEROITIC CURSIVE LETTER PA;Lo;0;R;;;;N;;;;;
109A6;MEROITIC CURSIVE LETTER MA;Lo;0;R;;;;N;;;;;
109A7;MEROITIC CURSIVE LETTER NA;Lo;0;R;;;;N;;;;;
109A8;MEROITIC CURSIVE LETTER NE;Lo;0;R;;;;N;;;;;
109A9;MEROITIC CURSIVE LETTER RA;Lo;0;R;;;;N;;;;;
109AA;MEROITIC CURSIVE LETTER LA;Lo;0;R;;;;N;;;;;
109AB;MEROITIC CURSIVE LETTER KHA;Lo;0;R;;;;N;;;;;
109AC;MEROITIC CURSIVE LETTER HHA;Lo;0;R;;;;N;;;;;
109AD;MEROITIC CURSIVE LETTER SA;Lo;0;R;;;;N;;;;;
109AE;MEROITIC CURSIVE LETTER ARCHAIC SA;Lo;0;R;;;;N;;;;;
109AF;MEROITIC CURSIVE LETTER SE;Lo;0;R;;;;N;;;;;
109B0;MEROITIC CURSIVE LETTER KA;Lo;0;R;;;;N;;;;;
109B1;MEROITIC CURSIVE LETTER QA;Lo;0;R;;;;N;;;;;
109B2;MEROITIC CURSIVE LETTER TA;Lo;0;R;;;;N;;;;;
109B3;MEROITIC CURSIVE LETTER TE;Lo;0;R;;;;N;;;;;
109B4;MEROITIC CURSIVE LETTER TO;Lo;0;R;;;;N;;;;;
109B5;MEROITIC CURSIVE LETTER DA;Lo;0;R;;;;N;;;;;
109BC;MEROITIC LOGOGRAM RMT;Lo;0;R;;;;N;;;;;
109BD;MEROITIC LOGOGRAM IMN;Lo;0;R;;;;N;;;;;
109BE;MEROITIC SYMBOL VIDJ;So;0;R;;;;N;;;;;
109BF;MEROITIC SYMBOL VIDJ-2;So;0;R;;;;N;;;;;
109C0;MEROITIC FRACTION ONE HALF;No;0;R;;;;1/2;N;;;;;
109C1;MEROITIC FRACTION ONE TWELFTH;No;0;R;;;;1/12;N;;;;;
109C2;MEROITIC FRACTION TWO TWELFTHS;No;0;R;;;;2/12;N;;;;;
109C3;MEROITIC FRACTION THREE TWELFTHS;No;0;R;;;;3/12;N;;;;;
109C4;MEROITIC FRACTION FOUR TWELFTHS;No;0;R;;;;4/12;N;;;;;

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109C5;MEROITIC FRACTION FIVE TWELFTHS;No;0;R;;;5/12;N;;;;;  
109C6;MEROITIC FRACTION SIX TWELFTHS;No;0;R;;;6/12;N;;;;;  
109C7;MEROITIC FRACTION SEVEN TWELFTHS;No;0;R;;;7/12;N;;;;;  
109C8;MEROITIC FRACTION EIGHT TWELFTHS;No;0;R;;;8/12;N;;;;;  
109C9;MEROITIC FRACTION NINE TWELFTHS;No;0;R;;;9/12;N;;;;;  
109CA;MEROITIC FRACTION TEN TWELFTHS;No;0;R;;;10/12;N;;;;;  
109CC;MEROITIC NUMBER ONE;No;0;R;;;1;N;;;;;  
109CD;MEROITIC NUMBER TWO;No;0;R;;;2;N;;;;;  
109CE;MEROITIC NUMBER THREE;No;0;R;;;3;N;;;;;  
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109DC;MEROITIC NUMBER EIGHTY;No;0;R;;;80;N;;;;;  
109DE;MEROITIC NUMBER ONE HUNDRED;No;0;R;;;100;N;;;;;  
109DF;MEROITIC NUMBER TWO HUNDRED;No;0;R;;;200;N;;;;;  
109E0;MEROITIC NUMBER THREE HUNDRED;No;0;R;;;300;N;;;;;  
109E1;MEROITIC NUMBER FOUR HUNDRED;No;0;R;;;400;N;;;;;  
109E2;MEROITIC NUMBER FIVE HUNDRED;No;0;R;;;500;N;;;;;  
109E3;MEROITIC NUMBER SIX HUNDRED;No;0;R;;;600;N;;;;;  
109E4;MEROITIC NUMBER SEVEN HUNDRED;No;0;R;;;700;N;;;;;  
109E5;MEROITIC NUMBER EIGHT HUNDRED;No;0;R;;;800;N;;;;;  
109E7;MEROITIC NUMBER ONE THOUSAND;No;0;R;;;1000;N;;;;;  
109E8;MEROITIC NUMBER TWO THOUSAND;No;0;R;;;2000;N;;;;;  
109E9;MEROITIC NUMBER THREE THOUSAND;No;0;R;;;3000;N;;;;;  
109EB;MEROITIC NUMBER FIVE THOUSAND;No;0;R;;;5000;N;;;;;  
109F0;MEROITIC NUMBER TEN THOUSAND;No;0;R;;;10000;N;;;;;

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0	10980	10990	109A0	109B0	109C0	109D0	109E0	109F0
1	10981	10991	109A1	109B1	109C1	109D1	109E1	
2	10982	10992	109A2	109B2	109C2	109D2	109E2	
3	10983	10993	109A3	109B3	109C3	109D3	109E3	
4	10984	10994	109A4	109B4	109C4	109D4	109E4	
5	10985	10995	109A5	109B5	109C5	109D5	109E5	
6	10986	10996	109A6		109C6	109D6		
7	10987	10997	109A7		109C7	109D7	109E7	
8	10988	10998	109A8		109C8	109D8	109E8	
9	10989	10999	109A9		109C9	109D9	109E9	
A	1098A	1099A	109AA		109CA			
B	1098B	1099B	109AB			109DB	109EB	
C	1098C	1099C	109AC	109BC	109CC	109DC		
D	1098D	1099D	109AD	109BD	109CD			
E	1098E	1099E	109AE	109BE	109CE	109DE		
F	1098F	1099F	109AF	109BF	109CF	109DF		

**Hieroglyphic alphabet**

10980	𐎠	MEROITIC HIEROGLYPHIC LETTER A → 13000 𐎠 egyptian hieroglyph a001
10981	𐎡	MEROITIC HIEROGLYPHIC LETTER E → 13184 𐎡 egyptian hieroglyph h006
10982	𐎢	MEROITIC HIEROGLYPHIC LETTER I → 1301E 𐎢 egyptian hieroglyph a026
10983	𐎣	MEROITIC HIEROGLYPHIC LETTER O → 130FE 𐎣 egyptian hieroglyph f001
10984	𐎤	MEROITIC HIEROGLYPHIC LETTER YA → 131CC 𐎤 egyptian hieroglyph m017a
10985	𐎥	MEROITIC HIEROGLYPHIC LETTER WA → 1336F 𐎥 egyptian hieroglyph v004
10986	𐎦	MEROITIC HIEROGLYPHIC LETTER BA → 130DE 𐎦 egyptian hieroglyph e011
10987	𐎧	MEROITIC HIEROGLYPHIC LETTER BA-2 → 130C0 𐎧 egyptian hieroglyph d058
10988	𐎨	MEROITIC HIEROGLYPHIC LETTER PA → 132AA 𐎨 egyptian hieroglyph q003
10989	𐎩	MEROITIC HIEROGLYPHIC LETTER MA → 13153 𐎩 egyptian hieroglyph g017
1098A	𐎪	MEROITIC HIEROGLYPHIC LETTER NA → 13216 𐎪 egyptian hieroglyph n035
1098B	𐎫	MEROITIC HIEROGLYPHIC LETTER NA-2
1098C	𐎬	MEROITIC HIEROGLYPHIC LETTER NE → 131D2 𐎬 egyptian hieroglyph m022a
1098D	𐎭	MEROITIC HIEROGLYPHIC LETTER NE-2
1098E	𐎮	MEROITIC HIEROGLYPHIC LETTER RA → 1308B 𐎮 egyptian hieroglyph d021
1098F	𐎯	MEROITIC HIEROGLYPHIC LETTER RA-2
10990	𐎰	MEROITIC HIEROGLYPHIC LETTER LA → 130ED 𐎰 egyptian hieroglyph e023
10991	𐎱	MEROITIC HIEROGLYPHIC LETTER KHA → 1340D 𐎱 egyptian hieroglyph aa001
10992	𐎲	MEROITIC HIEROGLYPHIC LETTER HHA → 133BC 𐎲 egyptian hieroglyph w011
10993	𐎳	MEROITIC HIEROGLYPHIC LETTER SA → 131B7 𐎳 egyptian hieroglyph m008
10994	𐎴	MEROITIC HIEROGLYPHIC LETTER SA-2 → 13283 𐎴 egyptian hieroglyph o034
10995	𐎵	MEROITIC HIEROGLYPHIC LETTER SE → 13283 𐎵 egyptian hieroglyph o034
10996	𐎶	MEROITIC HIEROGLYPHIC LETTER KA → 1316C 𐎶 egyptian hieroglyph g038
10997	𐎷	MEROITIC HIEROGLYPHIC LETTER QA → 1320E 𐎷 egyptian hieroglyph n029
10998	𐎸	MEROITIC HIEROGLYPHIC LETTER TA → 1337F 𐎸 egyptian hieroglyph v013
10999	𐎹	MEROITIC HIEROGLYPHIC LETTER TA-2 → 131FE 𐎹 egyptian hieroglyph n016
1099A	𐎺	MEROITIC HIEROGLYPHIC LETTER TE → 131FE 𐎺 egyptian hieroglyph n016 → 13254 𐎺 egyptian hieroglyph o004
1099B	𐎻	MEROITIC HIEROGLYPHIC LETTER TE-2 → 13254 𐎻 egyptian hieroglyph o004
1099C	𐎼	MEROITIC HIEROGLYPHIC LETTER TO → 13205 𐎼 egyptian hieroglyph n021
1099D	𐎽	MEROITIC HIEROGLYPHIC LETTER DA → 1307B 𐎽 egyptian hieroglyph d006

**Cursive alphabet**

1099E	𐎿	MEROITIC CURSIVE LETTER A
1099F	𐏀	MEROITIC CURSIVE LETTER E
109A0	𐏁	MEROITIC CURSIVE LETTER I
109A1	𐏂	MEROITIC CURSIVE LETTER O
109A2	𐏃	MEROITIC CURSIVE LETTER YA
109A3	𐏄	MEROITIC CURSIVE LETTER WA
109A4	𐏅	MEROITIC CURSIVE LETTER BA
109A5	𐏆	MEROITIC CURSIVE LETTER PA
109A6	𐏇	MEROITIC CURSIVE LETTER MA
109A7	𐏈	MEROITIC CURSIVE LETTER NA
109A8	𐏉	MEROITIC CURSIVE LETTER NE
109A9	𐏊	MEROITIC CURSIVE LETTER RA
109AA	𐏋	MEROITIC CURSIVE LETTER LA
109AB	𐏌	MEROITIC CURSIVE LETTER KHA
109AC	𐏍	MEROITIC CURSIVE LETTER HHA
109AD	𐏎	MEROITIC CURSIVE LETTER SA
109AE	𐏏	MEROITIC CURSIVE LETTER ARCHAIC SA
109AF	𐏐	MEROITIC CURSIVE LETTER SE
109B0	𐏑	MEROITIC CURSIVE LETTER KA
109B1	𐏒	MEROITIC CURSIVE LETTER QA
109B2	𐏓	MEROITIC CURSIVE LETTER TA
109B3	𐏔	MEROITIC CURSIVE LETTER TE
109B4	𐏕	MEROITIC CURSIVE LETTER TO
109B5	𐏖	MEROITIC CURSIVE LETTER DA

**Logograms**

109BC	𐏗	MEROITIC LOGOGRAM RMT
109BD	𐏘	MEROITIC LOGOGRAM IMN

**Symbols**

109BE	𐏙	MEROITIC SYMBOL VIDJ → 2625 𐏙 ankh → 132F9 𐏙 egyptian hieroglyph s034
109BF	𐏚	MEROITIC SYMBOL VIDJ-2

**Fractions**

109C0	𐏛	MEROITIC FRACTION ONE HALF
109C1	𐏜	MEROITIC FRACTION ONE TWELFTH
109C2	𐏝	MEROITIC FRACTION TWO TWELFTHS
109C3	𐏞	MEROITIC FRACTION THREE TWELFTHS
109C4	𐏟	MEROITIC FRACTION FOUR TWELFTHS
109C5	𐏠	MEROITIC FRACTION FIVE TWELFTHS
109C6	𐏡	MEROITIC FRACTION SIX TWELFTHS
109C7	𐏢	MEROITIC FRACTION SEVEN TWELFTHS
109C8	𐏣	MEROITIC FRACTION EIGHT TWELFTHS
109C9	𐏤	MEROITIC FRACTION NINE TWELFTHS
109CA	𐏥	MEROITIC FRACTION TEN TWELFTHS

**Numbers****Ones**

109CC	𐏦	MEROITIC NUMBER ONE
109CD	𐏧	MEROITIC NUMBER TWO
109CE	𐏨	MEROITIC NUMBER THREE
109CF	𐏩	MEROITIC NUMBER FOUR
109D0	𐏪	MEROITIC NUMBER FIVE
109D1	𐏫	MEROITIC NUMBER SIX
109D2	𐏬	MEROITIC NUMBER SEVEN
109D3	𐏭	MEROITIC NUMBER EIGHT

109D4 𐎄 MEROITIC NUMBER NINE

### Tens

109D5 𐎅 MEROITIC NUMBER TEN  
 109D6 𐎆 MEROITIC NUMBER TWENTY  
 109D7 𐎇 MEROITIC NUMBER THIRTY  
 109D8 𐎈 MEROITIC NUMBER FORTY  
 109D9 𐎉 MEROITIC NUMBER FIFTY  
 109DA 𐎊 <reserved>  
 109DB 𐎋 MEROITIC NUMBER SEVENTY  
 109DC 𐎌 MEROITIC NUMBER EIGHTY

### Hundreds





























109DE 𐎍 MEROITIC NUMBER ONE HUNDRED  
 109DF 𐎎 MEROITIC NUMBER TWO HUNDRED  
 109E0 𐎏 MEROITIC NUMBER THREE HUNDRED  
 109E1 𐎐 MEROITIC NUMBER FOUR HUNDRED  
 109E2 𐎑 MEROITIC NUMBER FIVE HUNDRED  
 109E3 𐎒 MEROITIC NUMBER SIX HUNDRED  
 109E4 𐎓 MEROITIC NUMBER SEVEN HUNDRED  
 109E5 𐎔 MEROITIC NUMBER EIGHT HUNDRED

### Thousands






109E7 𐎕 MEROITIC NUMBER ONE THOUSAND  
 109E8 𐎖 MEROITIC NUMBER TWO THOUSAND  
 109E9 𐎗 MEROITIC NUMBER THREE THOUSAND  
 109EA 𐎘 <reserved>  
 109EB 𐎙 MEROITIC NUMBER FIVE THOUSAND  
 109EC 𐎚 <reserved>  
 109ED 𐎛 <reserved>  
 109EE 𐎜 <reserved>  
 109EF 𐎝 <reserved>  
 109F0 𐎞 MEROITIC NUMBER TEN THOUSAND

## Figures

The following is a list of the Meroitic alphabet in order according to the values of the signs. The evidence for the values given will be found in the detailed discussion of the signs below:—

(1)  initial <i>a</i> or alif.	(12)  <i>w r</i> .
(2)  vowel <i>e</i> (earlier sometimes <i>ye</i> ).	(13)  <i>l</i> , older  .
(3)  vowel <i>i</i> .	(14)  <i>l</i> .
(4)  vowel <i>i</i> (earlier sometimes <i>yi</i> ).	(15)  <i>l</i> .
(5)  <i>y</i> .	(16)  <i>s(c)</i> .
(6)  <i>w</i> .	(17)  <i>s</i> .
(7)  <i>b</i> .	(18)  <i>k</i> .
(8)  <i>p</i> .	(19)  <i>q</i> , older  .
(9)  <i>m</i> .	(20)  <i>t(i)</i> .
(10)  <i>n</i> .	(21)  <i>te</i> , older  .
(11)  <i>n(i)</i> older  .	(22)  <i>t</i> .
	(23)  <i>s</i> (?), older  .

The hieroglyphic letters in brackets are forms occurring in the inscription *Meroë* 1 and sometimes elsewhere.

The above scheme of the alphabet shows a close connexion with Egyptian values for the signs.  like  appears to be a reduplication of the corresponding Egyptian sign.  for *l* and  for *r* seem to be the only signs devoid of any probable explanation from the Egyptian side: and the value of  is as yet only guessed.





The demotic letters, 5 , 9 , 16 , 17 , resemble the Egyptian demotic signs. The rest show no such resemblance, but may have been derived by a long process from some form of hieratic, or more directly from the hieroglyphic.

Figure 1. Table from Griffith 1911 showing the alphabet in both Hieroglyphic and Cursive Meroitic.



## INDEX C

### MEROITIC WORDS AND GROUPS

Abbreviations:—n. personal name, n. A. name of deceased, n. AA. of second deceased, n. B. of mother (n. BB. &c.), n. C. of father (n. CC. &c.); pl. n., place name; form. A B C D &c., terminal formulae A B C D &c., see Ch. V, p. 42; inv., invocation, see Ch. III, p. 33; descr., occurring in descriptive phrases, see p. 38. Eg., Egyptian. Titles are roughly divided as civil and sac(er)dotal).

- 𓂏, 𓂏
- 𓂏𓂏𓂏𓂏𓂏 n. B. *Kar.* 36  
 𓂏𓂏𓂏𓂏 n. B. *Kar.* 28  
 48113𓂏𓂏𓂏𓂏𓂏 n. A. *Kar.* 10  
 1𓂏𓂏𓂏 title(?) of ΔΔ. *Kar.* 6, v. 1𓂏𓂏𓂏  
 48145𓂏𓂏𓂏𓂏 n. A. (man) *Kar.* 2  
 48113𓂏𓂏𓂏𓂏 n. A. *Kar.* 68  
 481413𓂏𓂏 descr. *Kar.* 78  
 𓂏𓂏𓂏𓂏 n. B. *Kar.* 73, 𓂏𓂏𓂏𓂏 n. B. *Kar.* 74  
 48113𓂏𓂏𓂏𓂏 n. AA. *Kar.* 29, 39  
 𓂏𓂏𓂏 'envoy', Eg. *wpt*, descr. *Sh.* 4, 6, 19, see p. 10  
     𓂏𓂏𓂏𓂏 n. (?) descr. *Kar.* 21  
     𓂏𓂏𓂏 'chief envoy', descr. *Kar.* 56, *Sh.* 3 (twice), 8  
 48113𓂏𓂏𓂏𓂏 n. A. *Kar.* 93  
 𓂏𓂏𓂏 n. B. *Kar.* 54  
 4485𓂏 n. C. *Kar.* 119  
 48𓂏𓂏[𓂏]𓂏 'of Amanap' deity, descr. *Kar.* 102, v. *Mup* and see p. 71  
 444𓂏 n. B. *Kar.* 37  
 48113𓂏𓂏𓂏𓂏 n. A. *Kar.* 96  
 48𓂏𓂏𓂏 'of Ammon', descr. *Kar.* 46, 58, v. *Mni*  
 1𓂏𓂏𓂏 sac. title, descr. *Kar.* 124, v. 1𓂏𓂏𓂏  
 𓂏𓂏𓂏 civil title, descr. *Kar.* 47, 59  
 344𓂏𓂏 n. B. *Kar.* 112
- 𓂏𓂏 'prophet' (Eg.), descr. *Kar.* 15 (twice), 19 (thrice), 21 (five times), 47, 50, 56, 60 (twice), 69, 87, 89 (thrice), 117, 119, 125, 126, cf. *at* and see p. 57  
 44𓂏𓂏 descr. *Kar.* 118  
 𓂏𓂏𓂏 pl. descr. *Kar.* 22  
 5𓂏𓂏 sac. title, descr. *Kar.* 58, 102  
 44𓂏𓂏 descr. *Kar.* 47  
 𓂏𓂏𓂏𓂏 sac. title (in Eg. *arbtgi*, *arbtugi*), descr. *Kar.* 92, see p. 82, note 5  
 𓂏𓂏𓂏𓂏 'of Rome', descr. *Kar.* 112, cf. *Inscr.* 129/4 and see pp. 10, 72  
 4𓂏𓂏𓂏 n. B. *Sh.* 11  
 4811344𓂏𓂏𓂏 n. A. *Kar.* 20, [21]  
 48113𓂏𓂏𓂏𓂏 n. A. *Kar.* 60, cf. 61  
 48113𓂏𓂏𓂏𓂏 n. A. *Kar.* 29, 39  
 4814531𓂏 title(?), descr. *Kar.* 41  
 𓂏31𓂏 sac. title, descr. *Kar.* 13  
 𓂏𓂏𓂏 n. B. *Kar.* 64, 𓂏𓂏𓂏 n. B. *Sh.* 4  
 44𓂏𓂏 n. B. *Kar.* 91  
 48113𓂏𓂏𓂏 n. AA. *Kar.* 61, cf. 60  
 𓂏𓂏𓂏 title(?), descr. *Kar.* 10, 36, 70  
 𓂏𓂏𓂏 *Kar. Ostr.* 3 (exterior)  
 48113𓂏𓂏𓂏 n. A. *Kar.* 119  
 𓂏𓂏𓂏 sac. title, descr. *Kar.* 30, -52  
 44𓂏𓂏 descr. *Kar.* 127, see p. 82

Figure 2. First page of the glossary from Griffith 1911.

435 (43:113) 5/1143 5/1118:113  
 :435 27 527 :5/117 5/119 5/117  
 19 527 7 5/111 3/125 5 (9) 19  
 525 57:3 125 5/11 12 14 54137

REM 0089

5 27 15 43 13 :48 15 52 44 14 :48 113 43 5/1115  
 5 5 5/11 11 43 52 :17 5 (48 6 27) :3 4 16 :43 5/11 (48 15  
 13 5 5 527 5/11 3 :48 15 52 5 5/11 :11 14 6 5/11 113 :14 7

REM 0088

:45 9/13 2 4/11 2 7 58 :3 18  
 :44 11 5 58 :44 13  
 :43 113 5/11 43 :44 5/13 :113

REM 0133

Figure 3. Text in Cursive Meroitic from Hofmann 1991.

مفردات من اللغات القديمة مكتوبة كتابة تجريدية: المروية

سابعاً: (1) المروية (المختزلة) مرتبة ترتيباً هجائياً مروياً

سز ، سز (الهزة)

4/11 5w/3 6 4/11 5w/3 52	17: 6/11 w 2 52
( أنظر 5w/3 52 )	14-14-2 2 3 52 ( اسم "امون ميتا" في )
53: 10: 52 (= "خيز")	3 6/11 14 2 2 3 52 ( انظر بعدها )
3 5 3 3 3 3 3 52 (= "قربان خيز" في )	17: 3 6/11 14 14 2 2 3 52
• 204	
3 3 3 3 3 3 3 52 ( انظر 52 )	10: 11 5 1 3 5 5 5 5 2
52 : 8 . 10 . 11 . 10 . 8 (= "مأ")	5 w/3 4 5 w/3 52 (اسم اوزير) في
4 4 4 52 (= "المأ" ، أرض	4/11 5w/3 14 : 4/11 5w/3 52
النيل ) 3/3 5 5 2 ، 9 4 5 5 2	204 ( "يا اوزير" . وانظر 5w/3 ،
( " أرض النيل ، فائـد" )	( 11 w/3 )

Figure 4. Text in Cursive Meroitic from 'Abd Allāh 1986.







## A. Administrative

1. Title

**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

**2009-05-06**

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, Claude Rilly, 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?