

Oct 19  
November 4, 1993

Mr. Rick McGowan  
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Dear Rick:

A while back I have spoken with you on the phone regarding the inclusion of the Syriac script in the Unicode standard. Shortly thereafter, Peter Jasim have had some correspondence with you regarding the same matter. You have indicated to me then that no one had submitted any proposal yet. Therefore, we are submitting this proposal to the Unicode Consortium for thorough examination and possible inclusion in the Unicode standard. Please feel free to contact me for any question and/or clarification that you, or the committee in charge, might have.

Sincerely,

Sargon Hasso, Independent Consultant

P.S.

Currently, the following independent persons are in charge of the preparation of this proposal:

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cc: PJ  
EO

Assyrian<sup>1</sup>      S<sup>2</sup>+0000 -- SSSS+0000

The Assyrian script (*Syriac*) is used for writing the Assyrian language, which include the Eastern Assyrian script (*Nestorian*), the Western Assyrian script (*Serto* or *Jacobite*), and the *Estrangelo*<sup>3</sup> script. It is also used for writing Mandaic<sup>4</sup>.

Assyrian is written from right to left, and is predominantly cursive, even in its printed form. Few letters are written in different forms, depending on how they join to their neighbors. Vowels are written as *zaw'e* applied to consonantal base letters.

*Mandaic*. Mandaic is written with the same script, with an additional, 23rd letter; this extra letter is given the independent code SSSS+0023.

*Punctuation*. Most punctuation marks used in Assyrian are not given independent codes (they are unified with the Latin, Arabic, and Hebrew punctuation), except for the few cases where the mark has a unique form and function in Assyrian.

*Encoding Principles*. The alphabet of Assyrian is well defined. Each letter receives only one Unicode character value, regardless of the number of contextual shapes it may exhibit in text (this, indeed, is the only difference between Eastern Assyrian, Western Assyrian, Estrangelo, and Mandaic). The graphic form (glyph) shown in the Unicode character chart, for the most part, is that of free-form Estrangelo.

*Diacritical Points*<sup>5</sup> (*paroshe*). These are marks (more commonly, these are points of large, medium, and small sizes) that indicate vowels (*zaw'e*), cantillation marks, accents, and other modifications of consonantal letters. The occurrence of a character in the *Paroshe* range, and its depiction in relation to a dashed circle, constitute an assertion that this character is intended to be applied via some process to the consonantal letter, phrase and/or clause that precedes it in the text stream. General rules for applying non-spacing marks are given in the Generic Diacritical Mark block description section in the Unicode Standard, version 1.0. The Unicode standard does not specify a sequence order in case of multiple marks

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<sup>1</sup> We use *Assyrian* and *Syriac* interchangeably in this working proposal. However, we would strongly suggest the use of *Assyrian* as a proper name for this script.

<sup>2</sup> This notation is for this working proposal only, and it follows the same convention as used in Unicode Version 1.0, i.e., U+nnnn. *S* stands for Syriac.

<sup>3</sup> The correct spelling of *Estrangelo* is with an *o* at the end, not an *a*.

<sup>4</sup> Two issues were raised in the exploratory proposal: the order of letters and Mandaic. The order of letters is correct as it appears -- *Wow* is in its correct place. *Wow* should not be placed at the end because *Wow* is, by virtue of its position in the Assyrian alphabet (the sixth letter) also the number 6. Assyrian letters are also used as numbers and have ordinal values. More information will be provided if need be. We have left the last space in the character set as reserved for the extra letter in Mandaic.

<sup>5</sup> Generally we refer to all objects that are placed around the base letter in various positions, as *Diacritical Points*. However, they fall into four well-defined categories: distinction points, e.g., SSS+0005, the plural sign, e.g., SSS+0001, the actual diacritical point in its various forms e.g., SSS+0008, and, finally, the accents, e.g., SS+0008. For an in depth treatment of this subject, please cf. Segal's *The Diacritical Point and The Accents in Syriac*, Oxford University Press, 1953.

applied to the same Assyrian base character, since there is no possible ambiguity of interpretation. The Assyrian script contains a rich set of diacritical marks, which reflects its development over the course of its long history.

*Encoding Structure.* The Assyrian character block is divided into the following<sup>6</sup>:















S+0001-- S+0010	Assyrian punctuation and number marks
SS+0001 -- SS+0020 <sup>7</sup>	Assyrian diacritical marks ( <i>paroshe</i> ) -- I
SSS+0001 -- SSS+0017	Assyrian diacritical marks ( <i>paroshe</i> ) -- II
SSSS+0001 -- SSSS+0023	Assyrian letters














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<sup>6</sup> This subdivision is for future addition and expansion. Cf. following note.

<sup>7</sup> This list by no means is complete. Although, the majority of all Assyrian documents and manuscripts can be reproduced with the aid of only this list -- whether they are from 500 A.D. or from 1993 A.D. Therefore, we would like to reserve additional space following this category for future addition and amendment.

SEQUENCE	GLYPH	DEFINITION
S+0001	¶	SYRIAC QUOTATION MARK = <i>sahrane</i>
S+0002	‡	SYRIAC ABBREVIATION MARK = <i>gadmana</i>
S+0003	⬥	SYRIAC END OF PARAGRAPH SEPARATOR
S+0004	.	SYRIAC LONG PAUSAL MARK PASUQA = <i>period</i>
S+0005	,	SYRIAC SHORT PAUSAL MARK ZAUGA = <i>comma</i>
S+0006	؟	SYRIAC QUESTION MARK
S+0007	⦿	SYRIAC NUMERAL SIGN FOR TEN
S+0008	⦿/⦿	SYRIAC NUMERAL SIGN FOR THOUSAND
S+0009	⦿ 	SYRIAC NUMERAL SIGN FOR TEN THOUSAND
S+0010	⦿ ^	SYRIAC NUMERAL SIGN FOR MILLION
SS+0001	⦿ <sup>•</sup>	SYRIAC ONE DOT ABOVE RIGHT = <i>mshalana</i>

SS+0002		SYRIAC TWO DOTS HORIZONTAL ABOVE = rahta
SS+0003		SYRIAC TWO DOTS LEFT-SLANTED ABOVE = mshalmanota
SS+0004		SYRIAC ONE DOT ABOVE CENTER = ritma
SS+0005		SYRIAC TWO DOTS VERTICAL CENTER ABOVE = zauga elaya
SS+0006		SYRIAC THREE DOTS ABOVE = rahta d karte
SS+0007		SYRIAC ONE DOT ABOVE LEFT = esyana
SS+0008		SYRIAC TWO DOTS VERTICAL RIGHT ABOVE = mtdamrana
SS+0009		SYRIAC ONE DOT IN-LINE LEFT = pasoqa
SS+0010		SYRIAC TWO DOTS VERTICAL IN-LINE LEFT = zauga
SS+0011		SYRIAC TWO DOTS IN-LINE ABOVE AND BELOW = mqimana
SS+0012		SYRIAC ONE DOT RIGHT BELOW = mnakhta
SS+0013		SYRIAC ONE DOT LEFT BELOW = samka
SS+0014		SYRIAC TWO DOTS VERTICAL LEFT BELOW = mitkashpana
SS+0015		SYRIAC ONE LARGE DOT AND ONE SMALL DOT SLANTED LEFT BELOW = esasa

SS+0016		SYRIAC ONE LARGE DOT AND ONE SMALL DOT BELOW = napsha
SS+0017		SYRIAC TWO DOTS RIGHT-SLANTED ABOVE LEFT = elaya
SS+0018		SYRIAC TWO DOTS ABOVE AND IN-LINE DOT LEFT = rahta d paseq
SS+0019		SYRIAC ONE SMALL DOT AND ONE LARGE DOT LEFT-SLANTED BELOW LEFT = takhtaya
SS+0020		SYRIAC THREE DOTS BELOW = takhtaya d talata
SSS+0001		SYRIAC PLURAL MARK SYAME
SSS+0002		SYRIAC FRICATION MARK RUKAKHA
SSS+0003		SYRIAC AFFRICATION MARK MAJLIANA
SSS+0004		SYRIAC HALF CIRCLE BELOW A LETTER = qishta
SSS+0005		SYRIAC DIACRITICAL LARGE POINT OVER A LETTER
SSS+0006		SYRIAC DIACRITICAL LARGE POINT BELOW A LETTER
SSS+0007		SYRIAC DIACRITICAL POINT QUSHAYA
SSS+0008		SYRIAC VOWEL MARK ZQAPA

SSS+0009		SYRIAC VOWEL MARK PTAKHA
SSS+0010		SYRIAC VOWEL MARK ZLAME PSHIQE
SSS+0011		SYRIAC VOWEL MARK ZLAME QASHYE
SSS+0012		SYRIAC VOWEL MARK RWAKHA
SSS+0013		SYRIAC VOWEL MARK RWASA
SSS+0014		SYRIAC VOWEL MARK KHWASA
SSS+0015		SYRIAC ACCENT MTALQANA
SSS+0016		SYRIAC HALF-VOWEL MHAGYANA
SSS+0017		SYRIAC HALF-VOWEL MARHTANA
SSSS+0001		SYRIAC LETTER ALLAP
SSSS+0002		SYRIAC LETTER BET
SSSS+0003		SYRIAC LETTER GAMMAL
SSSS+0004		SYRIAC LETTER DALLAT
SSSS+0005		SYRIAC LETTER HE

SSSS+0006	ܘ	SYRIAC LETTER WAW
SSSS+0007	ܙ	SYRIAC LETTER ZAIN
SSSS+0008	ܠ	SYRIAC LETTER KHET
SSSS+0009	ܡ	SYRIAC LETTER TET
SSSS+0010	ܢ	SYRIAC LETTER YUDH
SSSS+0011	ܐ	SYRIAC LETTER KAP
SSSS+0012	ܑ	SYRIAC LETTER LAMMADH
SSSS+0013	ܒ	SYRIAC LETTER MEEM
SSSS+0014	ܓ	SYRIAC LETTER NUN
SSSS+0015	ܔ	SYRIAC LETTER SIMKAT
SSSS+0016	ܕ	SYRIAC LETTER E
SSSS+0017	ܖ	SYRIAC LETTER PE
SSSS+0018	ܗ	SYRIAC LETTER SADEH
SSSS+0019	ܘ	SYRIAC LETTER QOP
SSSS+0020	ܙ	SYRIAC LETTER RESH
SSSS+0021	ܠ	SYRIAC LETTER SHEEN
SSSS+0022	ܡ	SYRIAC LETTER TAW



SSSS+0023		RESERVED
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