

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

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**Title:** Proposal to encode the Cypro-Minoan script in the SMP of the UCS  
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**1. Introduction.** The Cypro-Minoan syllabary is an undeciphered syllabic script which was used on the island of Cyprus during the Late Bronze Age (*ca.* 1550–1050 BCE). Arthur Evans coined the term “Cypro-Minoan” in 1909 based on its visual similarity to Linear A on Minoan Crete, from which Cypro-Minoan is thought to be derived. The corpus of Cypro-Minoan comprises 250 objects—such as clay balls, cylinders, and tablets and votive stands. Discoveries have been made at various sites around Cyprus, as well as in the ancient city of Ugarit on the Syrian coast. In the Early Iron Age, Cypriots developed the Cypriot Syllabary from Cypro-Minoan. The Cypriot Syllabary was used to write Greek and Eteocypriot, and has been encoded already in the UCS.

**2. Structure.** The Cypro-Minoan script is undeciphered. Some, but not so many, characters are similar to characters in Linear A and B, but no reliable transliterations are sufficient to be definitive. The script appears to have left-to-right directionality. Numbers are known, and are the same as in other Aegean scripts. Some basic punctuation has been identified.

**4. Repertoire.** Through the course of the history of the decipherment of the Cypro-Minoan script, a standardized catalogue of letters was drawn up by Émilie Masson. The “Masson set” of numbers 1–114 from Masson 1974 form the basis for the repertoire, supplemented by an addition 208 (deriving from the clay cylinder from Enkomi where it is used 21 times) from Olivier 2007. Olivier gives explicit numbers to two “logograms”, 201 and 202, which have not been included in this repertoire because they, like other hapax signs given by other authors, are too uncertain to encode. He then gives three “aritmograms”, notionally 203–205, which we recommend to be unified with U+10107 <sup>1</sup> AEGEAN NUMBER ONE, U+10110 – AEGEAN NUMBER TEN, and U+10119 ° AEGEAN NUMBER ONE HUNDRED, and three “stiktograms”, notionally 206–208, of which 206–207 are to be unified with U+10100 † AEGEAN WORD SEPARATOR LINE and U+10101 • AEGEAN WORD SEPARATOR DOT. An additional 209 has been added, deriving from a clay tablet from Ugarit, where it is used 20 times). Michael Everson proposed the numbering for 203–209. (See Figures 1a, 1b, and 1c for Masson’s charts, and Figure 2 for Olivier’s.)

Masson’s original classification was divided into four groups, archaic CM, CM1, CM2, and CM3, based on what she considered to be developmental stages of the writing system. In 2011, Silvia Ferrara challenged a chronological classification based on the archaeological context. In the figures below, however, the classifications will be seen.

The encoding proposed here is based on Masson’s standardized catalogue, despite the fact that several of the characters are now considered to be variants of each other. In Ferrara 2012 the repertoire has been

reduced from 114 to 74 characters (See Figure 8 for Ferrara's chart); Olivier 2007 made slightly different unifications. Cross references for the Ferrara 2012 unifications are given in the names list.

The encoding of the unified Masson characters will enable the representation of the history of Cypro-Minoan studies, where the catalogue entities have been distinguished in discussions of the decipherment. Scholars wishing to publish normalized texts will certainly wish to avoid the use of the “redundant” characters, or might choose to use them as indicative of the temporal or geographical provenance of a text. But documents relating to the decipherment itself distinguish them regularly, and that distinction must be maintained. As noted, the names list contains cross references from variants to the main character in each instance. This is considered vital information by specialists.

**5. Character names.** The character names for Cypro-Minoan are based on Masson's catalogue, with numbers padded with one to two zeros where appropriate.

**5.1 Recommendations for expansion.** For future expansion based on newly-discovered characters, Cypro-Minoanists have two options: If the character is clearly based on an existing character, its catalogue number could be based on that with B, C, and so on appended. Other new signs could be added in the 200 series. It can be recommended that in scholarly publications the CM- numbers be used for encoded characters, and \*- numbers be used in publications for new discoveries which have not been standardized in the UCS.

**5.2 Cross-references in the names list.** The cross references indicate the relationship of variant characters to the main character, such as U+12D02 Φ CYPRO-MINOAN SIGN CM003 which has been identified as a variant of U+12D01 Ψ CYPRO-MINOAN SIGN CM002. This kind of annotation provides vital information to the user of the names list, namely, guidance as to the proper character to use for a normalized text, since the variant forms have been deemed obsolete. This is essential information which should be retained in the names list. We also propose annotations be given to the common Aegean character names to give the Olivier numbers:

10100	AEGEAN WORD SEPARATOR LINE
	* Cypro-Minoan CM206
10101	AEGEAN WORD SEPARATOR DOT
	* Cypro-Minoan CM207
10107	AEGEAN NUMBER ONE
	* Cypro-Minoan CM203
10110	AEGEAN NUMBER TEN
	* Cypro-Minoan CM204
10119	AEGEAN NUMBER ONE HUNDRED
	* Cypro-Minoan CM205

**6. Numbers.** Cypro-Minoan texts give a number 1, 10, and 100, which are identical to numbers common to the Aegean area.

**7. Glyphs.** The fonts used in this proposal were designed by Michael Everson, based on glyphs in Masson 1974, with some corrections specified by Silvia Ferrara.

## 8. Unicode Character Properties

12D00;CYPRO-MINOAN SIGN CM001;Lo;0;L;;;;N;;;;  
12D01;CYPRO-MINOAN SIGN CM002;Lo;0;L;;;;N;;;;  
12D02;CYPRO-MINOAN SIGN CM003;Lo;0;L;;;;N;;;;  
12D03;CYPRO-MINOAN SIGN CM004;Lo;0;L;;;;N;;;;  
12D04;CYPRO-MINOAN SIGN CM005;Lo;0;L;;;;N;;;;  
12D05;CYPRO-MINOAN SIGN CM006;Lo;0;L;;;;N;;;;  
12D06;CYPRO-MINOAN SIGN CM007;Lo;0;L;;;;N;;;;  
12D07;CYPRO-MINOAN SIGN CM008;Lo;0;L;;;;N;;;;  
12D08;CYPRO-MINOAN SIGN CM009;Lo;0;L;;;;N;;;;  
12D09;CYPRO-MINOAN SIGN CM010;Lo;0;L;;;;N;;;;  
12D0A;CYPRO-MINOAN SIGN CM011;Lo;0;L;;;;N;;;;  
12D0B;CYPRO-MINOAN SIGN CM012;Lo;0;L;;;;N;;;;  
12D0C;CYPRO-MINOAN SIGN CM012B;Lo;0;L;;;;N;;;;  
12D0D;CYPRO-MINOAN SIGN CM013;Lo;0;L;;;;N;;;;  
12D0E;CYPRO-MINOAN SIGN CM014;Lo;0;L;;;;N;;;;  
12D0F;CYPRO-MINOAN SIGN CM015;Lo;0;L;;;;N;;;;  
12D10;CYPRO-MINOAN SIGN CM016;Lo;0;L;;;;N;;;;  
12D11;CYPRO-MINOAN SIGN CM017;Lo;0;L;;;;N;;;;  
12D12;CYPRO-MINOAN SIGN CM018;Lo;0;L;;;;N;;;;  
12D13;CYPRO-MINOAN SIGN CM019;Lo;0;L;;;;N;;;;  
12D14;CYPRO-MINOAN SIGN CM020;Lo;0;L;;;;N;;;;  
12D15;CYPRO-MINOAN SIGN CM021;Lo;0;L;;;;N;;;;  
12D16;CYPRO-MINOAN SIGN CM022;Lo;0;L;;;;N;;;;  
12D17;CYPRO-MINOAN SIGN CM023;Lo;0;L;;;;N;;;;  
12D18;CYPRO-MINOAN SIGN CM024;Lo;0;L;;;;N;;;;  
12D19;CYPRO-MINOAN SIGN CM025;Lo;0;L;;;;N;;;;  
12D1A;CYPRO-MINOAN SIGN CM026;Lo;0;L;;;;N;;;;  
12D1B;CYPRO-MINOAN SIGN CM027;Lo;0;L;;;;N;;;;  
12D1C;CYPRO-MINOAN SIGN CM028;Lo;0;L;;;;N;;;;  
12D1D;CYPRO-MINOAN SIGN CM029;Lo;0;L;;;;N;;;;  
12D1E;CYPRO-MINOAN SIGN CM030;Lo;0;L;;;;N;;;;  
12D1F;CYPRO-MINOAN SIGN CM031;Lo;0;L;;;;N;;;;  
12D20;CYPRO-MINOAN SIGN CM032;Lo;0;L;;;;N;;;;  
12D21;CYPRO-MINOAN SIGN CM033;Lo;0;L;;;;N;;;;  
12D22;CYPRO-MINOAN SIGN CM034;Lo;0;L;;;;N;;;;  
12D23;CYPRO-MINOAN SIGN CM035;Lo;0;L;;;;N;;;;  
12D24;CYPRO-MINOAN SIGN CM036;Lo;0;L;;;;N;;;;  
12D25;CYPRO-MINOAN SIGN CM037;Lo;0;L;;;;N;;;;  
12D26;CYPRO-MINOAN SIGN CM038;Lo;0;L;;;;N;;;;  
12D27;CYPRO-MINOAN SIGN CM039;Lo;0;L;;;;N;;;;  
12D28;CYPRO-MINOAN SIGN CM040;Lo;0;L;;;;N;;;;  
12D29;CYPRO-MINOAN SIGN CM041;Lo;0;L;;;;N;;;;  
12D2A;CYPRO-MINOAN SIGN CM042;Lo;0;L;;;;N;;;;  
12D2B;CYPRO-MINOAN SIGN CM043;Lo;0;L;;;;N;;;;  
12D2C;CYPRO-MINOAN SIGN CM044;Lo;0;L;;;;N;;;;  
12D2D;CYPRO-MINOAN SIGN CM045;Lo;0;L;;;;N;;;;  
12D2E;CYPRO-MINOAN SIGN CM046;Lo;0;L;;;;N;;;;  
12D2F;CYPRO-MINOAN SIGN CM047;Lo;0;L;;;;N;;;;  
12D30;CYPRO-MINOAN SIGN CM048;Lo;0;L;;;;N;;;;  
12D31;CYPRO-MINOAN SIGN CM049;Lo;0;L;;;;N;;;;  
12D32;CYPRO-MINOAN SIGN CM050;Lo;0;L;;;;N;;;;  
12D33;CYPRO-MINOAN SIGN CM051;Lo;0;L;;;;N;;;;  
12D34;CYPRO-MINOAN SIGN CM052;Lo;0;L;;;;N;;;;  
12D35;CYPRO-MINOAN SIGN CM053;Lo;0;L;;;;N;;;;  
12D36;CYPRO-MINOAN SIGN CM054;Lo;0;L;;;;N;;;;  
12D37;CYPRO-MINOAN SIGN CM055;Lo;0;L;;;;N;;;;  
12D38;CYPRO-MINOAN SIGN CM056;Lo;0;L;;;;N;;;;  
12D39;CYPRO-MINOAN SIGN CM057;Lo;0;L;;;;N;;;;  
12D3A;CYPRO-MINOAN SIGN CM058;Lo;0;L;;;;N;;;;  
12D3B;CYPRO-MINOAN SIGN CM059;Lo;0;L;;;;N;;;;  
12D3C;CYPRO-MINOAN SIGN CM060;Lo;0;L;;;;N;;;;  
12D3D;CYPRO-MINOAN SIGN CM061;Lo;0;L;;;;N;;;;  
12D3E;CYPRO-MINOAN SIGN CM062;Lo;0;L;;;;N;;;;  
12D3F;CYPRO-MINOAN SIGN CM063;Lo;0;L;;;;N;;;;  
12D40;CYPRO-MINOAN SIGN CM064;Lo;0;L;;;;N;;;;  
12D41;CYPRO-MINOAN SIGN CM065;Lo;0;L;;;;N;;;;  
12D42;CYPRO-MINOAN SIGN CM066;Lo;0;L;;;;N;;;;  
12D43;CYPRO-MINOAN SIGN CM067;Lo;0;L;;;;N;;;;  
12D44;CYPRO-MINOAN SIGN CM068;Lo;0;L;;;;N;;;;  
12D45;CYPRO-MINOAN SIGN CM069;Lo;0;L;;;;N;;;;  
12D46;CYPRO-MINOAN SIGN CM070;Lo;0;L;;;;N;;;;  
12D47;CYPRO-MINOAN SIGN CM071;Lo;0;L;;;;N;;;;  
12D48;CYPRO-MINOAN SIGN CM072;Lo;0;L;;;;N;;;;  
12D49;CYPRO-MINOAN SIGN CM073;Lo;0;L;;;;N;;;;  
12D4A;CYPRO-MINOAN SIGN CM074;Lo;0;L;;;;N;;;;  
12D4B;CYPRO-MINOAN SIGN CM075;Lo;0;L;;;;N;;;;  
12D4C;CYPRO-MINOAN SIGN CM076;Lo;0;L;;;;N;;;;  
12D4D;CYPRO-MINOAN SIGN CM077;Lo;0;L;;;;N;;;;  
12D4E;CYPRO-MINOAN SIGN CM2D0;Lo;0;L;;;;N;;;;  
12D4F;CYPRO-MINOAN SIGN CM2D1;Lo;0;L;;;;N;;;;  
12D50;CYPRO-MINOAN SIGN CM080;Lo;0;L;;;;N;;;;  
12D51;CYPRO-MINOAN SIGN CM081;Lo;0;L;;;;N;;;;  
12D52;CYPRO-MINOAN SIGN CM082;Lo;0;L;;;;N;;;;  
12D53;CYPRO-MINOAN SIGN CM083;Lo;0;L;;;;N;;;;  
12D54;CYPRO-MINOAN SIGN CM084;Lo;0;L;;;;N;;;;  
12D55;CYPRO-MINOAN SIGN CM085;Lo;0;L;;;;N;;;;  
12D56;CYPRO-MINOAN SIGN CM086;Lo;0;L;;;;N;;;;  
12D57;CYPRO-MINOAN SIGN CM087;Lo;0;L;;;;N;;;;  
12D58;CYPRO-MINOAN SIGN CM088;Lo;0;L;;;;N;;;;  
12D59;CYPRO-MINOAN SIGN CM089;Lo;0;L;;;;N;;;;  
12D5A;CYPRO-MINOAN SIGN CM090;Lo;0;L;;;;N;;;;  
12D5B;CYPRO-MINOAN SIGN CM091;Lo;0;L;;;;N;;;;  
12D5C;CYPRO-MINOAN SIGN CM092;Lo;0;L;;;;N;;;;  
12D5D;CYPRO-MINOAN SIGN CM093;Lo;0;L;;;;N;;;;  
12D5E;CYPRO-MINOAN SIGN CM094;Lo;0;L;;;;N;;;;  
12D5F;CYPRO-MINOAN SIGN CM095;Lo;0;L;;;;N;;;;  
12D60;CYPRO-MINOAN SIGN CM096;Lo;0;L;;;;N;;;;  
12D61;CYPRO-MINOAN SIGN CM097;Lo;0;L;;;;N;;;;  
12D62;CYPRO-MINOAN SIGN CM098;Lo;0;L;;;;N;;;;  
12D63;CYPRO-MINOAN SIGN CM099;Lo;0;L;;;;N;;;;  
12D64;CYPRO-MINOAN SIGN CM100;Lo;0;L;;;;N;;;;  
12D65;CYPRO-MINOAN SIGN CM101;Lo;0;L;;;;N;;;;  
12D66;CYPRO-MINOAN SIGN CM102;Lo;0;L;;;;N;;;;  
12D67;CYPRO-MINOAN SIGN CM103;Lo;0;L;;;;N;;;;  
12D68;CYPRO-MINOAN SIGN CM104;Lo;0;L;;;;N;;;;  
12D69;CYPRO-MINOAN SIGN CM105;Lo;0;L;;;;N;;;;  
12D6A;CYPRO-MINOAN SIGN CM106;Lo;0;L;;;;N;;;;  
12D6B;CYPRO-MINOAN SIGN CM107;Lo;0;L;;;;N;;;;  
12D6C;CYPRO-MINOAN SIGN CM108;Lo;0;L;;;;N;;;;  
12D6D;CYPRO-MINOAN SIGN CM109;Lo;0;L;;;;N;;;;  
12D6E;CYPRO-MINOAN SIGN CM110;Lo;0;L;;;;N;;;;  
12D6F;CYPRO-MINOAN SIGN CM111;Lo;0;L;;;;N;;;;  
12D70;CYPRO-MINOAN SIGN CM112;Lo;0;L;;;;N;;;;  
12D71;CYPRO-MINOAN SIGN CM113;Lo;0;L;;;;N;;;;  
12D72;CYPRO-MINOAN SIGN CM114;Lo;0;L;;;;N;;;;  
12D80;CYPRO-MINOAN SIGN CM208;Po;0;L;;;;N;;;;  
12D81;CYPRO-MINOAN SIGN CM209;Po;0;L;;;;N;;;;

## 9. Bibliography

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## 10. Acknowledgements

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## Figures

	CM 1	CM 2	CM 3		CM 1	CM 2	CM 3
1	I	I	I	21	△ △ △	△	
2	‡ ॥		‡	22			
3				23	△ △ △	△	△
4	ト ト	ト	ト	24	△ △ △	△	△
5	十 +	十	+	25	△ △ △	△	△
6	† †	†	†	26	△ △ △	△	△
7	ヰ			27	△ △ △	△	△
8	〒 〒 〒	〒		28	△ △ △	△	△
9	ヰ リ リ	ヰ リ リ	ヰ リ リ	29	△		
10				30	△		
11				31	△		
12	レ レ レ	レ レ レ	レ レ レ	32	△		
13				33	△		
14	レ			34	△		
15	○			35	△		
16	ヰ			36	△		
17	ヰ			37	△		
18	ヰ			38	△		
19	ヰ			39	△		
20				40	△		-○-

Figure 1a. Sign list from Masson 1974

	CM 1	CM 2	CM 3		CM 1	CM 2	CM 3
41	△ △ △			61	△ △		
42	△			62	△		
43	△			63	△ △		
44	△ △	△	△	64	△ △		
45	△			65			
46	△			66	△ △ △		
47	△ △	△		67	△ △ △		
48	△ △	△		68	△ △ △	△	
49		△		69	△ △ △	△	
50	△ △ △			70	△ △ △	△	△
51		△		71	△	△	
52	△ △	△		72	△	△	
53	△ △	△		73	△	△	△
54		△		74	△	△	
55	△ △ △			75	△	△	
56		△		76	△	△	
57	△	△	△	77	△	△	
58	△ △	△ △		78	△	△	
59	△ △	△ △		79	△	△	
60				80			

Figure 1b. Sign list from Masson 1974

CM 1	CM 2	CM 3		CM 1	CM 2	CM 3
81	ム			101	ヲ ヲ ヲ	
82	ヽ			102	ヽ ヽ ヽ	ヽ
83	ヽ			103	ヽ ヽ ヽ	ヽ
84	ヽ			104	ヽ ヽ	ヽ
85	ヽ ヽ ヽ			105		
86	ヽ			106	ヽ	
87	ヽ ヽ	ヽ		107	ヽ ヽ ヽ	ヽ
88	ヽ ヽ ヽ			108	ヽ ヽ	
89				109	ヽ	
90				110	ヽ ヽ ヽ	ヽ
91	ヽ ヽ ヽ			111	ヽ	
92	ヽ			112	ヽ ヽ	
93		ヽ		113	ヽ ヽ	
94				114	ヽ ヽ ヽ	
95	ヰ					
96	ヰ					
97	ヰ					
98	ヰ					
99	ヰ					
100	ヰ					

**Figure 1c.** Sign list from Masson 1974

Syllabograms		026	063	096
001	I	027	064	097
002	II	028	067	099
004	トニ	030	068	101
005	ナナ	033	069	102
006	ヌヌ	034	070	103
007	キ	035	072	104
008	チチ	036	073	107
009	ツツ	037	075	108
011	ソソ	038	081	109
012	ハハ	039	082	110
012b	ハ	041	083	112
013	タタ	044	084	114
015	オ()	046	085	Logograms
017	ア	050	086	201
019	アア	053	087	202
021	アア	055	088	Aritmograms
023	ア	056	091	1
024	アア	059	092	10
025	アア	061	095	100 ?
Stiktograms				
				—
		•		—
		&		{}

**Figure 2.** Unified sign list from Olivier 2007. The aritmograms 1, 10, and 100, given notional Cypro-Minoan catalogue numbers 203, 204, and 205, are unified with common Aegean numbers. The stiktograms | and •, given notional Cypro-Minoan catalogue numbers 206 and 207, are unified with common Aegean punctuation. The & is CM208 proposed in this document.

CM2

Syllabograms		027	028	059	081	082
001	I	028	¶	060		¶¶
004	‐	029	¶	061	¶	‐
005	+	030	¶	062	¶¶	‐
006	‡	033	¶	064	¶	‐
008	†	035	¶	066	¶	‐
009	‡‐	036	¶	068	¶¶	‐
010	‡	037	¶	069	¶¶	‐
011	‐	038	¶	070	¶	‐
012	‐	044	¶	072	¶	‐
013	‐	047	¶	074	¶	‐
017	‐‐	049	¶	075	¶	‐
021	‐‐	051	¶	076	¶	‐
023	‐‐‐	052	¶	078	¶	‐
024	‐‐‐	054	¶¶	079	¶	‐
025	‐‐‐	056	¶¶	080	¶	‐
Stiktograms						•

Figure 3. Sign list for CM2 from Olivier 2007.

CM3

Syllabograms		023	025	056	095	096
001	I	025	¶	058	¶	096
002	‐	027	¶	069	‐	‐
004	‐	028	¶	070	¶	‐
005	+	035	¶	071	¶	‐
006	‡	036	¶	073	¶	‐
007	‡	037	¶	074	¶	‐
008	†	038	¶	075	¶	‐
009	‐	044	¶	082	¶	‐
011	‐	050	¶	087	¶	‐
013	‐	051	¶	091	¶	‐
019	‐‐	053	¶¶	092	‐	‐
021	‐‐	055	¶¶	094	‐	‐
Stiktograms						•

Figure 4. Sign list for CM3 from Olivier 2007.

COMMON TO ALL SIGNARIES

	CM 1	CM 2	CM 3		CM 1	CM 2	CM 3
001	I	I	I	038	III	III	III
004	T	T	T	044	M	M	M
005	+	+	+	056	II	II	II
006	#	#	#	069	E	E	E
008	F	F	F	070	F	F	F
009	L	L	L	075	田	口	口
011	S	S	S	082	Y	Y	Y
013	T	T	T	087	U	U	U
021	A	A	A	091	V	V	V
023	A	A	A	092	X	X	X
025	A	A	A	095	W	W	W
027	+	+	+	096	U	U	U
028	↑	↑	↑	097	H	H	H
035	II	II	II	102	J	J	J
036	W	W	W	104	K	K	K
037	W	W	W	110	K	K	K

Figure 5. Common sign list from Olivier 2007.

	CM 1	CM 2«CM 3»	CM 1	CM 2«CM 3»	CM 1	CM 2«CM 3»	
001	I	I	040	...	...	079	...
002	I	...	041	A	...	080	...
004	T	T	044	M	M	081	M
005	+	+	046	H	...	082	Y
006	#	#	047	...	...	083	Y
007	#	...	049	...	...	084	Y
008	F	F	050	W	...	085	U
009	L	L	051	...	W	086	Y
010	...	F	052	...	W	087	U
011	S	S	053	W	...	088	Y
012	A	T	054	...	W	089	...
012b	A	...	055	W	...	090	...
013	T	T	056	W	II	091	V
015	◊	...	058	...	U	092	X
017	W	W	059	U	II	094	...
019	W	...	060	...	U	095	W
021	A	A	061	U	U	096	U
023	A	A	063	U	...	097	H
024	A	A	062	...	II	098	...
025	A	A	064	W	U	099	W
026	A	...	066	...	U	100	...
027	+	+	067	U	...	101	U
028	↑	↑	068	H	H	102	J
029	...	A	069	E	E	103	J
030	W	A	070	F	F	104	K
033	A	R	071	...	U	105	...
034	W	...	072	E	E	107	H
035	II	II	073	U	...	108	H
036	W	W	074	...	U	109	K
037	W	W	075	U	U	110	J
038	W	W	076	...	U	112	H
039	W	...	078	...	U	114	U

Figure 6. Comparison sign list from Olivier 2007.

UNIQUE TO CM1

012b	𠂔
015	𠂅
026	𠂆
034	𠂇
039	𠂈
041	𠂉
046	𠂊
063	𠂋
067	𠂌
083	𠂍
084	𠂎
085	𠂏
086	𠂐
088	𠂑
101	𠂓
108	𠂔
109	𠂕
112	𠂖
114	𠂗

UNIQUE TO CM2

010	𠂔
029	𠂅
047	𠂆
049	𠂇
052	𠂈
054	𠂉
060	𠂊
062	𠂋
066	𠂌
076	𠂍
078	𠂎
079	𠂏
080	𠂐
089	𠂑
090	𠂒

UNIQUE TO CM3

040	𠂔
058	𠂅
071	𠂆
094	𠂇
098	𠂈
100	𠂉
105	𠂊

**Figure 7.** Comparison sign list from Olivier 2007.

TABLE 5.10 A tentative standardized sign repertoire.

Masson's Sign no.	CM 1	CM 2	CM 3	Masson's Sign no.	CM 1	CM 2	CM 3
001	I	I	I	058	-	-	¶
002	¶	-	¶	059	¶	¶	-
004	¶	¶	¶	061	¶	¶	-
005	†	†	†	064	¶	¶	-
006	‡	‡	‡	067 <sup>110</sup>	¶	-	-
007	‡	-	‡	068	¶	¶	-
008	‡	‡	‡	069	¶	¶	¶
009	‡	‡	‡	070	¶	¶	¶
011	§	§	§	071	-	-	¤
012	¶	¶	-	072	¶	¶	-
013	¶	¶	¶	073	¶	-	¤
015	◊	-	-	075	¶	□	□
017	¶	¶	-	076	-	¶	-
019	¶	-	¶	078	-	¶	-
021	¶	¶	¶	079	-	¶	-
023	¶	¶	¶	080	-	¶	-
024	¶	¶	-	081	¶	¶	-
025	¶	¶	¶	082	¶	¶	¶
027	¶	¶	¶	083	¶	-	-
028	¶	¶	¶	084	¶	-	-
030	¶	¶	-	085	¶	-	-
033	¶	¶	-	086	¶	-	-
034	¶	-	-	087	¶	¶	¶
035	¶	¶	¶	088	¶	-	-
036	¶	¶	¶	091	¶	¶	¶
037	¶	¶	¶	092	¶	¶	¶
038	¶	¶	¶	095	¶	¶	¶
040	-	-	¶	096	¶	¶	¶
044	¶	¶	¶	097	¶	¶	¶
046	¶	-	-	099	¶	-	¶
047	-	¶	-	102	¶	¶	¶
049	-	¶	-	103	¶	-	¶
050	¶	-	¶	104	¶	¶	¶
051	-	¶	¶	105	-	-	¶
053	¶	-	¶	107	¶	¶	-
055	¶	-	¶	110	¶	¶	¶
056	¶	¶	¶	114	¶	-	-

Figure 8. Standardized sign list from Ferrara 2012.

	12D0	12D1	12D2	12D3	12D4	12D5	12D6	12D7
0	I 12D00	Y 12D10	Ϛ 12D20	V 12D30	Ϛ 12D40	Ϛ 12D50	Ϛ 12D60	Ϛ 12D70
1	Ϛ 12D01	Ϛ 12D11	Ϛ 12D21	Ϛ 12D31	Ϛ 12D41	Ϛ 12D51	Ϛ 12D61	XV 12D71
2	Ϛ 12D02	Ϛ 12D12	Ϛ 12D22	Ϛ 12D32	Ϛ 12D42	Ϛ 12D52	Ϛ 12D62	Ϛ 12D72
3	Ϛ 12D03	Ϛ 12D13	Ϛ 12D23	Ϛ 12D33	Ϛ 12D43	Ϛ 12D53	Ϛ 12D63	Ϛ 12D73
4	Ϛ 12D04	Ϛ 12D14	Ϛ 12D24	Ϛ 12D34	Ϛ 12D44	Ϛ 12D54	Ϛ 12D64	12D74
5	Ϛ 12D05	Ϛ 12D15	Ϛ 12D25	Ϛ 12D35	Ϛ 12D45	Ϛ 12D55	Ϛ 12D65	
6	Ϛ 12D06	Ϛ 12D16	Ϛ 12D26	Ϛ 12D36	Ϛ 12D46	Ϛ 12D56	Ϛ 12D66	
7	Ϛ 12D07	Ϛ 12D17	Ϛ 12D27	Ϛ 12D37	Ϛ 12D47	Ϛ 12D57	Ϛ 12D67	
8	Ϛ 12D08	Ϛ 12D18	Ϛ 12D28	Ϛ 12D38	Ϛ 12D48	Ϛ 12D58	Ϛ 12D68	
9	Ϛ 12D09	Ϛ 12D19	Ϛ 12D29	Ϛ 12D39	Ϛ 12D49	Ϛ 12D59	Ϛ 12D69	
A	Ϛ 12D0A	Ϛ 12D1A	Ϛ 12D2A	Ϛ 12D3A	Ϛ 12D4A	Ϛ 12D5A	Ϛ 12D6A	
B	Ϛ 12D0B	Ϛ 12D1B	Ϛ 12D2B	Ϛ 12D3B	Ϛ 12D4B	Ϛ 12D5B	Ϛ 12D6B	
C	Ϛ 12D0C	Ϛ 12D1C	Ϛ 12D2C	Ϛ 12D3C	Ϛ 12D4C	Ϛ 12D5C	Ϛ 12D6C	
D	Ϛ 12D0D	Ϛ 12D1D	Ϛ 12D2D	Ϛ 12D3D	Ϛ 12D4D	Ϛ 12D5D	Ϛ 12D6D	
E	Ϛ 12D0E	Ϛ 12D1E	Ϛ 12D2E	Ϛ 12D3E	Ϛ 12D4E	Ϛ 12D5E	Ϛ 12D6E	
F	Ϛ 12D0F	Ϛ 12D1F	Ϛ 12D2F	Ϛ 12D3F	Ϛ 12D4F	Ϛ 12D5F	Ϛ 12D6F	

**Signs from Masson's list**

12D00	I	CYPRO-MINOAN SIGN CM001
12D01	‡	CYPRO-MINOAN SIGN CM002
12D02	◊	CYPRO-MINOAN SIGN CM003 → 12D01 ♡ cypro-minoan sign cm002
12D03	▮	CYPRO-MINOAN SIGN CM004
12D04	✚	CYPRO-MINOAN SIGN CM005
12D05	❖	CYPRO-MINOAN SIGN CM006
12D06	❖	CYPRO-MINOAN SIGN CM007
12D07	❖	CYPRO-MINOAN SIGN CM008
12D08	↓	CYPRO-MINOAN SIGN CM009
12D09	↳	CYPRO-MINOAN SIGN CM010 • needs cross-reference
12D0A	↶	CYPRO-MINOAN SIGN CM011
12D0B	↶	CYPRO-MINOAN SIGN CM012
12D0C	↶	CYPRO-MINOAN SIGN CM012B
12D0D	↶	CYPRO-MINOAN SIGN CM013
12D0E	↶	CYPRO-MINOAN SIGN CM014 → 12D0B ↶ cypro-minoan sign cm012
12D0F	◊	CYPRO-MINOAN SIGN CM015
12D10	Υ	CYPRO-MINOAN SIGN CM016 → 12D52 Υ cypro-minoan sign cm082
12D11	↷	CYPRO-MINOAN SIGN CM017
12D12	↷	CYPRO-MINOAN SIGN CM018 • needs cross-reference
12D13	↷	CYPRO-MINOAN SIGN CM019
12D14	↷	CYPRO-MINOAN SIGN CM020 → 12D13 ↷ cypro-minoan sign cm019
12D15	Ϙ	CYPRO-MINOAN SIGN CM021
12D16	Ϙ	CYPRO-MINOAN SIGN CM022 → 12D15 Ϙ cypro-minoan sign cm021
12D17	Ϙ	CYPRO-MINOAN SIGN CM023
12D18	Ϙ	CYPRO-MINOAN SIGN CM024
12D19	Ϙ	CYPRO-MINOAN SIGN CM025
12D1A	Ϙ	CYPRO-MINOAN SIGN CM026 • possibly Olivier CM202
12D1B	Ϙ	CYPRO-MINOAN SIGN CM027
12D1C	Ϙ	CYPRO-MINOAN SIGN CM028
12D1D	Ϙ	CYPRO-MINOAN SIGN CM029 • needs cross-reference
12D1E	Ϙ	CYPRO-MINOAN SIGN CM030 • possibly Olivier CM202
12D1F	Ϙ	CYPRO-MINOAN SIGN CM031 → 12D1E Ϙ cypro-minoan sign cm030
12D20	Ϙ	CYPRO-MINOAN SIGN CM032 → 12D1E Ϙ cypro-minoan sign cm030
12D21	Ϙ	CYPRO-MINOAN SIGN CM033
12D22	Ϙ	CYPRO-MINOAN SIGN CM034
12D23	Ϙ	CYPRO-MINOAN SIGN CM035
12D24	Ϙ	CYPRO-MINOAN SIGN CM036
12D25	Ϙ	CYPRO-MINOAN SIGN CM037
12D26	Ϙ	CYPRO-MINOAN SIGN CM038
12D27	Ϙ	CYPRO-MINOAN SIGN CM039 • needs cross-reference
12D28	Ϙ	CYPRO-MINOAN SIGN CM040
12D29	Ϙ	CYPRO-MINOAN SIGN CM041 • needs cross-reference
12D2A	Ϙ	CYPRO-MINOAN SIGN CM042 → 12D27 Ϙ cypro-minoan sign cm039
12D2B	Ϙ	CYPRO-MINOAN SIGN CM043 • needs cross-reference
12D2C	Ϙ	CYPRO-MINOAN SIGN CM044
12D2D	Ϙ	CYPRO-MINOAN SIGN CM045 → 12D2C Ϙ cypro-minoan sign cm044

12D2E	Ϙ	CYPRO-MINOAN SIGN CM046
12D2F	Ϙ	CYPRO-MINOAN SIGN CM047
12D30	Ϙ	CYPRO-MINOAN SIGN CM048 • needs cross-reference
12D31	Ϙ	CYPRO-MINOAN SIGN CM049
12D32	Ϙ	CYPRO-MINOAN SIGN CM050
12D33	Ϙ	CYPRO-MINOAN SIGN CM051
12D34	Ϙ	CYPRO-MINOAN SIGN CM052 • needs cross-reference
12D35	Ϙ	CYPRO-MINOAN SIGN CM053
12D36	Ϙ	CYPRO-MINOAN SIGN CM054 • needs cross-reference
12D37	Ϙ	CYPRO-MINOAN SIGN CM055
12D38	Ϙ	CYPRO-MINOAN SIGN CM056
12D39	Ϙ	CYPRO-MINOAN SIGN CM057 • needs cross-reference
12D3A	Ϙ	CYPRO-MINOAN SIGN CM058
12D3B	Ϙ	CYPRO-MINOAN SIGN CM059
12D3C	Ϙ	CYPRO-MINOAN SIGN CM060 • needs cross-reference
12D3D	Ϙ	CYPRO-MINOAN SIGN CM061
12D3E	Ϙ	CYPRO-MINOAN SIGN CM062 • needs cross-reference
12D3F	Ϙ	CYPRO-MINOAN SIGN CM063 • needs cross-reference
12D40	Ϙ	CYPRO-MINOAN SIGN CM064
12D41	Ϙ	CYPRO-MINOAN SIGN CM065 • needs cross-reference
12D42	Ϙ	CYPRO-MINOAN SIGN CM066 • needs cross-reference
12D43	Ϙ	CYPRO-MINOAN SIGN CM067
12D44	Ϙ	CYPRO-MINOAN SIGN CM068
12D45	Ϙ	CYPRO-MINOAN SIGN CM069
12D46	Ϙ	CYPRO-MINOAN SIGN CM070
12D47	Ϙ	CYPRO-MINOAN SIGN CM071
12D48	Ϙ	CYPRO-MINOAN SIGN CM072
12D49	Ϙ	CYPRO-MINOAN SIGN CM073
12D4A	Ϙ	CYPRO-MINOAN SIGN CM074 • needs cross-reference
12D4B	Ϙ	CYPRO-MINOAN SIGN CM075
12D4C	Ϙ	CYPRO-MINOAN SIGN CM076
12D4D	Ϙ	CYPRO-MINOAN SIGN CM077 • needs cross-reference
12D4E	Ϙ	CYPRO-MINOAN SIGN CM078
12D4F	Ϙ	CYPRO-MINOAN SIGN CM079
12D50	Ϙ	CYPRO-MINOAN SIGN CM080
12D51	Ϙ	CYPRO-MINOAN SIGN CM081
12D52	Ϙ	CYPRO-MINOAN SIGN CM082
12D53	Ϙ	CYPRO-MINOAN SIGN CM083
12D54	Ϙ	CYPRO-MINOAN SIGN CM084
12D55	Ϙ	CYPRO-MINOAN SIGN CM085
12D56	Ϙ	CYPRO-MINOAN SIGN CM086
12D57	Ϙ	CYPRO-MINOAN SIGN CM087
12D58	Ϙ	CYPRO-MINOAN SIGN CM088
12D59	Ϙ	CYPRO-MINOAN SIGN CM089 • needs cross-reference
12D5A	Ϙ	CYPRO-MINOAN SIGN CM090 • needs cross-reference
12D5B	Ϙ	CYPRO-MINOAN SIGN CM091
12D5C	Ϙ	CYPRO-MINOAN SIGN CM092
12D5D	Ϙ	CYPRO-MINOAN SIGN CM093 • needs cross-reference
12D5E	Ϙ	CYPRO-MINOAN SIGN CM094 • needs cross-reference
12D5F	Ϙ	CYPRO-MINOAN SIGN CM095

- 12D60 ⠼ CYPRO-MINOAN SIGN CM096  
 12D61 ⠼ CYPRO-MINOAN SIGN CM097  
 12D62 ⠼ CYPRO-MINOAN SIGN CM098  
   • Olivier CM201  
 12D63 ⠼ CYPRO-MINOAN SIGN CM099  
 12D64 ⠼ CYPRO-MINOAN SIGN CM100  
   • needs cross-reference  
 12D65 ⠼ CYPRO-MINOAN SIGN CM101  
   • needs cross-reference  
 12D66 ⠼ CYPRO-MINOAN SIGN CM102  
 12D67 ⠼ CYPRO-MINOAN SIGN CM103  
 12D68 ⠼ CYPRO-MINOAN SIGN CM104  
 12D69 ⠼ CYPRO-MINOAN SIGN CM105  
 12D6A ⠼ CYPRO-MINOAN SIGN CM106  
   • needs cross-reference  
 12D6B ⠼ CYPRO-MINOAN SIGN CM107  
 12D6C ⠼ CYPRO-MINOAN SIGN CM108  
   • needs cross-reference  
 12D6D ⠼ CYPRO-MINOAN SIGN CM109  
   • needs cross-reference  
 12D6E ⠼ CYPRO-MINOAN SIGN CM110  
 12D6F ⠼ CYPRO-MINOAN SIGN CM111  
   • needs cross-reference  
 12D70 ⠼ CYPRO-MINOAN SIGN CM112  
   • needs cross-reference  
 12D71 ⠼ CYPRO-MINOAN SIGN CM113  
   • needs cross-reference  
 12D72 ⠼ CYPRO-MINOAN SIGN CM114

### Punctuation

- 12D73 ⠼ CYPRO-MINOAN SIGN CM208  
   • ampersand  
 12D74 ⠼ CYPRO-MINOAN SIGN CM209  
   • paragraph

## A. Administrative

1. Title

**Proposal to encode the Cypro-Minoan script in the SMP of the UCS**

2. Requester's name

**UC Berkeley Script Encoding Initiative (Universal Scripts Project); authors: Michael Everson, Silvia Ferrara, Miguel Valério**

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

**Liaison contribution.**

4. Submission date

**2016-04-25**

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

**Yes.**

6b. More information will be provided later

**No.**

## 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

**Cypro-Minoan.**

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

**116.**

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 D.**

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 and FontLab.**

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

**Yes, see bibliography above.**

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, see above.**

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?

**Silvia Ferrara, Miguel Valério.**

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?

**Specialists and students of Cypriot epigraphy and Aegean prehistory.**

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

**Fairly rare as these things go.**

4b. Reference

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

**Yes.**

5b. If YES, where?

**By scholars 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?

**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 (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?