

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

Doc Type: Working Group Document**Title: Preliminary proposal to encode the Cher Vang Hmong script in the UCS****Source: UC Berkeley Script Encoding Initiative (Universal Scripts Project)****Author: Michael Everson****Status: Liaison Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Date: 2016-03-19**

1.0 Introduction. The Cher Vang Hmong script is used for writing the Hmong/Mong language, known as *Ntawv Txawj Vaag* (named after the inventor the Reverend Cher Vang Kong (Txawj Vaag Koo), who devised it in the 1980s for use within his church. This script has been used by members of the United Christians Liberty Evangelical church in America for more than 25 years, in printed material and videos. The script is also called *Ntawv Paj Ntaub*, translating as “flower-cloth writing system”. *Paj* means ‘flower’ and *ntaub* means ‘cloth’ and the two together mean ‘embroidery’. Another unrelated Flower Hmong script devised in 1959 is also called *Paj Ntaub*. Several of the consonant letters appear to have been derived from the shapes of Hebrew characters.

In this document, the Romanized Popular Alphabet orthography (widely used by the Hmong in North America) is given alongside example text in Cher Vang Hmong. Two features of the RPA are of note. Double vowels *ee* and *oo* indicate [ɛɪ] and [oɪ] respectively; final letters indicate tones thus:

RPA		
-b	ɿ	ɿ high-level
-m	ɿ	ɿ low-glottalized
-d	ɿ	ɿ low-rising
-j	ɿ	ɿ high-falling
-v	ɿ	ɿ mid-rising
-Ø	ɿ	ɿ mid-level
-s	ɿ	ɿ low-level
-g	ɿ	ɿ falling-breathy

2.0 Processing. Cher Vang Hmong is an alphabetic script comprised of 36 consonant characters, 11 vowel characters, and 7 tone characters. The aspirated characters are represented by following a consonant with ɿ *h*. Diphthongs are written as sequences ɿ *ai*, ɿ *aw*, ɿ *au*, ɿ *ia*, ɿ *ua*, ɿ *uo*. There are seven symbols used to indicate syntactic or semantic content. The combining tone marks are used on the vowels.

A peculiarity in the font is that 1E200 ɿ CONSONANT GLOTTAL appears to be identical to 1E22E ɿ VOWEL OH, and 1E212 ɿ CONSONANT RR appears to be identical to 1E22D ɿ VOWEL AI. Three punctuation characters which are not defined by James and Persson are given at the end of the code chart, with names relating to their positions in the ASCII-based font.

3.0 Non-alphabetic characters are used in Cher Vang Hmong. Ordinary generic punctuation marks like COMMA and FULL STOP are used in Cher Vang Hmong and can be represented by existing UCS characters.

4.0 Digits. 1E240..1E249 are the decimal digits 0–9.

4.0 Ordering. The ordering of the consonant onsets and tone marks follows that of the code chart.

5.0 Unicode Linebreaking Properties. The consonant onsets and vowel rimes behave like letters. The digits behave like digits. The punctuation marks 1E236..1E23C behave like 00B6 ¶.

6.0. Unicode Character Properties.

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1E200;CHER VANG HMONG CONSONANT GLOTTAL;Lo;0;L;;;;N;;;;;
1E201;CHER VANG HMONG CONSONANT H;Lo;0;L;;;;N;;;;;
1E202;CHER VANG HMONG CONSONANT Q;Lo;0;L;;;;N;;;;;
1E203;CHER VANG HMONG CONSONANT NQ;Lo;0;L;;;;N;;;;;
1E204;CHER VANG HMONG CONSONANT K;Lo;0;L;;;;N;;;;;
1E205;CHER VANG HMONG CONSONANT NK;Lo;0;L;;;;N;;;;;
1E206;CHER VANG HMONG CONSONANT NG;Lo;0;L;;;;N;;;;;
1E207;CHER VANG HMONG CONSONANT C;Lo;0;L;;;;N;;;;;
1E208;CHER VANG HMONG CONSONANT NC;Lo;0;L;;;;N;;;;;
1E209;CHER VANG HMONG CONSONANT NY;Lo;0;L;;;;N;;;;;
1E20A;CHER VANG HMONG CONSONANT XY;Lo;0;L;;;;N;;;;;
1E20B;CHER VANG HMONG CONSONANT Y;Lo;0;L;;;;N;;;;;
1E20C;CHER VANG HMONG CONSONANT R;Lo;0;L;;;;N;;;;;
1E20D;CHER VANG HMONG CONSONANT NR;Lo;0;L;;;;N;;;;;
1E20E;CHER VANG HMONG CONSONANT YD;Lo;0;L;;;;N;;;;;
1E20F;CHER VANG HMONG CONSONANT NTS;Lo;0;L;;;;N;;;;;
1E210;CHER VANG HMONG CONSONANT S;Lo;0;L;;;;N;;;;;
1E211;CHER VANG HMONG CONSONANT Z;Lo;0;L;;;;N;;;;;
1E212;CHER VANG HMONG CONSONANT RR;Lo;0;L;;;;N;;;;;
1E213;CHER VANG HMONG CONSONANT L;Lo;0;L;;;;N;;;;;
1E214;CHER VANG HMONG CONSONANT TX;Lo;0;L;;;;N;;;;;
1E215;CHER VANG HMONG CONSONANT NTX;Lo;0;L;;;;N;;;;;
1E216;CHER VANG HMONG CONSONANT X;Lo;0;L;;;;N;;;;;
1E217;CHER VANG HMONG CONSONANT DL;Lo;0;L;;;;N;;;;;
1E218;CHER VANG HMONG CONSONANT T;Lo;0;L;;;;N;;;;;
1E219;CHER VANG HMONG CONSONANT D;Lo;0;L;;;;N;;;;;
1E21A;CHER VANG HMONG CONSONANT NT;Lo;0;L;;;;N;;;;;
1E21B;CHER VANG HMONG CONSONANT N;Lo;0;L;;;;N;;;;;
1E21C;CHER VANG HMONG CONSONANT P;Lo;0;L;;;;N;;;;;
1E21D;CHER VANG HMONG CONSONANT NP;Lo;0;L;;;;N;;;;;
1E21E;CHER VANG HMONG CONSONANT M;Lo;0;L;;;;N;;;;;
1E21F;CHER VANG HMONG CONSONANT F;Lo;0;L;;;;N;;;;;
1E220;CHER VANG HMONG CONSONANT V;Lo;0;L;;;;N;;;;;
1E221;CHER VANG HMONG CONSONANT PL;Lo;0;L;;;;N;;;;;
1E222;CHER VANG HMONG CONSONANT NPL;Lo;0;L;;;;N;;;;;
1E223;CHER VANG HMONG CONSONANT ML;Lo;0;L;;;;N;;;;;
1E224;CHER VANG HMONG VOWEL A;Lo;0;L;;;;N;;;;;
1E225;CHER VANG HMONG VOWEL AA;Lo;0;L;;;;N;;;;;
1E226;CHER VANG HMONG VOWEL E;Lo;0;L;;;;N;;;;;
1E227;CHER VANG HMONG VOWEL EE;Lo;0;L;;;;N;;;;;
1E228;CHER VANG HMONG VOWEL I;Lo;0;L;;;;N;;;;;
1E229;CHER VANG HMONG VOWEL O;Lo;0;L;;;;N;;;;;
1E22A;CHER VANG HMONG VOWEL OO;Lo;0;L;;;;N;;;;;
1E22B;CHER VANG HMONG VOWEL U;Lo;0;L;;;;N;;;;;
1E22C;CHER VANG HMONG VOWEL W;Lo;0;L;;;;N;;;;;
1E22D;CHER VANG HMONG VOWEL AI;Lo;0;L;;;;N;;;;;
1E22E;CHER VANG HMONG VOWEL OH;Lo;0;L;;;;N;;;;;
1E22F;CHER VANG HMONG TONE B;Mn;230;NSM;;;;N;;;;;
1E230;CHER VANG HMONG TONE M;Mn;230;NSM;;;;N;;;;;
1E231;CHER VANG HMONG TONE J;Mn;230;NSM;;;;N;;;;;
1E232;CHER VANG HMONG TONE V;Mn;230;NSM;;;;N;;;;;
1E233;CHER VANG HMONG TONE S;Mn;230;NSM;;;;N;;;;;
1E234;CHER VANG HMONG TONE G;Mn;230;NSM;;;;N;;;;;
1E235;CHER VANG HMONG TONE D;Mn;230;NSM;;;;N;;;;;
1E236;CHER VANG HMONG SIGN OOV;So;0;L;;;;N;;;;;
1E237;CHER VANG HMONG SIGN PES;So;0;L;;;;N;;;;;
1E238;CHER VANG HMONG SIGN KHAS THEEB;So;0;L;;;;N;;;;;
1E239;CHER VANG HMONG SIGN KHUAM LUAS;So;0;L;;;;N;;;;;
1E23A;CHER VANG HMONG SIGN POOS;So;0;L;;;;N;;;;;
1E23B;CHER VANG HMONG SIGN XW XW;So;0;L;;;;N;;;;;
1E23C;CHER VANG HMONG SIGN KHUS AIM;So;0;L;;;;N;;;;;
1E240;CHER VANG HMONG DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;
1E241;CHER VANG HMONG DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;
1E242;CHER VANG HMONG DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;
1E243;CHER VANG HMONG DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;
1E244;CHER VANG HMONG DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;
1E245;CHER VANG HMONG DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;
1E246;CHER VANG HMONG DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;
1E247;CHER VANG HMONG DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;
1E248;CHER VANG HMONG DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;
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1E249;CHER VANG HMONG DIGIT NINE;Nd;0;L;;;9;9;9;N;;;;;
1E24D;CHER VANG HMONG SIGN-1;So;0;L;;;;;N;;;;;
1E24E;CHER VANG HMONG SIGN-2;So;0;L;;;;;N;;;;;
1E24F;CHER VANG HMONG SIGN-3;So;0;L;;;;;N;;;;;

7.0 References

James, Ian, & Mattias Persson. 2014. “New Flower Script for Mong by Cher Vang Kong”.
<http://www.skyknowledge.com/mong-ntaub3.htm>

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	1E20	1E21	1E22	1E23	1E24
0	᠊ 1E200	᠋᠊ 1E210	᠌᠊ 1E220	᠍᠊ 1E230	᠎᠊ 1E240
1	᠏᠊ 1E201	᠏᠋᠊ 1E211	᠏᠌᠊ 1E221	᠏᠍᠊ 1E231	᠏᠎᠊ 1E241
2	᠐᠊ 1E202	᠐᠋᠊ 1E212	᠐᠌᠊ 1E222	᠐᠍᠊ 1E232	᠐᠎᠊ 1E242
3	᠑᠊ 1E203	᠑᠋᠊ 1E213	᠑᠌᠊ 1E223	᠑᠍᠊ 1E233	᠑᠎᠊ 1E243
4	᠒᠊ 1E204	᠒᠋᠊ 1E214	᠒᠌᠊ 1E224	᠒᠍᠊ 1E234	᠒᠎᠊ 1E244
5	᠓᠊ 1E205	᠓᠋᠊ 1E215	᠓᠌᠊ 1E225	᠓᠍᠊ 1E235	᠓᠎᠊ 1E245
6	᠔᠊ 1E206	᠔᠋᠊ 1E216	᠔᠌᠊ 1E226	᠔᠍᠊ 1E236	᠔᠎᠊ 1E246
7	᠕᠊ 1E207	᠕᠋᠊ 1E217	᠕᠌᠊ 1E227	᠕᠍᠊ 1E237	᠕᠎᠊ 1E247
8	᠖᠊ 1E208	᠖᠋᠊ 1E218	᠖᠌᠊ 1E228	᠖᠍᠊ 1E238	᠖᠎᠊ 1E248
9	᠗᠊ 1E209	᠗᠋᠊ 1E219	᠗᠌᠊ 1E229	᠗᠍᠊ 1E239	᠗᠎᠊ 1E249
A	᠘᠊ 1E20A	᠘᠋᠊ 1E21A	᠘᠌᠊ 1E22A	᠘᠍᠊ 1E23A	
B	᠙᠊ 1E20B	᠙᠋᠊ 1E21B	᠙᠌᠊ 1E22B	᠙᠍᠊ 1E23B	
C	᠐᠈᠊ 1E20C	᠐᠈᠋᠊ 1E21C	᠐᠈᠌᠊ 1E22C	᠐᠈᠍᠊ 1E23C	
D	᠐᠊ 1E20D	᠐᠋᠊ 1E21D	᠐᠌᠊ 1E22D		᠐᠎᠊ 1E24D
E	᠐᠈᠊ 1E20E	᠐᠈᠋᠊ 1E21E	᠐᠈᠌᠊ 1E22E		᠐᠈᠎᠊ 1E24E
F	᠐᠊ 1E20F	᠐᠋᠊ 1E21F	᠐᠌᠊ 1E22F		᠐᠎᠊ 1E24F

The Cher Vang Hmong script (Txawj Vaag in RPA orthography) is also known as Paj Ntaub.

Consonant onsets

1E200	ᄁ	CHER VANG HMONG CONSONANT GLOTTAL
1E201	ᄂ	CHER VANG HMONG CONSONANT H
1E202	ᄃ	CHER VANG HMONG CONSONANT Q → 05E7 ᄃ hebrew letter qof
1E203	ᄄ	CHER VANG HMONG CONSONANT NQ
1E204	ᄅ	CHER VANG HMONG CONSONANT K → 05DB ᄅ hebrew letter kaf
1E205	ᄆ	CHER VANG HMONG CONSONANT NK
1E206	ᄇ	CHER VANG HMONG CONSONANT NG
1E207	ᄈ	CHER VANG HMONG CONSONANT C
1E208	ᄉ	CHER VANG HMONG CONSONANT NC
1E209	ᄊ	CHER VANG HMONG CONSONANT NY
1E20A	ᄋ	CHER VANG HMONG CONSONANT XY
1E20B	ᄌ	CHER VANG HMONG CONSONANT Y
1E20C	ᄍ	CHER VANG HMONG CONSONANT R
1E20D	ᄎ	CHER VANG HMONG CONSONANT NR
1E20E	ᄏ	CHER VANG HMONG CONSONANT YD
1E20F	ᄐ	CHER VANG HMONG CONSONANT NTS
1E210	ᄑ	CHER VANG HMONG CONSONANT S → 05E9 ᄑ hebrew letter shin
1E211	ᄒ	CHER VANG HMONG CONSONANT Z
1E212	ᄓ	CHER VANG HMONG CONSONANT RR
1E213	ᄔ	CHER VANG HMONG CONSONANT L
1E214	ᄕ	CHER VANG HMONG CONSONANT TX
1E215	ᄖ	CHER VANG HMONG CONSONANT NTX
1E216	ᄗ	CHER VANG HMONG CONSONANT X
1E217	ᄘ	CHER VANG HMONG CONSONANT DL
1E218	ᄙ	CHER VANG HMONG CONSONANT T → 05D8 ᄙ hebrew letter tet
1E219	ᄚ	CHER VANG HMONG CONSONANT D
1E21A	ᄛ	CHER VANG HMONG CONSONANT NT
1E21B	ᄜ	CHER VANG HMONG CONSONANT N
1E21C	ᄝ	CHER VANG HMONG CONSONANT P → 05D4 ᄝ hebrew letter pe
1E21D	ᄞ	CHER VANG HMONG CONSONANT NP
1E21E	ᄟ	CHER VANG HMONG CONSONANT M → 05DE ᄟ hebrew letter mem
1E21F	ᄠ	CHER VANG HMONG CONSONANT F
1E220	ᄡ	CHER VANG HMONG CONSONANT V
1E221	ᄢ	CHER VANG HMONG CONSONANT PL
1E222	ᄣ	CHER VANG HMONG CONSONANT NPL
1E223	ᄤ	CHER VANG HMONG CONSONANT ML

Vowel rimes

1E224	ᄥ	CHER VANG HMONG VOWEL A
1E225	ᄦ	CHER VANG HMONG VOWEL AA
1E226	ᄧ	CHER VANG HMONG VOWEL E
1E227	ᄨ	CHER VANG HMONG VOWEL EE
1E228	ᄩ	CHER VANG HMONG VOWEL I
1E229	ᄪ	CHER VANG HMONG VOWEL O
1E22A	ᄫ	CHER VANG HMONG VOWEL OO
1E22B	ᄬ	CHER VANG HMONG VOWEL U
1E22C	ᄭ	CHER VANG HMONG VOWEL W
1E22D	ᄮ	CHER VANG HMONG VOWEL AI → 1E212 ᄮ cher vang hmong consonant rr
1E22E	ᄮ	CHER VANG HMONG VOWEL OH → 1E200 ᄮ cher vang hmong consonant glottal

Tone marks

1E22F	ᄯ	CHER VANG HMONG TONE B = RPA -b high-level tone
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1E230	ᄰ	CHER VANG HMONG TONE M = RPA -m low-glottalized tone
1E231	ᄱ	CHER VANG HMONG TONE J = RPA -j high-falling tone
1E232	ᄲ	CHER VANG HMONG TONE V = RPA -v mid-rising tone
1E233	ᄳ	CHER VANG HMONG TONE S = RPA -s low-level tone
1E234	ᄴ	CHER VANG HMONG TONE G = RPA -g falling-breathy tone
1E235	ᄵ	CHER VANG HMONG TONE D = RPA -d low-rising tone

Punctuation

1E236	ᄶ	CHER VANG HMONG SIGN OOV = person, name
1E237	ᄷ	CHER VANG HMONG SIGN PES = item, thing
1E238	ᄸ	CHER VANG HMONG SIGN KHAB THEEB = location
1E239	ᄹ	CHER VANG HMONG SIGN KHUAM LUAS = animal
1E23A	ᄺ	CHER VANG HMONG SIGN POOS = invertebrate
1E23B	ᄻ	CHER VANG HMONG SIGN XW XW = reduplication
1E23C	ᄼ	CHER VANG HMONG SIGN KHUS AIM = creaky voice

Digits

1E240	ᄽ	CHER VANG HMONG DIGIT ZERO
1E241	ᄾ	CHER VANG HMONG DIGIT ONE
1E242	ᄿ	CHER VANG HMONG DIGIT TWO
1E243	ᅀ	CHER VANG HMONG DIGIT THREE
1E244	ᅁ	CHER VANG HMONG DIGIT FOUR
1E245	ᅂ	CHER VANG HMONG DIGIT FIVE
1E246	ᅃ	CHER VANG HMONG DIGIT SIX
1E247	ᅄ	CHER VANG HMONG DIGIT SEVEN
1E248	ᅅ	CHER VANG HMONG DIGIT EIGHT
1E249	ᅆ	CHER VANG HMONG DIGIT NINE

Punctuation

1E24D	ᅇ	CHER VANG HMONG SIGN-1 = dollar sign?
1E24E	ᅈ	CHER VANG HMONG SIGN-2 → 1E207 ᅈ cher vang hmong consonant c = at sign?
1E24F	ᅉ	CHER VANG HMONG SIGN-3 = question mark?