Universal Character Set International Organization for Standardization Organisation Internationale de Normalisation Международная организация по Стандартизации

Doc Type: Working Group Document

Title: Proposal to encode Rma script to UCS

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Status: Individual Contribution to WG2 & UTC

Action: For consideration by WG2 & UTC

Date: 2025–03–01

0 Executive summary

This proposal is a revised version of:

- · Eiso Chan, et al.: "Preliminary proposal to encode Rma script to UCS"
- · L2/22–130, "Preliminary proposal to encode Rma script to UCS" (Version 2)
- · Eiso Chan, et al.: "Proposal to encode Rma script to UCS"

and it incorporates comments made by the SEW and other experts in:

- L2/22–128, "Recommendations to UTC #172 July 2022 on Script Proposals"
- · Kushim Jiang: "Feedback on preliminary proposal to encode Rma script to UCS"
- Recommendations from 2025-02-14 SEW meeting

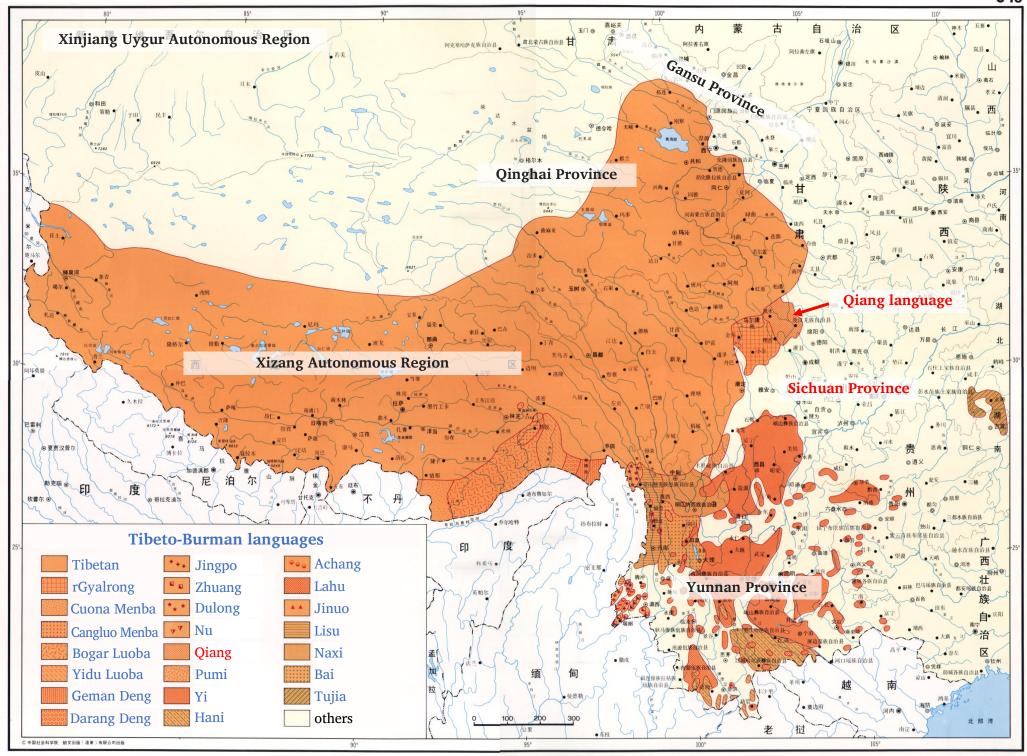
to propose adding 69 Rma characters in order to support the Rma script.

1 Introduction

The Rma script (෨ ෭෦෧෧, rrmea lehhrr, 尔玛文) is an alphabetic script with some features of Abugida, written by the Qiang people of Sichuan Province, PRC, to record the Qiang language.

The Qiang people have a long history. More than 3,000 years ago, the activities of the Qiang people were recorded in the oracle bones of the Shang dynasty (商朝), and they were mainly distributed in the northwestern and central plains of China. Today, the Qiang people are mainly distributed in the Mao County (茂县), Wenchuan County (汶川县), Li County (理县), Heishui County (黑水县) and Songpan County (松潘县) in Aba Tibetan and Qiang Autonomous Prefecture (阿坝藏族羌族自治州), Sichuan Province, China, with a total population of about 313,000 according to 2021 statistics.

The Qiang language is a Tibetan-Burman language with approximately 150,000 Qiang and Tibetan speakers (see the figure in the next page). The language is divided into two dialects, the Northern Qiang dialect (ISO 639-3: cng) and the Southern Qiang dialect (ISO 639-3: qxs), with five subdialects in the Northern and seven in the Southern. The Northern dialect is basically interlingual, while the Southern dialect is basically non-interlingual.



In 1990, at the request of the Qiang people, the Sichuan provincial government created the Qiang written with Latin script (Sun, 2012), also known as Latin Qiang. Note the distinction between the Qiang language and the Qiangic branch, which is a language branch under the Tibetan-Burmese languages including the languages such as Qiang, rGyalrongic and Pumi.

The Rma script is a newly developed script. Its name derives from the endonym of the Qiang people (/zme/, rrmea), and it is developed by Wei Jiuqiao and Wan Xing (万幸, אַנּוֹמִים). The glyph shapes for the letters were originally derived from the patterns of goat's horn [1] and cloud commonly used by the Qiang people.

Since 2019, the Qiang people living in Beichuan Qiang Autonomous County (北川羌族自治县), Mianyang City (绵阳市), Sichuan Province have been using the Rma script to write their language in Qiang cultural transmission and daily life. A number of running texts are shown in the accompanying illustrations following the main text.

2 Script details

2.1 Encoding model

The Rma script has some characteristics of the Abugida, such as the fact that the grapheme corresponding to a consonant always serves as the base character, while the grapheme corresponding to some vowels serves as the combining mark, and requires other graphemes in order to co-represent a single vowel phoneme. This phenomenon can be compared with the Tibetan script, in which the grapheme corresponding to a vowel needs to be combined with TIBETAN LETTER A (u0F68) when recording individual vowel phonemes.

However, Rma script cannot be fully categorized as Abugida because, first, the grapheme corresponding to a consonant does not carry an inherited vowel, but rather denotes a purely consonant phoneme. Although the names of the graphemes corresponding to these consonants contain the /a/ phoneme, in the vast majority of cases (*i.e.*, where the syllable does not contain a zero initial, or in the syllable with zero initial, where the final is not /a/, such as /au/, /an/), the grapheme corresponding to /a/ phoneme cannot be omitted. Second, the grapheme corresponding to some vowels serves as the base characters, and some other combining marks can be added above and below it. Note that in this case the grapheme cannot yet be called an "independent vowel", since the independent vowel in Brahmi model already restricts the syllable to contain a zero initial, whereas in the Rma script such a grapheme can be followed by a grapheme corresponding to a consonant to form a syllable.

Therefore, this document treats the Rma script as an alphabet, unlike the various previous versions which treated as an Abugida. This requires abandoning the concept of "dependent vowel" and "independent vowel" in favor of simple nomenclature, and the function of each letter is described in detail in the following sections of this document.

^{[8] (}From L2/22–130) The Qiang people refer to azaleas as "the flower of goat's horn". The devastating Wenchuan earthquake occurred on 12 May 2008. The area where the earthquake struck is home to the Qiang people. The song *The Flower of Goat's Horn Blossoms Again*, written by Freeking Chen and Liang Tianshan and sung by Sara Liu, pays tribute to the victims.

2.2 Consonant letters and vowel carrier

There are 47 consonant letters and 1 vowel carrier:

כ	BA	থ	LA	П	XA	g	SSA
5	PA	5	RLA	D	XXA	ച	ZHA
Б	BBA	ם	GA	٥	GVA	h	CHA
D	MA	7	KA	œ	KVA	Ð	DHA
Б	FA	Ь	GGA	٩	GVVA	۵Į	SHA
9	WA	9	NGA	২	VHA	ച	RRA
P	WFA	ล	HA	<	VA	อ	ZHJA
U	DA	리	HHA	გ	VVA	þ	CHQA
4	TA	ת	JA	ש	ZA	Ð	DHJA
괴	DDA	ባ	QA	Ь	CA	Ð	SHXA
ອ	NA	አ	JJA	عا	ZZA	গ্ৰ	RRYA
외	LHA	П	YA	G	SA	G	AGVEI

Vowel carrier. The G AGVEI behaves as a vowel carrier in syllables with zero initial, like the TIBETAN LETTER A (u0F68), instead of recording the glottal stop. The appendix also mentions that, in addition to serving as a vowel carrier in syllables with zero initial, The G AGVEI is used to indicate long vowels in phonologies where there is contrast between long and short vowels, or to be involved in indicating the tones in phonologies where syllables have different tones.

2.3 Vowel letters and vowel marks

There are 5 vowel letters and 3 vowel marks (presented with dotted circle):

ំ	AMEGV	े EAMEAGV	1 EGED	I	YU
៉	AEMAEGV	J UGUD	ı I	L	O

The vowel letters and vowel marks are pronounced slightly differently when recording different phonology. For example, in the phonology contrasting /a/ and / α /, $\ddot{\circ}$ AEMAEGV and $\dot{\circ}$ AMEGV record /a/ and / α /, respectively, otherwise / α / and /a/, respectively. See the appendix for detail.

For the graphemes recording vowels, a grapheme will be analyzed as a mark when it is zero-width, or as a base character when it is not zero-width. For syllables consisting only of this vowel, the $\dot{\circ}$ AMEGV, $\ddot{\circ}$ AEMAEGV, $\dot{\circ}$ EAMEAGV, J UGUD and J EGED need to be followed by the G AGVEI. Also note that J UGUD and J EGED have a tendency to touch the preceding base character in their strokes. See the appendix for detail.

Note that the following three pairs of strings are easily confused: $\langle II, JUGUD \rangle \sim \langle UDA \rangle$, $\langle II, 1EGED \rangle \sim \langle IIXA \rangle$, and $\langle IYU, 1EGED \rangle \sim \langle IIXA \rangle$.

2.4 Nasalization indicator and rhotacization indicator

There are 1 nasalization indicator and 1 rhotacization indicator:

, ENN r ER

Although the nasalization indicator ς ENN will add some width to the grapheme that it modifies, it still needs to be analyzed as a mark because, for example, for the string ς I, ς ENN, $\dot{\varsigma}$ AMEGV> ($\dot{\varsigma}$), that records $/\tilde{\imath}a/$ in Qugu Qiang, if ς ENN were not to be analyzed as a mark, the vowel $\dot{\varsigma}$ AMEGV would be assumed to modify the nasalization indicator ς ENN, which is unacceptable.

2.5 Tone marks

There are 2 tone marks:

ী TONE HIGH ৄ TONE LOW

2.6 Grapheme cluster structure

For Rma script, a grapheme cluster is a base character followed by several combining marks. (1) The consonant letter can be followed by zero or one vowel mark, zero or one $^{\circ}$ TONE HIGH, and zero or one $^{\circ}$ TONE LOW. (2) The vowel letter can be followed by zero or one $^{\circ}$, ENN, zero or one vowel mark, zero or one $^{\circ}$ TONE HIGH, and zero or one $^{\circ}$ TONE LOW. (3) The other base characters cannot be followed by any marks.

According to the phonologies verified so far, there are no cases of two or more vowel marks on a consonant letter or a vowel letter.

2.7 Symbol

There is 1 symbol, which is also the origin of the letter א RRA and the letter א MA.

ച SYMBOL RRMEA

This symbol is used to record the endonym of the Qiang people, instead of using spelling forms, such as $\langle s \rangle$ RRA, δ MA, δ EAMEAGV \rangle (/zme/, rrmea) in Mao county and Wenchuan county. Since the endonym of Qiang people is pronounced differently in different regions (e.g. /rma/ in Heishui county, / χ ma/ in Li county, /ma/ in Longxi town), this symbol is pronounced differently in different regions.

2.8 Punctuation and digits

There are 8 Rma-specific punctuation:

, FULL STOP " LEFT DOUBLE QUOTATION MARK
, COMMA "RIGHT DOUBLE QUOTATION MARK
È EXCLAMATION MARK LEFT SINGLE QUOTATION MARK

QUESTION MARK RIGHT SINGLE QUOTATION MARK

It has been confirmed that the Rma comma is different from the ASCII comma, rather than design variants of the same symbol. When Rma script and Latin script occur together, it is recognized that the comma used by both should not be confused.

The following punctuation are used for the Rma script:

```
: COLON (u003A)
; SEMICOLON (u003B)
... HORIZONTAL ELLIPSIS (u2026)
- HYPHEN-MINUS (u002D)
- EM DASH (u2014)
( LEFT PARENTHESIS (u0028)

) RIGHT PARENTHESIS (u0029)

| KEFT PARENTHESIS (u0029)
| RIGHT DOUBLE ANGLE BRACKET (u300B)
| LEFT SINGLE ANGLE BRACKET (u3009)
| RIGHT SINGLE ANGLE BRACKET (u3009)
```

After discussion, CJK brackets were recommended by the community over guillemets.

There is no Rma-specific digit. The European digits are used in Rma running texts.

2.9 Collation

In Rma script, the order of syllables is first based on the order of initials (the zero initial, i.e., the filler, comes first), with consonant clusters following the initial consonants; within the same consonants, the order of finals is based on the order of vowels. The high tone mark and the low tone mark are ignored first, and when the initial and final of the syllable are the same, then the ignored strings are considered.

Therefore, the order of Rma syllables can be handled as a purely character order, that is:

3 Proposal

The proposed repertoire is shown as below.

Codepoint	Glyph	Character Name
U+XX00	כ	RMA LETTER BA
U+XX01	5	RMA LETTER PA
U+XX02	מ	RMA LETTER BBA
U+XX03	Ω.	RMA LETTER MA
U+XX04	ق	RMA LETTER FA
U+XX05	Э	RMA LETTER WA
U+XX06	P	RMA LETTER WFA
U+XX07	U	RMA LETTER DA
U+XX08	4	RMA LETTER TA
U+XX09	괴	RMA LETTER DDA
U+XX0A	9	RMA LETTER NA
U+XX0B	괴	RMA LETTER LHA
U+XX0C	থ	RMA LETTER LA
U+XX0D	5	RMA LETTER RHA
U+XX0E	ם	RMA LETTER GA
U+XX0F	q	RMA LETTER KA
U+XX10	Ь	RMA LETTER GGA
U+XX11	Ð	RMA LETTER NGA

U+XX12	а	RMA LETTER HA
U+XX13	ବ	RMA LETTER HHA
U+XX14	ת	RMA LETTER JA
U+XX15	ח	RMA LETTER QA
U+XX16	٦	RMA LETTER JJA
U+XX17	П	RMA LETTER YA
U+XX18	п	RMA LETTER XA
U+XX19	ם	RMA LETTER XXA
U+XX1A	۵	RMA LETTER GVA
U+XX1B	(c	RMA LETTER KVA
U+XX1C	ق	RMA LETTER GVVA
U+XX1D	২	RMA LETTER VHA
U+XX1E	<	RMA LETTER VA
U+XX1F	ა	RMA LETTER VVA
U+XX20	U	RMA LETTER ZA
U+XX21	U	RMA LETTER CA
U+XX22	عا	RMA LETTER ZZA
U+XX23	G	RMA LETTER SA
U+XX24	IJ	RMA LETTER SSA
U+XX25	ച	RMA LETTER ZHA
U+XX26	h	RMA LETTER CHA
U+XX27	a	RMA LETTER DHA

U+XX28	এ	RMA LETTER SHA
U+XX29	ച	RMA LETTER RRA
U+XX2A	ച	RMA LETTER ZHJA
U+XX2B	Ь	RMA LETTER CHQA
U+XX2C	Ð	RMA LETTER DHJA
U+XX2D	এ	RMA LETTER SHXA
U+XX2E	ত্র	RMA LETTER RRYA
U+XX2F	G	RMA LETTER AGVEI
U+XX30	ំ	RMA MARK AMEGV
U+XX31	ំ	RMA MARK AEMAEGV
U+XX32	े	RMA MARK EAMEAGV
U+XX33	L	RMA LETTER UGUD
U+XX34	1	RMA LETTER EGED
U+XX35	1	RMA LETTER I
U+XX36	1	RMA LETTER YU
U+XX37	L	RMA LETTER O
U+XX38	ુ	RMA MARK ENN
U+XX39	Γ	RMA LETTER ER
U+XX3A	ੋ	RMA MARK TONE HIGH
U+XX3B	ূ	RMA MARK TONE LOW
		<reserved></reserved>
U+XX47	வ	RMA SYMBOL RRMEA
· · · · · · · · · · · · · · · · · · ·		

U+XX48	›	RMA FULL STOP
U+XX49	,	RMA COMMA
U+XX4A	È	RMA EXCLAMATION MARK
U+XX4B	ટ્ર	RMA QUESTION MARK
U+XX4C	//	RMA LEFT DOUBLE QUOTATION MARK
U+XX4D	11	RMA RIGHT LOW DOUBLE QUOTATION MARK
U+XX4E	/	RMA LEFT SINGLE QUOTATION MARK
U+XX4F	/	RMA RIGHT LOW SINGLE QUOTATION MARK

The information in NamesList.txt is as follows.

@ @	XX00)	Rma	XX4F
@	Cons	sonants		
XX00	RMA	LETTER	BA	
XX01	RMA	LETTER	PA	
XX02	RMA	LETTER	BBA	
XX03	RMA	LETTER	MA	
XX04	RMA	LETTER	FA	
XX05	RMA	LETTER	WA	
XX06	RMA	LETTER	WFA	
XX07	RMA	LETTER	DA	
XX08	RMA	LETTER	TA	
XX09	RMA	LETTER	DDA	
XXOA	RMA	LETTER	NA	
XX0B	RMA	LETTER	LHA	
XX0C	RMA	LETTER	LA	
XXOD	RMA	LETTER	RLA	
XX0E	RMA	LETTER	GA	
XXOF	RMA	LETTER	KA	
XX10	RMA	LETTER	GGA	
XX11	RMA	LETTER	NGA	
XX12	RMA	LETTER	HA	
XX13	RMA	LETTER	HHA	
XX14	RMA	LETTER	JA	
XX15	RMA	LETTER	QA	
XX16	RMA	LETTER	JJA	
XX17	RMA	LETTER	YA	
XX18	RMA	LETTER	XA	
XX19	RMA	LETTER	XXA	
XX1A	RMA	LETTER	GVA	
XX1B	RMA	LETTER	KVA	
XX1C	RMA	LETTER	GVVA	
XX1D	RMA	LETTER	VHA	
XX1E	RMA	LETTER	VA	
XX1F	RMA	LETTER	VVA	
XX20	RMA	LETTER	ZA	
XX21	RMA	LETTER	CA	
XX22	RMA	LETTER	ZZA	

```
XX23
           RMA LETTER SA
XX24
           RMA LETTER SSA
XX25
           RMA LETTER ZHA
XX26
           RMA LETTER CHA
XX27
           RMA LETTER DHA
XX28
          RMA LETTER SHA
XX29
          RMA LETTER RRA
          RMA LETTER ZHJA
XX2A
XX2B
          RMA LETTER CHQA
XX2C
          RMA LETTER DHJA
XX2D
           RMA LETTER SHXA
XX2E
           RMA LETTER RRYA
XX2F
           RMA LETTER AGVEI
a
          Vowels
XX30
          RMA MARK AMEGV
XX31
          RMA MARK AEMAEGV
XX32
          RMA MARK EAMEAGV
          RMA LETTER UGUD
XX33
          RMA LETTER EGED
XX34
          RMA LETTER I
XX35
          RMA LETTER YU
XX36
XX37
           RMA LETTER O
XX38
           RMA MARK ENN
XX39
           RMA LETTER ER
           Tones
XX3A
           RMA MARK TONE HIGH
XX3B
           RMA MARK TONE LOW
(a
           Symbol
XX47
          RMA SYMBOL RRMEA
a
          Punctuation
XX48
          RMA FULL STOP
XX49
          RMA COMMA
          RMA EXCLAMATION MARK
XX4A
XX4B
          RMA QUESTION MARK
XX4C
          RMA LEFT DOUBLE QUOTATION MARK
XX4D
           RMA RIGHT LOW DOUBLE QUOTATION MARK
XX4E
           RMA LEFT SINGLE QUOTATION MARK
XX4F
           RMA RIGHT LOW SINGLE QUOTATION MARK
```

The information in UnicodeData.txt is as follows.

```
XX00; RMA LETTER BA; Lo; 0; L;;;;; N;;;;
XX01; RMA LETTER PA; Lo; 0; L;;;;; N;;;;
XX02; RMA LETTER BBA; Lo; 0; L;;;;; N;;;;
XX03; RMA LETTER MA; Lo; 0; L;;;;; N;;;;
XX04; RMA LETTER FA; Lo; 0; L;;;;; N;;;;;
XX05; RMA LETTER WA; Lo; 0; L;;;;; N;;;;;
XX06; RMA LETTER WFA; Lo; 0; L;;;;; N;;;;
XX07; RMA LETTER DA; Lo; 0; L;;;;; N;;;;
XX08; RMA LETTER TA; Lo; 0; L;;;;; N;;;;;
XX09; RMA LETTER DDA; Lo; 0; L;;;;; N;;;;
XX0A; RMA LETTER NA; Lo; 0; L;;;;; N;;;;;
XX0B; RMA LETTER LHA; Lo; 0; L;;;;; N;;;;
XXOC; RMA LETTER LA; Lo; 0; L;;;;; N;;;;
XXOD; RMA LETTER RLA; Lo; 0; L;;;;; N;;;;
XXOE; RMA LETTER GA; Lo; 0; L;;;;; N;;;;;
XXOF; RMA LETTER KA; Lo; 0; L;;;;; N;;;;
XX10; RMA LETTER GGA; Lo; 0; L;;;;; N;;;;
XX11; RMA LETTER NGA; Lo; 0; L;;;;; N;;;;
XX12; RMA LETTER HA; Lo; 0; L;;;;; N;;;;;
XX13; RMA LETTER HHA; Lo; 0; L;;;;; N;;;;
XX14; RMA LETTER JA; Lo; 0; L;;;;; N;;;;;
XX15; RMA LETTER QA; Lo; 0; L;;;;; N;;;;
```

```
XX16; RMA LETTER JJA; Lo; 0; L;;;;; N;;;;
XX17; RMA LETTER YA; Lo; 0; L;;;;; N;;;;;
XX18; RMA LETTER XA; Lo; 0; L;;;;; N;;;;;
XX19; RMA LETTER XXA; Lo; 0; L;;;;; N;;;;
XX1A; RMA LETTER GVA; Lo; 0; L;;;;; N;;;;
XX1B; RMA LETTER KVA; Lo; 0; L;;;;; N;;;;
XX1C; RMA LETTER GVVA; Lo; 0; L;;;;; N;;;;;
XX1D; RMA LETTER VHA; Lo; 0; L;;;;; N;;;;
XX1E; RMA LETTER VA; Lo; 0; L;;;;; N;;;;
XX1F; RMA LETTER VVA; Lo; 0; L;;;;; N;;;;
XX20; RMA LETTER ZA; Lo; 0; L;;;;; N;;;;
XX21; RMA LETTER CA; Lo; 0; L;;;;; N;;;;;
XX22; RMA LETTER ZZA; Lo; 0; L;;;;; N;;;;;
XX23; RMA LETTER SA; Lo; 0; L;;;;; N;;;;;
XX24; RMA LETTER SSA; Lo; 0; L;;;;; N;;;;
XX25; RMA LETTER ZHA; Lo; 0; L;;;;; N;;;;
XX26; RMA LETTER CHA; Lo; 0; L;;;;; N;;;;
XX27; RMA LETTER DHA; Lo; 0; L;;;;; N;;;;;
XX28; RMA LETTER SHA; Lo; 0; L;;;;; N;;;;
XX29; RMA LETTER RRA; Lo; 0; L;;;;; N;;;;
XX2A; RMA LETTER ZHJA; Lo; 0; L;;;;; N;;;;
XX2B; RMA LETTER CHQA; Lo; 0; L;;;;; N;;;;;
XX2C; RMA LETTER DHJA; Lo; 0; L;;;;; N;;;;;
XX2D; RMA LETTER SHXA; Lo; 0; L;;;;; N;;;;;
XX2E; RMA LETTER RRYA; Lo; 0; L;;;;; N;;;;
XX2F; RMA LETTER AGVEI; Lo; 0; L;;;;; N;;;;
XX30; RMA MARK AMEGV; Mn; 230; NSM;;;;; N;;;;
XX31; RMA MARK AEMAEGV; Mn; 230; NSM; ;; ;; N; ;; ;;
XX32; RMA MARK EAMEAGV; Mn; 230; NSM; ;; ;; N; ;; ;;
XX33; RMA LETTER UGUD; Lo; 0; L;;;;; N;;;;
XX34; RMA LETTER EGED; Lo; 0; L;;;;; N;;;;
XX35; RMA LETTER I; Lo; 0; L;;;;; N;;;;
XX36; RMA LETTER YU; Lo; 0; L;;;;; N;;;;;
XX37; RMA LETTER O; Lo; 0; L; ; ; ; ; N; ; ; ;
XX38; RMA MARK ENN; Mc; NSM; L;;;;; N;;;;
XX39; RMA LETTER ER; Lo; 0; L;;;;; N;;;;;
XX3A; RMA MARK TONE HIGH; Mn; 230; NSM; ;;;; N;;;;;
XX3B; RMA MARK TONE LOW; Mn; 220; NSM;;;;; N;;;;
XX47; RMA SYMBOL RRMEA; So; 0; L;;;;; N;;;;
XX48; RMA FULL STOP; Po; 0; ON; ;; ;; N; ;; ;;
XX49; RMA COMMA; Po; 0; ON;;;;; N;;;;;
XX4A; RMA EXCLAMATION MARK; Po; 0; ON;;;;; N;;;;;
XX4B; RMA QUESTION MARK; Po; 0; ON; ;; ;; N; ;; ;;
XX4C; RMA LEFT DOUBLE QUOTATION MARK; Ps; 0; ON;;;;; N;;;;;
XX4D; RMA RIGHT LOW DOUBLE QUOTATION MARK; Pe; 0; ON; ; ; ; ; ; ; ; ;
XX4E; RMA LEFT SINGLE QUOTATION MARK; Ps; 0; ON;;;;; N;;;;;
XX4F; RMA RIGHT LOW SINGLE QUOTATION MARK; Pe; 0; ON; ; ; ; ; N; ; ; ;
```

The information in EastAsianWidth.txt is as follows.

```
XX00..XX2F
           ; N
                              # Lo [48] RMA LETTER BA..RMA LETTER AGVEI
                              # Mn [3] RMA VOWEL SIGN AMEGV..RMA VOWEL SIGN EAMEAGV
XX30..XX32 ; N
                              # Lo [5] RMA VOWEL SIGN UGUD..RMA LETTER O
XX33..XX37 ; N
                             # Mc
XX38
                                        RMA NASALIZATION MARK
            ; N
XX39
                             # Lo
                                       RMA RHOTACIZATION MARK
            ; N
XX47
                             # So
                                       RMA SYMBOL RRMEA
            ; N
XX48..XX4B
           ; N
                             # Po [4] RMA FULL STOP..RMA QUESTION MARK
XX4C
            ; N
                             # Ps
                                        RMA LEFT DOUBLE QUOTATION MARK
                             # Pe
XX4D
            ; N
                                        RMA RIGHT LOW DOUBLE QUOTATION MARK
XX4E
            ; N
                             # Ps
                                       RMA LEFT SINGLE QUOTATION MARK
XX4F
            ; N
                              # Pe
                                       RMA RIGHT LOW SINGLE QUOTATION MARK
```

The information in LineBreak.txt is as follows.

```
XX00..XX2F
                           # Lo [48] RMA LETTER BA..RMA LETTER AGVEI
XX30..XX32 ; CM
                           # Mn [3] RMA VOWEL SIGN AMEGV..RMA VOWEL SIGN EAMEAGV
XX33..XX37 ; CM
                          # Lo [5] RMA VOWEL SIGN UGUD..RMA LETTER O
XX38 ; CM
                                   RMA NASALIZATION MARK
                          # Mc
XX39
          ; AL
                         # Lo
                                   RMA RHOTACIZATION MARK
XX3A..XX3B ; CM
                         # Mn [2] RMA TONE HIGH..RMA TONE LOW
XX47 ; AL
                         # So
                                   RMA SYMBOL RRMEA
XX48..XX4B ; CL
                         # Po [4] RMA FULL STOP..RMA QUESTION MARK
                                RMA LEFT DOUBLE QUOTATION MARK
       ; OP
                         # Ps
XX4D
          ; CL
                         # Pe
                                   RMA RIGHT LOW DOUBLE QUOTATION MARK
XX4E
          ; OP
                         # Ps
                                  RMA LEFT SINGLE QUOTATION MARK
                           # Pe
XX4F
           ; CL
                                   RMA RIGHT LOW SINGLE QUOTATION MARK
```

The information in PropList.txt is as follows.

```
XX4C ; Quotation_Mark # Ps RMA LEFT DOUBLE QUOTATION MARK
XX4D ; Quotation_Mark # Pe RMA RIGHT LOW DOUBLE QUOTATION MARK
XX4E ; Quotation_Mark # Ps RMA LEFT SINGLE QUOTATION MARK
XX4F ; Quotation_Mark # Pe RMA RIGHT LOW SINGLE QUOTATION MARK
XX48..XX4B ; Terminal_Punctuation # Po [4] RMA FULL STOP..RMA QUESTION MARK
XX48..XX4B ; Sentence_Terminal # Po [4] RMA FULL STOP..RMA QUESTION MARK
XX48..XX4B ; Pattern_Syntax # Po [4] RMA FULL STOP..RMA QUESTION MARK
XX4C ; Pattern_Syntax # Ps RMA LEFT DOUBLE QUOTATION MARK
XX4D ; Pattern_Syntax # Pe RMA RIGHT LOW DOUBLE QUOTATION MARK
XX4E ; Pattern_Syntax # Ps RMA LEFT SINGLE QUOTATION MARK
XX4F ; Pattern_Syntax # Pe RMA RIGHT LOW SINGLE QUOTATION MARK
```

The information in VerticalOrientation.txt is shown as below.

```
XX00..XX2F ; R
                           # Lo [48] RMA LETTER BA..RMA LETTER AGVEI
XX30..XX32 ; R
                           # Mn [3] RMA VOWEL SIGN AMEGV..RMA VOWEL SIGN EAMEAGV
                           # Lo [5] RMA VOWEL SIGN UGUD..RMA LETTER O
XX33..XX37 ; R
XX38 ; R
                          # Mc
                                    RMA NASALIZATION MARK
                          # Lo
XX39
          ; R
                                    RMA RHOTACIZATION MARK
XX3A..XX3B ; R
                          # Mn [2] RMA TONE HIGH..RMA TONE LOW
                          # So
XX47 ; R
                                    RMA SYMBOL RRMEA
XX48..XX4B
          ; R
                          # Po [4] RMA FULL STOP..RMA QUESTION MARK
     ; R
XX4C
                           # Ps
                                    RMA LEFT DOUBLE QUOTATION MARK
XX4D
           ; R
                           # Pe
                                    RMA RIGHT LOW DOUBLE QUOTATION MARK
XX4E
           ; R
                           # Ps
                                    RMA LEFT SINGLE QUOTATION MARK
                                    RMA RIGHT LOW SINGLE QUOTATION MARK
XX4F
           ; R
                           # Pe
```

The Rma script is a newly proposed script for ISO 15924. The suggested code is Rmea.

Script=Rmea

The information in ScriptExtensions.txt is shown as below.

```
3008 ; Bopo Hang Hani Hira Kana Mong Tibt Yiii Rmea #Ps LEFT ANGLE BRACKET 3009 ; Bopo Hang Hani Hira Kana Mong Tibt Yiii Rmea #Pe RIGHT ANGLE BRACKET 300A ; Bopo Hang Hani Hira Kana Lisu Mong Tibt Yiii Rmea #Ps LEFT DOUBLE ANGLE BRACKET 300B ; Bopo Hang Hani Hira Kana Lisu Mong Tibt Yiii Rmea #Pe RIGHT DOUBLE ANGLE BRACKET
```

Acknowledgement

We would like to express our gratitude to our friends who provided us with relevant photos for the purpose of writing this document, and to the experts who helped us review the text.

We would also like to express our sincerest condolences and profound respect to Professor Sun Hongkai (孙宏开) and Professor Huang Bufan (黄布凡), who recently passed away. their invaluable contribution to the study of the Qiangic branch of the Tibetan-Burmese language family has enabled us to advance our research to a new level.

Reference

孙宏开 / Sun Hongkai. (2012). "论藏缅语族中的羌语支语言" / "On the Qiangic Branch of the Tibeto-Burman Language Group", in: 戴庆厦 / DAI Qingxia (ed.),中国少数民族语言文字研究 (一) / Studies on Ethnic Languages in China (Volume 1). 北京 / Beijing: 民族出版社 / Ethnic Publishing House.

中国社会科学院语言研究所,中国社会科学院民族学与人类学研究所,香港城市大学语言资讯科学研究中心. (2012). 中国语言地图集 / Language Atlas of China. 北京 / Beijing: 商务印书馆 / The Commercial Press.

魏久乔 / WEI Jiuqiao, 王玉琴 / WANG Yuqin (2018). 跟玉琴学羌语 / Learning Qiang Language with Yuqin. 台北 / Taipei: 华人一家文化企业社.

<rrmea.cn/vvaqi>.

<weijiuqiao.github.io/qiang_script/>.

The appendix cites more references because it dives into the various Qiang phonologies. The references cited in appendix are not cited again in this document.

Appendix 1 Phonology of Qiang language

This appendix, modified from the proposal "Feedback on preliminary proposal to encode Rma script to UCS" by Kushim Jiang, previously presented the phonologies of Qugu Qiang, Luobozhai Qiang, Taoping Qiang, and Baishui Qiang, illustrating how the Rma script records their initials, finals, and tones. In addition, it previously gave a comparison of Rma Qiang and Latin Qiang when recording Qugu Qiang.

The content of this section has now been moved to: weijiuqiao.github.io/qiang_script/qiang-phonology.pdf, which also maintains the latest version of this section.

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4	XX03	XX13	XX23	XX33	
5	XX04	XX14	xx24	XX34	
6	XX05	XX15	XX25	XX35	
7	XX06	XX16	XX26	XX36	ஷ
1	ХХ07	XX17	XX27	ХХ37	XX47
8	ХХ08	XX18	d)	XX38	3 XX48
9	9	D xx19	S	XX39) XX49
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В	ച	C XX1B	h	ххзв	X X4B
С	9	XXIC	XX2C		/// XX4C
D	2	XX1D	<u>J</u>		XX4D
E	XXOE	XX1E	S		XX4E
F	P	5	6		XX4F

Consonants

XX00

- XX00 J RMA LETTER BA
- XX01 5 RMA LETTER PA
- XX02 מל RMA LETTER BBA
- XX03 א RMA LETTER MA
- XX04 🖰 RMA LETTER FA
- XX05 g RMA LETTER WA
- XX06 אמן RMA LETTER WFA
- XX07 U RMA LETTER DA
- XX08 4 RMA LETTER TA
- XX09 **2** RMA LETTER DDA
- XXOA 9 RMA LETTER NA
- XXOB **刘** RMA LETTER LHA
- XXOC **9** RMA LETTER LA XXOD **9** RMA LETTER RLA
- XXOE D RMA LETTER GA
- XXOF PRMA LETTER KA
- XX10 **b** RMA LETTER GGA
- XX11 3 RMA LETTER NGA
- XX12 a RMA LETTER HA
- XX13 **q** RMA LETTER HHA
- XX14 ת RMA LETTER JA
- XX15 η RMA LETTER QA
- XX16 为 RMA LETTER JJA
- XX17 η RMA LETTER YA
- XX18 n RMA LETTER XA
- XX19 RMA LETTER 161A
- XX1A D RMA LETTER GVA
- XX1B **G** RMA LETTER KVA
- XX1C RMA LETTER GVVA
- XX1D ₹ RMA LETTER VHA
- XX1E < RMA LETTER VA
- XX1F 5 RMA LETTER VVA
- XX20 u RMA LETTER ZA
- XX21 U RMA LETTER CA
- XX22 L RMA LETTER ZZA
- XX23 **G** RMA LETTER SA
- XX24 **g** RMA LETTER SSA
- XX25 a RMA LETTER ZHA
- XX26 **h** RMA LETTER CHA
- XX27 a rma letter dha
- XX28 A RMA LETTER SHA
- XX29 **э** RMA LETTER RRA
- XX2A **a** RMA LETTER ZHJA
- XX2B **h** RMA LETTER CHQA
- XX2C **d** RMA LETTER DHJA
- XX2D **1** RMA LETTER SHXA
- XX2E \mathbf{a} RMA LETTER RRYA
- XX2F **G** RMA LETTER AGVEI

Vowels

- XX31 ÖRMA MARK AEMAEGV
- XX32 ` RMA MARK EAMEAGV
- XX33 J RMA LETTER UGUD
- XX34 1 RMA LETTER EGED
- XX35 I RMA LETTER I
- XX36 J RMA LETTER YU
- XX37 L RMA LETTER O
- XX38 S, RMA MARK ENN
- XX39 r RMA LETTER ER

Tones

- XX3A ♂ RMA MARK TONE HIGH
- XX3B 2 RMA MARK TONE LOW

Symbol

XX47 **\$\mathbf{n}** RMA SYMBOL RRMEA

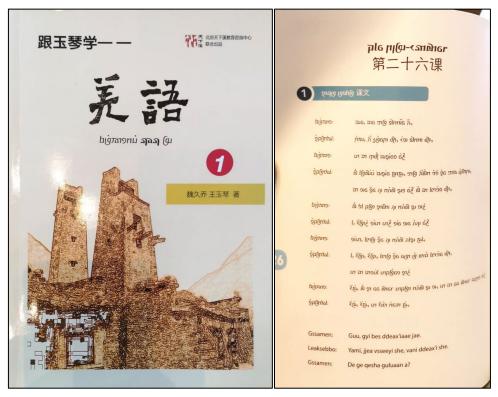
Punctuation

- XX48 , RMA FULL STOP
- XX49, RMA COMMA
- XX4A **¿** RMA EXCLAMATION MARK
- XX4B & RMA QUESTION MARK
- XX4C "RMA LEFT DOUBLE QUOTATION MARK
- XX4D / RMA RIGHT LOW DOUBLE QUOTATION MARK
- XX4E 'RMA LEFT SINGLE QUOTATION MARK
- XX4F , RMA RIGHT LOW SINGLE QUOTATION MARK



Fig. 1 Rma alphabet

The alphabet uses a different font than this proposal. Note the handwritten variants of letter a $\dot{}$ (the last letter on line 5) and ae $\ddot{}$ (the last letter on line 7) shown on the alphabet.



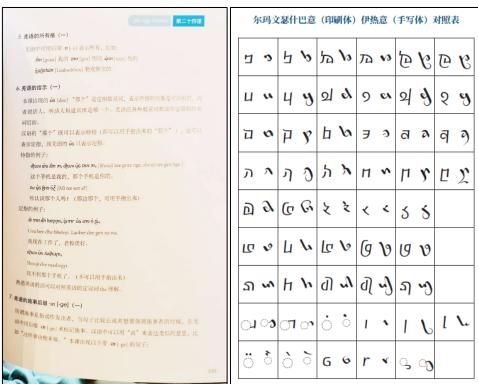


Fig. 2 The Qiang language textbook with Rma script From left to right, top to bottom:

Fig. 2(a), 2(b) and 2(c), the cover page and inner pages of the textbook, copied from the article describing the textbook on the WeChat Public Account; Fig. 2(d), printed and handwritten forms of the Rma letters shown in the textbook, cited in L2/22–130.

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Fig. 3 Glyph comparison of five Rma typefaces

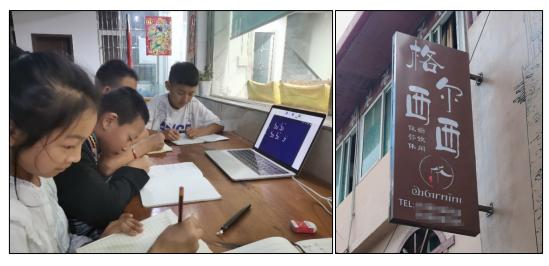




Fig. 4 Rma script used in Luobozhai, Wenchuan (汶川县萝卜寨村) From left to right, top to bottom:

Fig. 4(a), Luobozhai children learning to write Rma script;
Fig. 4(b), Signboard of B&B guesthouse in Luobozhai, showing *gveerxīxi* Distrinīn;
Fig. 4(c) and 4(d), front and back of a leaflet describing Luobozhai,
showing *vvuazigver* similar.







Fig. 5 Rma script used in Wenchuan Happy Ranch (汶川开心牧场) in Weizhou, Wenchuan

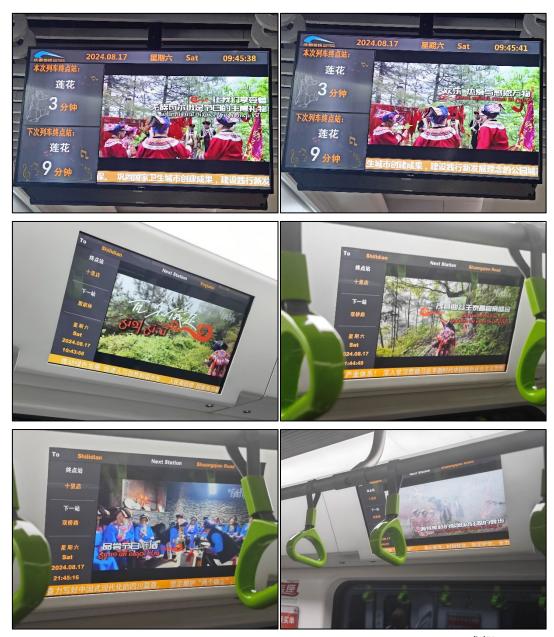
From left to right, top to bottom:

Fig. 5(a), road sign showing the 3rd camp in Wenchuan Happy Ranch; Fig. 5(b), hats as cultural and creative products; Fig. 5(c), road sign as Fig. 5(a); Fig. 5(d), ticket for Wenchuan Happy Ranch. All figures show *kuazaxivilibī* הופואוחשׂוֹם.



Fig. 6 Rma script used in Beichuan (北川羌族自治县) From left to right, top to bottom:

Fig. 6(d), Beichuan Salang Association holds mid-year gathering events; Fig. 6(e) and 6(f), events held by Beichuan Salang Association cited in L2/22-130.



 ${f Fig.\,7}$ Rma script used in the movie playing on the screens in Chengdu (成都) subway





Fig. 8 Rma script used in a traditional sports event in Weizhou town (威州镇), Wenchuan county



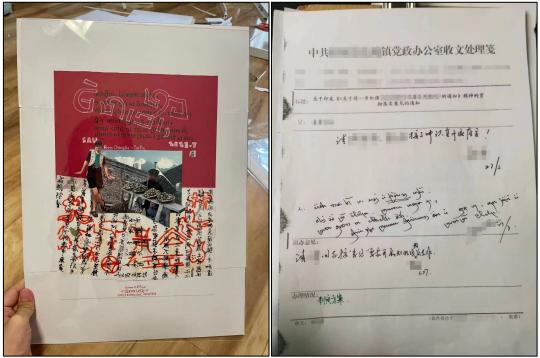


Fig. 9 Rma script used in various scenarios
From left to right, top to bottom:
Fig. 9(a), a poster for a singer group, showing rrmea shebi קובווף קיב ;
Fig. 9(b), a wedding invitation from Mao county;

Fig. 9(c), a leaflet for student activities created by students; Fig. 9(d), Comments written in Rma script on government documents.

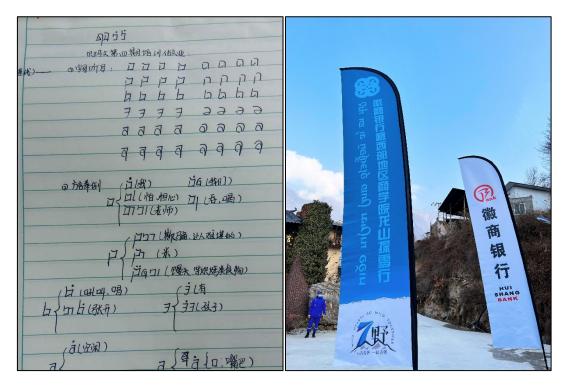




Fig. 10 Rma script used in various scenarios
From left to right, top to bottom:
Fig. 10(a), homework of a Qiang student;
Fig. 10(b), posters for events organized by Huishang Bank;
Fig. 10(c), a festival red paper in Rma script;
Fig. 10(d), wedding celebration of Qiang compatriots, cited in L2/22–130.

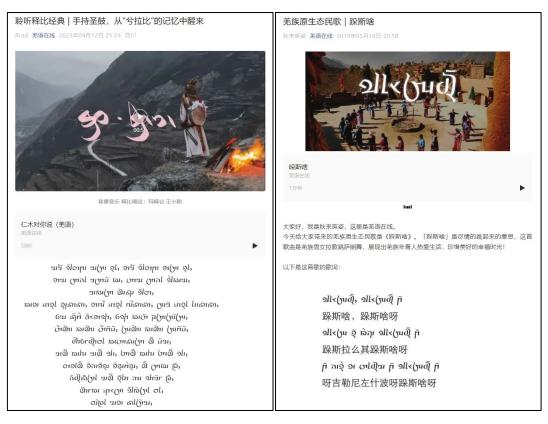




Fig. 11 A WeChat Public Account "Qiang Language Online" From left to right, top to bottom:

Fig. 11(a), classics *Rrmea Shebi Bbugi*; Fig. 11(b), folk song *Ddovsusha*; Fig. 11(c), Story of Wangqiaenzong; Fig. 11(d), a poster for Teachers' Day.

Summary Form

ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646

Please fill all the sections A, B and C below. Please read Principles and Procedures Document (P&P) from unicode.org/wg2/principles.html for guidelines and details before filling this form.

Please ensure you are using the latest Form from unicode.org/wg2/summaryform.html. See also unicode.org/roadmaps for latest Roadmaps.

A. Administrative

A. Administrative							
1. Title: Proposal to encode R	ma script to UCS						
Requester's name: Eiso CHAN, Kushim JIANG, WEI Jiuqiao, Nathaniel SIMS							
3. Requester type (Member body/Liaison/Individual contribution):	Individual contribution	on					
4. Submission date:	March 1, 2025						
5. Requester's reference (if applicable):							
6. Choose one of the following:							
This is a complete proposal:		yes					
(or) More information will be provided later:							
B. Technical – Gener	al						
1. Choose one of the following:							
a. This proposal is for a new script (set of characters):		yes					
Proposed name of script:	Rma						
b. The proposal is for addition of character(s) to an existing blo	ck:	no					
Name of the existing block:							
2. Number of characters in proposal:		69					
3. Proposed category (select one from below - see section 2.2 of P&P							
A-Contemporary X B.1-Specialized (small collection)	B.2-Specialized (large collection	on)					
C-Major extinct D-Attested extinct	E-Minor extinct						
	oscure or questionable usage sym						
4. Is a repertoire including character names provided?		yes					
a. If YES, are the names in accordance with the "character nam	ing guidelines"						
in Annex L of P&P document?		yes					
b. Are the character shapes attached in a legible form suitable for review?							
5. Fonts related:	(106466 11:1: 41 4 1	10					
a. Who will provide the appropriate font to the Project Editor o	1 10646 for publishing the standa	ard?					
b. Identify the party granting a license for use of the font by the	aditam (in aluda addusas a mail	ftm site ataly					
WEI Jiuqiao, weijiuqiao@g		rtp-site, etc.).					
6. References:	man.com						
a. Are references (to other character sets, dictionaries, descripti	ve texts etc.) provided?	ves					
b. Are published examples of use (such as samples from newspa							
of proposed characters attached?	ves						
7. Special encoding issues:							
Does the proposal address other aspects of character data proce	essing (if applicable) such as inpu	ıt.					
presentation, sorting, searching, indexing, transliteration etc. (if							
	•						
8. Additional Information:							
Submitters are invited to provide any additional information about 1	Properties of the proposed Chara	acter(s) or Script					
that will assist in correct understanding of and correct linguistic pr							
Examples of such properties are: Casing information, Numeric infor							
information such as line breaks, widths etc., Combining behavior,							
Collation behavior, relevance in Mark Up contexts, Compatibility equ							
information. See the Unicode standard at www.unicode.org for such							
Character Database (www.unicode.org/reports/tr44) and associated Unicode Technical Reports for information needed							

for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain:	no				
2. 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				
If YES, with whom? Qiang people lived in Sichuan Province, PRC; the Rmc	a script developers				
If YES, available relevant documents: this document and L2/22	2-130				
3. Information on the user community for the proposed characters (for example:					
size, demographics, information technology use, or publishing use) is included?	yes				
Reference: WEI Jiuqiao, WANG Yuqin. Learning Qiang Language with Yuqin. (W	Vei & Wang, 2018)				
4. The context of use for the proposed characters (type of use; common or rare)	common				
Reference:					
5. Are the proposed characters in current use by the user community?	yes				
If YES, where? Reference: Beichuan Qiang Autonomous County, Mian	nyang City,				
Sichuan Province, PRC.					
(中华人民共和国四川省绵阳市北川羌族					
6. After giving due considerations to the principles in the P&P document must the proposed of	haracters be entirely				
in the BMP?	no				
If YES, is a rationale provided?					
If YES, reference:					
7. Should the proposed characters be kept together in a contiguous range (rather than being s	scattered)? <u>yes</u>				
8. Can any of the proposed characters be considered a presentation form of an existing					
character or character sequence?	no				
If YES, is a rationale for its inclusion provided?					
If YES, reference:					
9. Can any of the proposed characters be encoded using a composed character sequence of eight	ther				
existing characters or other proposed characters?	no				
If YES, is a rationale for its inclusion provided?					
If YES, reference:					
10. Can any of the proposed character(s) be considered to be similar (in appearance or functi					
to, or could be confused with, an existing character?	no				
If YES, is a rationale for its inclusion provided?					
If YES, reference:					
11. Does the proposal include use of combining characters and/or use of composite sequences					
If YES, is a rationale for such use provided?	yes				
If YES, reference: Combining characters are an inherent part of the					
Is a list of composite sequences and their corresponding glyph images (graphic symbols	s) provided? <u>no</u>				
If YES, reference:					
12. Does the proposal contain characters with any special properties such as					
control function or similar semantics?	no				
If YES, describe in detail (include attachment if necessary):					
13. Does the proposal contain any Ideographic compatibility characters?	no				
If YES, are the equivalent corresponding unified ideographic characters identified?					
If YES, reference:					