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# Sociolinguistic background Introduction

The Miao nationality is one of the minorities in China that have a relatively large and scattered population with a long history. According to China's fifth population census conducted in 2000, the Miao population in China numbered 8,940,116, mainly distributed in provinces and regions like Guizhou, Hunan, Yunnan, Sichuan, and Guangxi. According to Chinese historical records, the Miao nationality originally lived in the vicinity of China's Yellow River basin. For various reasons, they later migrated to China's southwest. Some even dispersed to Southeast Asia, Europe and America. According to legend, the Miao people had once had their own script, but it was lost during migration.

The Northeastern Yunnan Simple Miao script (hereafter called the "Simple Miao script") was designed for those Miao people known as *Dahua Miao* 大花苗 ("Big Flowery Miao") living in northwestern Guizhou Province and northeastern Yunnan Province in China. According to linguistic survey analysis, the Miao language is divided into three dialects: the Western Hunan dialect, the Eastern Guizhou dialect, and the Sichuan-Guizhou-Yunnan dialect. The last of these is further divided into the Sichuan-Guizhou-Yunnan sub-dialect, the Northeastern Yunnan sub-dialect, and the Guiyang sub-dialect. Significant differences among these Miao dialects and sub-dialects render them mutually unintelligible. The Northeastern Yunnan dialect is the one spoken by the Dahua Miao, whose population is estimated at about 500,000.

The Simple Miao script was created by British missionary Samuel Pollard, who went to preach in the areas of Zhaotong in Yunnan and Weining in Guizhou in early 20th century, together with Miao and Han intellectuals Yang Yage, Zhang Yuehan, and Stephen Li. This script adopted some of the Cree letters used in northeastern Canada as well as some Miao pictographs, and so it is a unique script deserving separate encoding.

After creating the Simple Miao script, Pollard and his associates promoted its use by establishing schools in the areas of Weining, Guizhou and Zhaotong, Yunnan such that many Miao people came to master this script. Impact was so extensive that even the Yi people and the Lisu people in the areas of Kunming and Luquan used this script to write their language. In 1905, Pollard and his associates edited and published "Hua Miao Book I" and "Hua Miao Book II" in the Simple Miao script. In 1916, British pastor Wang Shude and Yang Yage of the Miao people group started out from Shimenkan in Weining, Guizhou and traveled through Kunming, Hanoi, Hong Kong, and Shanghai to reach Yokohama in Japan to make copper type for Simple Miao characters. After returning to China, they translated and published books like the "New Testament" and "Ancient Songs". In early versions of the Simple Miao script, tones were specified with vowel marks to the upper right, right, lower right and other positions of the consonant. As this caused inconvenience in typesetting, in the 1950s Yang Rongxin and other Miao people in Weining, Guizhou started to improve the script. They designed letters for tones, placing them all to the lower right of the consonant. In the 1980s, Miao intellectuals in areas like Kunming and Chuxiong further improved Yang Rongxin's revision and created the "Normalized Miao script". Script use was promoted with the translation and publication of the "Miao-Chinese Concise Dictionary", the Miao-Chinese textbook series "Language" for Primary 1-3 students, and other literature, with as many as 10,000 copies printed. In Guizhou and Yunnan, it is estimated that tens of thousands of people are currently using this script.

It has been more than 100 years since the creation of the Simple Miao script. It is generally endorsed by those Miao people speaking the Northeastern Yunnan sub-dialect. During the process of its development and use, several revisions were made leading to the existence of different versions. However, they were all based on the original foundation using the same alphabet system. Users who have mastered one version can quickly learn to read another. Therefore, different versions can be unified in encoding.

#### Script name

The common English name for the Simple Miao script is the Pollard script. The name registered in ISO 15924 is "Pollard Phonetic" with the code "Plrd". However, this name is not correct given Samuel Pollard was not the only person who created the script. In fact, many of the world's scripts are not named after a person. Most importantly, compared to the Romanized Miao script created in the 1950s to write the Northeastern Yunnan Miao sub-dialect, this script is considered easy to learn and master by the Miao people. It is thus fitting to call it the "Northeastern Yunnan Simple Miao script", which the Miao nationality gladly accepts. Therefore, we believe we should respect the

preference of the Miao people and name the script accordingly. As for the name "Pollard Phonetic" registered in ISO 15924, it should be changed to "Northeastern Yunnan Simple Miao".

# **Script Description**

## **Syllable Component Order**

The Simple Miao script is used for tonal languages. All syllables are of the form  $C\ V\ (V)\ T$ 

Each syllable is divided into an initial and a final. The initial is the initial consonant and the final consists of the vowel cluster and the tone. Nasalization and voicing are considered as initial rather than final.

### Marking of the linguistic qualities of syllable initials

It is possible to know linguistic characteristics of the consonant by some of the marks contained within the letters. The people who use the script view the entire combination of marks in the syllable initial as a single character, so it would be wrong to break the initial characters apart into grapheme clusters. In contrast the users of the script view the separate vowel sounds and tone characters of the syllable finals as separate characters.

## **Character storage order**

The placement of the tone marker is arbitrary. Both CTV(V) and CV(V)T are possible in the 1936 recension. However, to keep the storage order in the 1936 recension consistent with the 1988 recension visual order, it is proposed that the tone be stored as the last character in the syllable.

#### Tone marking – tone categories or tone values

The 1936 recension uses tone positions to express tone categories. These positions are named as if the initial character was a body: head, shoulder, waist, and foot. There are also numbers that correspond to the positions.

The reformed, New Miao and 1988 Chuxiong recension scripts mark actual tone values. These values are numbered. Tone values have graphical representation (except for one which is unmarked), but the representation used is not consistent across the different reformed versions. While the graphical shape is not completely consistent, the tone number and values do map across all versions. Therefore the graphical variations in the various reformed and 1988 versions should be treated as font issues.

#### Fifth tone category

Originally Pollard used five locations for the tone categories. As the script was refined the fifth position underneath the initial, called the "floor" position, was dropped in most areas. But in some Miao dialects the fifth tone category still exists. A code point is included for this floor position for historical documents, or in case some dialect needs a fifth tone category. See illustration 1 below.

#### **Punctuation**

Users of the Simple Miao script freely use the same punctuation marks as Chinese and Latin. No new encodings for punctuation are required. Often texts use underlines, double underlines, and wavy underlines to distinguish names of people, place names and book titles, but this is a word processing attribute and not an encoding issue.

#### Music notation

Users of the Simple Miao script use the same musical notation of numbers, dots and dashes that is common in China. Often particular letters designed by Pollard are used for the scale in place of the numbers. Sometimes symbols resembling Lisu tone marks are used instead. No additional encodings are required for musical notation if Lisu tone symbols are adopted into the standards.

### Line-breaking

Line breaks occur in place of spaces or after punctuation. A line break may not be inserted between any Simple Miao character, or before punctuation. There is no line breaking hyphenation.

### Word breaking

Word breaking occurs only before a consonant. Syllables of consonant, vowels and tone are never split.

### Archaic experimental or rare characters

There are some rare characters that were used in some of the experimental reform scripts. It is assumed that these characters are archaic. Enwall (1994b) has an excellent treatment of the history of these experimental reforms. It is possible that since hundreds or as many as tens of thousands of people were taught these reformed scripts that they may not truly be dead writing systems. These few characters are not encoded because they were experimental and no publishing used these characters.

## Viability of the script

The script is vibrant, living and showing no signs of dying. Usage continues to grow both within the many Miao dialects, and also is spreading into different ethnic groups. The Basic Multilingual Plane (BMP) would be the appropriate place to encode it if space allows.

### Composites with "wart"

There is a mark called a "wart" in English. This is only known to be extant in relatively recent A-Hmao writings. There are two graphical forms, a "left" and a "right". Both of these forms represent the same function and sometimes vary predictably depending on the shape of the character it appears in, but there is a great deal of regional variation. By default, the "wart" is applied to the left side so it is not confused with a vowel. If the base grapheme is hollow on the right side, the "wart" sometimes is applied to the right to reduce space used in printing.

The "wart" is said to represent a "reduced stress", and is almost certainly a different way to represent the dot-like mark in "half-voiced" characters of the Chuxiong style of the Simple Miao script. The dot-like mark containing characters and "wart" characters are never used together. Separate code points are not required for the "wart"-containing characters, since they are a style difference from the dot-like containing characters. The "wart" and "dot-like" mark are unified because the differences are visual, that is, these differences are font implementation issues and not encoding issues. See the illustration below.

## **Encoding order**

There is wide variation in collating order. Even with the more comprehensive Chuxiong 1988 recension where there is a definite collating order prescribed, there is frequently variation in the order where the "Y" character should be in the order. This sequence is close to the 1936 style sequence that is taught in government schools in Guizhou province. Following the 1988 style sequence (initials then vowels), the tone value and tone category markers are included.

### **Need for space for additional characters**

Because the consonants have visually encoded within them certain linguistic features, and since only those values that are actually used are encoded, the script might logically expand. For this reason it is recommended that a few code points be reserved beyond the space required for this proposal. The reasonable argument for keeping the additional code points fairly low is that the 1988 recension is quite extensive, and is likely to cover most requirements from a language found in South West China.

# **Suggested encoding**

# Suggested names list

Names use the equivalent New Miao writing where possible, but there is not a one-to-one mapping between the Latin based New Miao writing and the Simple Miao script. For example, New Miao writing uses nothing where the Simple Miao script uses "Y" to carry other characteristics of the syllable, such as nasalization and voicing. This mismatch between the reasoning of the different scripts leaves these names particularly arbitrary. Due to regional accent variations, there is also inconsistency between different sources.

## Suggested names list

Initials.		
offset	Symbol	Name
0000	J	SIMPLE MIAO LETTER B
		$\rightarrow$ U+14A7 CANADIAN SYLLABICS MO
0001	٦.	SIMPLE MIAO LETTER B STRESSED
0002	」'	SIMPLE MIAO LETTER P
0003	L	SIMPLE MIAO LETTER NB
0004	CJ.	SIMPLE MIAO LETTER NB STRESSED
0005	(_)'	SIMPLE MIAO LETTER NP
0006	Т	SIMPLE MIAO LETTER D
0007	T'	SIMPLE MIAO LETTER T STRESSED
0008	Τ'	SIMPLE MIAO LETTER T
0009	CT	SIMPLE MIAO LETTER ND
000A	CT.	SIMPLE MIAO LETTER ND STRESSED
000B	CT'	SIMPLE MIAO LETTER NT
000C	コ	SIMPLE MIAO LETTER M
000D	⊐.	SIMPLE MIAO LETTER M HALF STRESSED
000E	⊐'	SIMPLE MIAO LETTER HM
000F		SIMPLE MIAO LETTER NG
0010	<b>(</b> □.	SIMPLE MIAO LETTER NG STRESSED
0011	(⊐'	SIMPLE MIAO LETTER NK
0012	Г	SIMPLE MIAO LETTER ZH
0013	Γ,	SIMPLE MIAO LETTER ZH STRESSED

0014	г'	SIMPLE MIAO LETTER CH
0015	CE	SIMPLE MIAO LETTER NZH
0016	Œ,	SIMPLE MIAO LETTER NZH STRESSED
0017	Œ'	SIMPLE MIAO LETTER NCH
0018	1	SIMPLE MIAO LETTER TC
0019	1.	SIMPLE MIAO LETTER TC STRESSED
001A	1'	SIMPLE MIAO LETTER Q
001B	(1	SIMPLE MIAO LETTER NJ
001C	(1.	SIMPLE MIAO LETTER NJ STRESSED
001D	(1'	SIMPLE MIAO LETTER NQ
001E	Δ	SIMPLE MIAO LETTER DL
		$\rightarrow$ U+1403 CANADIAN SYLLABICS I
001F	Δ.	SIMPLE MIAO LETTER DL STRESSED
0020	Δ'	SIMPLE MIAO LETTER TL
0021	CΔ	SIMPLE MIAO LETTER NDL
0022	(Δ.	SIMPLE MIAO LETTER NDL STRESSED
0023	(Δ'	SIMPLE MIAO LETTER NTL
0024	Α	SIMPLE MIAO LETTER TL PALATALIZED
0025	Δ.	SIMPLE MIAO LETTER DL PALATALIZED STRESSED
0026	Δ'	SIMPLE MIAO LETTER DL PALATALIZED
0027	CA	SIMPLE MIAO LETTER NTL PALATALIZED
0020		
0028	CA.	SIMPLE MIAO LETTER NDL PALATALIZED STRESSED
0029	ca'	SIMPLE MIAO LETTER NTL PALATALIZED
002A	<b>-</b>	SIMPLE MIAO LETTER Z
00211	†	SIMPLE MIAO LETTER Z
002B	<b>†</b> •	SIMPLE MIAO LETTER C STRESSED
0.05	•	
002C	†'	SIMPLE MIAO LETTER C

002D	(†	SIMPLE MIAO LETTER NZ
002E	(†*	SIMPLE MIAO LETTER NC STRESSED
002F	(†'	SIMPLE MIAO LETTER NC
0030	τ	SIMPLE MIAO LETTER Q
0031	τ.	SIMPLE MIAO LETTER DR STRESSED
0032	τ'	SIMPLE MIAO LETTER TR
0033	CT	SIMPLE MIAO LETTER NTR
0034	CT.	SIMPLE MIAO LETTER NTR STRESSED
0035	CT'	SIMPLE MIAO LETTER NDR
0036	Υ	SIMPLE MIAO LETTER H
0037	Υ.	SIMPLE MIAO LETTER H STRESSED
0038	γ'	SIMPLE MIAO LETTER H ASPIRATED
0039	CY	SIMPLE MIAO LETTER NH
003A	CA.	SIMPLE MIAO LETTER NH STRESSED
003B	cy'	SIMPLE MIAO LETTER NH ASPIRATED
003C	V	SIMPLE MIAO LETTER V
		→ U+142F CANADIAN SYLLABICS PE
003D	٧.	SIMPLE MIAO LETTER V STRESSED
003E	٧,	SIMPLE MIAO LETTER V ASPIRATED
003F	٨	SIMPLE MIAO LETTER Y
		$\rightarrow$ U+1431 CANADIAN SYLLABICS PAAI
0040	٧.	SIMPLE MIAO LETTER Y STRESSED
0041	۸,	SIMPLE MIAO LETTER Y ASPIRATED
0042	Α	SIMPLE MIAO LETTER ZTL
		$\rightarrow$ U+15C5 CANADIAN SYLLABICS GHO
0043	Α'	SIMPLE MIAO LETTER ZDL STRESSED

0044	A ?	SIMPLE MIAO LETTER ZDL
	Α'	
0045	L	SIMPLE MIAO LETTER L
		→ U+14AA CANADIAN SYLLABICS MA
0046	r.	SIMPLE MIAO LETTER L STRESSED
0047	L'	SIMPLE MIAO LETTER L ASPIRATED
0048	ما	SIMPLE MIAO LETTER HL
0049	•ما	SIMPLE MIAO LETTER HL STRESSED
004A	'ما	SIMPLE MIAO LETTER HL ASPIRATED
004B	)	SIMPLE MIAO LETTER M
		→ U+1450 CANADIAN SYLLABICS TO
004C	Э.	SIMPLE MIAO LETTER M STRESSED
004D	כ'	SIMPLE MIAO LETTER M ASPIRATED
004E	С	SIMPLE MIAO LETTER NR
		→ U+1455 CANADIAN SYLLABICS TA
004F	C.	SIMPLE MIAO LETTER NR STRESSED
0050	C'	SIMPLE MIAO LETTER NR ASPIRATED
0051	3	SIMPLE MIAO LETTER R
0052	3.	SIMPLE MIAO LETTER R STRESSED
0053	3'	SIMPLE MIAO LETTER R ASPIRATED
0054	3	SIMPLE MIAO LETTER NJH
0055	Σ.	SIMPLE MIAO LETTER NJH STRESSED
0056	Σ'	SIMPLE MIAO LETTER NJH ASPIRATED
0057	е	SIMPLE MIAO LETTER NGG VOICELESS
0058	e.	SIMPLE MIAO LETTER HNGG VOICELESS
0059	e'	SIMPLE MIAO LETTER HNGG VOICELESS ASPIRATED
005A	6	SIMPLE MIAO LETTER NGG
005B	е.	SIMPLE MIAO LETTER HNGG
005C	6'	SIMPLE MIAO LETTER HNGG ASPIRATED
005D	1	SIMPLE MIAO LETTER HX
005E	1.	SIMPLE MIAO LETTER J STRESSED
005F	', 	SIMPLE MIAO LETTER Q
0060	J	SIMPLE MIAO LETTER SH
0061	7	SIMPLE MIAO LETTER X

0062	S	SIMPLE MIAO LETTER S
0063	Г	SIMPLE MIAO LETTER F
0064	٦	SIMPLE MIAO LETTER H
0065	R	SIMPLE MIAO LETTER R OTHER
00.55		<ul> <li>Only used for loan words in contrast with 3</li> </ul>
0066	U	SIMPLE MIAO LETTER W
0067		→ U+144C CANADIAN SYLLABICS TE (Reserved for future use)
0068		(Reserved for future use)
0069		(Reserved for future use)
006A		(Reserved for future use)
006B		(Reserved for future use)
006C		(Reserved for future use)
006D		(Reserved for future use)
006E		(Reserved for future use)
006F		(Reserved for future use)
Vowels 0070	_	SIMPLE MIAO LETTER A
		$\rightarrow$ U+1428 CANADIAN SYLLABICS FINAL SHORT HORIZONTAL
		STROKE
0071	0	SIMPLE MIAO LETTER O
0072	P	$\rightarrow$ U+1424 CANADIAN SYLLABICS FINAL RING SIMPLE MIAO LETTER E
0073	0	→ U+1548 CANADIAN SYLLABICS RI SIMPLE MIAO LETTER I
0074		ightarrow U+1422 CANADIAN SYLLABICS FINAL TOP HALF RING SIMPLE MIAO LETTER U
0075	U	$\rightarrow$ U+14D1 CANADIAN SYLLABICS CARRIER NG SIMPLE MIAO LETTER YU
0076	5	ightarrow U+1423 CANADIAN SYLLABICS FINAL RIGHT HALF RING SIMPLE MIAO LETTER AI
	1	
		→ U+144A CANADIAN SYLLABICS WEST CREE P

0078	L	SIMPLE MIAO LETTER EI
	•	• The shape of this letter has become more angular since 1936.
		This sound cannot be uniquely expressed in New Miao writing. The
		Hanyu pinyin characters are used for the name.
		→ U+14A1 CANADIAN SYLLABICS C
0079	II	SIMPLE MIAO LETTER AO
		$\rightarrow$ U+1426 CANADIAN SYLLABICS FINAL SHORT VERTICAL
007.4		STROKES
007A	٢	SIMPLE MIAO LETTER EU
007B		→ U+154B CANADIAN SYLLABICS RA SIMPLE MIAO LETTER W
007B	5	SIMPLE MIAO LETTER W SIMPLE MIAO LETTER AN
007D	2	SIMPLE MIAO LETTER ANG
007E	8	SIMPLE MIAO LETTER IE
007E	=	SIMPLE MIAO LETTER IU SIMPLE MIAO LETTER IU
0071	N	
0800	٦	<ul> <li>Some sources claim IOU, this spelling is consistent with Hanyu pinyin)</li> <li>SIMPLE MIAO LETTER YU</li> </ul>
0001		• This sound is written as 'I' in New Miao writing.
0081	Г	SIMPLE MIAO LETTER I
0082		<ul> <li>Note that TONE VALUE 5 has the same shape</li> <li>SIMPLE MIAO LETTER IA</li> </ul>
0002	<b>^</b>	
0083		→ U+1546 CANADIAN SYLLABICS RI SIMPLE MIAO LETTER UA
	<b>₽</b>	→ U+1543 CANADIAN SYLLABICS RE
0084	ε	SIMPLE MIAO LETTER EN
0085	- <b>ε</b> ₀	SIMPLE MIAO LETTER ENG
	·	<ul> <li>Only used with Chinese borrow words.</li> </ul>
0086	6	SIMPLE MIAO LETTER ANG
		<ul> <li>Possible alternative representation style •</li> </ul>
0087		Only used in combination with other vowels  (Percentage of future use)
0087		(Reserved for future use)
0089		(Reserved for future use)
0089 008A		(Reserved for future use)
OUOA		(Reserved for future use)

008B		(Reserved for future use)
008C		(Reserved for future use)
008D		(Reserved for future use)
008E		(Reserved for future use)
008F		(Reserved for future use)
Tone va	alue markers	
0090		SIMPLE MIAO TONE VALUE 1  • This character has no graphical value.
0091	T	SIMPLE MIAO TONE VALUE 2  →
0092	3	SIMPLE MIAO TONE VALUE 3 →
0093	M	SIMPLE MIAO TONE VALUE 4 →
0094	Γ	SIMPLE MIAO TONE VALUE 5 →
0095	S	SIMPLE MIAO TONE VALUE 6
0096	L	→ SIMPLE MIAO TONE VALUE 7
0097	t	→ SIMPLE MIAO TONE VALUE 8 →
Tone ca	itegory marke	

#### Tone category markers

I OHC Ca	itegory marke	13
0098	<u>্</u>	SIMPLE MIAO TONE CATEGORY HEAD
0099	ੰ	SIMPLE MIAO TONE CATEGORY SHOULDER
009A	<b>_</b>	SIMPLE MIAO TONE CATEGORY WAIST
009B	O_	SIMPLE MIAO TONE CATEGORY FOOT
009C	<b>○</b>	SIMPLE MIAO TONE CATEGORY FLOOR
009D		(Reserved for future use)
009E		(Reserved for future use)
009F		(Reserved for future use)

# **Suggested Unicode character properties**

Relative offset is used for the code point in this table.

```
0000; SIMPLE MIAO LETTER B; Lo; 0; L;;;; N;;;;
0001; SIMPLE MIAO LETTER B STRESSED; Lo; 0; L;;;; N;;;;
0002; SIMPLE MIAO LETTER P; Lo; 0; L;;;; N;;;;
0003; SIMPLE MIAO LETTER NB; Lo; 0; L;;;; N;;;;
0004; SIMPLE MIAO LETTER NB STRESSED; Lo; 0; L;;;; N;;;;
0005; SIMPLE MIAO LETTER NP; Lo; 0; L;;;; N;;;;
0006; SIMPLE MIAO LETTER D; Lo; 0; L;;;; N;;;;
0008; SIMPLE MIAO LETTER T; Lo; 0; L;;;; N;;;;
0009; SIMPLE MIAO LETTER T STRESSED; Lo; 0; L;;;; N;;;;
00004; SIMPLE MIAO LETTER ND; Lo; 0; L;;;; N;;;;
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000B;SIMPLE MIAO LETTER NT;Lo;0;L;;;;;N;;;;
000C; SIMPLE MIAO LETTER M; Lo; 0; L;;;; N;;;;
000D; SIMPLE MIAO LETTER M HALF STRESSED; Lo; 0; L;;;;; N;;;;;
000E;SIMPLE MIAO LETTER HM;Lo;0;L;;;;;N;;;;;
000F;SIMPLE MIAO LETTER NG;Lo;0;L;;;;;N;;;;
0010; SIMPLE MIAO LETTER NG STRESSED; Lo; 0; L; ;; ;; N; ;; ;;
0011;SIMPLE MIAO LETTER NK;Lo;0;L;;;;N;;;;
0012; SIMPLE MIAO LETTER ZH; Lo; 0; L; ;; ;; N; ;; ;
0013;SIMPLE MIAO LETTER ZH STRESSED;Lo;0;L;;;;;N;;;;;
0014; SIMPLE MIAO LETTER CH; Lo; 0; L;;;;; N;;;;
0015;SIMPLE MIAO LETTER NZH;Lo;0;L;;;;;N;;;;
0016; SIMPLE MIAO LETTER NZH STRESSED; Lo; 0; L;;;;; N;;;;
0017;SIMPLE MIAO LETTER NCH;Lo;0;L;;;;;N;;;;;
0018; SIMPLE MIAO LETTER TC; Lo; 0; L;;;;; N;;;;;
0019; SIMPLE MIAO LETTER TC STRESSED; Lo; 0; L;;;;; N;;;;;
001A; SIMPLE MIAO LETTER Q; Lo; 0; L;;;; ; N;;;;
001B; SIMPLE MIAO LETTER NJ; Lo; 0; L;;;; N;;;;
001C;SIMPLE MIAO LETTER NJ STRESSED;Lo;0;L;;;;;N;;;;;
001D; SIMPLE MIAO LETTER NQ; Lo; 0; L;;;;; N;;;;;
001E;SIMPLE MIAO LETTER DL;Lo;0;L;;;;;N;;;;
001F;SIMPLE MIAO LETTER DL STRESSED;Lo;0;L;;;;;N;;;;;
0020;SIMPLE MIAO LETTER TL;Lo;0;L;;;;;N;;;;;
0021;SIMPLE MIAO LETTER NDL;Lo;0;L;;;;;N;;;;
0022;SIMPLE MIAO LETTER NDL STRESSED;Lo;0;L;;;;;N;;;;;
0023;SIMPLE MIAO LETTER NTL;Lo;0;L;;;;;N;;;;
0024; SIMPLE MIAO LETTER TL PALATALIZED; Lo; 0; L; ;; ;; N; ;; ;;
0025; SIMPLE MIAO LETTER DL PALATALIZED STRESSED; Lo; 0; L;;;;; N;;;;
0026; SIMPLE MIAO LETTER DL PALATALIZED; Lo; 0; L;;;;; N;;;;;
0027; SIMPLE MIAO LETTER NTL PALATALIZED; Lo; 0; L;;;;; N;;;;
0028; SIMPLE MIAO LETTER NDL PALATALIZED STRESSED; Lo; 0; L;;;;; N;;;;;
0029;SIMPLE MIAO LETTER NTL PALATALIZED;Lo;0;L;;;;;N;;;;;
002A; SIMPLE MIAO LETTER Z; Lo; 0; L;;;;; N;;;;;
002B;SIMPLE MIAO LETTER C STRESSED;Lo;0;L;;;;;N;;;;
002C; SIMPLE MIAO LETTER C; Lo; 0; L; ; ; ; ; N; ; ; ;
002D; SIMPLE MIAO LETTER NZ; Lo; 0; L;;;; :N;;;;
002E;SIMPLE MIAO LETTER NC STRESSED;Lo;0;L;;;;;N;;;;;
002F;SIMPLE MIAO LETTER NC;Lo;0;L;;;;;N;;;;
0030; SIMPLE MIAO LETTER Q; Lo; 0; L;;;;; N;;;;;
0031; SIMPLE MIAO LETTER DR STRESSED; Lo; 0; L;;;;; N;;;;;
0032;SIMPLE MIAO LETTER TR;Lo;0;L;;;;;N;;;;;
0033; SIMPLE MIAO LETTER NTR; Lo; 0; L;;;;; N;;;;
0034; SIMPLE MIAO LETTER NTR STRESSED; Lo; 0; L;;;;; N;;;;;
0035;SIMPLE MIAO LETTER NDR;Lo;0;L;;;;;N;;;;
0036; SIMPLE MIAO LETTER H; Lo; 0; L;;;; ; N;;;;
0037;SIMPLE MIAO LETTER H STRESSED;Lo;0;L;;;;;N;;;;;
0038; SIMPLE MIAO LETTER H ASPIRATED; Lo; 0; L;;;;; N;;;;;
0039; SIMPLE MIAO LETTER NH; Lo; 0; L;;;; N;;;;
003A; SIMPLE MIAO LETTER NH STRESSED; Lo; 0; L; ;; ;; N; ;; ;;
003B; SIMPLE MIAO LETTER NH ASPIRATED; Lo; 0; L;;;;; N;;;;;
003C;SIMPLE MIAO LETTER V;Lo;0;L;;;;;N;;;;
003D; SIMPLE MIAO LETTER V STRESSED; Lo; 0; L;;;;; N;;;;;
003E; SIMPLE MIAO LETTER V ASPIRATED; Lo; 0; L; ;; ;; N; ;; ;;
003F;SIMPLE MIAO LETTER Y;Lo;0;L;;;;;N;;;;
0040;SIMPLE MIAO LETTER Y STRESSED;Lo;0;L;;;;;N;;;;;
0041; SIMPLE MIAO LETTER Y ASPIRATED; Lo; 0; L;;;;; N;;;;;
0042;SIMPLE MIAO LETTER ZTL;Lo;0;L;;;;;N;;;;
0043; SIMPLE MIAO LETTER ZDL STRESSED; Lo; 0; L;;;;; N;;;;;
0044; SIMPLE MIAO LETTER ZDL; Lo; 0; L;;;;; N;;;;
0045;SIMPLE MIAO LETTER L;Lo;0;L;;;;;N;;;;
0046; SIMPLE MIAO LETTER L STRESSED; Lo; 0; L;;;;; N;;;;;
0047; SIMPLE MIAO LETTER L ASPIRATED; Lo; 0; L;;;;; N;;;;;
0048;SIMPLE MIAO LETTER HL;Lo;0;L;;;;;N;;;;
0049;SIMPLE MIAO LETTER HL STRESSED;Lo;0;L;;;;;N;;;;;
004A; SIMPLE MIAO LETTER HL ASPIRATED; Lo; 0; L;;;;; N;;;;;
004B;SIMPLE MIAO LETTER M;Lo;0;L;;;;;N;;;;
004C; SIMPLE MIAO LETTER M STRESSED; Lo; 0; L;;;;; N;;;;
004D;SIMPLE MIAO LETTER M ASPIRATED;Lo;0;L;;;;;N;;;;;
004E;SIMPLE MIAO LETTER NR;Lo;0;L;;;;;N;;;;
004F;SIMPLE MIAO LETTER NR STRESSED;Lo;0;L;;;;;N;;;;;
0050;SIMPLE MIAO LETTER NR ASPIRATED;Lo;0;L;;;;;N;;;;
0051;SIMPLE MIAO LETTER R;Lo;0;L;;;;;N;;;;;
0052;SIMPLE MIAO LETTER R STRESSED;Lo;0;L;;;;;N;;;;;
0053;SIMPLE MIAO LETTER R ASPIRATED;Lo;0;L;;;;;N;;;;;
0054; SIMPLE MIAO LETTER NJH; Lo; 0; L;;;;; N;;;;
0055;SIMPLE MIAO LETTER NJH STRESSED;Lo;0;L;;;;;N;;;;;
0056;SIMPLE MIAO LETTER NJH ASPIRATED;Lo;0;L;;;;;N;;;;
0057; SIMPLE MIAO LETTER NGG VOICELESS; Lo; 0; L;;;;; N;;;;;
0058;SIMPLE MIAO LETTER HNGG VOICELESS;Lo;0;L;;;;;N;;;;;
0059; SIMPLE MIAO LETTER HNGG VOICELESS ASPIRATED; Lo; 0; L;;;;; N;;;;
005A;SIMPLE MIAO LETTER NGG;Lo;0;L;;;;;N;;;;
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005B;SIMPLE MIAO LETTER HNGG;Lo;0;L;;;;;N;;;;;
005C;SIMPLE MIAO LETTER HNGG ASPIRATED;Lo;0;L;;;;;N;;;;
005D;SIMPLE MIAO LETTER HX;Lo;0;L;;;;;N;;;;
005E; SIMPLE MIAO LETTER J STRESSED; Lo; 0; L;;;;; N;;;;;
005F;SIMPLE MIAO LETTER Q;Lo;0;L;;;;;N;;;;
0060; SIMPLE MIAO LETTER SH; Lo; 0; L;;;; N;;;;;
0061;SIMPLE MIAO LETTER X;Lo;0;L;;;;;N;;;;
0062; SIMPLE MIAO LETTER S; Lo; 0; L; ; ; ; ; N; ; ; ;
0063;SIMPLE MIAO LETTER F;Lo;0;L;;;;;N;;;;
0064; SIMPLE MIAO LETTER H; Lo; 0; L; ;; ;; ;N; ;; ;;
0065;SIMPLE MIAO LETTER R OTHER;Lo;0;L;;;;;N;;;;;
0066; SIMPLE MIAO LETTER W; Lo; 0; L; ; ; ; ; N; ; ; ;
0067; (Reserved for future use)
0068; (Reserved for future use)
0069; (Reserved for future use)
006A; (Reserved for future use)
006B; (Reserved for future use)
006C; (Reserved for future use)
006D; (Reserved for future use)
006E; (Reserved for future use)
006F; (Reserved for future use)
0070; SIMPLE MIAO LETTER A; Lo; 0; L;;;;; N;;;;;
0071;SIMPLE MIAO LETTER O;Lo;0;L;;;;;N;;;;
0072; SIMPLE MIAO LETTER E; Lo; 0; L;;;;; N;;;;;
0073;SIMPLE MIAO LETTER I;Lo;0;L;;;;;N;;;;
0074; SIMPLE MIAO LETTER U; Lo; 0; L; ; ; ; ; N; ; ; ;
0075; SIMPLE MIAO LETTER YU; Lo; 0; L;;;;; N;;;;
0076; SIMPLE MIAO LETTER AI; Lo; 0; L;;;;; N;;;;;
0078; SIMPLE MIAO LETTER EI; Lo; 0; L;;;;; N;;;;;
0079; SIMPLE MIAO LETTER AO; Lo; 0; L; ;; ;; N; ;; ;;
007A; SIMPLE MIAO LETTER EU; Lo; 0; L; ;; ;; N; ;; ;;
007B; SIMPLE MIAO LETTER W; Lo; 0; L;;;; ; N;;;;
007C; SIMPLE MIAO LETTER AN; Lo; 0; L;;;;; N;;;;;
007D; SIMPLE MIAO LETTER ANG; Lo; 0; L;;;;; N;;;;
007E;SIMPLE MIAO LETTER IE;Lo;0;L;;;;:N;;;;
007F; SIMPLE MIAO LETTER IU; Lo; 0; L; ;; ;; N; ;; ;;
0080; SIMPLE MIAO LETTER YU; Lo; 0; L;;;;; N;;;;;
0081;SIMPLE MIAO LETTER I;Lo;0;L;;;;;N;;;;;
0082; SIMPLE MIAO LETTER IA; Lo; 0; L;;;;; N;;;;;
0083;SIMPLE MIAO LETTER UA;Lo;0;L;;;;;N;;;;
0084; SIMPLE MIAO LETTER EN; Lo; 0; L;;;;; N;;;;;
0085; SIMPLE MIAO LETTER ENG; Lo; 0; L;;;;; N;;;;
0086; SIMPLE MIAO LETTER ANG; Lo; 0; L;;;;; N;;;;
0087: (Reserved for future use)
0088: (Reserved for future use)
0089; (Reserved for future use)
008A; (Reserved for future use)
008B; (Reserved for future use)
008C; (Reserved for future use)
008D; (Reserved for future use)
008E; (Reserved for future use)
008F; (Reserved for future use)
0090:SIMPLE MIAO TONE VALUE 1:Mc:0:L:::::N::::
0091;SIMPLE MIAO TONE VALUE 2;Mc;0;L;;;;;N;;;;
0092;SIMPLE MIAO TONE VALUE 3;Mc;0;L;;;;;N;;;;
0093; SIMPLE MIAO TONE VALUE 4; Mc; 0; L;;;;; N;;;;;
0094;SIMPLE MIAO TONE VALUE 5;Mc;0;L;;;;;N;;;;
0095; SIMPLE MIAO TONE VALUE 6; Mc; 0; L;;;;; N;;;;
0096; SIMPLE MIAO TONE VALUE 7; Mc; 0; L;;;;; N;;;;;
0097; SIMPLE MIAO TONE VALUE 8; Mc; 0; L;;;;; N;;;;;
0098; SIMPLE MIAO TONE CATEGORY HEAD; Mn; 0; L;;;;; N;;;;;
0099; SIMPLE MIAO TONE CATEGORY SHOULDER; Mn; 0; L;;;;; N;;;;;
009A; SIMPLE MIAO TONE CATEGORY WAIST; Mn; 0; L;;;;; N;;;;
009B;SIMPLE MIAO TONE CATEGORY FOOT;Mn;0;L;;;;;N;;;;;
009C;SIMPLE MIAO TONE CATEGORY FLOOR;Mn;0;L;;;;;N;;;;
009D: (Reserved for future use)
009E; (Reserved for future use)
009F; (Reserved for future use)
```

# **Bibliography**

Enwall, Joakim (1994, 1995), A myth become reality: History and development of the Miao written language. Volumes 1 and 2. Stockholm East Asian monographs no. 5-6., Institute of Oriental Languages, Stockholm University, Sweden.

Enwall, Joakim (1994). In search of the Entering Tone: The importance of the Sichuanese tones for understanding the tone marking system of the Sichuan Hmong Pollard Script. In Joakim Enwall (ed.), Outstretched leaves on his bamboo staff: Studies in honour of Göran Malmqvist on his 70<sup>th</sup> birthday. Stockholm: The Association of Oriental Studies. pp 70-74.

Johnson, Michael (1998). Farwestern Hmongic. Unknown publisher.

Xiong, Yuyou 熊玉有 (2003). 苗族文化史 "A cultural history of the Miao nationality", 云南民族出版社 "Yunnan Nationalities Press", Yunnan Institute for Nationality Research. Kunming, Yunnan, China.

Wang, Yangcai 王 阳 才, et al. (2005). 楚雄苗族使略 ChuXiong MiaoZu ShiLue "ChuXiong Miao People History",云南民族出版社 "Yunnan Nationalities Press". Kunming, Yunnan, China.

Wang, Shengying 王 盛 英, et al., Eds. (1996). 苗汉简明词典 "Miao-Han concise dictionary", 云南民族出版社 "Yunnan Nationalities Press". Kunming, Yunnan, China.

Wang, Shiwei 王 时 炜 (2005). ad hmaob lul ad got ndeued: diand dongd beis shangb lul. 苗语 理论基础 Series "Miao language theory foundation". 云南民族出版社 "Yunnan Nationalities Press".

Wang, Chunde 王 春 德 , et al., Eds. (1991). zhong1guo2 shao3shu4 min2zu2 wen2zi4 "Chinese Minorities writing". Zhongguo Zang Xue chubanshe 中国藏 学出版社 "Chinese Tibetan Educational Publishing".

王辅世. 1985. 《苗语简志》. 北京: 民族出版社.

Unknown editors (1948). "Miao hymnal", China Inland Mission republished by Zhongguo Jidujiao Xiehui 中国基督教协会 "Chinese Christian Association" in 1988.

Unknown editors (1984), "Black Yi songbook". Yunnan Sheng Jidujiao Xiehui 云南省基督教协会 "Yunnan Province Christian Association".

Unknown editors (unknown), "White Yi songbook", Yunnan Sheng Jidujiao Xiehui 云南省基督教协会 "Yunnan Province Christian Association".

#### Illustrations

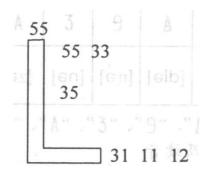
Illustration 1: Chart of complete Chuxiong Simple Miao script system. (Wang Yangcai, 2005).



Illustration 2 (Left): The mapping in A-Hmao between Chao-style tone markers, Simple Miao Tone Values, Simple Miao Tone Categories and IPA tone numbers (Wang 1991). Illustration 3 (Right): A-Hmao Tower of Babel passage excerpt from unknown source showing the "wart" (Wang Shi Wei, 2005).

小字母的 佐 置	调值	调类	苗文例字	國际音标	意义
在太字母的上方	7	GR.	Jacac	Sey <sup>55</sup> ntso <sup>55</sup> ntsa <sup>55</sup> nie <sup>55</sup> 早上 洗 牙	早上刷牙
	Y	1	はんようしてき	Ngu <sup>55</sup> ntsa <sup>55</sup> mi <sup>55</sup> Sie <sup>55</sup> 草绿 绿色貌	绿草青青
	1	41	Y To	a <sup>33</sup> dw <sup>33</sup>	牆壁
在大字母的右上角	13	5	3"(†"([^°[	Zau <sup>33</sup> ntsi <sup>33</sup> nt6o <sup>33</sup> t6ie <sup>33</sup> 好名 记 住	美名永记
m jest is glitage	7	61.	[·]*	1a <sup>53</sup> bie <sup>53—31</sup> 別人 始	別人的
		81		Va <sup>53</sup> dau <sup>53-31</sup>	豆饭
在大字母的右侧	1	2		nghau dzhey ndihau khau 姑娘 会 绣 花	姑娘会 绣花
	J	7	)_)_S <sub>5</sub> J <sub>11</sub>	ma <sup>il</sup> ma <sup>il</sup> Sey <sup>il</sup> kau <sup>il</sup> 阿妹 缝 帽	阿妹缝帽
在大字母的右下角		4 <sub>II</sub>	Co)n(Can Ti	nhy <sup>11</sup> mhau <sup>11</sup> ndzhau dhau <sup>11</sup> 他 走 到 能	他能走到
	J	6п	L.Tax	1a <sup>31</sup> die <sup>31</sup> 高兴真	真高兴
	1	8 m	م۸ بید	ghau <sup>31</sup> zhi <sup>31</sup>	+ /\

Illustration 4 (Left): Showing the relationship between absolute tone values and Simple Miao tone positions (Wang Shi Wei 2005). Illustration 5 (Right): Songbook showing use of Chinese notation, unknown publisher.



Lª ±.ゴCT∙V. 1 1=0 4/4 3 5 5 32 32 1 - - 35 6 1 1 6 1 5 - -我的 神 我要 敬拜 你 我的心 深 深 地 爱 你 בוּבוֹ אֿבֿי. א יּחַבַּ ĬŸS"Œ'<**₽**¬¬ Y' Τ° 3 5 6 - 32 321 1 - 66 66 5 - 32 32 1 - -在你 的 座前我思想 你恩典 我的心 赞美 敬拜你 ᲚᲡ ᲜᲔᲚᲔᲠᲜᲐ᠈ษ฿ ฃ๙๙๚๛ ๘ํ๚๛ 3 5 1 1 1 3 6 5 3 5 3 5 1 1 1 6 3 5 -- 1 你是 我 唯 一的喜 乐。 你 是我心灵 的 满 足 ⊏⊐°ŽS°°L∝(° Ž †° Ē)- □□ ÅLĿ J. 3 5 6 - 32 321 1 - 66 66 5 - 32 32 1 - - - | 在 你的 座前我思想你 恩典我的 神 我要 敬拜你。 

Illustration 6: Musical notation with Simple Miao letters replacing the numbers in Bai Yi hymnal.

Illustration 7: (Left) "Hymnbook is Lakkia" from Cambridge University Library showing the "floor" fifth tone category. Illustration 8: (Right) "John in Laka" from Cambridge University Library showing the "floor" fifth tone category.

せいって、ちゃと下十八岁 ミリップピE. コロッツナー +: Ci & + N'S L'G\_. O TEC C7 20 30 f SE - 5 V, & C: からかで ロ・マッチエッ レンッ 50 日: ハゞいいかナテュペ.テュに: VII ギーッシアンハアンKNS 20 Y: I sosofiny T. LYt.

ב״ם ..ד.ים"ב״ב ביים, ביים ביים

CT。+「Y^L= 1 □...

# ISO/IEC JTC 1/SC 2/WG 2

# PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646.1.

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html</a> for guidelines and details before filling this form.

Please ensure you are using the latest Form from <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/road

#### A. Administrative

1. Title:	Preliminary proposal for encoding the		liao script
2. Requester's r		China	
	pe (Member body/Liaison/Individual contribution):		
4. Submission d		2007-09-14	
	reference (if applicable):	CN/07-007	
6. Choose one o			A.1.
	a complete proposal:		No
` '	re information will be provided later:		Yes
B. Technical –			
1. Choose one o			Voc
	posal is for a new script (set of characters): posed name of script:	Northeastern Yunnan Simple Miao	Yes
	posed harne of script.		
	me of the existing block:		
i	aracters in proposal:		139
1	egory (select one from below - see section 2.2 of	P&P document):	
A-Contempo		B.2-Specialized (large collection	on)
C-Major extir	nct D-Attested extinct	E-Minor extinct	•
F-Archaic Hie	eroglyphic or Ideographic	G-Obscure or questionable usage syr	nbols
4. Is a repertoire	e including character names provided?		Yes
	are the names in accordance with the "character	naming guidelines"	
I .	Annex L of P&P document?		Yes
I	character shapes attached in a legible form suita		Yes
	ide the appropriate computerized font (ordered pr	••••	rmat) for
	the standard?	David Morse	
	e now, identify source(s) for the font (include addr	ess, e-mail, ftp-site, etc.) and indicate	the tools
used:			
6. References:	erences (to other character sets, dictionaries, des	printing toyto ata ) provided?	Yes
	plished examples of use (such as samples from ne		
	ed characters attached?	Yes	503)
7. Special encode			
	proposal address other aspects of character data	processing (if applicable) such as inp	ut.
	on, sorting, searching, indexing, transliteration etc		
·	Addressed througho		
8. Additional Info	ormation:		
Submitters are i	nvited to provide any additional information about	Properties of the proposed Characte	r(s) or Script that
will assist in cor	rect understanding of and correct linguistic proces	ssing of the proposed character(s) or	script.
	ch properties are: Casing information, Numeric in		
information such	n as line breaks, widths etc., Combining behaviou	r, Spacing behaviour, Directional beh	aviour, Default
	iour, relevance in Mark Up contexts, Compatibility		
http://www.upic	e the Unicode standard at <a href="http://www.unicode.org/ode.org/Public/UNIDATA/UCD.html">http://www.unicode.org/Public/UNIDATA/UCD.html</a> and associated as the control of the control	g_ for such information on other scripts and Unicode Technical Penorts for info	s. AISO SEE
for consideration	n by the Unicode Technical Committee for inclusion	on in the Unicode Standard	Jimalion Needed
List sortsideration	J. a.o omoodo roomnod oommidee loi moldak	on an are officed official.	

<sup>1</sup> \_ Form number: N3102-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03)

## C. Technical - Justification

Has this proposal for addition of character(s) been submitted before?  If YES explain  Preliminary proposal by Jenkins (L2/97-104) has not moved forward for 10 years.	Yes
Has contact been made to members of the user community (for example: National Body,	ouro.
user groups of the script or characters, other experts, etc.)?	Yes
	iivaii
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	Voc
	Yes
Reference: See Sociolinguistic background Introduction.	
	mmon
Reference: Scriptures, dictionaries, song books, textbooks	
	Yes
If YES, where? Reference: Northeastern Yunnan, China	
6. After giving due considerations to the principles in the P&P document must the proposed characters be in the BMP?	entirely Yes
	Yes
If YES, is a rationale provided?	res
If YES, reference: Vibrancy and size of potential user community.	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	Yes
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:	
Can any of the proposed characters be encoded using a composed character sequence of either	
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 function)	
to an existing character?	Yes
If YES, is a rationale for its inclusion provided?	Yes
If YES, reference: Although some appear similar to Cree letters, this is a different	nt script
altogether with different behaviours. Hence, it would be best to them as a block.	
11. Does the proposal include use of combining characters and/or use of composite sequences?	Yes
If YES, is a rationale for such use provided?	No
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	No
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 character(s)?	No
If YES, is the equivalent corresponding unified ideographic character(s) identified?	
If YES, reference:	
120, 10,010,100.	