

Universal Multiple-Octet Coded Character Set
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A comparison between the 1994-01 proposal from China and the new SIL beta fonts for New Tai Lue answers a number of questions I posed in my analysis paper of three 1994 proposals from China (<http://www.indigo.ie/egt/standards/iso10646/pdf/tai-analyses.pdf>). The following differences between the two repertoires are:

- 1 SIL xDB DAI LUE MODIFIER W is missing from the Chinese proposal.
- 2 SIL xDC DAI LUE MODIFIER FINAL is missing from the Chinese proposal.
- 3 SIL xEA DAI LUE NUMBER ONE ALT is missing from the Chinese proposal.
- 4 Chinese x52–x64 are missing from the SIL proposal. Of these, x52–x56 can be generated using SIL xDB with a base consonant. x57–x64 cannot.
- 5 The names are different. SIL names appear to be more suitable for the UCS; the Chinese names appear to be Pinyin romanization-based, with an h- prefixed to "high" consonants.
- 6 The order of the two repertoires is largely, but not entirely, the same.

Taking the Chinese order, the SIL names, and moving the digits to a new column, I have prepared the tables attached. I propose the following disposition of the issues raised in my earlier paper.

1. Order is a bit peculiar vis à vis Brahmic. *Issue still open.*
2. x2B–x35 are vowels, possibly vowel signs? *New Tai Lue does not use vowel signs; vowels are spacing characters. Closed.*
3. x36–x3B are possibly final consonants, or consonants with long -AA? They are named MA, NA, etc. just as base consonants have been and they all have a small loop which could be -AA (or -U; x35 also has the loop). *Both Chinese and SIL have coded final consonant glyphs, while still naming them with the inherent -a. It seems that this appendage is the historical VIRAMA. Do the proposed finals need coding? If one were transliterating my name into New Tai Lue, one might get the following, where the last is a final -l, codeable with virama but not available in the Chinese or SIL glyph repertoires. Issue still open.*

ᄒᄒᄒᄒ ᵃmay¹kha¹l' < ᄒ-ᄒ-ᄒ-ᄒ ᵃma-ay-¹kha-¹la-¹

4. More vowels appear at x3C–x42. *These appear to be real vowels, but could be V + YA + VIRAMA (cf. xx71, xx72.) Issue still open.*
5. Two unidentified tone marks at x43–x44. *Use and names of these still need to be provided. Issue still open.*
6. DIGIT TEN at x4F is probably DIGIT ZERO. *It is in fact DIGIT ZERO. Issue closed.*
7. Two abbreviation signs at x50–x51. *SIL name these and consider them letters. Issue still open.*
8. x52–x56 are base consonant + virama + WA. *Issue still open.*
9. x57–x5D are base consonant + virama + LA. *Issue still open.*

西双版纳新傣文字符表

	0	1	2	3	4	5	6
0	000	016	032	048	064	080	096
1	001	017	033	049	065	081	097
2	002	018	034	050	066	082	098
3	003	019	035	051	067	083	099
4	004	020	036	052	068	084	100
5	005	021	037	053	069	085	101
6	006	022	038	054	070	086	102
7	007	023	039	055	071	087	103
8	008	024	040	056	072	088	104
9	009	025	041	057	073	089	105
A	010	026	042	058	074	090	106
B	011	027	043	059	075	091	107
C	012	028	044	060	076	092	108
D	013	029	045	061	077	093	109
E	014	030	046	062	078	094	110
F	015	031	047	063	079	095	111

10. x5E–x60 are base consonant + virama + NA. *Issue still open.*
11. x61–x62 are base consonant + virama + YA. *Issue still open.*
12. x63–x64 are base consonant + virama + MA. *Issue still open.*
13. Are xx62–xx74 required?

For information the Chinese proposed code table and names are provided here.

In the repertoire given on the following pages, I have used the order of the Chinese proposal for ease of comparison, but as noted above, ordering is still an issue.

x00	SPACE	x30	IE	x60	TNA
x01	HQA	x31	IA	x61	HPYA
x02	QA	x32	O	x62	PYA
x03	HGA	x33	UA	x63	HSMA
x04	HXA	x34	EE	x64	SMA
x05	HNGA	x35	AU	x65	reserved
x06	GA	x36	NGA	x66	reserved
x07	XA	x37	NA	x67	reserved
x08	NGA	x38	MA	x68	reserved
x09	HZA	x39	GA	x69	reserved
x0A	HSA	x3A	DA	x6A	reserved
x0B	HYA	x3B	BA (bhaa)	x6B	reserved
x0C	ZA	x3C	AI	x6C	reserved
x0D	SA	x3D	AAI	x6D	reserved
x0E	YA	x3E	UI	x6E	reserved
x0F	HDA	x3F	OI	x6F	reserved
x10	HTA	x40	UAI		
x11	HNA	x41	EEI		
x12	DA	x42	EI		
x13	TA	x43	TONE A		
x14	NA	x44	TONE B		
x15	HBA	x45	reserved		
x16	HPA	x46	DIGIT ONE		
x17	HMA	x47	DIGIT TWO		
x18	BA	x48	DIGIT TJREE		
x19	PA	x49	DIGIT FOUR		
x1A	MA	x4A	DIGIT FIVE		
x1B	HFA	x4B	DIGIT SIX		
x1C	HWA	x4C	DIGIT SEVEN		
x1D	HLA	x4D	DIGIT EIGHT		
x1E	FA	x4E	DIGIT NINE		
x1F	WA	x4F	DIGIT TEN		
x20	LA	x50	ABBRV. ONE		
x21	HHA	x51	ABBRV. TWO		
x22	DHA	x52	HSWA		
x23	BHA	x53	SWA		
x24	HA	x54	YWA		
x25	DDA	x55	DWA		
x26	BBA	x56	ZWA		
x27	HGWA	x57	HGLA		
x28	HXWA	x58	GLA		
x29	GWA	x59	XLA		
x2A	XWA	x5A	SLA		
x2B	AQ	x5B	HPLA		
x2C	AA	x5C	HSLA		
x2D	I	x5D	HTLA		
x2E	UQ	x5E	HSNA		
x2F	U	x5F	SNA		

TABLE XXX - Row xx: NEW TAI LUE

	xx8	xx9	xxA	xxB	xxC	xxD	xxE	xxF
0		၅	လ	ဂ	စ	ဝ	လ်	၎
1	ၘ	ၙ	ၚ	ၛ	ၜ	ၝ	ၞ	ၟ
2	ၠ	ၡ	ၢ	ၣ	ၤ	ၥ	ၦ	ၧ
3	ၨ	ၩ	ၪ	ၫ	ၬ	ၭ	ၮ	ၯ
4	ၰ	ၱ	ၲ	ၳ	ၴ	ၵ	ၶ	ၷ
5	ၸ	ၹ	ၺ	ၻ		ၽ	ၾ	
6	ၼ	ၽ	ၿ	ၠ		ၢ	ၣ	
7	ၤ	ၥ	ၦ	ၧ		ၩ	ၪ	
8	ၬ	ၭ	ၮ	ၯ		ၱ	ၲ	
9	ၴ	ၵ	ၶ	ၷ		ၹ	ၺ	
A	ၸ	ၹ	ၺ	ၻ			ၽ	
B	ၼ	ၽ	ၿ	ၠ			ၢ	
C	ၤ	ၥ	ၦ	ၧ			ၩ	
D	ၬ	ၭ	ၮ	ၯ			ၱ	ၲ
E	ၴ	ၵ	ၶ	ၷ			ၹ	ၺ
F	ၸ	ၹ	ၺ	ၻ			ၽ	ၿ

G = 00
P = 00

TABLE XXX - Row XX: NEW TAI LUE

dec	hex	Name	dec	hex	Name
	80	(This position shall not be used)		D9	NEW TAI LUE DIGIT NINE
	81	NEW TAI LUE LETTER QA HIGH		DA	(This position shall not be used)
	82	NEW TAI LUE LETTER QA LOW		DB	(This position shall not be used)
	83	NEW TAI LUE LETTER KA HIGH		DC	(This position shall not be used)
	84	NEW TAI LUE LETTER KHA HIGH		DD	(This position shall not be used)
	85	NEW TAI LUE LETTER NGA HIGH		DE	(This position shall not be used)
	86	NEW TAI LUE LETTER KA LOW		DF	(This position shall not be used)
	87	NEW TAI LUE LETTER KHA LOW		E0	NEW TAI LUE LETTER LAE
	88	NEW TAI LUE LETTER NGA LOW		E1	NEW TAI LUE CLUSTER LAEW
	89	NEW TAI LUE LETTER CA HIGH		E2	NEW TAI LUE CLUSTER SWA HIGH
	8A	NEW TAI LUE LETTER SA HIGH		E3	NEW TAI LUE CLUSTER SWA LOW
	8B	NEW TAI LUE LETTER YA HIGH		E4	NEW TAI LUE CLUSTER YWA LOW
	8C	NEW TAI LUE LETTER CA LOW		E5	NEW TAI LUE CLUSTER TWA LOW
	8D	NEW TAI LUE LETTER SA LOW		E6	NEW TAI LUE CLUSTER CWA LOW
	8E	NEW TAI LUE LETTER YA LOW		E7	NEW TAI LUE CLUSTER KLA HIGH
	8F	NEW TAI LUE LETTER TA HIGH		E8	NEW TAI LUE CLUSTER KLA LOW
	90	NEW TAI LUE LETTER THA HIGH		E9	NEW TAI LUE CLUSTER KHLA LOW
	91	NEW TAI LUE LETTER NA HIGH		EA	NEW TAI LUE CLUSTER SLA LOW
	92	NEW TAI LUE LETTER TA LOW		EB	NEW TAI LUE CLUSTER PHLA HIGH
	93	NEW TAI LUE LETTER THA LOW		EC	NEW TAI LUE CLUSTER SLA HIGH
	94	NEW TAI LUE LETTER NA LOW		ED	NEW TAI LUE CLUSTER THLA HIGH
	95	NEW TAI LUE LETTER PA HIGH		EE	NEW TAI LUE CLUSTER SNA HIGH
	96	NEW TAI LUE LETTER PHA HIGH		EF	NEW TAI LUE CLUSTER SNA LOW
	97	NEW TAI LUE LETTER MA HIGH		F0	NEW TAI LUE CLUSTER THNA LOW
	98	NEW TAI LUE LETTER PA LOW		F1	NEW TAI LUE CLUSTER PHYA HIGH
	99	NEW TAI LUE LETTER PHA LOW		F2	NEW TAI LUE CLUSTER PHYA LOW
	9A	NEW TAI LUE LETTER MA LOW		F3	NEW TAI LUE CLUSTER SMA HIGH
	9B	NEW TAI LUE LETTER FA HIGH		F4	NEW TAI LUE CLUSTER SMA LOW
	9C	NEW TAI LUE LETTER WA HIGH		F5	(This position shall not be used)
	9D	NEW TAI LUE LETTER LA HIGH		F6	(This position shall not be used)
	9E	NEW TAI LUE LETTER FA LOW		F7	(This position shall not be used)
	9F	NEW TAI LUE LETTER WA LOW		F8	(This position shall not be used)
	A0	NEW TAI LUE LETTER LA LOW		F9	(This position shall not be used)
	A1	NEW TAI LUE LETTER HA HIGH		FA	(This position shall not be used)
	A2	NEW TAI LUE LETTER DA HIGH		FB	(This position shall not be used)
	A3	NEW TAI LUE LETTER BA HIGH		FC	(This position shall not be used)
	A4	NEW TAI LUE LETTER HA LOW		FD	NEW TAI LUE DIGIT ONE ALTERNATE
	A5	NEW TAI LUE LETTER DA LOW		FE	NEW TAI LUE MODIFIER W
	A6	NEW TAI LUE LETTER BA LOW		FF	NEW TAI LUE MODIFIER FINAL
	A7	NEW TAI LUE CLUSTER KWA HIGH			
	A8	NEW TAI LUE CLUSTER KHWA HIGH			
	A9	NEW TAI LUE CLUSTER KWA LOW			
	AA	NEW TAI LUE CLUSTER KHWA LOW			
	AB	NEW TAI LUE LETTER A			
	AC	NEW TAI LUE LETTER AA			
	AD	NEW TAI LUE LETTER I			
	AE	NEW TAI LUE LETTER U			
	AF	NEW TAI LUE LETTER UU			
	B0	NEW TAI LUE LETTER E			
	B1	NEW TAI LUE LETTER EE			
	B2	NEW TAI LUE LETTER O			
	B3	NEW TAI LUE LETTER AW			
	B4	NEW TAI LUE LETTER UE			
	B5	NEW TAI LUE LETTER FINAL WA			
	B6	NEW TAI LUE LETTER FINAL NGA			
	B7	NEW TAI LUE LETTER FINAL NA			
	B8	NEW TAI LUE LETTER FINAL MA			
	B9	NEW TAI LUE LETTER FINAL KA			
	BA	NEW TAI LUE LETTER FINAL DA			
	BB	NEW TAI LUE LETTER FINAL BA			
	BC	NEW TAI LUE LETTER AY			
	BD	NEW TAI LUE LETTER AAY			
	BE	NEW TAI LUE LETTER UUY			
	BF	NEW TAI LUE LETTER OY			
	C0	NEW TAI LUE LETTER AWY			
	C1	NEW TAI LUE LETTER UEY			
	C2	NEW TAI LUE LETTER OEY			
	C3	NEW TAI LUE TONE LETTER TWO			
	C4	NEW TAI LUE TONE LETTER ONE			
	C5	(This position shall not be used)			
	C6	(This position shall not be used)			
	C7	(This position shall not be used)			
	C8	(This position shall not be used)			
	C9	(This position shall not be used)			
	CA	(This position shall not be used)			
	CB	(This position shall not be used)			
	CC	(This position shall not be used)			
	CD	(This position shall not be used)			
	CE	(This position shall not be used)			
	CF	(This position shall not be used)			
	D0	NEW TAI LUE DIGIT ZERO			
	D1	NEW TAI LUE DIGIT ONE			
	D2	NEW TAI LUE DIGIT TWO			
	D3	NEW TAI LUE DIGIT THREE			
	D4	NEW TAI LUE DIGIT FOUR			
	D5	NEW TAI LUE DIGIT FIVE			
	D6	NEW TAI LUE DIGIT SIX			
	D7	NEW TAI LUE DIGIT SEVEN			
	D8	NEW TAI LUE DIGIT EIGHT			