	Universal Multiple-Octet Coded Character Set				
	International Organization for Standardization				
	Organisation Internationale de Normalisation				
	Международная организация по стандартизации				
Doc Type:	Working Group Document				
Title:	Proposal to define Standardized Variation Sequences for BOPOMOFO				
The:	LETTER I				
Source:	Eiso Chan, Selena Wei				
Status:	Individual Contribution to UTC #154				
Action:	For consideration by UTC				
Date:	2018-01-08				

### 1. Introduction

There are two forms for U+3127 BOPOMOFP LETTER I, one is the horizontal stoke form(aka —), the other is the vertical bar form(aka |). Unicode had included this character since Version 1.0.0, which the glyph was the vertical bar form at that time. Please see Fig. 1.

Fig. 1 U+3127 on Unicode Standard, Version 1.0.0

# 3127 BOPOMOFO LETTER I

The glyph had been changed to the horizontal stroke form since Version 8.0.0. Please see Fig. 2. And the note is that "the vertical stroke form is considered a rendering variant". Please see Fig. 2.

Fig. 2 U+3127 on Unicode Standard, Version 8.0.0 3127 — BOPOMOFO LETTER I • the vertical stroke form is considered a rendering variant

In the present, the horizontal stroke form is used widely in Taiwan. Please see Fig. 3. What Fig. 3 shows is a picture from Jay Chou's music video of the song *Sunny Day*. The glyph of U+3127 is the horizontal stroke one.



Fig. 3 the music video of Sunny Day

The horizontal stroke form is also used for the Hokkien text book. Please see Fig. 4.



However, the vertical bar form is needed for Taiwan as well. Please see Fig. 5. The glyph on the Taiwanese Phonetic Symbols System published by the Ministry of Education of ROC is the vertical form. This symbols system is designed by Prof. Chu Chao-hsiang(朱兆祥), a member of National Languages Committee in Taiwan Province, in 1946, which is used for the transcription of Taiwanese languages and dialects, especially Taiwanese Hokkien.

Fig. 5 Part of the Taiwanese Phonetic Symbols System http://ws.moe.edu.tw/001/Upload/userfiles/方音符號系統資料下載.pdf

$\mathbf{O}$	椅姨	义尤	嚾
5	鳥苦	YF	鴨塔
ट	好寶	セ厂	厄雪
X	武輸		鐵摺
- <del>'</del> <del>'</del>	家(漳)	τr	桌學
さ	火(泉)	Xr	秃嗽(吸吮)
×	猪(泉)	セ厂	格(漳)
. 历	哀愛	さ厂	郭(泉)
*	歐甌	さセ厂	狹(泉)
さセ	挨鞋(泉)	<b>ガ</b> 厂	
IY	夜野	台厂	
3	腰叫	IYF	壁隻
IX	優油	121	尺借
幺	妖跳	IXF	

TCA had explained that these two forms are needed for Taiwan at the same time on WG2 N3246 & N4609. Please see Fig. 6.

Fig. 6 Annex 1 of WG2 N4609



The vertical bar form is still used for the lexicography and the Chinese text books of mainland China. Please see Figs. 7 through 8. The dictionaries use Bopomofo to mark out the pronunciations of the Chinese Hanzi with Pinyin together, and use it to mark out the pronunciations of the letters used for Chinese. All the forms on these are the vertical bar ones. Fig. 7 《现代汉语词典》(第 7 版), P. 1531



1 yī ① 题 最小的正整数。参看 1219 页 《数字》。② 题 表示同一:咱们是~家人

Fig. 8 《现代汉语》(增订四版), P. 24

字母:	Aa	Bb	Сс	Dd	Ee	(( <i>E</i> ) <sub>Ff</sub>	Gg
名称:	Y	ちせ	ちせ	力せ	ţ	せに	«t
	Hh	1 1 1	108 - <u>108</u> 109 - 109 - 109		9 49 9 69 6 7 (4) 59 9		() () () () () () () () () () () () () (
	ΓΥ	li I	Jj HI#	Kk チゼ	LI せめ	Мm ぜЛ	'Nn ろせ
	<u>1.2101</u>	() Land	11 H Y	VELOCIE		1. 唐 63 书	<u>ider van i</u>
	00	Рр	Qq	Rr	Ss	Tt	人工时间有点的
12 12 Cita	ट	タセ	۲۱۶	YI	44	よせ	目的中学剧情中 [11] 对最终计称4
	Uu	Vv	Ww	Xx	Yy	Zz	和自己成品書
	×	万せ	ХY	тΙ	IY	Pt	自己的第三人称单数。 1996年1月1日日 - 中国

The vertical bar form was used for the initial(聲母), and the horizontal stroke form was used for the final(韻母) at the early usage shown by the article 《國語字母二種》(*Two Kinds of the Chinese National Language Alphabets*) written by Qian Xuantong(錢玄同). Please see Figs. 10 through 11 and Table 1.

	Vertical Bar Form	Horizontal Stroke Form
Glyph	J	1
Usage	initial(聲母)	final(韻母)

Table 1 Vertical Bar Form and Horizontal Stroke Form for the Early Usage

Therefore, these two forms are different and should be distinguished for the early usage or the

study on the reform of the Chinese Hanzi.

CNS 11643, Taiwan's official standard, has included two forms at the same time. We think it is necessary to use two forms in plain text at the same time. Please see Fig. 9.

## 2. Proposal

There is a need to be able to preserve the vertical bar form in plain text, and to distinguish the differences between the vertical bar form and the horizontal stroke form in text processing. At present, we don't think that it is helpful to end users and machines to encode them separately. Bopomofo letters aren't the ideographs, which the Script on Unicode is Bopomofo not Han, so it's not appropriate on this issue by the method of IVD. Therefore, we propose defining one standard variation sequence for U+3127, using VS1 to present the vertical bar form.

Base Character	Variation Selector	Glyph	Description
3127	FE00	J	Vertical bar form

3. Figures

	252	253	254	255	256	257	262	263	264	265	266	267
0		β	$\sigma$	丂	历			(6)				
Ŭ		2530	2540	2550	2560	2570		2630				
1	Λ	$\gamma$	τ	Γ	$\checkmark$	万	(1)	(7)				
1	2521	2531	2541	2551	2561	2571	2621	2631				
2	М	δ	υ	Ч	幺	兀	(2)	(8)				
	2522	2532	2542	2552	2562	2572	2622	2632				
3	Ν	ε	$\varphi$	<	ヌ	$\int$	3	(9)				
	2523	2533	2543	2553	2563	2573	2623	2633				
4	[I]	ζ	χ	T	3	帀	(4)	(10)				
	2524	2534	2544	2554	2564	2574	2624	2634				
5	Ο	η	$\phi$	出	4		(5)	i				
	2525	2535	2545	2555	2565	2575	2625	2635				
6	$\prod$	$\theta$	ω	イ	尤		(6)	ii				
	2526	2536	2546	2556	2566		2626	2636				
7	Р	l	5	ア	L		(7)	iii				
	2527	2537	2547	2557	2567		2627	2637				
8	Σ	κ	タ	$\Box$	儿		8	iv				
	2528	2538	2548	2558	2568		2628	2638				
9	Т	λ	Π	P	-		(9)	$\mathbf{V}$				
	2529	2539	2549	2559	2569		2629	2639				
A	Υ	μ	$\Box$	ち	X		(10)	vi				
	252A	253A	254A	255A	256A		262A	263A				
в	Φ	ν	分	4	Ц		(1)	vii				
	252B	253B	254B	255B	256B		262B	263B				

Fig. 9 CNS 11643-2007, P. 9(Plane 1)

Fig. 10 《國語月刊漢字改革號》, P. 119





國語字母二種

# 载玄同

(注字) (音母)	(國字甲) (語母種) 融	(國字乙) (語母種)		4	(併于d3) (併于t5)	(併于gh) (併于ch)
2	聲 母	7	~~~~	۲ - ۴-		
ケ	b	Ъ	\$	)	(删,併于n)	
文	$\mathbf{p}$	р	ł	ł	(併于	(併于sh)
·•	m	m	~~~~	止	d3	${f gh}$
С	f	í	~~~~	Ť	tS	$\mathbf{ch}$
万	v	V	~~~	P	S	sh
ゟ	d	d	~~~	$\mathbf{O}$	3	jh
Ż	τ	t	52752	p	dz	$\mathbf{dz}$
3	n	n		ち	ts	ts
47	ļ			2	8	S
{{	50	50	2	儿	r	r
$\overline{\mathfrak{Z}}$	k	k	~~~~	1	j	]
兀	(删)	(跚)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Х	W	w
T	x,h	x,h		1	ų	vh

120		<b>1</b>	Л	刋	第一管
	韻 母		1世		je
	i	i	万	(酮,併於je及 a)(	则併於疗及词
X	u	u	1幺	jaw	jaw
	У	у	1又1	ju	ju
Y	a	a	13	jen	jen
己	0	0	4	in	in
己 主	(删,俳子e)(	删,俳干e)	1 七	jaŋ	jang
七	e	e	14	11)	ing
历	aj	aj	YX {	Wa	wa
ľ	ej	ej	XE	WO	WO
幺	$a\mathbf{w}$	aw	│ Х死	waj	waj
又马	ew	ew	JX	wej,-wi	wej,-wi
马	an	an	X Z Z	wan	wan
5	en	en	X4	wen,-un	wen,-un
尢	aŋ	ang	~ X尤	wan	wang
L	eŋ	eng	XL	റ	$\operatorname{ong}$
几	er	er	니 니 근	(删,併于jo)	(删,併于jo)
ſ	3	jh	山壮	цe	vhe
2	Z	Z	1 13	yen	vhen
*	吉合 韻	母	} L14	yn	yn
ΠY <sup>*</sup>	ja	ja	LIL	jon	jong
一三	jo	jo			
				. <u>.</u>	·· ·

Fig. 11 《國語月刊漢字改革號》, P. 120

### Fig. 12 《兩岸常用詞典》, P. 1567

靥/靨 yè Πせ`〈书〉酒窝。[例] 笑~ | 酒~ | 羞~。 动き鼻草脉络 一丁 5 3 1 1 3 Yyiban-yiyan ろら×す、何や 承指传统晋原山N 中, 两个拍子呈现些强飞板)一般(肥) → yī 1 ① 自然数的开始。大写作"壹", 阿拉伯数字作"1"。[例]~、二、三、四。 2序数的起始。[例]~年级。❸专一:单 一。[例]~心~意|~夫~妻。④同样。 [例] 表里不~ | 整齐划~。 5 整个; 全; 满。[例]~身湿淋淋 |~ 肚子学问。 6 刚 刚; 才。[例]~听就会上天~黑, 就睡觉。 ⑦两个重叠动词间加"一"字,表示尝试, 不费力。[例] 听~听 | 说~说 | 看~看 | 试~试。⑧指某一或另一。[例]淀粉,~名 碳水化合物。 ⑨ 表示很少。 [例]~本万利 | ~筹莫展 | ~ 知半解。 ●表示短暂。 [例] 等~下│坐~会儿。●民族音乐中的记音符 号,相当于简谱中的"7",参见435页【工

### 4. Bibliographies

CNS11643-2007

- 《方音符號系統》, Department of Lifelong Education of the MOE of ROC, Cf. https://depart.moe.edu.tw/ed2400/News Content.aspx?n=115F1082F1FB6842&sms= EFB4F5BEE71F2ECF&s=7999ED5540060D14
- 國語研究會(Guoyu Yanjiuhui): 《國語月刊漢字改革號》(Guoyu Yuekan Hanzi Gaige Hao), 國 語研究會(Guoyu Yanjiuhui), 1923
- 陳殿冠(Chen Tian-kuan): 《臺灣鶴佬話》(*Taiwanese Hokkien Text Book*), Book 1, 臺中市:臺 灣文藝事業有限公司(Taichung City: Taiwan Literature and Art Co., Ltd.), 2003, ISBN 957-28554-0-9
- 周杰倫(Jay Chou): 《葉惠美》(Yeh Hui-mei), 臺北市: 臺灣新力音樂(Taipei City: Sony Music Taiwan), 2003, EAN/UPC: 886971811025
- 周杰倫(Jay Chou):《尋找周杰倫 EP》[*Hidden Track(EP)*], 臺北市:臺灣新力音樂(Taipei City: Sony Music Taiwan), 2003
- 黄柏荣(Huang Borong), 廖序东(Liao Xudong): 《现代汉语》(*Xiandai Hanyu*), Edition 4, 北京:高等教育出版社(Beijing: Higher Education Press), 2007, ISBN 978-7-04-021403-1
- 李行健(Li Xingjian), 李鎏(Li Xian): 《兩岸常用詞典》(*Liang'an Changyong Cidian*), 北京: 高 等教育出版社(Beijing: Higher Education Press), 2012, ISBN 978-7-04-033668-9
- 中国社会科学院语言研究所词典编辑室(Zhongguo Shehui Kexueyuan Yuyan Yanjiusuo Cidian Bianjishi): 《现代汉语词典》(*Xiandai Hanyu Cidian*), Edition 7, 北京: 商务印书馆 (Beijing: Commercial Press), 2016, ISBN 978-7-100-12450-8

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