ISO/IEC JTC1/SC2/WG2 N4967

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

Doc Type:	Working Group Document					
Title:	Updated proposal on Gongche characters for Kunqu Opera					
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Source:	Wang Xiaolei(王晓磊), Hou Le(侯乐)					
Status:	Individual Contribution to WG2 #67, London, UK					
Action:	For consideration by JTC1/SC2/WG2 and UTC					
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References:	<u>L2/17-087, L2/17-103, L2/18-189, IRGN2299, IRGN2290, IRGN2293</u>					

We submitted the proposal called "*Proposal to encode characters for Gongche Notation in SMP*" (aka L2/17-087) to UTC last year. That document had been discussed in UTC #151, please see 151-A79 and 151-A80 in the minutes (aka L2/17-103).

E.5 Proposal to encode characters for Gongche Notation in SMP [Chan, et al, L2/17-087]

[151-A79] Action Item for John Jenkins: Add the seven Gongche characters in L2/17-087 with a "tiny slash downwards" to UAX #45.

[151-A80] Action Item for Ken Lunde: Respond to submitter of <u>L2/17-087</u> with UTC disposition.

For 151-A79, John has added these seven characters to UAX #45 as UTC-03160 through UTC-03166, and they will be included in the Version 11. Please also see Section 4 in this document. And then, Eiso submitted the document called *"Request to discuss how to handle seven unencoded Gongche characters for Kunqu Opera"* (aka IRGN2299) to IRG. IRGN2299 has been discussed in IRG #50 in Beijing, China. After the discussion, IRG thought these seven Gongche characters were not suitable to encode as the CJK Unified Ideographs. Please see IRG M50.8 in IRGN2290 (aka L2/18-189) and Section 13 in IRGN2293.

[IRGN2290]

Recommendation IRG M50.8: Encoding of Gongche Characters (IRGN2299, IRGN2293)

Unanimous

IRG reviewed IRGN2299 and considers Gongche symbols are for music notations and should not be included in CJK unified ideograph blocks (IRGN2293).

[IRGN2293]

13. Encoding of Gongche Characters Reference:

 IRGN2299: Request to discuss how to handle seven unencoded Gongche characters for Kungu Opera

The editors acknowledged the needs of these characters. The editor considered these characters to be symbols for musical notations and should not be in the CJK Unified Ideographs blocks.

This document provides the explanations and evidences of seven unencoded Gongche characters. As we know, the differences between these seven characters and the common ideographs are obvious, but there are so many Gongche characters which has been included in ISO/IEC 10646 and Unicode as CJK Unified Ideographs.

I request WG2 and UTC to encode these seven Gongche characters separately as non-CJKUI and create a new block called **Gongche**, if IRG's recommendation M50.8 been accepted.

On the other hand, there are also seven characters which are "合", "四", "一", "上", "尺", "工", "凡" with double tiny slashes downward shown in Figs. 3 & 4. Mr. Wang Xiaolei, Ms. Hou Le and I have checked so many books on Gongche notation. We can confirm those characters are uncommon, so there is no need to encode them at present.

Those seven characters which are "合", "四", "一", "上", "尺", "工", "凡" with double tiny slashes downward are theoretical Gongche characters. If any expert concerns with those ones, we think the better way is to make the **Gongche** block contain 32 characters.



1. Introduction

Gongche notation (工尺谱/工尺譜) is a traditional musical notation method, once popular in ancient China, and now it's also used in Chinese local operas, especially Kunqu Opera (昆曲/ 崑曲), Peking Opera (京剧/京劇), Yueju Opera (粤剧/粤劇) and so on. It uses the characters like Chinese ideographs to represent musical notes. It was named after two of the Chinese ideographs that were used to represent musical notes, namely "工" gōng and "尺" chě.

Many characters for Gongche Notation have the same appearances with Chinese ideographs exactly, so the vast majority of them could be used isomorphic ideographs to indicate. Hong Kong SARG once submitted two ideographs which are just used in the lyrics of Yueju Opera as UNCs in <u>IRGN1405R</u>. Please see Fig. 1. And UTC has submitted other two ideographs which are used in the lyrics of Kunqu Opera and traditional Gongche Notation to WS2017. Please see Fig. 2.

Fig. 1 H-87D2 & H-87D6 in IRGN1405R



Fig. 2 UTC-02976(01240) & UTC-02977(01242) in WS2017

	60.0 千 田洋上				往
	3	6			UTC-02976
-	60.	0 彳			初
	田彳凡				1)u
	3	6			UTC-02977

However, some characters' appearances do not conform to the general principles of writing Chinese ideographs. The end strokes of "合", "四", " \rightarrow ", "上", "尺", "工", "尺" are extended by a tiny slash downward.

According to Fig. 3, when these 7 characters and UTC-02976, UTC-02977 would be included in ISO/IEC 10646 and Unicode, we can get the table for Gongche Notation as below.

N/A	N/A	N/A	N/A	合	吗	
1	2:	3:	4:	5:	ę	?
上,	尺	I,	凡	合	四	<u> </u>
1	?	Ŗ	4	5	Ģ	?
Ŀ	尺	Ĭ	凡	<u>,</u>	Ŧī.	Z
1	2	3	4	5	6	7
仩	伬	仜	곇	依	伍	亿
İ	Ż	3	4	5	Ġ	7
往	沢	征	곇	袕	征	亿
İ	ż	ż	: 4	; 5	÷6	ż

Table 1 Characters for Gongche Notation

After the discussion in IRG #50, it looks the better way to encode them is to treat them as the non-CJKUIs. If WG2 and UTC agree with the recommendation IRG M50.8, the new block should be created and include these seven Gongche characters in it. Please see or review Sections 2 and 3.

The other way is still to encode them as CJKUI, but IRG didn't think it was really a good way for this issue. Please see Sections 4 and 5.

2. Proposed Characters as Non-Ideographs

The ordering of these seven Gongche characters is based on the original natural ordering of the musical scale.

There is a character like kana $\mathcal{O}(U+306E)$ and a character like kana $\mathcal{O}(U+306E)$ by a tiny slash downward in the evidences, but, in fact, they are same with \square (U+56DB) and \square (U+56DB) by a tiny slash downward. Kana \mathcal{O} (U+306E) looks like cursive form of \square (U+56DB). Notice that the kana \mathcal{O} is from \mathcal{T} (U+4E43) not \square (U+56DB), and the corresponding hentaigana letter is \mathcal{P} (U+1B099).

We can know the variant form for $\mathbb{A}(U+51E1)$ is $\mathbb{L}(U+51E2)$ by Unihan Database, and some evidences show the glyph is $\mathbb{L}(U+51E2)$ by a tiny slash downward. According to Fig. 3, $\mathbb{L}(U+51E2)$ by a tiny slash downward and $\mathbb{A}(U+51E1)$ by a tiny slash downward are the same character.

These two characters should be normalized to be " \mathfrak{P} " and " \mathfrak{R} ". Please see Table 4 as well. \neg can't be unified with $\overline{}$ (U+31D6) or $\overline{}$ (U+4E5B).

UCS	Representative Glyphs	Proposed Character Name	Evidence
U+19BF0	合	GONGCHE CHARACTER HE BY A TINY SLASH DOWNWARD	Fig. 3, 4, 28
U+19BF1	四	GONGCHE CHARACTER SI BY A TINY SLASH DOWNWARD	Figs. 3, 4, 15, 22, 23
U+19BF2		GONGCHE CHARACTER YI BY A TINY SLASH DOWNWARD	Figs. 3, 4, 17, 21
U+19BF3	上	GONGCHE CHARACTER SHANG BY A TINY SLASH DOWNWARD	Figs. 3, 4, 5, 7, 9, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 27, 29
U+19BF4	尺	GONGCHE CHARACTER CHE BY A TINY SLASH DOWNWARD	Figs. 3, 4, 5, 7, 8, 9, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 27, 28, 29
U+19BF5	I,	GONGCHE CHARACTER GONG BY A TINY SLASH DOWNWARD	Figs. 3 through 29
U+19BF6	R,	GONGCHE CHARACTER FAN BY A TINY SLASH DOWNWARD	Figs. 3, 4, 7, 8, 11, 12, 13, 17, 21, 24, 28, 29

Table 2 Proposed Gongche Characters

3. Unicode Properties as Non-Ideographs

19BF0; GONGCHE CHARACTER HE BY A TINY SLASH DOWNWARD; Lo; 0; L;;;;; N;;;;;

19BF1; GONGCHE CHARACTER SI BY A TINY SLASH DOWNWARD; Lo; 0; L;;;;; N;;;;;

19BF2;GONGCHE CHARACTER YI BY A TINY SLASH DOWNWARD;Lo;0;L;;;;N;;;;;

19BF3; GONGCHE CHARACTER SHANG BY A TINY SLASH DOWNWARD; Lo; 0; L;;;;; N;;;;;

19BF4; GONGCHE CHARACTER CHE BY A TINY SLASH DOWNWARD; Lo; 0; L;;;;; N;;;;;

19BF5; GONGCHE CHARACTER GONG BY A TINY SLASH DOWNWARD; Lo; 0; L;;;;; N;;;;;

19BF6; GONGCHE CHARACTER FAN BY A TINY SLASH DOWNWARD; Lo; 0; L;;;;; N;;;;;

Script=Common

4. Proposed Characters as Ideographs

The following is the information for these seven characters in UAX #45. UTC-03160;X;U+5408;30.3;0174.241; 合[2];UTCDoc L2/17-087 UTC-03161;X;U+56DB;31.2;0216.221;四[2];UTCDoc L2/17-087 UTC-03162;X;U+4E00;1.0;0075.011;一[2];UTCDoc L2/17-087 UTC-03163;X;U+4E0A;1.2;0076.071;上[2];UTCDoc L2/17-087 UTC-03164;X;U+5C3A;44.1;0299.321;尺[2];UTCDoc L2/17-087 UTC-03165;X;U+5DE5;48.0;0325.011;工[2];UTCDoc L2/17-087 UTC-03166;X;U+51E1;16.1;0134.021;凡[2];UTCDoc L2/17-087

And the following table shows their references, glyphs, IDSes and so on.	
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U Ref.	Glyph	IDS	RS	FS	T/S	Var.	Evidence
UTC-03160	合	合[2]	30.3	3	0	N/A	Fig. 3, 4, 28
UTC-03161	Щ	四[2]	31.2	3	0	N/A	Figs. 3, 4, 15, 22, 23
UTC-03162		-[ž]	1.0	1	0	N/A	Figs. 3, 4, 17, 21
UTC-03163	上 ,	⊥[≆]	1.2	2	0	N/A	Figs. 3, 4, 5, 7, 9, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 27, 29
UTC-03164	尺,	尺[2]	44.1	4	0	N/A	Figs. 3, 4, 5, 7, 8, 9, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 27, 28, 29
UTC-03165	— ,	I[ž]	48.0	1	0	N/A	Figs. 3 through 29
UTC-03166	凡,	凡[2]	16.1	4	0	N/A	Figs. 3, 4, 7, 8, 11, 12, 13, 17, 21, 24, 28, 29

Table 3 Attributes for UTC-03160 through UTC-03166

5. Unicode Properties as Ideographs

The properties for these seven characters are showed as below if they been treated as CJKUIs. "3xxxx" means the code point(s) in the future extension.

3xxxx;CJK UNIFIED IDEOGRAPH-3xxxx;Lo;0;L;;;;;N;;;;;

Script=Han

6. Gongche Characters Mapping

UCS	Glyph 1	Glyph 2	Zhao	Chen	WLi	WLiu	Yu	Gu	Zheng	BK
19BF0	合	合	습	合	absent	absent	absent	absent	合	absent
19BF1	四	四	四	巴	absent	で	absent	5	absent	absent
19BF2	7		?	٦	absent	2	+	absent	absent	absent
19BF3	上	Ŀ,	上,	나	F	上	よ	上	absent	L.
19BF4	尺	尺,	尺,	尺	ß	乃	ろ	又	尼	尺
19BF5	I,	Т,	I,	Ц,	ユ	L	よ	3	H.	Ţ
19BF6	凡,	凡,	凡,	凡	r,	R	15	R.	凡	凡

Table 4 Unified Gongche Characters Mapping

Zhao is for 赵晓楠, Chen is for 陈根方, WLi is for 王锡纯 & 李秀云, WLiu is for 王季烈 & 刘 富梁, Yu is for 俞振飞, Gu is for 顾铁华, Zheng is for 郑剑西, BK is for 《中国百科大词典》. Please see the full name of these books in Section 8.

7. Evidences

Fig. 3

赵晓楠: 《工尺谱常识与视唱》, 北京:人民音乐出版社 (Beijing: People's Music Publishing House), 2014, ISBN 978-7-103-04558-9, P. 3

工尺谱字	Ŀ,	尺,	I,	凡,	合	四	
简谱音高	1	2:	3	4	5	ę	?
工尺谱字	上,	尺,	I,	凡,	合	29	-
简谱音高	1	2	3	4	5	ė	?
工尺谱字	Ŀ	尺	Ţ	凡	六	Б	Z
简谱音高	1	2	3	4	5	6	7
工尺谱字	仩	伬	仜	仍	佽	伍	亿
简谱音高	i	ż	ż	4	5	Ġ	Ż
工尺谱字	化	很	紅	彳凡	袕	征	亿
简谱音高	i	ż	3	į	; 5	ė	ż

Fig. 4

陈根方:《中国工尺谱的数字实现研究》 (*Research on Digitization of Chinese Gongche Notation*), 上海大学博士学位论文 (Shanghai University Doctoral Dissertation), 2011, P.6

降低八度的方法就是在每个基本谱字的最后一个笔划上加向左下方向的尾 巴笔画,降低一个八度加一个尾巴笔画,降低两个八度加两个尾巴笔画,尾巴笔 画都和谱字的最后一个笔画相连。如表 1.3 所示。

表 1.3 基本谱字和降低一个和二个八度后的谱字

基本谱字	合	四		上	尺	I	凡
降低一个八度谱字	肻	四	~	上	尽	Ţ,	凡
降低二个八度谱字	肻	四	7	_ل_	尽	Ţ,	凡

42 王王 2 の上 9 民上八ろ F ユの F 一五六ユ 合ユ 尼上 悃 王氏 いの上尺 F 大王 大百上 マ上エアエバ 上上ノアノア エル 上尺上 の尺上の合 上尺 上尺 9 上记 合う 습 エ近に近 シア上 加尺 山上の合 계 家の 旧 4 王王 この 尺く上 Ŀ ユ 五六ユ尺上 一堂寺东 邊雲閣曲譜 牡丹章 至 還雲間曲譜 牡丹亭 自與飯後不見了小姐為此 Π 五六ユ Ŕ 0 9 ō 五六 合
の 1 5 6 T Ŧ. 0 0 0 进 E Ξ 尺一上 五六エ 等等等 戸上の 合ユ 0 0 ドッ 8

 Figs. 5 through 6

 王锡纯, 李秀云: 《遏云阁曲谱·牡丹亭》, 遏云阁, 1870, Folio 1

長生殿	九			送	調	₽	цущ ш	還雲
貼白吓痰	芝羅 福豆	首と語言	び ×		造去且唱	不迮	田園	是在翠
	反 尺°上山山。 1。	E I I	一の上	Ş	見娘娘相	水水	早芝	夾白著
世代	新的来做 "ToT'f'	調査三時	E	三三	王学子が、 そっド、ジ	H ST	産	漢字。
まかに	读: - · · · · ·	王二月二日の一日	一の合	来)	国家であった	大臣	民人たろ	ます。

 Fig. 7

 王锡纯, 李秀云: 《遏云阁曲谱·长生殿》, 遏云阁, 1870, Folio 9

小澤天麗得 贈 諧 諧 諧 語 「	楊牽接生来京人一點算心難道。
目占先者ヌヌヌ又何用終い、ふい、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、	好有有有利期権技見
照相相相下的使東花更いいいいいいいいいいいいいいいいいいいいいいいいいいいいいいいいいいいい	水仙子間間間間畫畫畫 。 · · · · · · · · · · · · · · · · · · ·
十 長生殿	邊雲閣曲譜「業間

 Fig. 8

 王锡纯, 李秀云: 《遏云阁曲谱·长生殿》, 遏云阁, 1870, Folio 10

Fig. 9 王锡纯, 李秀云: 《遏云阁曲谱·邯郸梦》, 遏云阁, 1870, Folio 4



一倍赴市曹吉也 唱 進和疾開刀一下 《来不要達了監旨 苦生。 4 6 你,他,	
著生也明白死也明白夫人你翁了這班孽權向午門叫寃去mm是孩	為大百
一有旨不計自教要明正典刑理正且阿呀要明正典刑呢者生吓是吓想	➡ 詣 ∻
不喇自教討員軍不喇自教討王王相会不可如此「「一」、「「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「	雪」
金 圆 玉 小 小 玉 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁 丁	電家
美閣曲譜 李 昭 王 曹閣夢	
不可得矣吓夫人取倦的佩劍過來正且相公要佩劍何用吓走生阿吁夫	道中
田駿頃足可以榮葉飯何苦求禄而今及此思復衣短菜乘青曜而行邯鄲	査長
1 首 奉聖旨不許退衙者 # 又不容俺退衙 # @ # # 吓夫人俺家本山東	御 王
2支送著任當期機器或省可的慢打商量的上述 「「一個、小小小」。 「」。「」。「」。」、「」。」。「」。」。「」。」。」。」。」 「」。」	

 Figs. 10 through 11

 王锡纯, 李秀云: 《遏云阁曲谱·邯郸梦》, 遏云阁, 1870, Folio 5

Fig. 12 王锡纯, 李秀云: 《遏云阁曲谱·南柯梦》, 遏云阁, 1870, Folio 3

巴吓哈妙吓寡乃楞妃再		八上の会	-	R. R
1883年1 南洲 走。去、走、工。R 子、1	工型設置所見好で	u 是嘚城,	附城上起鼓	帮我
粉解重把旗勢	家谷物道御書	いた。		作表
一度度夢		描	関山譜	臺寶

Fig. 13 王锡纯, 李秀云: 《遏云阁曲谱·南柯梦》, 遏云阁, 1870, Folio 4

工水開挑 售官主飲若要 尝米頭魚	我也『太子『四』你就找後出他世我也『太子』四一、一个、一个、一个、一个、一个、一个、一个、一个、一个、一个、一个、一个、一个
のよい上の人で、上の人で、上の人で、上の人で、上の人で、上の人で、上の人で、上の人で、	他叫我是读子樂發
いた。 「「「」」。 「」」。 「」」。 「」」。 「」」。 「」」。 「」」。	高利 一 大 一 大 の 大 の 、 た の 、 大 の 、 た の た 、 た の た の た 、 た の た の た の た の た の た の 、 た の た 、 た の た の た 、 た の た の た の た の た の た 、 た の た の た た の た た の た た の た た の た た た た た た た た た た た た た
「たいのので、「「「「「「「」」」」	知我的心事」小心腸心腸名
四一南河萝	過雲閉曲譜

O A SOR 前 原 我 vF. 方 唐 爐 FE 究 米 檀 所 水 行 品 是 越 在 欲 福 請 何 借 位 好 士 檀 宿り 禪 說 同 1越自小 此言管家 請 堂 下口 庵 ·y. 問 宿 檀 坐 有 宵 待 師 越 這 從 所 請 义 明 .1. 觀 到 羽厚 貼 日 0.3 尼 音 去 71 里 檀 就 不 A 庵 取 廂 越 行 (日) 大王 Ł 茶 請 好 的 石 壯 地 米 檀 貼 堂 嚴 從 越 ind to 白 いろ RI. 洛 稻 佛 安 果 不 4 40. 陽 .0 歇 像 首 消 是 170 「貼」言い 至 17 (0) 女 3 索禮 電能. 北 娘 .1. 瞻 10 偶 師 位 Ē 的 聖 是 拜 遭 聲 田 姐 义 金 有 姐 王儿 風 音 集 番、隨 雨. 禮 待 香 卷 3 Fo 来 輕 端 貼 我 五 紫 FS. 「谷外 进 方 暗 開 的 第 ~ 海月 法 女 上 PE 相 10 界 皇衣 非 娘 調 留. 庵 ネ 有 舉 米 .1. 方線 调 幸 金 P 恕 呀 葉 止

Fig. 14 王季烈, 刘富梁: 《集成曲谱金集卷五·金雀记》, 上海: 商务印书馆, 1925, Folio 6

王季烈, 刘富梁: 《集成曲谱金集卷八·醉菩提》, 上海: 商务印书馆, 1925, Folio 76

OFR H 開 有 香 内 此 乃 值 奇 看 你 淨 P 官 弔 P Fo L 送内小 態寺住 R 看 彌 聞 府 Fo 0 頹 萬 米 他 勒 t Fo 空中 古傳一下眾喝末 開 3 -安 佛 FOR 生 道子家 持 E 德 是 是 圓 戲 仰 R 行 喝江 也. 問 人 聽 生白 教 令 向 4 聽喝 即此 孙 喻 羽厚 乃 古誰 濟 + 盧 .). L 喻 0.4 0 道寺 主 ホ 2 頂 所 無死 百 上全 之聲 上 雁 朝 E 眠 47-14-15 影 留 大 想 臣 撒 Å 離 勝 -化 手 凤調 + ALSO R. 之 便 如 群 期 能 四 花 5 苦 路 金龍 欺 太 + 秋 子 调 * Fo 尉 2 聖 思 R Fo 發在 滴 低 To + 苦 頭 4 朋 YP 虎 端 1 0 情 Fort 行 跑 不 氯京 財 寺 顧 悲 主ジ -前 出出 愴 賢 50 松 RI 米 林 貧 0 T Yj 拈 之 僧 3

Fig. 16 王季烈, 刘富梁: 《集成曲谱玉集卷六·烂柯山》, 上海: 商务印书馆, **1925**, Folio 36

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王季烈, 刘富梁: 《集成曲谱玉集卷七·长生殿》, 上海: 商务印书馆, 1925, Folio 45

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	還	N SOA	14	過	ork.		刻	07 4 Y	1240	各唱	受他	摇颺
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王季烈, 刘富梁: 《集成曲谱玉集卷七·长生殿》, 上海: 商务印书馆, 1925, Folio 62

Fig. 19 俞振飞: 《粟庐曲谱·牡丹亭》, 上海: 上海辞书出版社, 1953, 2011 reprint, Folio 141

鳥嫌 是開花傍砌如依主嬌 香已 10 一去咱 龍會罵 廬 幽 曲 好尋 隆 譜 ~ F D de la 春 名 г 康 人去我随後就来貼 道了你好生答應夫 D 27 原来如此我知 壮 秋 n 丹 亭

14

			Fig. 20	
俞振飞·	《粟庐曲谱·西楼记》	上海・	上海辞书出版社 1953 2011 reprint Folio 262	

57.1.8 賢窩只道愁魔病鬼朝露捐奈依舊纏綿祗剩 誰想旋魂不斷三日後心口還熟被父親殺醒依信相思如今半 生不死吓又悲傷起頭可都因孽債未完那魔君還不肯饒我嗄 審夢何如我于鵑為想素嚴只願一病而止到決絕了這段 鎮黄昏兀首血 言看風簾自 相 緣 集空調 1. y 二六二

24

Fig. 21 俞振飞: 《粟庐曲谱·长生殿》, 上海: 上海辞书出版社, 1953, 2011 reprint, Folio 285

粟 OF 曲 첆 怎敢 絮 M 得 10 好 PF 甚麼 娘晚得 你, 小明欺俺去 娘 別有 ·*· · · · · · · · · · · 個 二八五

r 0 ģ SP 1 **5 團 外 圓 To C 7 50 今生モ sh? To p To 孝 同 2, 10 旗 稀貨要重逢他年 日じびと 10 4 E 作 * 作三只 因 他 For 外 五六

顾铁华: 《粟庐曲谱外编·浣纱记》, Self Printed, 2002, Folio 156

栗蘆 2.4 形 曲 譜 外编 35 雁 Fo S. 寄 子 作旦 刖 桐 丁墨山 前 0+12 道 5, 浣 估 To 友震眉 紗 Por to 10.00 5 礼 五七 37 記

Fig. 23 顾铁华: 《粟庐曲谱外编·浣纱记》, Self Printed, 2002, Folio 157

医李 今)	12 %	to in F	
驚鬚白今日個流落天涯只留得琵琶在揣差	收路遭窮敗受奔波風塵顔面黑歎凋殘雪	顏氣人也喝一枝花不限防餘年值亂離逼拶得沿門鼓板好不 ちゃうちゃち ちょうちゅうちょう ちょうちょうちょうちょうちょうちょうちょうちょうちょうちょうちょうちょうちょうち	
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Fig. 25 顾铁华: 《粟庐曲谱外编·长生殿》, Self Printed, 2002, Folio 505

栗 UY 廬 -曲 7 譜外編 韵 YA 3 + E my) 4, Yo 3) 5 n 弭 ŋ 3 詞 Ą 15 n 4 長 生 五〇五 階 殿

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顾铁华: 《粟庐曲谱外编·长生殿》, Self Printed, 2002, Folio 511

栗蘆 曲 譜 外编 跋 彈 借 詞 比 ž ĩ 39 F 63 花 點請問老大那貴 她 娘 D 有咱家 長 娘生得如何 生 五 大 内 田 殿 姐

郑剑西: 《二黄寻声谱》, 北京: 中国戏剧出版社, 2015, PP. 38-39 *This figure was provided by 新水令 who was a user on Zhihu.com.

Fig. 28

余叔岩 ◆ 捉 放 曹 副皮優三眼 搭板 快二六 合子会四乙四次 回点合。上、四小で 我難哪以冒險官。 E 丁合四合? エ合四〉 尺乙 合) 道 K 夾 行在 生義 茶された 上四エ尺上尺 工尺上 演 是 策 国 IX 合·工· 四○ 贪 六 尺。 上 四X • L エペエ六 二丁六日 尺X 五凡, 御上言 些大 圖 工○ 工X 凡 尺 L 夜四・山井 エアト上(大闘) 「二六工尺乙四合 第 Z四合 豳 置 我自 五凡工尺工六 四义上四• 上 大闆 ・ AX L 市民の中国 減いとと 唐量 影 上尺(尺工六 尺・工 尺? (大闆) ・四上尺) 四上尺・ ◆ 捉 放 曹 函度優三眼 余权岩

32

王伯恭:《中国百科大辞典》,北京:中国大百科全书出版社,1999,ISBN 7-5000-6212-5/Z·113, P. 1711

[第一70 建铁 [話 算出地林玉的冷噪又用语——系列将学校

工尺谱 中国音乐传统记谱法的一种。广泛用于民间歌曲、器乐曲、说唱音乐和戏曲音乐的记谱方法。近代流行的工尺谱常用"合、四、一、上、尺、工、凡、六、五、乙"作为音名和唱名记录音高,它们相当于 sol、la、si、do、re、mi、fa、sol、la、si 或简谱的 5、6、7、1、2、3、4、5、6、7 等音。比 "乙"高的加"亻"旁,如仩(ĺ)、伬(²)、仜(³)等,比"合"低的写作"上(¹)、尺(²)、工(³)、凡(4)。板眼符号用"丶"或 "×、-"、或"∟、O、●、△"等。明清以来通行的工尺谱是由唐代的"燕乐半字谱"及宋代的"俗字谱"等演变而来。 Notice that China once submitted \bot , & \dashv , as G_BK100001 and G_BK100010 to CJK C1 and CJK D, but, as we know, they hadn't been included in the final version of CJK Ext. E.

Fig. 30 IRGN907 CJK C1 V 1.0, P. 1

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Fig. 31 IRGN907 CJK C1 V 1.0, P. 5

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008	0080.151		「ハレ」
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China			BK100010

Fig. 32 IRGN1272 CJK D V 1.0, P. 1

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Fig. 33 IRGN1272 CJK D V 1.0, P. 3

0010	00		BK100010	
002	63	<u>ト</u> レ		
×		/ /		
2	3	0080.151		

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Jiao Lei(焦磊) and Miss Prajñavṛttā(님뗐기윜) give some useful comments.

(End of Document)

	ISO/IEC JTC 1/SC	2/WG 2	2	
	PROPOSAL SUMMARY FORM TO A			
	FOR ADDITIONS TO THE REPERTO			
	Please fill all the sections a			
	Please read Principles and Procedures Document (P & P) from <u>http://sto</u>			s.html _ for guidelines
	and details before filli			
	Please ensure you are using the latest Form from . <u>http://std.</u>			orm.html
	See also <u>http://std.dkuug.dk/JTC1/SC2/WG2/doc</u>	<u>s/roadma</u>	aps.ntml for latest <i>Rodamaps</i> .	
	A. Administrative			
	Title: Updated proposal on Gon			a
		' YOU, W	ANG Xiaolei and HOU Le	utter.
	. Requester type (Member body/Liaison/Individual contribution): . Submission date:		Individual contrib 2018-06-01	
	. Requester's reference (if applicable):		2018-00-01	
	. Choose one of the following:			
	This is a complete proposal:			YES
	(or) More information will be provided later:			
	B. Technical – General			
1	. Choose one of the following:			
1	a. This proposal is for a new script (set of characters):			YES
	Proposed name of script:		Gongche	125
	b. The proposal is for addition of character(s) to an existing blo	ck:	Gongene	NO
	Name of the existing block:			
2	. Number of characters in proposal:			7
	. Proposed category (select one from below - see section 2.2 of P&P	docum	ent).	
	A-Contemporary B.1-Specialized (small collection)		B.2-Specialized (large collec	tion)
	C-Major extinct D-Attested extinct		E-Minor extinct	
	F-Archaic Hieroglyphic or Ideographic	G-Obs	cure or questionable usage sy	mbols
Δ	. Is a repertoire including character names provided?			YES
-	a. If YES, are the names in accordance with the "character nam	ing guid	elines"	123
	in Annex L of P&P document?			YES
	b. Are the character shapes attached in a legible form suitable t	for revie	w?	YES
5	. Fonts related:			
	a. Who will provide the appropriate computerized font to the P	Project E	ditor of 10646 for publishing t	he standard?
	Jerry YC		, ,	
	b. Identify the party granting a license for use of the font by the	e editors	s (include address, e-mail, ftp-	site, etc.):
	Jerry YOU, chengyu51	.7@hotn	nail.com	
6	. References:			
	a. Are references (to other character sets, dictionaries, descript	tive text	s etc.) provided?	YES
	b. Are published examples of use (such as samples from newsp	apers, n	nagazines, or other sources)	
	of proposed characters attached?		YES	
7	. Special encoding issues:			
	Does the proposal address other aspects of character data proc	-		
	presentation, sorting, searching, indexing, transliteration etc. (i	if yes ple	ease enclose information)?	YES
-				
	. Additional Information:			
	ubmitters are invited to provide any additional information about Pro			
	n correct understanding of and correct linguistic processing of the pr			
	re: Casing information, Numeric information, Currency information			
	tc., Combining behaviour, Spacing behaviour, Directional behaviour, ompatibility equivalence and other Unicode normalization			Unicode standard at
	http://www.unicode.org_ for such information on other			Character Database
	http://www.unicode.org/reports/tr44/) and associated Unicode Te	•		
	ne Unicode Technical Committee for inclusion in the Unicode Standa			- /

¹/₋₋ Form number: N4502-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, 2008-05, 2009-11, 2011-03, 2012-01)

1. Has this proposal for addition of character(s) been submitted before?	NO
If YES explain	
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.)?	NO
If YES, with whom?	
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	NO
Reference:	
4. The context of use for the proposed characters (type of use; common or rare)	Rare
Reference:	
5. Are the proposed characters in current use by the user community?	YES
If YES, where? Reference:	
 After giving due considerations to the principles in the P&P document must the proposed characters be ent 	irely
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 scattered)?	YES
3. 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 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, 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?	NO
If YES, is a rationale for such use provided?	
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
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:	