

Universal Multiple-Octet Coded Character Set
 International Organization for Standardization
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 Международная организация по стандартизации

Doc Type: Unicode Technical Committee Document
Title: Proposal to add two ideographs to UAX #45
Source: Eiso Chan (陈永聪, Culture and Art Publishing House)
Status: Individual Contribution to UTC #171
Action: For consideration by UTC
Reference: [IRGN2240](#) & [EisoFeedback](#), [L2/20-080](#)
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0. Background

Việt Nam requested to update the V-Source glyphs for U+20BC7 (𠄎) and U+25426 (𠄎). IRG and WG2 accepted these requests. I once pointed out the original UCS2003 glyphs for these two characters were incorrect for Việt Nam uses, but those two ones (𠄎 & 𠄎) are real non-cognate characters for other Chinese uses. Dr. Ken Lunde also mentioned the original UCS2003 glyphs would mislead the users after the V-Source glyphs had been modified in Section 4 of L2/20-080. All the UCS2003 glyphs in CJK Ext. B block have been removed, so it's a good time to add them to UAX #45 as the separate characters.

1. Proposal

The U-Source references suggestions for these two characters and the related information are listed as below.

SN	Ref.	Glyph	IDS	RS	TS	FS
1	UTC-03296	𠄎	𠄎口己	30.3	6	5
2	UTC-03297	𠄎	𠄎石己	112.3	8	5

2. Evidence

The following pieces of evidence have been shown in my feedback for IRGN2240. I just copy them to this document.

2.1. Evidence for UTC-03296

In Fig. 1 and 2, this character is used for the mathematical uses in 19th and early 20th centuries. The mathematicians used the Heavenly Stem elements (天干) as

the right part with the radical mouth as the left part, so the right part for this use must be 巳 not 已, 巳 or others.

微積

乘等于中二率相乘故有式 乙辛丁乙天=辛天 所以 乙上辛 即知所容正方之邊等

于底與中垂線相乘以底垂和約之 如底爲十二尺中垂線

爲六尺則得所容方邊四尺

華蘅芳曰 乙辛丁乙天=辛天 即 乙辛丁乙天=辛天 即 乙辛丁乙天=辛天 即 乙辛丁乙天=辛天

李鳳苞曰乙與甄相乘爲 乙辛丁乙天=辛天 與三率相乘之積 乙辛丁乙天=辛天 等各加 乙天

爲 甄乙 即 甄乙 移乘作除得 天=乙辛

今有三角形之底與中垂線求所容長廣有定率之矩形

如圖呬呬呬三角形呬 **呬** 爲所容矩形命底呬呬爲乙中垂線

呬呬爲辛矩形之廣叮噦爲天其長叮噦爲地又設天地定率

若一與卯即地等于 卯天 **噦** 呬與呬呬二三三角形相似故

Fig. 1 李善蘭 (Li Shanlan): 《代微積拾級》 (Daiweiji Sheji), 墨海刊本, 1859, folio 9

顯其上面縱面投影圖。可顯其傍面。側面投影圖。可顯其餘一傍面。於橫面上畫長方體。上面之長方形甲乙丙丁。為橫面投影圖。從甲、乙、丙、丁。作投影線。隔庚丑而畫其一傍面之長方形吃吧。即為縱面投影圖。

以啖丑為縱面與側面之界線。

自橫面投影圖之各點。作庚丑之平行線。而與啖丑之引長線相交。則得甲'乙'二點。以丑'為心。以丑'甲'及丑'乙'為半徑。畫四分圓。即一象限之弧。則得甲'乙'二點。於庚丑'之引長線上。

次自甲'乙'二點作投影線。

又自縱面投影圖之各點。作庚丑'之平行線。則得交點呷、噉、吃、吧。聯點呷噉吃吧。則得其側面投影圖。

再觀二十七圖。更易明其理。

圖題十四 三等邊柱體。其軸線正立於橫面上。求作投影圖。 (二十

Fig. 2 孫鉞 (Sun Yue): 《最新中學教科書用器畫》 (*Mechanical Drawing and Descriptive Geometry for Middle Schools*), 上海: 商務印書館 (Shanghai: Commercial Press, Limited), 1914, p. 29

2.1. Evidence for UTC-03297

In Fig. 3 and 4, 碌配 is the pseudonym (別號) of Lin Changyi (林昌彝), and it is the heteromorphic words of 求己, which this word is cited from *Shenmengzi*, so the right part for this use must also be 己 not 巳, 已 or others.

球	洵
記	道
安本	蓋本
能注	有注
刺槐	樂槐
犀里	水里
截有	之有
鑄求	辯知
君已	凡道
子先	居先
晦生	處生
迹陋	視自
不巷	聽謂
磨固	以進
礪窮	泉退
其學	源有
道道	池時
安無	沼吾
能倦	爲不
顯嘗	樂妄
揚曰	故動
故莫	字是
號邪	從以
求器	水自
已成	表謂
先不	德知
生磨	也道
字礪	
從其	
石刃	

Fig. 3 林慎思 (Lin Shensi): 《伸蒙子》 (Shenmengzi), 叢書集成初編 (王雲五主編) [Congshu Jicheng Chubian chief edited by Wang Yunwu], 上海: 商務印書館 (Shanghai: Commercial Press, Limited), 1940, p. 7

林昌彝(1803——1876年),字蕙常,又字芑溪,别号茶叟。晚取《伸蒙子·砢砢篇》之义,又号砢砢山人,福建侯官(今福州市)五虎山人,家住城内南后街。其父林高汉,本系儒生,后往外洋经商。林昌彝少从母亲吴氏授读,吴氏督促甚严,使其学业日臻进步。年长后,林昌彝曾绘《一灯课读图》,清同邑林则徐等人题咏,以纪念母亲辛勤督课之劳。后来,他又拜

Fig. 4 邹自振 (Zou Zizhen): 《林昌彝及其〈射鹰楼诗话〉》 (*Lin Changyi and His Work: Notes on Poets and Poetry by Sheying Tower*), 《福建乡土》 (*Fujian Hometown Magazine*), 2003.01, ISSN : 1006-074X, p. 40

3. Spoofing Variants

These two characters are suitable to include the `kSpoofingVariant` property values with U+20BC7 (吧) and U+25426 (砢) when they are encoded in future.

4. Acknowledgement

The glyphs used in this document are included in BabelStoneHan.

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