Universal Multiple-Octet Coded Character Set
International Organization for Standardization
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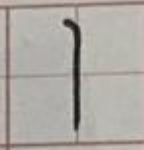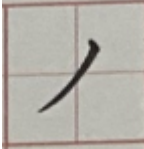|	
Doc Type:	**Working Group Document**
Title:	**Annotations for CJK strokes used as Hangul strokes**
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0. Introduction

In the primary school Korean textbook in China, which is published by Yanbian Educational Publishing House (延边教育出版社/연변교육출판사), there is a list of Hangul strokes before teaching the modern basic Hangul letters. Maybe it's useful to include them in a Hangul font for China because these strokes are used for the basic education of the Joseon people in China. I don't know if it's also useful for DPRK/North Korea, ROK/South Korea, and Koreans in Central Asia. If other Hangul encoding experts can provide any other comment, it will be valuable for them.

The basic stroke style of Hangul script is derived from Hanzi/Hanja, so the best way to handle the Hangul strokes is to unify them to CJK strokes. The following is my suggestion based on the picture.

U+31D4	ヽ		점 jeom	1st stroke of ㅊ
U+31D0	一		검너금 geomneogeum	1st stroke of 一
U+31D1	丨		내리금 naerigeum	1st stroke of ㅣ
U+31D2	ノ		삐침 bbicim	1st stroke of ㅅ

U+31C0	一		치삐침 cibbicim	4th stroke of 파
U+31CF	丶		벌림 beolrim	2nd stroke of ㅅ
U+31C7	フ		웃꺾음 usggeogg'eum	1st stroke of ㄱ
U+31C4	ㄴ		아래꺾음 araeggeogg'eum	1st stroke of ㄴ
U+31E3	○		동그라미 donggeurami	1st stroke of ㅇ

Please note the followings.

1) Jeom and beolrim are both treated as 點 U+31D4 (丶) in Hanzi/Hanja, but they are treated as different strokes for Hangul, and the position of beolrim is similar to that of 捺 U+31CF (丶) in Hanzi/Hanja, so it's acceptable to unify it to 捺 here.

2) Bbicim is not used for the basic Hangul letter, but the last horizontal stroke of the lower left letters would be written as bbicim. This situation is similar to that of Hanzi/Hanja.

3) The Hangul letter ㄱ is used for the bottom component of some Idu characters, such as U+5DEA (㐪), U+3AC7 (㫇) and so on. We often use U+200CD (⿰) as the component in IDS, but the current glyph for the Hangul stroke usggeogg'eum is suitable to unify with U+31C7 (フ) not U+31D5 (ㄱ).

4) The Hangul letter ㄴ is used for the bottom component of one Idu character, U+4733 (䜳). We use U+200CA (⿱) as the component in IDS, but the current glyph for the Hangul araeggeogg'eum is suitable to unify with U+31C4 (ㄴ) not U+31D7 (ㄴ).

1. Proposal

The following is the updated information for `NamesList.txt`.

```
31C0    CJK STROKE T
    = hangul stroke cibbicim
    * 2nd stroke of 51B0
    * 4th stroke of D30C

31C4    CJK STROKE SW
    = hangul stroke araeggeogg'eum
    * 3rd stroke of 4EA1
```

```
    * 4th stroke of 56DB
    * 1st stroke of 3134


31C7    CJK STROKE HP
    = hangul stroke usggeogg'eum
    * 1st stroke of 53C8
    * 4th stroke of 4ECA
    * 1st stroke of 3131


31CF    CJK STROKE N
    = hangul stroke beolrim
    * 3rd stroke of 5927
    * 2nd stroke of 3145
31D0    CJK STROKE H
    = hangul stroke geomneogeum
    * 1st stroke of 5927
    * 1st stroke of 4E03
    * 1st stroke of 3161
31D1    CJK STROKE S
    = hangul stroke naerigeum
    * 4th stroke of 4E2D
    * 1st stroke of 3163
31D2    CJK STROKE P
    = hangul stroke bbicim
    * 1st stroke of 4E4F
    * 1st stroke of 3145


31D4    CJK STROKE D
    = hangul stroke jeom
    * 3rd stroke of 4E38
    * 1st stroke of 314A


31E3    CJK STROKE Q
    = hangul stroke donggeurami
    * 6th stroke of 3514
    * 1st stroke of 3147
```

On the other hand, the relative CJK strokes should be treated as the Hangul characters as well. The following is the information for ScriptExtensions.txt.

```
# Script_Extensions=Hang

31C0         ; Hang # So     CJK STROKE T
31C4         ; Hang # So     CJK STROKE SW
31C7         ; Hang # So     CJK STROKE HP
31CF..31D2   ; Hang # So  [4] CJK STROKE N..CJK STROKE P
```

```
31D4          ; Hang # So       CJK STROKE D
31E3          ; Hang # So       CJK STROKE Q


# Total code points: 9
```

In fact, the strokes used for Tangut, Khitan and Jurchen scripts are derived from Hanzi basically. If it's accepted that all the Hangul strokes could be unified to CJK strokes in my opinion, I will submit the document on the strokes for other relative scripts in future.

2. Bibliography

延边教育出版社朝鲜语文编辑室, 东北朝鲜文教材研究开发中心: 《义务教育朝鲜族学校教科书 朝鲜语文 一年级上册》, 延吉: 延边教育出版社, 2014.07, ISBN 978-7-5524-2753-0 / 연변교육출판사 조선어문편집실, 동북조선문교재연구개발쎈터:《의무교육조선족학교교과서 조선어문 1 학년 상권》, 연길: 연변교육출판사, 2014.07, ISBN 978-7-5524-2753-0

3. Picture

(End of Document)