

Subject: Changing glyphs and IDSs of 97 KR Hanja chars containing ‘叱 (U+53F1)’

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Status: KR National Body Position

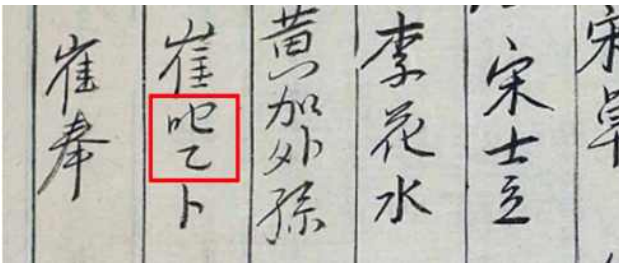
Date: 2022-10-14 (c); 2022-10-19 (e);


1. Background: Discussion Records in ORT for SN 00056/KC-00023 of WS2021

- <https://hc.jsecs.org/irg/ws2021/app/?id=56>

« 00055 **00056** 00057

00056	5.0 叱 ㄷ 叱 乙 SC=5, FS=2 TS=6	叱 KC-00023							Glyph no change, IRG 57.
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	Description	Submitter
Attributes ATTRIBUTES_IDS WS2021 v1.0 [Resolved]	IDS should be ㄷㄷㄷ乙	Eiso CHAN Individual 2021-05-22 13:39 +0900 #852
Evidence MISIDENTIFIED_GLYPH WS2021 v1.0 [Resolved]	The current glyph looks not match the evidence, but I don't know how to get the rationale / semantics based on the evidence.	Eiso CHAN Individual 2021-05-22 13:41 +0900 #853
Attributes ATTRIBUTES_IDS WS2021 v1.0 [Resolved]	IDS is not necessarily unique. The suggested IDS could be added (not replace the original IDS).	ROK 2021-09-02 10:38 +0900 #2659
Evidence MISIDENTIFIED_GLYPH WS2021 v1.0 [Resolved]	The upper component is a handwritten form of 叱. 	ROK 2021-09-02 11:21 +0900 #2712
Evidence MISIDENTIFIED_GLYPH WS2021 v1.0 [Resolved]	I want to withdraw my comment now and hope to keep this character in WS2021, but I still don't understand the rationale for this character. I hope I can study more on it with the Korean experts after the meeting.	Eiso CHAN Individual 2021-09-16 14:13 +0900 #2712

- ROK discussed this issue throughly in depth and suggests as shown below.
- ROK appreciates that Mr. Eiso raised this issue.

2. Reading of '叱 (U+53F1)'

1) Historical changes of reading of Chinese Hanzi char '叱 (U+53F1)'

- Old Chinese (上古 漢語): Zhou Dynasty (周) ~ Han Dynasty (漢)
/nhjid/ -> /thjid/
- Middle Chinese (中古 漢語):
Wei Jin Southern and Northern Dynasties (魏晉南北朝) ~ Song Dynasty (宋)
/tɕhit/ -> /tʃhit/
- Early Modern Chinese (近古 漢語): Yuan Dynasty (元) ~ Qing Dynasty (清).
/tʃhi/

2) Shuōwénjiězì (『說文解字』) explains that reading of '叱' (U+53F1) changed as reading of '七[qī]' changed.

叱
訶也
而訶
怒大
也言
从口
七聲
昌
切
十栗

3) The modern reading of '叱' in Korea is 'jil', which was derived from its reading /tʃhit/ in Middle Chinese (中古漢語) and then changed thereafter.

- Hanja char '叱' was used for a special purpose to indicate various sound in Old Korean.

4) Therefore, KR suggests that glyphs and IDs of 97 KR Hanja chars in UCS and Working Sets 2017 and 2021 containing '叱' as a component be changed. Specifically, the component '口+匕' (U+53E3, U+5315; mouth-dagger) need be changed to '叱' (U+20B9F; mouth-seven).

- If necessary, new IDs can be added instead of replacing the current ID(s).

3. Usage Examples of ‘叱’ in Old Korean

3.1 In borrowed Hanja chars, ‘叱’ indicates ‘s/t’ or ‘ㅅ’ (Korean ‘s’) sound

1) Used in reading-borrowed (音借) Hanja chars:

唵 = 굿 (구 + ㅅ), 唵 = 것 (거 + ㅅ), 唵 唵 唵 = 곱 (고 + ㅅ), ...

2) Used in meaning-borrowed (訓借) Hanja chars:

始叱 = 비롯 (from the beginning, for the first time)

唵 : ‘사잇’

3) Usage Examples in Old Korean documents

a) in Hyangga (향가) contained in book Samgug Yusa (『삼국유사』, The Heritage of the Three States)

花盼 折叱可 獻乎理音如 (a sentence in Hyangga <獻花歌>)

-> Old Korean 곱힐 것이 받조보림다

=> Modern Korean 꽃을 꺾어 바치오리다

b) in Gyunyeo's Hyangga (향가) in Goryeo Dynasty

法界 毛叱所只 至去良 (a sentence in Hyangga <禮敬諸佛歌>)

-> Old Korean 법계 못드록 니르가라

=> Modern Korean 법계가 마치도록[끝나도록] 이르거라

c) in Idu document in Joseon Dynasty

始叱 秋冬日 寒時良中 / 비롯 秋冬日 寒時에

=> 비로소 秋冬日 추운 때에 (a sentence in 辭豐基郡守上監司狀 from book <退溪先生文集卷之八>)

3.2 ‘叱’ indicates syllable-final sound ‘ㅅ’ in Middle Korean

- Syllable-final sound ‘ㅅ’ is a combination of ‘ㄹ [l]’ sound and ‘ㅅ [s/t]’ sound in Old Korean before 15th century.

- Later, ‘ㅅ’ is changed to ‘ㄹ’ and, accordingly, ‘叱’ is changed to ‘乙’ or ‘叱’ is dropped.

- Example: 唵 = 말 -> 말 = 斗 (indicates quantity)

3.3 ‘叱’ changes lax sound (ㅂ, ㄷ, ㄱ) to fortis sound (ㅃ, ㄸ, ㄲ)

1) ‘ㅅ [叱]’ + lax sound ‘ㅂ, ㄷ, ㄱ’ -> fortis sound ‘ㅃ, ㄸ, ㄲ’

- 叱 can be placed anywhere relative to the base Hanja char.

2) Examples of ㅅ[叱] + ‘ㅂ’ -> ‘ㅃ’

吩 = ㅃ (叱 + 分 分 -> ㅃ); 唵 = ㅃ (分 分 + 叱 -> ㅃ)

吩不喻 = ㅃ더러, ㅃ만 아니라

吩是白遣 = ㅃ이삼고 (라고 하였을 ㅃ인데, 라고 하였을 ㅃ이고, 하였을 ㅃ이고)

3) Example of ㅅ[叱] + ㄷ -> ‘ㄸ’

唵 = ㄸ (叱 + 동 同 -> ㄸ); 唵 = ㄸ (동 同 + 叱 -> ㄸ)

4. The list of Hanja chars containing ‘叱’ that need be changed

4.0 Number of KR Hanja chars whose glyphs and IDss need be changed

UCS/WS	# chars	CJK block	# Hanja chars which need be changed
UCS	63	CJK ExtG	16
		CJK main	13
		CJK ExtA	20
		CJK ExtC	3
		CJK ExtF	11
WS2017	3	CJK ExtH	3
WS2021	31		31
sum	97		97

Note. If necessary, new IDss can be added instead of replacing the current IDs(s).

4.1 63 Hanja chars in UCS

4.1.1 16 Hanja chars in CJK ExtG

301D4 □ 30.6	夫 叱 KC-00414	U+301D4 □	夫 □ 叱
301D9 □ 30.6	丹 叱 KC-00411	U+301D9 □	丹 □ 叱
301E4 □ 30.7	石 叱 KC-00434	U+301E4 □	石 □ 叱
301E8 □ 30.7	只 叱 KC-00436	U+301E8 □	只 □ 叱
301FF □ 30.9	豆 叱 KC-00472	U+301FF □	豆 □ 叱
30200 □ 30.9	走 叱 KC-00476	U+30200 □	走 □ 叱
30205 □ 30.9	圃 叱 KC-00458	U+30205 □	圃 □ 叱
3020C □ 30.9	沙 叱 KC-00474	U+3020C □	沙 □ 叱
30211 □ 30.10	其 叱 KC-00486	U+30211 □	其 □ 叱
30215 □ 30.10	所 叱 KC-00480	U+30215 □	所 □ 叱
30216 □ 30.10	非 叱 KC-00490	U+30216 □	非 □ 叱

30217 口 30.10	知 𠂔	KC-00493	U+30217	𠂔	知	𠂔
30220 口 30.11	恠 𠂔	KC-00502	U+30220	𠂔	恠	𠂔
30234 口 30.13	麻 𠂔	KC-00523	U+30234	𠂔	麻	𠂔
30235 口 30.13	富 𠂔	KC-00547	U+30235	𠂔	富	𠂔
30237 口 30.14	都 𠂔	KC-00546	U+30237	𠂔	都	𠂔

4.1.2 13 Hanja chars in CJK main (aka URO)

517A 八 12.8	龕 𠂔	GK-683F	龕 𠂔	K2-2426	U+517A	龕	龕	分	𠂔
5391 厂 27.5	厖 𠂔	GK-6876	厖 𠂔	K2-2576	U+5391	厖	厖	厂	𠂔
54DB 口 30.6	𠂔 𠂔	GK-685E	𠂔 𠂔	K2-2729	U+54DB	𠂔	𠂔	𠂔	分
551C 口 30.7	𠂔 𠂔	GE-3356	𠂔 𠂔	K0-5845	U+551C	𠂔	𠂔	末	𠂔
551F 口 30.7	𠂔 𠂔	GK-677E	𠂔 𠂔	K2-2747	U+551F	𠂔	𠂔	去	𠂔
55B8 口 30.9	𠂔 𠂔	GK-685C	𠂔 𠂔	K2-2827	U+55B8	𠂔	𠂔	甫	𠂔
55ED 口 30.10	𠂔 𠂔	GK-6857	𠂔 𠂔	K2-2842	U+55ED	𠂔	𠂔	直	𠂔
591E 夕 36.7	外 𠂔	GK-6878	外 𠂔	K2-2B4E	U+591E	𠂔	𠂔	外	𠂔
5DFC 己 49.7	巴 𠂔	GK-685A	巴 𠂔	K2-2F7B	U+5DFC	𠂔	𠂔	巴	𠂔
5EE4 广 53.12	𠂔 𠂔	GK-6822	𠂔 𠂔	K2-3071	U+5EE4	𠂔	𠂔	庫	𠂔
65D5 方 70.9	於 𠂔	GK-6870	於 𠂔	K2-3840	U+65D5	𠂔	𠂔	於	𠂔

83BB
艸 140.7

葍
GK-6827

葍
K2-577C

U+83BB 葍

葍吐

848A
艸 140.9

花
GK-6821

花
K2-5873

U+848A 花

花吐

4.1.3 20 Hanja chars in CJK ExtA

357E
口 30.5

小
K3-2247

U+357E

小

小吐

358B
口 30.6

介
K3-224A

U+358B

介

介吐

358C
口 30.6

仇
K3-224B

U+358C

仇

仇吐

358D
口 30.6

斗
K3-224D

U+358D

斗

斗吐

358E
口 30.6

介
K3-224E

U+358E

介

吐介

3599
口 30.7

加
K3-2250

U+3599

加

加吐

359A
口 30.7

付
K3-2251

U+359A

付

付吐

359B
口 30.7

古
K3-2252

U+359B

古

古吐

359C
口 30.7

古
K3-2253

U+359C

古

古口吐

359D
口 30.7

未
K3-2254

U+359D

未

未吐

35AF
口 30.8

同
K3-225A

U+35AF

同

同吐

35B0
口 30.8

同
K3-225B

U+35B0

同

吐同

35B2
口 30.8

如
K3-225D

U+35B2

如

如吐

35B3
口 30.8

汝
K3-225E

U+35B3

汝

汝吐

35DF
口 30.10

注
K3-2265

U+35DF

注

注吐

35E0 □ 30.10	始 𠂔 K3-2266	U+35E0	𠂔	𠂔	始𠂔
35E1 □ 30.10	蕊 𠂔 K3-226C	U+35E1	蕊	𠂔	++𠂔
35EF □ 30.11	耄 𠂔 K3-226D	U+35EF	耄	𠂔	耄𠂔
360F □ 30.15	道 𠂔 K3-2276	U+360F	道	𠂔	道𠂔
3612 □ 30.16	種 𠂔 K3-2278	U+3612	種	𠂔	種𠂔

4.1.4 3 Hanja chars in CJK ExtC

2A741 人 9.7	仍 𠂔 K5-005E	U+2A741	𠂔	𠂔	仍𠂔
2B173 老 125.5	老 𠂔 K5-00A5	U+2B173	𠂔	𠂔	老𠂔
2B490 金 167.5	金 𠂔 K5-000F	U+2B490	𠂔	𠂔	金𠂔

4.1.5 11 Hanja chars in CJK ExtF

2D1CC □ 30.4	刀 𠂔 KC-04881	U+2D1CC	𠂔	𠂔	刀𠂔
2D1CD □ 30.4	九 𠂔 KC-06069	U+2D1CD	𠂔	𠂔	九𠂔
2D1DD □ 30.5	山 𠂔 KC-06070	U+2D1DD	𠂔	𠂔	山𠂔
2D1E4 □ 30.6	牛 𠂔 KC-04887	U+2D1E4	𠂔	𠂔	牛𠂔
2D1F7 □ 30.7	可 𠂔 KC-04891	U+2D1F7	𠂔	𠂔	可𠂔
2D203 □ 30.7	处 𠂔 KC-04888	U+2D203	𠂔	𠂔	处𠂔
2D256 □ 30.9	尾 𠂔 KC-04893	U+2D256	𠂔	𠂔	尾𠂔
2D266 □ 30.10	具 𠂔 KC-04898	U+2D266	𠂔	𠂔	具𠂔

2D2A2 □ 30.12	馬 𠂔	KC-04902	U+2D2A2	□	𠂔馬吐
2D2AC □ 30.12	等 𠂔	KC-06101	U+2D2AC	□	𠂔等吐
2D2DA □ 30.13	訥 𠂔	KC-04903	U+2D2DA	□	𠂔訥吐

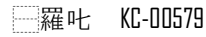
4.2 3 Hanja chars in WS2017 (CJK ExtH) containing ‘𠂔’ that need be changed

314B9 □ 30.7	圭 𠂔	KC-07781	U+314B9	𠂔圭𠂔𠂔	KC-07781
31543 □ 30.13	陶 𠂔	KC-07384	U+31543	𠂔陶𠂔𠂔	KC-07384
31568 □ 30.17	鋤 𠂔	KC-07915	U+31568	𠂔鋤𠂔𠂔	KC-07915

4.3 31 Hanja chars in WS2021 containing ‘𠂔’ that need be changed

00056	乙 5.5 𠂔𠂔乙	KC-00023	00056	𠂔𠂔乙	KC-00023
00435	□ 30.4 𠂔二𠂔	KC-00396	00435	𠂔二𠂔	KC-00396
00440	□ 30.4 𠂔又𠂔	KC-00395	00440	𠂔又𠂔	KC-00395
00441	□ 30.5 𠂔士𠂔	KC-00402	00441	𠂔士𠂔	KC-00402
00442	□ 30.5 𠂔士𠂔	KC-00404	00442	𠂔士𠂔	KC-00404
00449	□ 30.5 𠂔也𠂔	KC-00403	00449	𠂔也𠂔	KC-00403
00453	□ 30.6 𠂔五𠂔	KC-00417	00453	𠂔五𠂔	KC-00417
00454	□ 30.6 𠂔彡𠂔	KC-00421	00454	𠂔彡𠂔	KC-00421
00461	□ 30.6 𠂔毛𠂔	KC-00412	00461	𠂔毛𠂔	KC-00412

00464	口 30.6 日 文叱 、(4) 9	𠵼 KC-00413	00464	𠵼 文叱	KC-00413
00465	口 30.6 日 之叱 、(4) 9	𠵼 KC-00420	00465	𠵼 之叱	KC-00420
00470	口 30.7 日 巨叱 一(1) 10	𠵼 KC-00428	00470	𠵼 巨叱	KC-00428
00475	口 30.7 日 北叱 (2) 10	𠵼 KC-00432	00475	𠵼 北叱	KC-00432
00501	口 30.8 日 多叱 、(3) 11	𠵼 KC-00449	00501	𠵼 多叱	KC-00449
00503	口 30.8 日 伊叱 、(3) 11	伊 KC-00453	00503	伊 伊叱	KC-00453
00504	口 30.8 日 自叱 、(3) 11	𠵼 KC-00454	00504	𠵼 自叱	KC-00454
00505	口 30.8 日 朱叱 、(3) 11	朱 KC-00456	00505	朱 朱叱	KC-00456
00524	口 30.9 日 吾叱 一(1) 12	吾 KC-00461	00524	吾 吾叱	KC-00461
00525	口 30.9 日 求叱 一(1) 12	求 KC-00464	00525	求 求叱	KC-00464
00526	口 30.9 日 扶叱 一(1) 12	扶 KC-00473	00526	扶 扶叱	KC-00473
00543	口 30.9 日 何叱 、(3) 12	何 KC-00462	00543	何 何叱	KC-00462
00553	口 30.10 日 ? 叱 一(1) 13	甚 KC-00487	00553	甚 ? 叱	KC-00487
00554	口 30.10 日 東叱 一(1) 13	東 KC-00488	00554	東 東叱	KC-00488
00592	口 30.11 日 彥叱 、(4) 14	彥 KC-00507	00592	彥 彥叱	KC-00507
00598	口 30.11 日 建叱 乙(5) 14	建 KC-00501	00598	建 建叱	KC-00501
00631	口 30.13 日 帶叱 一(1) 16	帶 KC-00532	00631	帶 帶叱	KC-00532
00632	口 30.13 日 曹叱 一(1) 16	曹 KC-00534	00632	曹 曹叱	KC-00534
00646	口 30.13 日 許叱 、(4) 16	許 KC-00536	00646	許 許叱	KC-00536
00713	口 30.16 日 語叱 、(4) 19	語 KC-00566	00713	語 語叱	KC-00566
00732	口 30.17 日 廣叱 、(4) 20	廣 KC-00568	00732	廣 廣叱	KC-00568



5. Conclusions

- KR suggests that glyphs and IDs of 97 KR Hanja chars in UCS and Working Sets 2017 and 2021 containing ‘叱’ as a component be changed. Specifically, the component ‘口+匕’ (U+53E3, U+5315; mouth-dagger) need be changed to ‘叱’ (U+20B9F; mouth-seven).

If necessary, new IDs can be added instead of replacing the current ID(s).

- The 97 KR Hanja chars are classified as shown below:

UCS/WS	# Hanja chars which need be changed
UCS (CJK main, ExtA, ExtC, ExtF, ExtG)	63
WS2017 (CJK ExtH)	3
WS2021	31
sum	97

References

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