

Doc Type:	Working Group Document
Title:	Shuowen Seal Informal Meeting Report
Source:	Wang Ning(王寧), Wang Liun(王立軍), Hsueh-Jen, HSU(許學仁), Selena Wei(魏林梅), Toshiya SUZUKI(鈴木俊哉), Chen Zhuang(陳壯), Wang Xiaoming(王曉明), Hu Jiajia(胡佳佳)
Status:	Proposal
Action:	For consideration by JTC1/SC2/WG2 and UTC
Reference	N4853_Shuowen Seal Ad Hoc Meeting Resolutions N4973_Comments on encoding Shuowen Small Seal
Date:	2019-06-01(Beijing Normal University, Beijing)

This document reports on points of consensus reached of the participants in *Shuowen* Seal Informal meeting(1st June, 2019 in Beijing), laying out the plan for future work to encode *Shuowen* Seal characters in UCS. The points addressed in Q1-8 below derive from issues raised in WG2/N4853, and discussed in 4973 and N4922.

In this meeting, it clearly stated how to deal with the eight issues: 1. The specific directions of Guwen (古文) and Zhouwen (籀文) in *Shuowen* Seal characters, 2. Chongwen (重文) in Tenghuaxie version, 3. possible duplicate (近似字), 4. etymological errors in the original book(原書誤刻), 5. the original broken or inconsistent component (殘斷或不一致之部件), 6. taboo glyphs (避諱字), 7. inconsistencies between the Original Glyph and the glyph submitted by WG2N4688(WG2N4688 字圖與原書不一致), 8. Modify errors of TTF fonts(修正錯誤造字).

The informal meeting participants(see [Appendix 5](#)) also express their unanimous and deepest thanks to the meeting host, Research Center for Chinese Characters Collation and Normalization, Beijing Normal University, for the great care taken to organize this successful conference.

Q1: Separate encoding of Guwen (古文) and Zhouwen (籀文) from Zhuanwen (篆文) may induce the inflation of the codespace for Seal script block?

Suzuki raised this question by his submission (see [Appendix 6](#), and participants's feedback see [Appendix 7](#)); according to *Shuowen* preface, Xu Shen(許慎) wrote as “今敘篆文，合以古籀”，the collections of Guwen (古文) and Zhouwen (籀文) in *Shuowen* are specially selected for *Shuowen*, thus, if we encode more Guwen and Zhouwen sampled from other materials like Hanjian (汗簡) or Three Script Stone (三體石經), the required number of the codepoints for Guwen and Zhouwen would be large like whole of Zhuanwen (篆文). Other participants commented it would not happen, because:

- The Guwen and Zhouwen collected in *Shuowen* are classified as *Shuowen* Guwen (《說文》古文) or *Shuowen* Zhouwen (《說文》籀文),
- On the other hand, the characters in Hanjian or Three Script Stone are classified as Chuancho Guwen (傳抄古文),
- They are regarded as different scripts, and they should not be used in the mixture with each other.

After this response, Suzuki accepted the separate encoding of Guwen and Zhouwen. The participants reached as consensus: *Shuowen* Guwen and *Shuowen* Zhouwen are the only characters taken from *Shuowen*. The separated encoding of *Shuowen* Guwen and *Shuowen* Zhouwen, *Shuowen* Seal separated

solution, but this rule is only applicable to the characters taken from *Shuowen*.

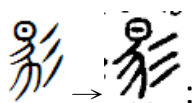
Q2: Regarding the issue of Chongwen (重文), Xu Shen mentioned that if there are variant characters, only one character is accepted.

The examples are as follows. After verification by experts, there are 15 sets of Chongwen. [Please see Appendix1 for the full contents.](#)

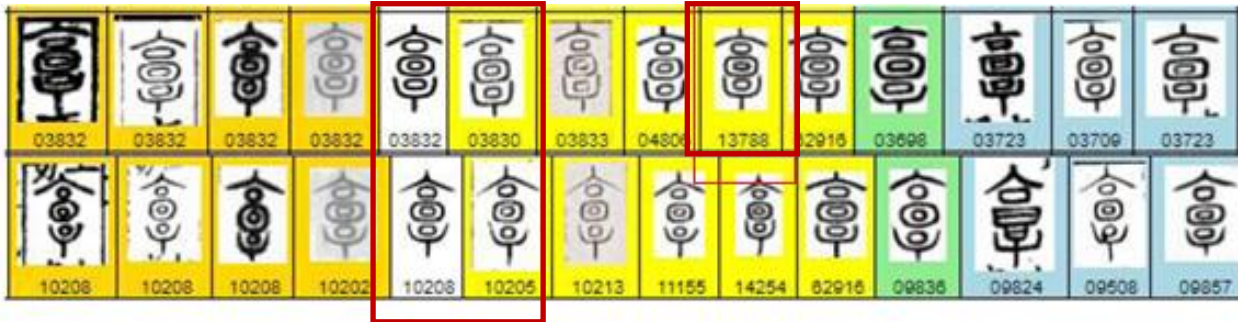
No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning	Note
1	00939	口	右		you4	助也。从口从又。	encode
	02078	又	右		you4	手口相助也。从又从口。	

Q3: On the Possible duplicate (近似字), after the verification by expert, two sets of very similar glyphs were found. Xu Shen clearly stated that Guwen and Zhouwen should not be resemble. To improve the glyphic difference, the representative glyphs would be updated by using other versions, as explained in the following table:

A. Tenghuaxie version *Shuowen* Zhouwen is changed to Duan version (段注本) glyph





王	孫	陳	N4688	TCA	毛4	毛5	華東	北師	逢甲	段	述	汪	祁



Q4: How the etymological errors in original book should be processed

After verification by experts, it was found that the original book made etymological errors in five characters. For most characters, *Shuowen* mentions each component. In five problematic characters, the components in the explanation and the representative glyphs show inconsistencies. By the comparisons with other DaXu versions of *Shuowen*, they are confirmed to be the errors in Tenghuaxie version. For these 5 characters, the corrected representative glyphs would be used in the proposal, instead of original wrong glyphs.

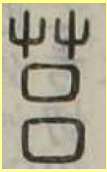












No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original glyph	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Content
1	卷 1	650	00632			茨	艸	12	Zhengzhuan	從艸次聲
2	卷 10	392	07082			焯	火	382	Zhengzhuan	原圖疑誤刻，从火皂聲，字樣依陳本修正
3	卷 11	703	08271			鮎	魚	424	Zhengzhuan	原圖疑誤刻，从魚占聲，字樣依段注本修正
4	卷 13	509	09700			蠹	虫	472	Zhengzhuan	陳本跟段注本皆出頭

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original glyph	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Content
5	卷8	319	05767			卧	卧	297	Zhengzhuan	原圖疑誤刻，从人、臣，取其伏也。

Q5: How the original broken or inconsistent designs were handled

After verification by experts, it was found that there are 11 characters contains broken or inconsistently designed glyphs in the original book due to rubbing or other conditions; the finding was mainly based on the same component glyphs of the same version. Therefore, correction was processed according to the meaning of the character and the reference of other versions. Since showing broken or inconsistently designed glyphs as the representative glyphs would be confusing for the implementers, the corrected representative glyphs would be used in the proposal. Also no participants supported the separate encoding of the original but broken glyph or inconsistently designed glyphs at the different codepoints. To use such glyphs for back compatibility, teaching, comparison etc, the participants recommended to use IVD/IVS solution.

I. 「呂」

	No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original glyph	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Content
Need to restore	1	卷1	321	00303			莒	艸	12	Zhengzhuan	依字理恢復原形 《說文解字·呂部》：「  ，脊骨也。象形。昔太嶽為禹心呂之臣，故封呂侯。膂，篆文呂從肉從旅。」
Component of “呂”	A.	卷5上	60	03235			筮			Zhengzhuan	
	B.	卷6上	247	04071			柎			Zhengzhuan	
	C.	卷7上	517	05124			呂			Zhengzhuan	
	D.	卷8上	260	x184			侶			Newly added character	
	E.	卷12上	45	08391			閭			Zhengzhuan	

II. 「卓」

	No.	Vol.	Serial No.	Serial No. in Tenghuaxi version	Original glyph	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
Need to restore	2	卷8	290	05738			卓			Zhengzhuan	依字理恢復原形 早、匕為卓。而早， 从日在甲上。甲， 作形。
	3	卷2	563	01302			卓			Zhengzhuan	See “卓”
Component of “卓”	1.	卷8	72	05538			卓			Zhengzhuan	
	2.	卷10	396	07086			卓			Zhengzhuan	
	3.	卷10	885	07567			卓			Zhengzhuan	
	4.	卷7	725	05332			卓			Zhengzhuan	
	5.	卷12	688	09015			卓			Zhengzhuan	
	6.	卷12	277	08617			卓			Zhengzhuan	
	7.	卷11	254	07852			卓			Zhengzhuan	
	8.	卷2	361	01101			卓			Zhengzhuan	
	9.	卷11	751	08321			卓			Zhengzhuan	

III.Others



No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original glyph	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note	Note
4	卷5	51	03226				籊	竹	143	Zhengzhuan	原圖拓印不全，依陳本正形
5	卷5	283	03452				𪔁	𪔁	166	Zhengzhuan	右上從宀，原圖不應斷筆
6	卷13	522	09713				蜚			Variant	原字形當从非，中間不應斷
7	卷13	746	x380				坊	土	480	Newly added character	依形从土方聲，不宜斷開
8	卷13	809	09983				勸	力	488	Zhengzhuan	虎形
9	卷14	251	10273				𪔁	斗	496	Zhengzhuan	少一點
10	卷14	253	10275				魁	斗	496	Zhengzhuan	殘筆
11	卷7	215	04834				彖	彖	252	Zhengzhuan	圈起處應該連起來。

Q6: How the taboo character deformation were handled

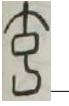

According to expert verification, the taboos of Tenghuaxie version are presented in two ways of changing the character or omitting the strokes. N4973 proposed 8 taboo characters. After checking, we also found 3 taboo characters (the table below is indicated by yellow background), a total of 11 taboo characters.

There are two ways to deal with it:

A. if it is confirmed “changing the character” , please refer to the other version to restore it, such as

“正”  →  ;

B. If it is confirmed “omitting the strokes” , use the original glyph as the prefix, and treat other

characters by IVS/IVD. , such as “玄”  →  .

[Please see Appendix 2 for the full contents.](#)

Q7: About inconsistencies between the Original Glyph and the glyph submitted by WG2N4688.

In WG2N4688, this document proposes to encode 11,108 Small Seal Script characters of Shuowen Jiezi (中國書店's reprint of Tenghuaxie Version, 14 volumes in total) in UCS. Among those characters, there are 800 small Seal Script characters have been introduced on WG2#63 meeting. The appendix contains 14 parts, providing original glyphs, TTF glyphs, SW Radicals, Corresp Modern Chars.

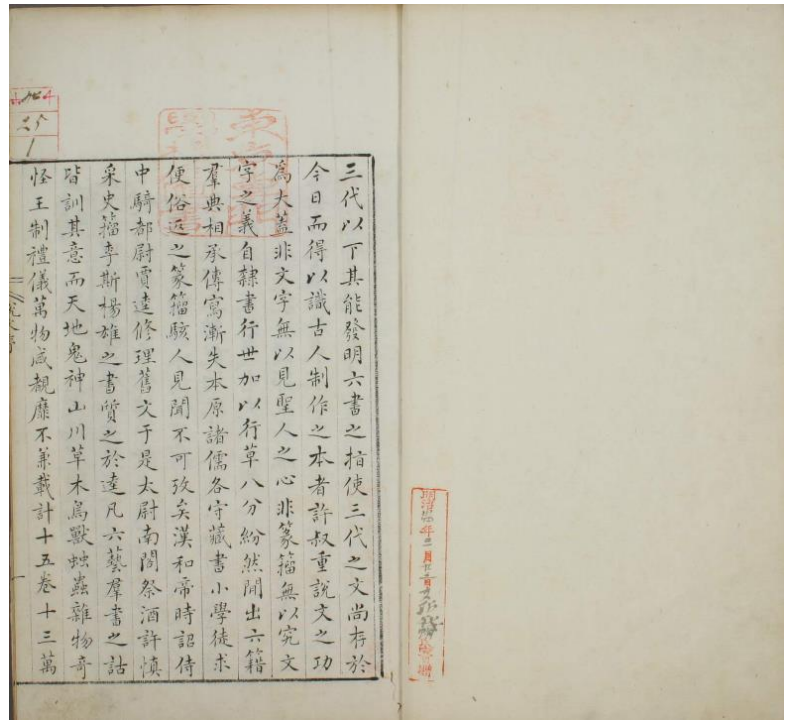
In 2019, experts from TCA and China propose the changing of the source book from 中國書局's reprint to the original Tenghuaxie version (藤花榭本, 東京專門學校圖書). We again compared the proposal documents with the Original Glyph (Tenghuaxie version), we found 113 inconsistencies between the Original Glyph and the glyph submitted by WG2N4688, and re-screened it to fix it.

[Please see Appendix 3.](#)



Old source:


















New source:



Q8: To modify errors of TTF Fonts.

According to the instructions of Q7, we compared with the Original Glyph, there are 60 errors of TTF Fonts. We corrected the characters according to the Original Glyph. [Please see Appendix 4.](#)










Appendix 1- Duplicate(重文)

No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning	Note
1	00939	口	右		you4	助也。从口从又。	encode
	02078	又	右		you4	手口相助也。从又从口。	
2	01005	口	否		fou3/pi3	不也。从口从不。	encode
	08352	不	否		fou3/pi3	不也。从口从不，不亦聲。	
3	00888	口	吹		chui1	嘘也。从口从欠。	encode
	06060	欠	吹		chui1/chui1	出气也。从欠从口。	
4	00980	口	吁		xu1	驚也。从口于聲。	encode
	03407	亏	吁		xu1	驚語也。从口从亏，亏亦聲。	
5	02780	放	敖		ao2	出游也。从出从放。	encode
	04307	出	敖		ao2	游也。从出从放。	
6	03436	豈	愷		kai3	康也。从心、豈，豈亦聲。	encode
	07327	心	愷		kai3	樂也。从心豈聲。	
7	07729	水	湮		tu01/tuo4	河津也。在西河西。从水巫聲。	encode
	00881	口	唾		tu04	口液也。从口垂聲。唾或从水。	
8	07347	心	愨		zhe2	敬也。从心折聲。	encode
	00899	口	愨		zhe2	知也。从口折聲。哲或从心	
9	06118	欠	欸		you3	愁兒。从欠幼聲。	encode

No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning	Note
	01029	口	歛		you1	鹿鳴聲也。从口幼聲。呦或从欠	
10	10374	車	輟		chuo4	車小缺復合者。从車𠂔聲。	encode
	05346	网	輟		zhuo2	捕鳥覆車也。从网𠂔聲。𠂔或从車	
11	03072	刀	劓		duo2	判也。从刀度聲。	encode
	02259	支	劓		du4	閉也。从支度聲。讀若杜。𠂔或从刀。	
12	03915	木	柅		ni3	木也。實如梨。从木尼聲。	encode
	04191	木	柅		chi4/ni3	簞柄也。从木尸聲。尿或从木尼聲。	
13	08507	手	𠂔		gong3	攤也。从手珣聲。	encode
	02063	𠂔	𠂔		gong3	衰也。从𠂔工聲。珣或加手。	
14	09582	虫	螻		mao2	螻螻也。从虫𠂔聲。	encode
	09707	𧈧	螻		mou2/mao2	蟲食艸根者。从蟲，象其形。吏抵冒取民財則生。𧈧或从𠂔。	
15	10500	冂	院		yuan4	堅也。从冂完聲。	encode
	05054	宀	院		huan2/yuan4	周垣也。从宀奂聲。窳或从冂。又爰眷切。	

Appendix 2- Taboo character deformation

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF Font	Refer to 陳本 to restore the glyph	Corresp Modern Char.	SW Radical	SW Radical Number	Type
1.	卷1	23	00023		禛		禛	示	3	Zhengzhuān
2.	卷1	144	00140		琰		琰	玉	6	Zhengzhuān
3.	卷4	475	02773		宮		玄	玄	126	Zhengzhuān
4.	卷4	477	02775		茲		茲	玄	126	Zhengzhuān
5.	卷4	478	X096		茲			玄	126	Newly added character
6.	卷4	634	02931		胤		胤	肉	135	Zhengzhuān
7.	卷7	90	X155		曆			日	231	Newly added character
8.	卷7	209	04828		鎡		鎡	鼎	250	Variant

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF Font	Refer to 陳本 to restore the glyph	Corresp Modern Char.	SW Radical	SW Radical Number	Type
9.	卷8	455	x202					衣	300	Newly added character
10.	卷9	38	06178				顛	頁	324	Zhengzhuan
11.	卷 11	173	07771				洫	水	410	Zhengzhuan

Appendix 3- Inconsistencies list between the Original Glyph and the glyph submitted by

WG2N4688

1.Old evidence according to 中國書局 edition.

2.New evidence according to the original Tenghuaxie version (藤花榭本, 東京專門學校圖書) edition.

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-New evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
1	卷1	47	00047				禪	示	3	Zhengzhuan	不同：「米」的四筆不連
2	卷1	79	00079				禡	示	3	Zhengzhuan	不同：「示」
3	卷1	92	00092				禪	示	3	Zhengzhuan	不同：「日」與「口」沒碰到
4	卷1	109	00105				瓊	玉	6	Zhengzhuan	不同：「巳」沒連
5	卷1	111	00107				璠	玉	6	Zhengzhuan	不同：「米」四筆沒連
6	卷1	127	00123				璠	玉	6	Zhengzhuan	不同：中間部分連起來
7	卷1	154	00150				瑞	玉	6	Zhengzhuan	不同：原圖「而」有一個點

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
8	卷1	172	00168			璣	璣	玉	6	Zhengzhuan	不同：右邊的「王」中間那橫，跟「人」沒碰到
9	卷1	199	00195			璣	璣	玉	6	Zhengzhuan	不同：「日」的左半邊沒碰到那一「」
10	卷1	205	00201			璣	璣	玉	6	Zhengzhuan	不同：中間的「厶」沒碰到上面那橫
11	卷1	253	X013			璣		玉	6	Newly added character	不同：原圖「王」有四橫
12	卷1	436	00418			璣	璣	艸	12	Zhengzhuan	不同：原圖有一小橫
13	卷1	437	00419			璣	璣	艸	12	Zhengzhuan	不同：左邊的「艸」沒碰到「貝」
14	卷1	497	00479			璣	璣	艸	12	Zhengzhuan	不同：左邊的「艸」沒碰到下面的那一橫
15	卷2	76	X032			璣		牛	19	Newly added character	不同：左下「十」


No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-New evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
16	卷2	112	00862			嗑	嗑	口	22	Zhengzhuan	不同：「佳」跟「木」沒連起來
17	卷2	117	00867			啐	啐	口	22	Zhengzhuan	不同：原圖左邊的「口」
18	卷2	142	00892			嚏	嚏	口	22	Zhengzhuan	不同：「夷」的下半部分未封口
19	卷2	211	00961			哇	哇	口	22	Zhengzhuan	不同：「土」和「土」分開
20	卷2	222	00972			嘜	嘜	口	22	Zhengzhuan	不同：「力」
21	卷2	285	X034			哦		口	22	Newly added character	不同：右上
22	卷2	330	01070			趨	趨	走	26	Zhengzhuan	不同：「艸」沒連
23	卷2	333	01073			趨	趨	走	26	Zhengzhuan	不同：「心」不一樣
24	卷2	339	01079			蹇	蹇	走	26	Zhengzhuan	不同：「走」不一樣






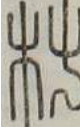












No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
25	卷2	356	01096				越	走	26	Zhengzhuan	不同：底部沒有連在一起
26	卷2	370	01110				趨	走	26	Zhengzhuan	不同：「米」四點連不連
27	卷2	378	01118				跬	走	26	Zhengzhuan	不同：兩個「土」斷開
28	卷2	433	01172				邁			Variant	不同：字型「萬」點沒出頭
29	卷2	441	01180				述	辵	33	Zhengzhuan	不同：字型「市」多一橫
30	卷2	474	01213				逢	辵	33	Zhengzhuan	不同：「丰」第二橫應該比第三橫短
31	卷2	503	01242				邁	辵	33	Zhengzhuan	不同：「垂」第一筆不同
32	卷2	512	01251				遴	辵	33	Zhengzhuan	不同：「夕」相連
33	卷2	714	01439				踽	足	40	Zhengzhuan	不同：「禹」不同

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
34	卷2	745	01470			蹶	蹶	足	40	Zhengzhuan	不同：「人」筆畫不同
35	卷3	3	01535			璽	璽			Variant	不同：「壬」多一筆
36	卷3	7	01539			覓	覓	品	45	Zhengzhuan	不同：「覓」少一筆
37	卷3	98	01630			訊	訊	言	56	Zhengzhuan	不同：「汛」
38	卷3	170	01702			訃	訃	言	56	Zhengzhuan	不同：「刃」少一點
39	卷3	232	01764			說	說	言	56	Zhengzhuan	不同：「兒」
40	卷3	302	01834			訕	訕	言	56	Zhengzhuan	不同：「出」
41	卷3	303	01835			讒	讒			Variant	不同：「出」
42	卷3	304	01836			詭	詭	言	56	Zhengzhuan	不同：「死」

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
43	卷3	470	01993			韃	韃	革	70	Zhengzhuan	不同：「革」直線不相連
44	卷3	531	02050			嶺				Variant	不同：「山」中間直線沒有往下相連
45	卷3	532	02051			彌		彌	72	Zhengzhuan	不同：第一個「口」無閉合
46	卷3	638	02156			臧	臧			Variant	不同：「E」第一橫不同
47	卷3	672	02190			專	專	寸	89	Zhengzhuan	不同：「專」的下半部分未封口
48	卷3	753	02269			致		支	92	Zhengzhuan	不同：左半部不同
49	卷4	87	02399			眷	眷	目	99	Zhengzhuan	不同：上面少一筆
50	卷4	189	02495			翮		羽	108	Zhengzhuan	不同：上半部分
51	卷4	233	02536			隸	隸	隹	109	Zhengzhuan	不同：左下角

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
52	卷4	282	02585				羯	羊	114	Zhengzhuan	不同：右半部不相連
53	卷4	330	02633				鸚	鳥	119	Zhengzhuan	不同：左右相反
54	卷4	363	02666				鷺	鳥	119	Zhengzhuan	不同：「各」不同
55	卷4	401	02704				雛	鳥	119	Zhengzhuan	不同：右半部不同
56	卷4	487	02784						129	Zhengzhuan	不同
57	卷4	544	02841				肱			Variant	不同
58	卷4	719	03016				膊	肉	135	Zhengzhuan	不同：專不相連
59	卷4	721	03018				壘	肉	135	Zhengzhuan	不同：「冂」不相連
60	卷4	724	03021				肱	肉	135	Zhengzhuan	不同：右半部不同

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
61	卷4	818	03110				券	刀	137	Zhengzhuan	不同：上面少一筆
62	卷5	53	03228				簾	竹	143	Zhengzhuan	不同：「鹿」出頭
63	卷5	85	03260				匱			Variant	不同：「自」少一直線
64	卷5	237	03406				粵	于	157	Zhengzhuan	不同：中間點的方向
65	卷5	627	03788				舜	舜	200	Zhengzhuan	不同：右邊部分
66	卷5	643	03804				韋	韋	201	Zhengzhuan	左「力」與右「刀」不同
67	卷6	52	03876				櫻	木	206	Zhengzhuan	字不同
68	卷6	87	03911				櫬	木	206	Zhengzhuan	不同：中間橫斷開
69	卷6	120	03944				穀	木	206	Zhengzhuan	「彡」不同





No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
70	卷6	354	04178			榷	榷	木	206	Zhengzhuan	右邊不同
71	卷6	394	04218			极	极	木	206	Zhengzhuan	不同：右邊是及
72	卷6	429	04253			柎	柎	木	206	Zhengzhuan	不同：右邊是出
73	卷6	521	04333			積	積	禾	220	Zhengzhuan	「禾」不同
74	卷6	527	04339			𠂔	𠂔	巢	222	Zhengzhuan	不同：少一橫一豎
75	卷6	710	04513			邾	邾	邑	229	Zhengzhuan	不同：井中有一點
76	卷6	820	04623			邳	邳	邑	229	Zhengzhuan	不同：左邊中間不封口
77	卷7	194	04813			齊	齊	齊	247	Zhengzhuan	字形不同
78	卷7	195	04814			𡵓	𡵓	齊	247	Zhengzhuan	字形不同

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
79	卷7	305	04924				秦	禾	253	Zhengzhuan	連筆了
80	卷7	501	05111				鞞	宀	269	Variant	少了「𠂔」
81	卷7	600	05207				疝	疒	274	Zhengzhuan	出的字形不同
82	卷7	732	05339				婁	网	279	Variant	婁出頭
83	卷7	864	05459				尗	尗	285	Zhengzhuan	最上方字形不同
84	卷8	34	05500				佻	人	287	Zhengzhuan	旬未連在一起
85	卷8	198	05664				偽	人	287	Zhengzhuan	「為」中間的曲不是斷的
86	卷8	434	05882				裝	衣	300	Zhengzhuan	「月」字連筆了

No.	Vol	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
87	卷8	464	05909			耆	耆	老	302	Zhengzhuan	日字少了一橫
88	卷8	659	06091			歡	歡	欠	320	Zhengzhuan	喜字少了一口
89	卷9	159	06296			髭	髭			Variant	也未封口
90	卷9	382	06500			戔	戔	广	353	Zhengzhuan	戈少了一劃
91	卷9	581	06684			豸	豸	豸	366	Zhengzhuan	出的字形不同
92	卷10	121	06821			駟	駟	馬	370	Zhengzhuan	缶字中間連起來
93	卷10	307	06997			燬	燬	火	382	Zhengzhuan	中間字形不同
94	卷10	407	07097			燬	燬	火	382	Zhengzhuan	亏少了一筆
95	卷10	499	07183			赧	赧	赤	388	Zhengzhuan	多了一橫

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
96	卷10	573	07255			本	本	辶	400	Zhengzhuan	不同
97	卷11	54	07652			漶	漶	水	410	Zhengzhuan	原字形 「夷」中間一筆是連豎的
98	卷11	360	07958			湼	湼	水	410	Zhengzhuan	「足」封口
99	卷11	386	07984			淮	準	水	410	Zhengzhuan	「隹」字形有誤
100	卷11	543	08118			羨	羨	永	418	Zhengzhuan	少一橫
101	卷11	729	08299			鮫	鮫	魚	424	Zhengzhuan	「交」字形有誤
102	卷12	10	08356			臻	臻	至	433	Zhengzhuan	「秦」字形有誤
103	卷12	106	08447			聒	聒	耳	439	Zhengzhuan	字形有誤

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
104	卷12	148	08488			掌	掌	手	441	Zhengzhuan	少一豎
105	卷12	342	08682			揮	揮	手	441	Zhengzhuan	「包」字應連起來
106	卷12	796	09114			匱	匱	匚	459	Zhengzhuan	字形有誤
107	卷13	3	09209			繭	繭	糸	467	Zhengzhuan	「虫」字形不同
108	卷13	43	09249			縷	縷	糸	467	Zhengzhuan	「欠」字形有誤
109	卷13	108	09314			綉	綉	糸	467	Zhengzhuan	字形有誤
110	卷13	111	09317			紕	紕	糸	467	Zhengzhuan	字形有誤
111	卷13	851	x382			勦	勦	力	488	Newly added character	字形有誤
112	卷14	316	10338			輻	輻	車	498	Zhengzhuan	多一筆

No.	Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph-Old evidence	Original Glyph-Ne w evidence	TTF Font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note
113	卷14	525	10542							Variant	多一筆

[\(Back\)](#)

Appendix 4- Error list of TTF Fonts

No.	Vol.	Serial No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submission font	Correspond Modern Char.	SW Radical	SW Radical Number	Type	Note	Font file name	TTF code
1	卷1	291	00273				蕙	艸	12	Zhengzhu an	止的末筆不同	SmallSeal01.ttf	4f2e
2	卷1	342	00324				芄	艸	12	Zhengzhu an	右上角要連起來	SmallSeal01.ttf	4f61
3	卷1	378	00360				蕙 蓄	艸	12	Zhengzhu an	最下面「口」沒有中間豎筆	SmallSeal01.ttf	4f85
4	卷1	480	00462				蕙	艸	12	Zhengzhu an	「兼」的中間部分要連起來	SmallSeal01.ttf	4feb
5	卷1	498	00480				蕙	艸	12	Zhengzhu an	字型「匕」不用出頭	SmallSeal01.ttf	4ffd
6	卷1	514	00496				苑	艸	12	Zhengzhu an	「宀」點不要超出	SmallSeal01.ttf	500d
7	卷1	569	00551				蕙	艸	12	Zhengzhu an	「女」的末筆要封口	SmallSeal01.ttf	5045

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submissi on font	Corres p Mode rn Char.	SW Radic al	SW Radica l Numb er	Type	Note	Font file name	TTF cod e
8	卷1	626	00608				薄	艸	12	Zhengzhu an	「用」的末筆要連	SmallSeal01.ttf	507e
9	卷1	739	00721				蓄	艸	12	Zhengzhu an	兩個「人」字形不與豎筆連	SmallSeal01.ttf	50f2
10	卷1	764	X021					艸	12	Newly added character	左邊辵字第一筆不與第二三筆接	SmallSeal01.ttf	510c
11	卷1	783	00752				葬	艸	14	Zhengzhu an	中間不觸下橫筆	SmallSeal01.ttf	511f
12	卷2	449	01188				遵	辵	33	Zhengzhu an	右邊酉與寸需與原圖改	SmallSeal02.ttf	52ec
13	卷2	473	01212				邁	辵	33	Zhengzhu an	右邊「冫」形參考原圖修正	SmallSeal02.ttf	5304
14	卷2	477	01216				遞	辵	33	Zhengzhu an	「厂」筆形不同	SmallSeal02.ttf	5308

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submissi on font	Corres p Mode rn Char.	SW Radic al	SW Radica l Numb er	Type	Note	Font file name	TTF cod e
15	卷 2	563	01302				連	辵	33	Zhengzhu an	圈起處加一短筆	SmallSeal02.ttf	5362
16	卷 2	735	01460				踵	足	40	Zhengzhu an	足的最後一橫筆不連旁邊的豎筆	SmallSeal02.ttf	5413
17	卷 2	736	01461				蹕	足	40	Zhengzhu an	下方少一豎筆	SmallSeal02.ttf	5414
18	卷 3	202	01734				壽	言	56	Zhengzhu an	工字型缺短豎筆	SmallSeal03.ttf	5530
19	卷 3	531	02050							Variant	「山」中間豎筆往下，從上連下	SmallSeal03.ttf	5685
20	卷 3	609	02127				帝			Variant	上筆豎筆輕觸下筆	SmallSeal03.ttf	56d5
21	卷 3	671	02189				尋	寸	89	Zhengzhu an	上半部依原圖修	SmallSeal03.ttf	571a
22	卷 3	790	02306				甯	用	95	Zhengzhu an	用字第一橫畫碰左豎筆	SmallSeal03.ttf	5794

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submissi on font	Corres p Mode rn Char.	SW Radic al	SW Radica l Numb er	Type	Note	Font file name	TTF cod e
23	卷4	175	02481				翹	羽	108	Zhengzhu an	右上應該是作土，下方兩土再分開一點	SmallSeal04.ttf	5849
24	卷4	192	02498				翾	羽	108	Zhengzhu an	左方厂字筆形應作兩筆	SmallSeal04.ttf	585a
25	卷4	499	02796				壑			Variant	1.橫筆不與左右觸， 2.左下再分開一點	SmallSeal04.ttf	598d
26	卷4	557	02854				髀	骨	134	Zhengzhu an	依原形左邊分開不觸	SmallSeal04.ttf	59c7
27	卷5	7	03182				蕩	竹	143	Zhengzhu an	「勿」字首筆微曲	SmallSeal05.ttf	5b18
28	卷5	121	03296				筴	竹	143	Zhengzhu an	「几」的撇筆依原圖修	SmallSeal05.ttf	5b8a
29	卷5	124	03299				箊	竹	143	Zhengzhu an	1.左邊第二筆左右皆觸 2.左邊一三筆不觸右邊	SmallSeal05.ttf	5b8d

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submission font	Corresp Modern Char.	SW Radical	SW Radical Number	Type	Note	Font file name	TTF code
30	卷5	443	03609				饗	食	180	Zhengzhu an	原圖中間筆形不與食相觸	SmallSeal05.ttf	5cc
31	卷5	457	03623				餘	食	180	Zhengzhu an	原圖的「木」與上橫筆連，依原形改	SmallSeal05.ttf	5cd
32	卷5	534	03697					矢	186	Zhengzhu an	「勿」字首筆微曲	SmallSeal05.ttf	5d2
33	卷6	93	03917				櫛	木	206	Zhengzhu an	「示」的右豎筆不觸上橫筆	SmallSeal06.ttf	5e0
34	卷6	130	03954				𣎵	木	206	Zhengzhu an	曰的第一筆不觸上橫筆	SmallSeal06.ttf	5e2
35	卷6	315	04139				匱			Variant	字型少一筆	SmallSeal06.ttf	5ee
36	卷7	43	04680				日	日	231	Zhengzhu an	依原形改	SmallSeal07.ttf	611
37	卷7	209	04828 避諱字？				鎡	鼎	250	Variant	右下的口要封起來，	SmallSeal07.ttf	61b

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submissi on font	Corres p Mode rn Char.	SW Radic al	SW Radica l Numb er	Type	Note	Font file name	TTF cod e
38	卷7	215	04834				录	录	252	Zhengzhu an		SmallSeal07.ttf	61c2
39	卷7	280	04899				康	禾	253	Zhengzhu an	中間依原圖略方，不分	SmallSeal07.ttf	6203
40	卷7	490	05100				寡	宀	269	Zhengzhu an	內框左邊（頁的左上角）要連	SmallSeal07.ttf	62d5
41	卷7	732	05339				婁	网	279	Variant	婁出頭	SmallSeal07.ttf	63c7
42	卷8	34	05500				徇	人	287	Zhengzhu an	徇的第二筆依原圖	SmallSeal08.ttf	6474
43	卷8	290	05738				卓	匕	289	Zhengzhu an	圈起處加一短筆。	SmallSeal08.ttf	6574
44	卷8	297	05745				炆			Variant	雙十分開	SmallSeal08.ttf	657b
45	卷8	319	05767				臥	卧	297	Zhengzhu an	原圖多刻，「臣」字短橫刪掉	SmallSeal08.ttf	6591

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submissi on font	Corres p Mode rn Char.	SW Radic al	SW Radica l Numb er	Type	Note	Font file name	TTF cod e
46	卷8	434	05882				裝 衣		300	Zhengzhu an	「月」字依原形分	SmallSeal08.ttf	6604
47	卷8	455	x202 避字? 諱					衣	300	Newly added character	右下角的口要封口	SmallSeal08.ttf	6619
48	卷8	520	05957				尿 尾		307	Zhengzhu an	水的右上筆和上筆分	SmallSeal08.ttf	665a
49	卷9	159	06296				髻			Variant	右下部件依原形修	SmallSeal09.ttf	67b6
50	卷10	365	07055				爨 火		382	Zhengzhu an	中間的框是連續的	SmallSeal10.ttf	6ada
51	卷11	173	07771 避字? 諱				洙 水		410	Zhengzhu an	右下的口需封口	SmallSeal11.ttf	6dbc
52	卷11	596	08171				霰 雨		422	Zhengzhu an	依原形修	SmallSeal11.ttf	6f63
53	卷12	248	08588				撫 手		441	Zhengzhu an	豎筆連	SmallSeal12.ttf	7112

N o.	Vo l.	Seri al No.	Serial No. in Tenghua xie version	Original Glyph	20190530 Modify TTF Font	WG2N4688 Submissi on font	Corres p Mode rn Char.	SW Radic al	SW Radica l Numb er	Type	Note	Font file name	TTF cod e
54	卷 13	17	09223				纒	糸	467	Zhengzhu an	請依下圖修正 	SmallSeal13 .ttf	73a5
55	卷 13	294								Variant	依原形改(少一豎筆)	SmallSeal13 .ttf	74ba
56	卷 13	458	09656				蠶	虫	471	Zhengzhu an	左邊工跟虫字分開一點	SmallSeal13 .ttf	755e
57	卷 13	467	09665				蠶	虫	471	Zhengzhu an	中間田依原形略方	SmallSeal13 .ttf	7567
58	卷 14	134	10163				鑄	金	490	Zhengzhu an	下方雙土再分開一點	SmallSeal14 .ttf	7776
59	卷 14	253	10275				魁	斗	496	Zhengzhu an	請依原圖，修方一點	SmallSeal14 .ttf	77ed
60	卷 14	322	10344				車			Variant	第一個車豎筆出頭，但不與下豎筆連 舟第二橫筆連	SmallSeal14 .ttf	7832

[\(Back\)](#)

Appendix 5- Participants at 2019/6/1 meeting

No	Name	Name in Ideograph	Organization
1	Wang Ning	王寧	Beijing Normal University
2	Wang Liun	王立軍	Laboratory of Chinese Character Research and Modern Application, Beijing Normal University
3	Hsueh-Jen, HSU	許學仁	Editor-in-Chief of MOE's dictionary of Chinese character variants
4	Selena Wei (Wei, Lin Mei)	魏林梅	Chinese Foundation for Digitization technology
5	Toshiya SUZUKI	鈴木俊哉	Hiroshima University
6	Chen, Zhuang	陳壯	Chinese Electronics Standardization Institute
7	Wang Xiaoming	王曉明	Institute of Applied Linguistics, Ministry of Education P.R.C
8	Hu Jiajia	胡佳佳	Beijing Normal University
9		漢字研究與 現代應用實 驗室	Laboratory of Chinese Character Research and Modern Application, Beijing Normal University

Appendix 6- Suzuki's submission

Title: Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen

Source: suzuki toshiya

Date: 2019/05/26

1. Background

In WG2 meeting in 2018, there was a discussion whether horse's Guwen (#06958) and Zhouwen (#06959) should be coded separately. Selena suggested to separate them because they are classified in different script: Guwen and Zhouwen.

王	孫	陳	N4688	TCA	毛4	毛5	華東	北師	逢甲	段	述	汪	祁
06957	06957	06957	06956	06957	06955	06960	07906	13585	26861	06686	06714	06477	06712
06958	06958	06958	06957	06958	06956	06961	07907	13586	37018	06687	06715	06478	06713
06959	06959	06959	06958	06959	06957	06962	07908	13649	37009	06688	06716	06479	06714



馬's Zhuanwen, Guwen and Zhouwen in various Shuowen

海源閣本

In WG2, most experts suggested to unify them because their shape difference is quite subtle, and not stable. For example, on N4688 (藤花樹本), 毛4 (汲古閣未改本), 毛5 (汲古閣通行本) look as if there is a rule Guwen is curved to right, Zhouwen is curved to left. But 王 (王昶旧藏本), 孫 (平津館本), and 陳 (陳昌治一篆一行本) do not have such rule. 海源閣本 do not have such rule either, although 海源閣本 is regarded as the source of 藤花樹本.

2. Similar Cases: Distinction by Guwen / Zhuanwen or Zhouwen / Zhuanwen contrast

Adding to 馬, at least, there are 10 pairs whose difference is almost stylistic and deducible. In most of them, Guwen/Zhouwen are related to the characters with different semantics. For example, there are Zhuanwen A₁ and Guwen A₂, and A₂'s glyph shape is quite similar to that of A₁. But A₂ is shown as a Guwen of another Zhuanwen B₁.

2.1. 𪗇

N4688:v01.p09.g13 (Zhouwen of 璿) versus N4688:v04.p34.g07. There is no special note by Xu Xuan.



2.2. 𪗈

N4688:v02.p14.g12 (Zhouwen of 嘯) versus N4688:v08.p42.g01. There is a note by Xu Xuan supposing 2 characters are duplicated (臣鉉等案口部有此籀文嘯字此重出).



2.3. 𪗉

N4688:v02.p42.g08 versus N4688:v02.p42.g10 (Guwen of 邇), in 王昶本 and 平津館本. Also it should be noted that the glyphs in 海源閣本 are almost same with 王昶本/平津館本, not similar to 藤花榭本.



2.4. 𪗊

N4688:v02.p48.g12 (Guwen of 得) versus N4688:v08.p37.g11. There is a note by Xu Xuan supposing 2 characters are duplicated (臣鉉等案彳部作古文得字此重出).



2.5. 鞞

N4688:v03.p30.g09 versus N4688:v05.p18.g09 (Guwen of 鞞). There is no special note by Xu Xuan. One of the remarkable point is that some XiaoXu versions show Guwen by very subtle differentiation (like bar-like stroke or needle-like stroke).



2.6. 羨

N4688:v04.p20.g11 versus N4688:v09.p19.g08 (Guwen of 羨). There is a note by Xu Xuan supposing 2 characters are duplicated (臣鉉等按羊部有羨。羨、進善也。此古文重出。)



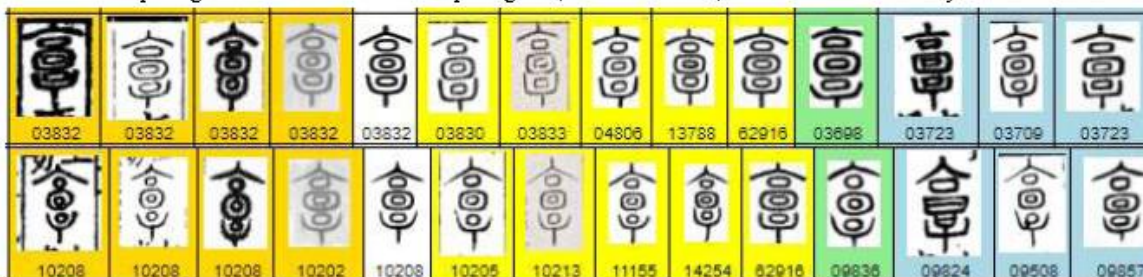
2.7. 𧯞

N4688:v05.p28.g03 (Guwen of 𧯞) versus N4688:v10.p51.g01. There is no note by Xu Xuan. One of the remarkable point is some XiaoXu version use same structure for 2 characters.



2.8. 意

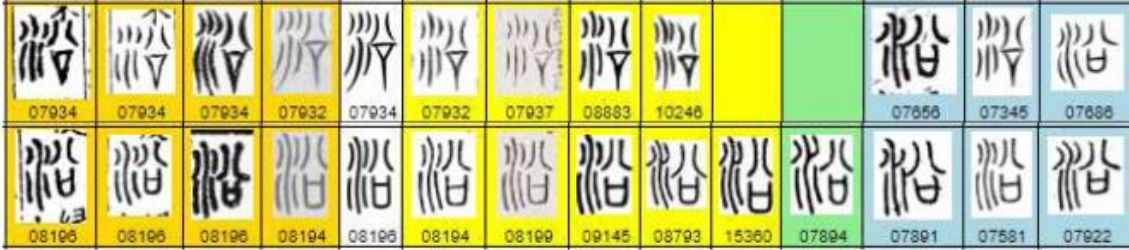
N4688:v05.p37.g13 versus N4688:v13.p44.g10 (Guwen of 壘). There is no note by Xu Xuan.



not 沈 but 沿

2.9. 沿

N4688:v11.p04.g02 (Guwen of 沈) versus N4688:v11.p20.g08. There is a note by Xu Xuan supposing 2 characters are duplicated (鉉等曰口部已有此重出).



2.10. 數

毛 03 下 葉 16 左 g04 versus N4688:v13.p47.g11 (Zhouwen of 壤). In XiaoXu edition, there is a note by Xu Xuan supposing these 2 characters are duplicated (臣鉉等按支部有數此重出). However, Sungben's now we can check has no 數 in 支部.



not 沈 but 沿

3. Concern on the Separate Encoding for Deducible Stylized Variations

3.1. Can we deduce Guwen or Zhouwen Glyph Shape?

Shuowen gives the Guwen of “沈” which is looking like “沿”. Then, how the Guwen of “沿” would be looking like? To distinguish from “沈”, Guwen of “沿” is expected to be distinctively designed? If so, now we cannot know its shape because (currently available version of) Shuowen does not show explicitly?

There is a point to be confirmed. To understand Shuowen Jiezi, there would be an assumption; if only Zhuanwen is given, the author omitted Guwen and Zhouwen because their shapes are almost same with Zhuanwen (in volume 15, the author Xu Shen wrote as “今敘篆文、合以古籀”, Dan Yucai read it as “小篆已改古籀、古籀異於小篆者、則以古籀附小篆之後、曰古文作某、籀文作某、此全書之通例”). It could be understood as, if the glyphic difference was only bar or needle, the author ought have not shown Guwen and Zhouwen explicitly. In following some historical examples of deducible stylization are shown.

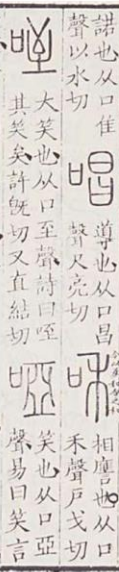
3.2. Example 1: Hanjian in Sung dynasty (汗簡)

Hanjian (汗簡) has been regarded as a collection of Guwen collected from various materials. Although the name of author is not stated in the book, it is regarded as compiled by 郭忠恕 during the end of Five Dynasties to early Sung dynasty. At the end of the book, there is a list of all Shuowen radicals

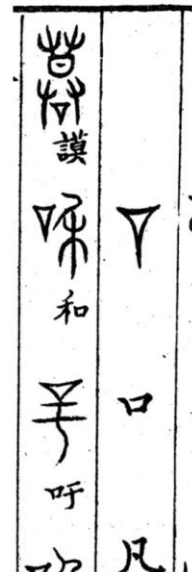
stylized for Guwen (①). It would be useful to algorithmic transform from Zhuanwen as Guwen, by per-component replacement.



①汗簡目錄



②說文
“和”



③汗簡
“和”

We can find such stylized Guwen in the main part of Hanjian. Shuowen does not show Guwen of “和” (②), but Hanjian shows it (③). If we think the glyphic difference between Zhuanwen and Guwen as hard to be deduced and these 2 glyphs should be coded separately, the required codespace for Guwen may increase the codespace for Seal script twice. Can we restrict as “(maybe stylized-)Guwen glyphs in Hanjian is exceptionally important, they should be coded separately, but such from other references should not be coded separately”? It would be unstable.

3.3. Example 2: Three Scripts Stone in Wei Dynasty (魏三体石經)

The stylization by the component replacement might be found in the earlier evidence. Three Scripts Stone (三体石經) is post-Shuowen but pre-Sungben material. If we try to find the Guwen glyphs including triangle (▽), some of them are not found in Shuowen. However, their structures are basically same with those of Zhuanwen. Should we encode yet another 命, 可, 咸 because they are Guwen?



④ 可 has no Guwen in Shuowen

⑤ 徂 has no Zhuanwen/Guwen/Zhouwen in Shuowen

⑥ 咸 has no Guwen/Zhouwen in Shuowen

⑦ 命 has no Guwen/Zhouwen in Shuowen

3.4. Extensible Structure of Separated Encoding of Guwen?

There would be 2 questions:

- In future extensions of Seal script block, these characters (whose glyph shape is quite similar to existing & coded Seal glyph, but distinguished by “this is Zhuanwen, that is Guwen”) should be coded separately?
- If they should be coded separately, which encoding structure is better? At present, we don't have prepared good metadata to identify the glyph shape of Seal, it would be expected that the encoding structure would be something helpful for them. Here are 2 examples.

Zhuanwen	Guwen
...	...
...	...
...	...

- encode all Shuowen heading characters sequentially if they are not Guwen or Zhouwen.
- encode all Guwen at the codepoints which are calculated from the corresponding Zhuanwen and constant offset

SW	SW	SW / Ext1	Ext1 / Ext2

	...		
	...		

	...		
	...		

- encode all Shuowen heading characters sequentially
- characters found in other Old Hanzi materials are coded if they are not in previously coded set (in this example, the characters taken from “Three Scripts Stone” are added, then, “Hanjian” are added)

Appendix 7- Selena& Hsu Hsueh-Jen's feedback

Title: Feedback on Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen

Source: Selena, Hsu Hsueh-Jen

Date: 2019/05/31

Feedback

In the study of Suzuki Toshiya's document Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen, We thinks his ideas are very creative, but based on the integrity, **we still recommend the Shuowen Small Seal Script as the basis for the code, and will respect the decisions of the previous meeting**, please refer to Appendix1- N4853 & Appendix2- N4973.

The reasons for our proposal to complete the code based on Shuowen are as follows:

我們提案以說文解字為基礎完整編碼的理由如下：

Xu Shen in *Shuowen Narration* explained that the principle of the glyphs collected in Shouwen is “今敘篆文，合以古(Guwen)、籀(Zhouwen)”，that is, using small seal as the prefix, and collecting Guwen and Zhouwen, which are the variant characters existed at that time and are called “重文 Chongwen” (variant characters). *Shuowen* contains 9,353 Zhengzhuan characters, including Variants 1136 characters (or 1174 characters / 1175 characters), accounting for about 12.55%. *Shuowen* Zhengzhuan and Variants have a close relationship with converging Chinese character system.

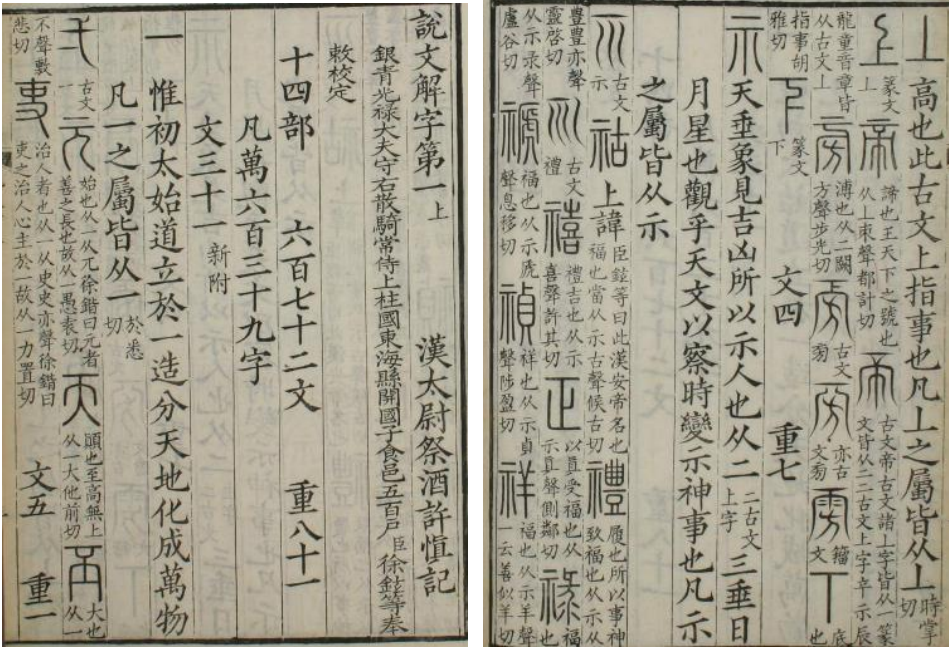
許慎在《說文解字·敘》中說明《說文》收錄字形原則為「今敘篆文，合以古、籀。」，就是以小篆為字頭，並收集當時存在的異體字「古文 Guwen、籀文 Zhouwen」，我們稱為「重文 Chongwen」（variant character），《說文》收錄「正篆」9353字，其中「重文」1136字（或稱1174字／1175字），約佔12.55%。《說文》「正篆」與「重文」有匯聚漢字系統的緊密關係。

The editorial principles of *Shuowen*, if the glyphs of Guwen, Zhouwen and Seal are the same, only retain the Small Seal glyph; if the glyphs of Guwen, Zhouwen and Seal are different, all are retained and are named Chongwen. The arrangement order of *Shuowen* glyphs is as below:

The principle is to list Small Seal glyph first, then Guwen and Zhouwen glyphs

For example, "一", first list Small Seal 一, then list Guwen 𠄎

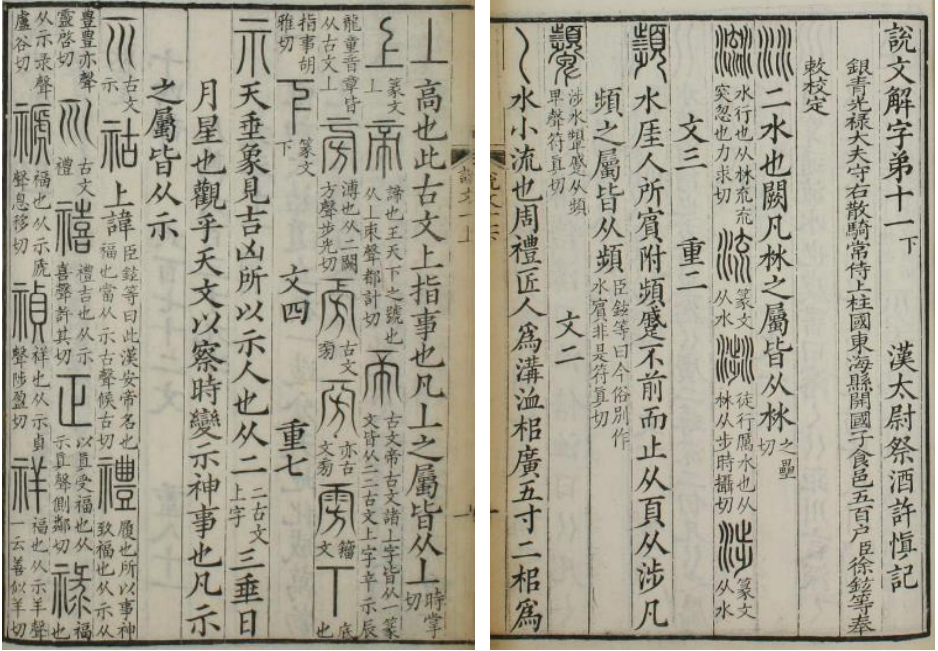
"禮", first list Small Seal 禮, then list Guwen 𠄎



There are also exceptions to the principle

For example, "上", first list Guwen , then list Seal

For radical 𣶒, "流" and "涉", first list Zhouwen , then list Small Seal and .



If all Guwen and Zhouwen glyphs corresponding to Shuowen Small Seal Script are collected, there will be a lot of duplicates, which conflicts with the coding principles we discussed earlier?

《說文解字》編輯原則，如古、籀、篆字形相同的，只保留小篆字形；如古、籀和小篆字形有差別，則同時保留，稱為「重文」。《說文解字》字形排列的先後順序原則先列小篆，再列古、籀等重文

如：「一」下先列小篆一，再列古文式

「禮」下先列小篆禮，再列古文礼。

也有例外變通的原則

如：「上」先列古文二，再列篆文上。

「𣎵」部下「流」、「涉」二字先列从籀文「𣎵」的字形，再列小篆的流、涉。

若每一個 **Shuowen Small Seal Script** 所對應之古文 **Guwen**、籀文 **Zhouwen** 都收入編碼，那豈不就編了很多重複字，與我們之前討論之編碼原則衝突？

These possible duplicate character sets have slight differences in line number, line type and component position, including style difference in Guwen or Zhouwen etc. Considering that Shuowen is not only a dictionary but also a comprehensive sorting and build-up of the small seal glyph system; therefore, even if glyphs that have only subtle differences are worth keeping, and they should be encoded individually. The Zhouwen (Chin characters in the Warring States Period) and Gowen (the Six Kingdoms characters in the Warring States Period) collected in the duplicates in Shuowen are valid supplements to the small seal glyph system, they should be preserved as well and be encoded respectively. See Appendix 2.

字形微別在線條數、線條類型、部件位置等方面有細微差異，包括古文、籀文等風格上的差異。考慮到《說文》本身並不僅僅是一部字典，而是對小篆字形系統的全面整理和構建，因此即使只有細微差異的字形，也有保留的價值，應分別給予編碼。而其中所收錄的重文中的籀文（戰國時期的秦文字）和古文（戰國時期的六國文字）字形，是對小篆字形系統的有效補充，也應該予以保留，分別給予編碼。請見附件二。

Rules and Principles

2.1 Ordering

Characters are ordered based on the Shuowen Jiezi radical sequence and the arrangement order of the characters within the same radical partition of the Tenghuaxie version.

2.2 Selection of character

All Zhengzhuan (正篆) characters, Variants (重文) and newly added characters of Tenghuaxie version are to be included.

2.3 Shapes of characters

Characters from Tenghuaxie version shall have shapes consistent with their original forms in the Tenghuaxie version. Added characters and component variants shall have shapes consistent with their original forms. No purposed adjustment or re-construction.

Appendix 1

Important resolution of N4853 (Shuowen Seal Ad Hock Meeting, 28-29th Aug, 2017):

There is unanimous agreement that Shuowen Seal characters should be encoded as a separate script, in a new block, independent of CJKUI (and not by means of a VS scheme taking CJKUI as Base).

The working name of the script will be “Shuowen Seal”, and the character names will be algorithmically derived beginning with “Shuowen Seal Character U+3XXXX” (per the Road Map, in the TIP=Tertiary Ideographic Plane). Any subsequent supplemental block might be named “Seal Supplement”.

As a separate script, CJKUI guidelines (such as Annex S) will not apply, but new rules will be developed and documented in the process of determining the repertory.

There is agreement that 藤花榭本 may serve as “baseline”, for the determination of the repertory (the number of rows / code points), and for production of a single-column chart in 藤花榭本 glyph style.

There is agreement to create multi-column charts (for reference in ISO/IEC JTC1/SC2/WG2 N4853 developing the Shuowen Seal encoding methodology, repertory, and property data), including columns representing the glyphs of specific important editions of Shuowen. The multi-column chart data will include at minimum 藤花榭本 and 陳昌治本 columns (glyphs and mappings), but may also include data for additional columns as available.

There is agreement that issues related to 避諱 (taboo character deformation / glyph substitution) will be addressed in conjunction with multicolumn chart development (perhaps by means of a VS scheme).





Appendix 2



The proposal content of N4973 is mainly for the topic that n4853 needs to be dealt with, namely Duplicate and Taboo character deformation:












N4973 的提案內容，主要針對 n4853 留待處理的議題，即 Duplicate 與 Taboo character deformation :

Duplicate:

Exact duplicate, a total of 15 sets (see the table below). These duplicate sets are merely different in line shape and length, and they have no influence on glyph structure. It has been confirmed only one code point will be encoded.

No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning	Note
1	00939	口	右		you4	助也。从口从又。	encode
	02078	又	右		you5	手口相助也。从又从口。	
2	01005	口	否		fou3/pi3	不也。从口从不。	encode
	08352	不	否		fou3/pi3	不也。从口从不，不亦聲。	

No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning	Note
3	00888	口	吹		chui1	噓也。从口从欠。	encode
	06060	欠	吹		chui1/chui1	出气也。从欠从口。	
4	00980	口	吁		xu1	驚也。从口于聲。	encode
	03407	亏	吁		xu1	驚語也。从口从亏，亏亦聲。	
5	02780	放	敖		ao2	出游也。从出从放。	encode
	04307	出	敖		ao2	游也。从出从放。	
6	03436	豈	愷		kai3	康也。从心、豈，豈亦聲。	
	07327	心	愷		kai3	樂也。从心豈聲。	encode
7	07729	水	湓		tuo1/tuo4	河津也。在西河西。从水垂聲。	encode
	00881	口	湓		tuo4	口液也。从口垂聲。唾或从水。	
8	07347	心	愨		zhe2	敬也。从心折聲。	encode
	00899	口	愨		zhe2	知也。从口折聲。哲或从心	
9	06118	欠	嗽		you3	愁兒。从欠幼聲。	encode
	01029	口	嗽		you1	鹿鳴聲也。从口幼聲。呦或从欠	
10	10374	車	輟		chuo4	車小缺復合者。从車殺聲。	encode


No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning	Note
	05346	网	輟		zhuo2	捕鳥覆車也。从网𠂔聲。𠂔或从車	
11	03072	刀	劓		duo2	判也。从刀度聲。	encode
	02259	支	劓		du4	閉也。从支度聲。讀若杜。劓或从刀。	
12	03915	木	梃		ni3	木也。實如梨。从木尼聲。	encode
	04191	木	梃		chi4/ni3	箕柄也。从木尸聲。屎或从木尼聲。	
13	08507	手	搯		gong3	攤也。从手珣聲。	encode
	02063	扌	搯		gong3	衰也。从扌工聲。珣或加手。	
14	09582	虫	蝥		mao2	蝥蝥也。从虫敕聲。	encode
	09707	虫	蝥		mou2/mao2	蟲食艸根者。从蟲，象其形。吏抵冒取民財則生。蝥或从敕。	
15	10500	冂	院		yuan4	堅也。从冂完聲。	encode
	05054	宀	院		huan2/yuan4	周垣也。从宀奂聲。窳或从冂。又爰眷切。	


Possible duplicate. Considering that Shuowen is not only a dictionary but also a comprehensive sorting and build-up of the small seal glyph system; therefore, even if glyphs that have only subtle differences are worth keeping, and they should be encoded individually.

n4973 proposed 6 groups of glyphs, and Mr. Suzuki proposes 10 groups of glyphs in the document of “Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen” (2019/5/26), of which 4

groups are repeated with n4973. Please see annex 3. Since "possible supPLICATE coding" has not yet fully reached consensus, it will be discussed at this meeting. For the other comments on Suzuki, please see N4922 and "Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen".

N4973 提出 6 組字形，2019/5/26/Suzuki 先生提出 10 組字形，其中 4 組與 n4973 重複。請見附件三。由於「possible supPLICATE 分開編碼」尚未完全取得共識，將於這次會議上進行討論。Suzuki 的其他相關意見，請見 N4922 及“Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen”。

No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning
1	00314	艸	藍		lan2	染青艸也。从艸監聲。
	00644	艸	藍		lan2	瓜蒞也。从艸監聲。
2	00519	艸	難		ran2	艸也。从艸難聲。
	07002	火	難		ran2	燒也。从火狀聲。或从艸難。
3	07909	水	沿		yan2	緣水而下也。从水占聲。《春秋傳》曰：“王沿夏。”
	07647	水	沿		yun3	水。出河東東垣王屋山，東爲沛。从水允聲。古文。
4	03714	亭	亭		guo1	度也，民所度居也。从回，象城口之重，兩亭相對也。或但从口。（音韋。）凡口之屬皆从口。
	09841	土	亭		yong1	城垣也。从土庸聲。古文墉
5	06088	欠	歛		xiao4	吟也。从欠肅聲。《詩》曰：“其歛也訶。”
	00932	口	歛		yu4	吹聲也。从口肅聲。籀文嘯从欠
6	06019	見	尋		de2	取也。从見从寸。寸，度之，亦手也。

No.	Serial No. in Tenghuaxie version	SW Radical	Corresp Modern Char	TTF Font	pronunciation	meaning
	01350	彳	尋		de2	行有所得也。从彳尋聲。古文省彳。

Taboo character deformation.

According to expert verification, the taboos of Tenghuaxie version are presented in two ways of changing the character or omitting the strokes. N4973 proposed 8 taboo characters. After checking, we also found 3 taboo characters (the table below is indicated by yellow background), a total of 11 taboo characters.

There are two ways to deal with it: A. if it is confirmed “changing the character”, please refer to the other version to restore it; B. If it is confirmed “omitting the strokes”, use the original glyph as the prefix, and treat other characters by IVS/IVD.

According to expert verification, 藤花樹本的避諱字以改字或省略筆形兩種方是呈現。N4973 提出 8 個避諱字，經查，我們另找出 3 個避諱字，共 11 個。

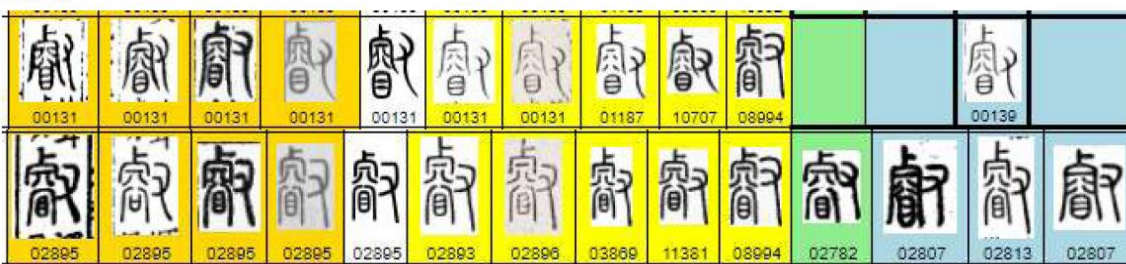
處理方式分為兩種：A.確為避諱改字，則參酌其他版本還原；B.確為避諱缺筆，以不缺筆的原形字做字頭，其他字以 IVS/IVD 處理。



Appendix 3

Above is Section 2 of “Request for Discussion on the Separation of Zhuanwen / Guwen / Zhouwen” (from Mr. Suzuki), the table below is the data of N4688 -SmallSealAppendix.

2.1. 叡

N4688:v01.p09.g13 (Zhouwen of 璿) versus N4688:v04.p34.g07. There is no special note by Xu Xuan.



Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 1	131	00127					Variant

Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 4	504	02799			壑		Variant

2.2. 𪛗

N4688:v02.p14.g12 (Zhouwen of 𪛗) versus N4688:v08.p42.g01. There is a note by Xu Xuan supposing 2 characters are duplicated (臣鉉等案口部有此籀文𪛗字此重出).



Repeated with n4973.

2.3. 𪛘

N4688:v02.p42.g08 versus N4688:v02.p42.g10 (Guwen of 𪛘), in 王昶本 and 平津館本. Also it should be noted that the glyphs in 海源閣本 are almost same with 王昶本/平津館本, not similar to 藤花樹本.



Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 2	542	01281			𪛘	疋	Zhengzhuan
卷 2	544	01283			𪛙		Variant

2.4. 得

N4688:v02.p48.g12 (Guwen of 得) versus N4688:v08.p37.g11. There is a note by Xu Xuan supposing 2 characters are duplicated (臣鉉等案彳部作古文得字此重出)



Repeated with n4973.

2.5. 鞞

N4688:v03.p30.g09 versus N4688:v05.p18.g09 (Guwen of 鞞). There is no special note by Xu Xuan. One of the remarkable point is that some XiaoXu versions show Guwen by very subtle differentiation (like bar-like stroke or needle-like stroke).



Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 3	471	01994			鞞	革	Zhengzhuan
卷 5	263	003432					Variant

2.6. 美

N4688:v04.p20.g11 versus N4688:v09.p19.g08 (Guwen of 美). There is a note by Xu Xuan supposing 2 characters are duplicated (臣鉉等按羊部有美。美、進善也。此古文重出。)



Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 4	296	02599			姜	羊	Zhengzhuan
卷 9	277	06407			姜		Variant

2.7. 恁

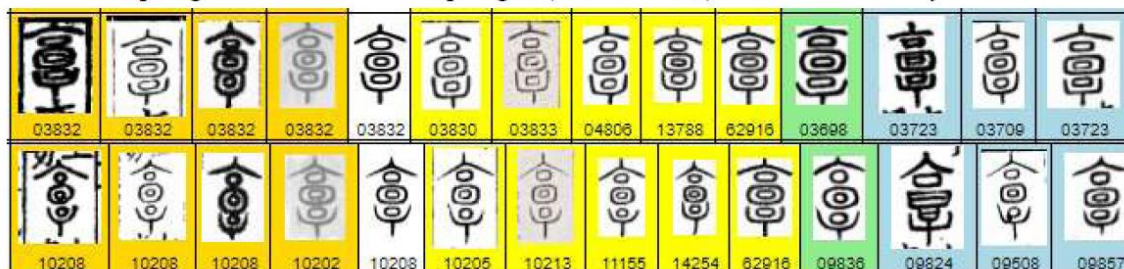
N4688:v05.p28.g03 (Guwen of 餵) versus N4688:v10.p51.g01. There is no note by Xu Xuan. One of the remarkable point is some XiaoXu version use same structure for 2 characters.



Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 5	407	03573			恁		Variant
卷 10	750	07432			恁	心	Zhengzhuan

2.8. 亭

N4688:v05.p37.g13 versus N4688:v13.p44.g10 (Guwen of 壙). There is no note by Xu Xuan.



Repeated with n4973.

2.9. 沿

N4688:v11.p04.g02 (Guwen of 沈) versus N4688:v11.p20.g08. There is a note by Xu Xuan supposing 2 characters are duplicated (鉉等曰口部已有此重出).



Repeated with n4973.

2.10. 數

毛 03 下.葉 16 左.g04 versus N4688:v13.p47.g11 (Zhouwen of 壞). In XiaoXu edition, there is a note by Xu Xuan supposing these 2 characters are duplicated (臣鉉等按支部有數此重出). However, Sungben's now we can check has no 數 in 支部.



Vol.	Serial No.	Serial No. in Tenghuaxie version	Original Glyph	TTF font	Corresp Modern Char.	SW Radical	Type
卷 13	700	09887			數		

(End of document)