

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

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Title: Glyph Corrections for 31 Tangut ideographs and one Tangut component
Source: Andrew West and Viacheslav Zaytsev
Status: Individual Contribution
Action: For consideration by JTC1/SC2/WG2 and UTC
Date: 2017-09-07

1. Introduction

Document WG2 N4588 (2014-08-12, last revision R2 2014-10-01) identified 76 Tangut characters with incorrectly written glyphs in the primary source for the Tangut repertoire (Li Fanwen's 2008 *Tangut-Chinese Dictionary*) whilst under ballot, and these corrections were incorporated into the published repertoire of the Tangut block (ISO/IEC 10646:2014 Amd. 2 and Unicode 10.0).

Document WG2 N4723 (2016-04-21) identified an additional three Tangut glyph corrections in the published Tangut repertoire.

This document identifies a further thirty-one Tangut ideographs that are incorrectly written in the ISO/IEC 10646 and Unicode code charts, as well as one Tangut component. The glyphs for these thirty-two characters should be corrected as shown in Table 1. Eight of these are individual corrections, and twenty-three relate to one component (U+18885 𐰪 Tangut Component-134) which has an incorrect shape. Two characters (U+17378 and U+17D36) have a revised stroke count, and one character (U+18488) has a revised radical (Radical 458 𐰪 to Radical 325 𐰪).

Table 1. Summary of Glyph Corrections

Character	Current Glyph	Proposed New Glyph	Old Stroke Count	New Stroke Count
U+17159	𐰪	𐰪	10	10
U+1732E	𐰪	𐰪	10	10

U+17336	𪗇	𪗇	8	8
U+17378	𪗈	𪗈	10	9
U+173E1	𪗉	𪗉	11	11
U+173EB	𪗊	𪗊	12	12
U+173EC	𪗋	𪗋	12	12
U+173F4	𪗌	𪗌	13	13
U+173FB	𪗍	𪗍	15	15
U+173FF	𪗎	𪗎	16	16
U+17403	𪗏	𪗏	20	20
U+1756E	𪗐	𪗐	14	14
U+176E4	𪗑	𪗑	13	13
U+1788A	𪗒	𪗒	9	9
U+1788B	𪗓	𪗓	11	11
U+1788C	𪗔	𪗔	13	13
U+1788D	𪗕	𪗕	14	14
U+17B16	𪗖	𪗖	12	12
U+17B17	𪗗	𪗗	15	15
U+17B5B	𪗘	𪗘	14	14
U+17D36*	𪗙	𪗙	12	13

U+17F8B	𪛈	𪛈	9	9
U+17FBB	𪛉	𪛉	13	13
U+181B2	𪛊	𪛊	11	11
U+181C0	𪛋	𪛋	13	13
U+1820D	𪛌	𪛌	10	10
U+1823D	𪛍	𪛍	14	14
U+183B3	𪛎	𪛎	10	10
U+18488	𪛏	𪛏	13	13
U+1841D	𪛐	𪛐	14	14
U+187C6	𪛑	𪛑	15	15
U+18885	𪛒	𪛒	4	4

* We are grateful to Jerry You (Yóu Chéngyǔ 游程宇) for pointing out the glyph correction for U+17D36.

2. Tangut Component 134





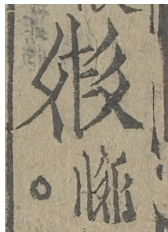


U+18885 𐰇 Tangut Component-134 is written with a slanting first stroke in Li Fanwen's 2008 dictionary and most other modern sources, as shown for example by U+1788A 𐰇 (on left side), U+173E1 𐰇 (in middle), and U+183B3 𐰇 (on right side):



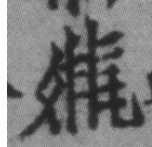



Character (current glyph)	Nishida 1966	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008
U+1788A 𐰇	 69-051	 2965	 3582	 2004/2082	 5037	 4044
U+173E1 𐰇	 202-084	 5608	 1572	 0895/0942	 2677	 2503
U+183B3 𐰇	 236-045	 2754	 4706	 4704/4859	 0461	 5435

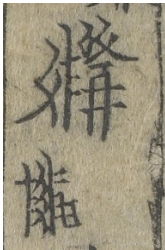

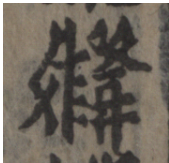

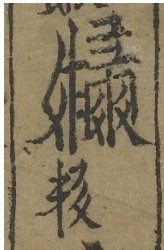
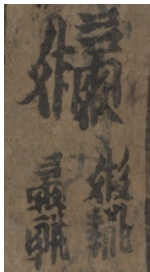

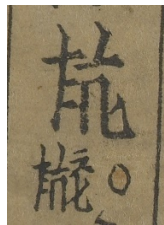

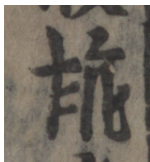

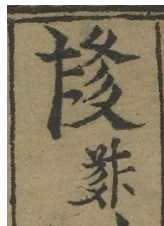


However, original Tangut sources almost all show that the first stroke is horizontal rather than slanting (i.e. 𐰇 rather than 𐰇). In contrast, the similar component 𐰇 has a very distinct slanting first stroke. A comparison of characters with these two components from the *Homophones (Tongyin)* is shown below.


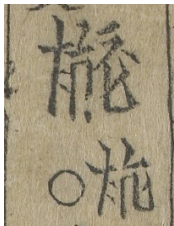
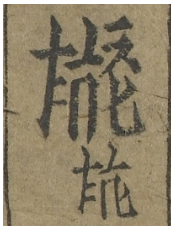
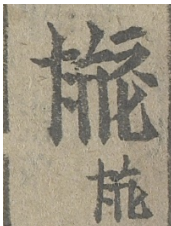
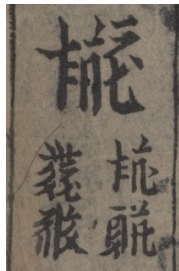
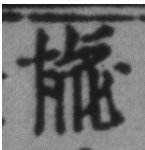
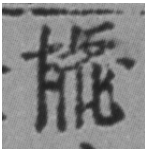


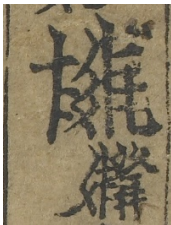

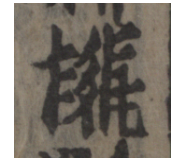


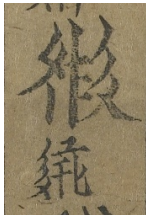




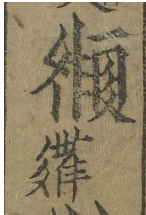

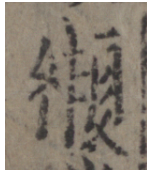
Component 134 (current glyph) 𐰇	U+1788A 	U+173E1 	U+183B3 
Component 258 𐰇	U+17E89 	U+17899 	U+17C0B 






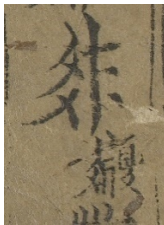



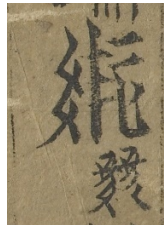
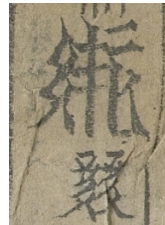
There are a total of 23 encoded Tangut characters with Component 134 𐞪, and evidence for their correct glyph forms is presented below. These examples convincingly indicate that the first stroke of the component 𐞪 should be horizontal rather than slanting. The only example with a slanting first stroke is one instance from *Sea of Characters* for U+1788B.



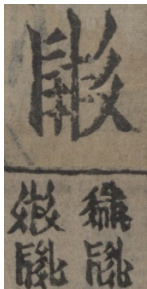
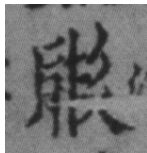


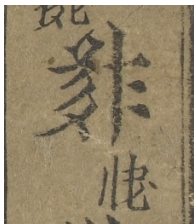


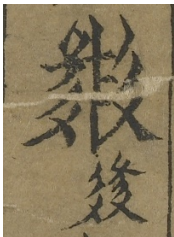



Character (current glyph)	<i>Tongyin A</i>	<i>Tongyin B2</i>	<i>Tongyin D</i>	<i>Wenhai</i>	<i>Zhangzhongzhu</i>
U+17159 𐞩	 03B66		 04B51	 1 63.242	
U+17336 𐞫	 18A65	 19A16	 19A16		
U+173E1 𐞭	 24A26	 25A12	 25A12	 1 63.242	 A 32:1A
U+173EB 𐞮	 49A67	 49B61		 1 90.262	 B 22:4D

Character (current glyph)	<i>Tongyin A</i>	<i>Tongyin B2</i>	<i>Tongyin D</i>	<i>Wenhai</i>	<i>Zhangzhongzhu</i>
U+173EC 	 27B22	 28A12	 28A12	 1 90.262	
U+173F4 	 37B18	 38A36		 1 82.222  3 07.211	 A 30:3C  B 30:3C
U+173FB 	 40B72	 41A46		 3 19.222	

Character (current glyph)	<i>Tongyin A</i>	<i>Tongyin B2</i>	<i>Tongyin D</i>	<i>Wenhai</i>	<i>Zhangzhongzhu</i>
U+173FF 𪛗	 49A43	 49B35		 1 18.223	
U+17403 𪛛	 35B22	 36A55		 1 27.121	
U+1788A 𪛚	 10A46	 11A47	 11A47	 1 66.162	
U+1788B 𪛛	 36B72	 37B31		 1 20.121  3 17.242	

Character (current glyph)	<i>Tongyin A</i>	<i>Tongyin B2</i>	<i>Tongyin D</i>	<i>Wenhai</i>	<i>Zhangzhongzhu</i>
U+1788C 𪛈 	 07A22	 10A24	 10A24	 1 20.171	 A 13:2A  B 13:2A
U+1788D 𪛉 	 18A25	 15A24	 15A24	 1 18.223	
U+17B16 𪛖 	 09B42	 10B34	 10B34	 1 79.171	
U+17B17 𪛗 	 09B43	 10B33	 10B33	 1 82.121	

Character (current glyph)	<i>Tongyin A</i>	<i>Tongyin B2</i>	<i>Tongyin D</i>	<i>Wenhai</i>	<i>Zhangzhongzhu</i>
U+17B5B 𐵑	 32B66	 35B11			 A 19:2C  B 19:2C
U+17F8B 𐵑	 19A75	 20A17	 20A17	 1 71.212	
U+17FB9 𐵑 U+17FBB 𐵑 (see 2.1)	 33A75	 33B75	 33B75		
U+1820D 𐵑 (see 2.2)	A ghost character, not attested in any original Tangut source as far as we can ascertain				

Character (current glyph)	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Zhangzhongzhu
U+1823D 𪚦	 32B67	 35A78		 1 52.212	 A 35:6B  B 35:6B
U+183B3 𪚻	 11A17	 12A17	 12A17	 1 19.112	
U+1841D 𪚽		 38A66		 1 51.132	
U+187C6 𪚾		 38B25		 1 63.242	

2.1 U+17FBB

U+17FBB 𠂔 (L2008-2146) is an erroneous form of U+17FB9 𠂓 (L2008-2175) that is only listed in Li Fanwen 1986, Li Fanwen 1997, and Li Fanwen 2008. It is probably a mistake based on the glyph of the B2 edition of *Tongyin* where the three horizontal strokes of 𠂓 only just cross the vertical stem.

Character (current glyph)	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008
U+17FB9 𐄛	𐄛 5664		𐄛 3788/3922	𐄛 4505	𐄛 2175
U+17FBB 𐄛		𐄛 3533			𐄛 2146

Li Fanwen 1997 p. 408

[齒頭音 tsu 2.1 音租]

𢇛 2146

(不識)

𪗇 𪗇 ki 1. 30 tsu 2. 11 [鷄租] 已 ? (同 33A7)。

Li Fanwen 2008 p. 355

𦵒 2146

(訛體,正體見 2175 𧯛 214150。)

Li Fanwen 1997 p. 414

2141
50

𧯛
2175

[齒頭音 tshwu 2.1 音粗]

shame; disgrace

耻也。(名)

纓 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕
紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕 紕
耻：從？方羞；耻者羞耻也，害臊也，
耻也，愧也，羞也，有愧頌詞之義（海
15.153）。（按：此處誤將紕釋為纓）

Li Fanwen 2008 p. 360

耗

〔齒頭音 tshwu 2.1 音卒〕

for a particular person, occasion, purpose,
etc.

專心、虔誠也。(形)

𪗇𪗇 tshwu 2.1 kji 1.30[卒吃]所專(同 33A7)。

𢇛 𢇛𢇛𢇛𢇛𢇛 專：神穿成右(寶 61.52)。

純甄粹鮮滌 虔：行爲心著（甚爲專心）（同丁
33B75 背注）。

2.2 U+1820D

U+1820D 𐞤 (L2008-0831) is a ghost character, not attested in any original Tangut source as far as we can ascertain. It was included in Li Fanwen's dictionary because it was discussed by earlier scholars such as A. I. Ivanov (1878–1937) and Wang Jingru (1903–1990), as shown below.

Li Fanwen 1997 p. 163

𐞤
0831

[舌頭音 no(聲調不詳)音那]

surname

彌藥也。(名)

(按:王靜如認為“𐞤 𐞤其音[米拿],伊鳳閣曾謂為蒙古、西藏稱西夏之詞。余按藏文作 mi-nyog 及 me-nyag 二音”(國83)。此字其它詞書未見,疑有筆誤。《同音》及《文海》上“彌藥”二字為𐞤 𐞤 mi 2.28 nia 2.18,而非𐞤 𐞤。謹錄于此,供讀者參考。)

Li Fanwen 2008 p. 142

𐞤
0831

[舌頭音 no(聲調不詳)音那]

a nation

彌藥也。(名)

(按:王靜如認為“𐞤 𐞤其音[米拿]),伊鳳閣曾謂為蒙古、西藏稱西夏之詞。余按藏文作 mi-nyog 及 me-nyag 二音”(國83)。此字其它詞書未見,疑有筆誤。《同音》及《文海》上“彌藥”二字為𐞤 𐞤 mi 2.28 nia 2.18,而非𐞤 𐞤。謹錄于此,供讀者參考。)

Wang Jingru 1932 p. 77

西夏國名考

王靜如

[大夏—𐞤 𐞤,——黨項—羌——於彌—昆
—繡昆—𐞤—𐞤 𐞤—楚之罕姓——
河西,——外秦及尼定]

Wang Jingru 1932 p. 83

西夏自稱之名彌之同音昆及繡昆外尚有𐞤及𐞤 𐞤等名。𐞤字輒對中國之“番”⁽¹⁸⁾據伊鳳閣(A.Ivanov)所論其音 mi,以有即西夏之 mi (人)其音為人。⁽¹⁹⁾𐞤 𐞤其音米拏,伊鳳閣曾謂為蒙古、西藏稱西夏之詞。余按藏文作 mi-nyag 及 me-nyag 二音。

與羅君美書

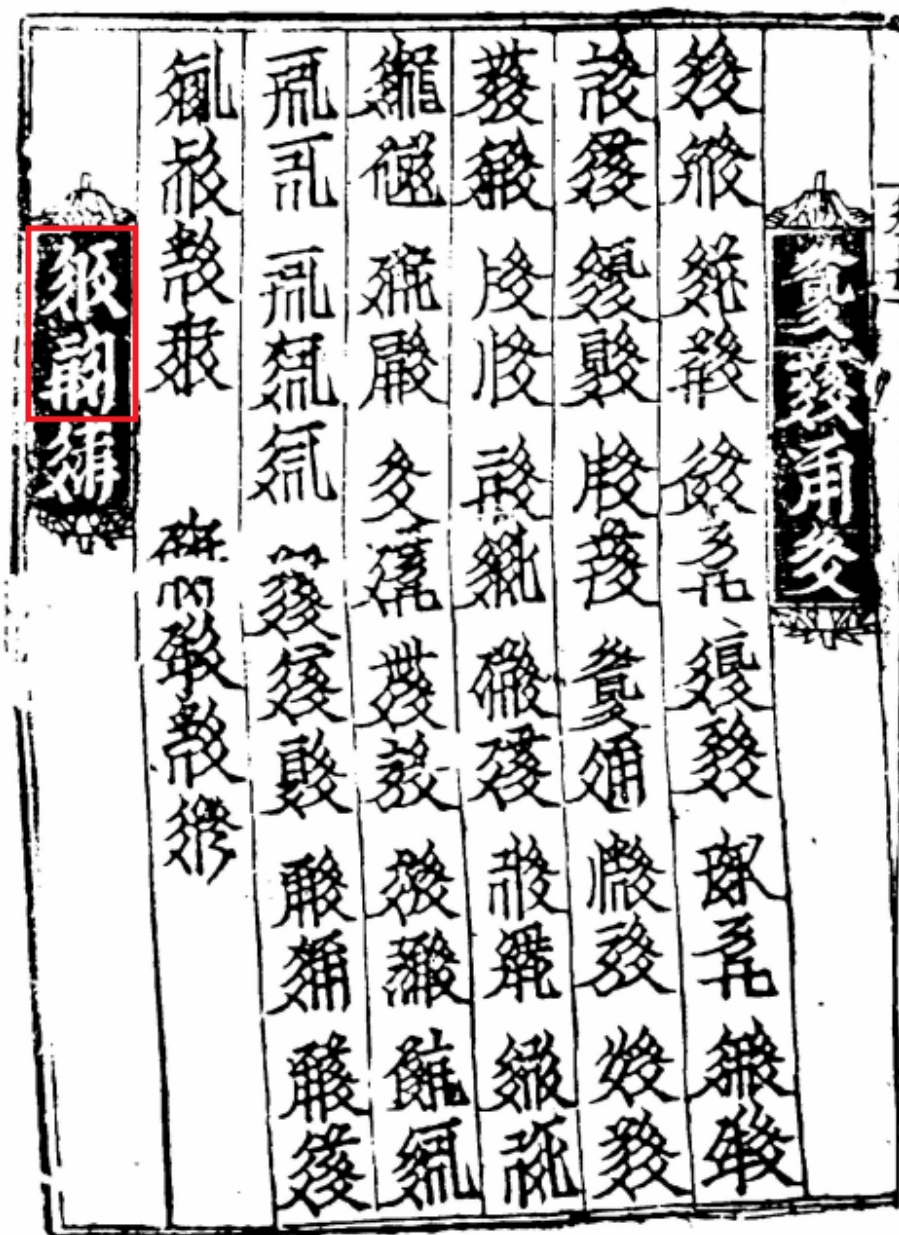
A. Ivanof.

君美世臺雅鑒久未晤談時深渴念前者在津
 提議由鄙人預備研究西夏字并西藏音一節
 當卽着手以便鑽研查西夏字偶發見有𐽳字
 按掌中珠第八篇有胡桃名目此字加艸字頭
 恰與葫字相對可以規定無艸字頭音應與之
 相同但帶上艸字頭音拏無艸字頭亦音拏余
 意蒙古西藏稱西夏民族曰米那乃番胡相對
 之字卽米拏𐽳是也又第八篇有蒲桃薹茅
 名目音麥諾中國蒲萄是從希臘移來西夏文
 化物質名目多來自小亞細亞所以麥諾名目
 必爲小亞細亞之 Vainos 也明矣有外國人名
 Odogson 者論怕未尔人種中有一種人叫 sya-
 ni 旁有拶字西藏音 Vca 就是漢字𐽳卽人也

與羅君美書 古寫本抱朴子(下)

Ivanov gives 𐽳𐽳 “mi-na” (米拏) as an autonym of the Tangut people, but it is unclear what the source for this word is. It is possible that 𐽳𐽳 is a copying mistake by Ivanov for 𐽳𐽳 “Tangut people” which occurs as a heading in the Tangut monolingual glossary *Mixed Characters (Zazi)* (see picture below). As Ivanov compared the character 𐽳 with another character 𐽳 (U+17751) which occurs in *Pearl in the Palm (Zhangzhongzhu)* (14:2A) and he did not notice difference in the bottom right component of U+17751 (𐽳 rather than 𐽳), we cannot exclude the possibility that 𐽳 is a mistake by Ivanov for 𐽳 𐽳 𐽳 (cf. Li Fanwen 1997, p. 802, no. 4390 where the character 𐽳 is miswritten with 𐽳 component, which shows that scholars can confuse the two components). However, we do not consider this hypothesis to be preferred because the character 𐽳 𐽳 𐽳 does not occur in Tangut sources either. We should also note that as far as we can tell the earlier related paper of Ivanov (1923) does not mention the character 𐽳.

Although we have not been able to find primary evidence for U+1820D, we think it is best to modify the glyph from 𐽳 to 𐽳 in order to be consistent with all other characters with the 𐽳 component.


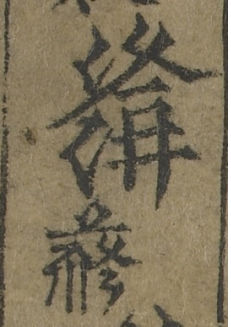




3. Individual Glyph Corrections

3.1 U+1732E


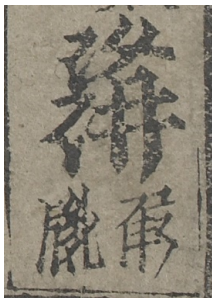

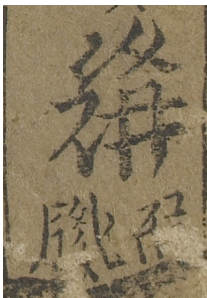
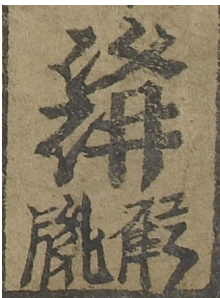
Character (current glyph)	Nishida 1966	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+1732E 	 180-093	 4141	 0493	 3161/3280	 1205	 1543	



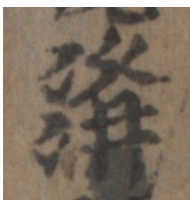
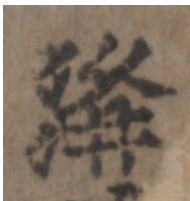
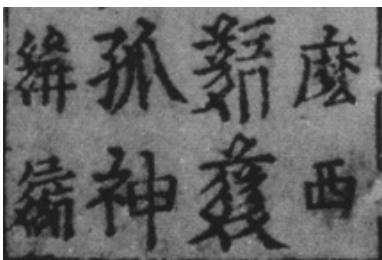
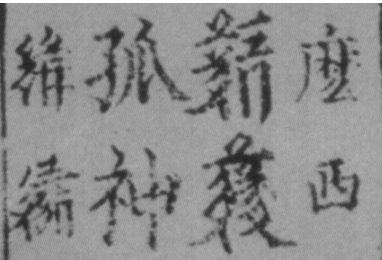

The top-right component of U+1732E 𐄢 is written incorrectly in Li Fanwen's 2008 dictionary and in Kychanov's 2006 dictionary. In all Tangut sources the left-slanting slope of the top-right component extends to the left edge of the character, bisecting the left-side component. The correct form of the character is given in Nishida 1966, Sofronov 1968, and Han Xiaomang 2004.

<i>Tongyin A</i> 09A52	<i>Tongyin B2</i> 09B72	<i>Tongyin B3</i> 09B72	<i>Tongyin D</i> 09B72
			
U+1732E	U+1732E	U+1732E	U+1732E



<i>Wenhai 1</i> 91.132	<i>Zhangzhongzhu</i> A 23:1B	<i>Grains of Gold</i> 10A0108
		
U+1732E	U+1732E	U+1732E



Note that the similar character U+1732D 𢇛 (L1542) is different from U+1732E in this respect, and does not have an extended left-slanting stroke. Even though in some sources shown below the left-slanting stroke just touches the 彡 component, unlike U+1732D it never crosses it in U+1732E. The code chart form of U+1732D is correct as it is, and does not need any modification.


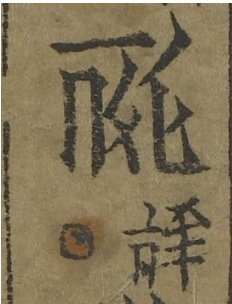

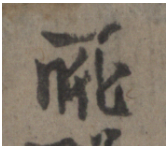
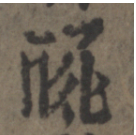

<i>Tongyin A</i> 28B14	<i>Tongyin B1</i> 29A18 (1 st folio)	<i>Tongyin B1</i> 29A18 (2 nd folio)	<i>Tongyin B2</i> 29A18	<i>Tongyin B3</i> 29A18
				
U+1732D	U+1732D	U+1732D	U+1732D	U+1732D

<i>Tongyin C</i> 29A18	<i>Tongyin D</i> 29A18	<i>Wenhai 1</i> 6.111	<i>Zhangzhongzhu</i> A 06:4E = B 07:1E	<i>Grains of Gold</i> 10A0205
		 	 	
U+1732D	U+1732D	U+1732D	U+1732D	U+1732D

3.2 U+17378

Character (current glyph)	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+17378 	 0015/0016	 4241	 0486	






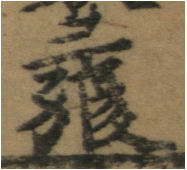
U+17378  “horse with white hooves” is included in Kychanov’s 2006 dictionary and Li Fanwen’s 2008 dictionary. A variant form with a single horizontal line across the top which is attested in the A edition of the *Homophones (Tongyin)* is encoded as 1700F . The form given in Li Fanwen 2008 (and thus in the code charts) seems to be based upon the glyph for the character in the definition for an entry for a different character in the *Sea of Characters (Wenhai 1. 36.152)*. However, this is not a good example to rely on as it is not the main entry for this character (the main entry is not in the extant copy of *Sea of Characters*), and the glyph is not well-written. In another entry in *Sea of Characters (Wenhai 1. 11.153)*, in the *Homophones B* edition, and in other Tangut sources this character is shown with a single unbroken horizontal stroke above the left and middle components, so we believe that the form with two horizontal strokes on the top is a mistake. The correct form of the character is given in Han Xiaomang 2004.

<i>Tongyin A</i> 07B15	<i>Tongyin B2</i> 08A53	<i>Tongyin D</i> 08A53	<i>Wenhai 1</i> 11.153	<i>Wenhai 1</i> 36.152	<i>Zazi</i> 8B0501
					
U+1700F	U+17378	U+17378	U+17378	U+17378	U+17378


3.3 U+1756E

Character (current glyph)	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+1756E 	 4415	 1390	 1272/1329	 3292	 1361	


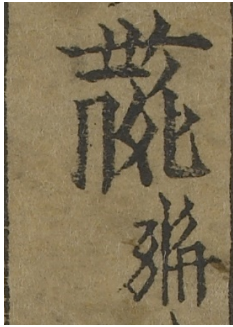

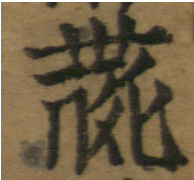

The lower right hand component is wrong in all modern sources except Sofronov 1968. Based on the original Tangut sources it should be 𐞪 not 𐞩 (a combination that is not found in any other Tangut character).

<i>Tongyin A</i> 38B74	<i>Tongyin B2</i> 39A65	<i>Wenhai 1</i> 19.222	<i>Wenhai 1</i> 19.222	<i>Wenhai 1</i> 74.271	<i>Proverbs</i> 12A0416
					
U+1756E	U+1756E	U+1756E	U+1756E	U+1756E	U+1756E

3.4 U+176E4

Character (current glyph)	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+176E4 𪗗	 0688	 2389	 1648/1719	 4242	 4110	

U+176E4 𪗗 “shed” is a homophone of U+17378 discussed above (both read ²par₁), and the bottom part of the character should be derived from U+17378 (with 𪗗 “wood” above as the semantic element). However, the glyph used in LiFanwen 2008 does not match either the glyph for U+17378 (L0486) in Li Fanwen 2008 or the proposed corrected glyph discussed above. This character only occurs in a very few sources, but on the whole they do show that the bottom part of U+176E4 should match the proposed new glyph for U+17378, with a single horizontal stroke extending two-thirds of the way across the character (note that the shorter horizontal stroke in the *Tongyin* A and D examples is still longer than would be expected for the 𪗗 component). One of the two examples in *Proverbs* seems to show the horizontal stroke broken into two, but this is anomalous. Sofronov 1968 and Han Xiaomang 2004 give the same glyph form as we propose.

<i>Tongyin</i> A 07B14	<i>Tongyin</i> B2 08A52	<i>Tongyin</i> D 08A52	<i>Proverbs</i> 04A0105	<i>Proverbs</i> 19A0709
				
U+176E4	U+176E4	U+176E4	U+176E4	U+176E4

3.5 U+17D36




U+17D36 𐰇 is a variant of U+17D69 𐰇 that is used in Nishida Tatsuo's 1966 dictionary of Tangut characters. The code chart glyph is slightly wrong, using the component 𐰇 on the bottom right instead of 𐰇 as shown in Nishida's dictionary.

Nishida Tatsuo, *Seikamoji shōjiten* 西夏文字小字典 (1966) p. 335

18-083














𐰇 *lofi «上衣」：流風音類，小類42(49A2)，注(左) 𐰇
 *ku «外衣」：文字要素 𐰇，𐰇，𐰇に分析できる(B₂).

U+17D36 occurs in the A edition of *Homophones (Tongyin)*, and U+17D69 occurs in the B editions of *Homophones (Tongyin)*. Examining the original printed editions of *Tongyin* it can be seen that the bottom right component is the same in both characters, and U+17D36 should indeed be written as shown by Nishida.

<i>Tongyin</i> A 49A28	<i>Tongyin</i> B1 49B21	<i>Tongyin</i> B2 49B21
		
U+17D36	U+17D69	U+17D69


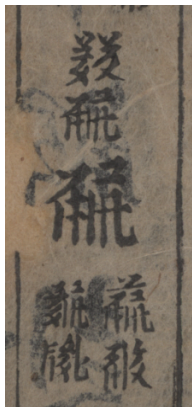
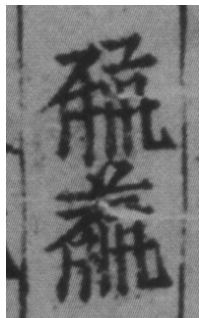
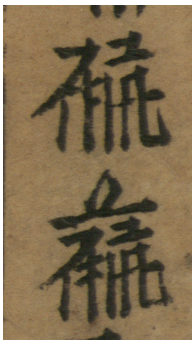
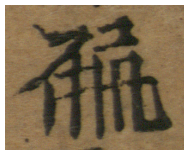
3.6 U+181B2


According to the *Sea of Characters (Wenhai)* U+174F3 𪛗 ‘fat’ is constructed from the top part of U+174F0 𪛖 ‘deep’ and the whole of U+181B2 𪛗 ‘fat’ (𪛖𪛗𪛗𪛗). Therefore the bottom part of U+174F3 should be identical to the whole of U+181B2. However, this is not the case in Li Fanwen’s 2008 *Tangut-Chinese Dictionary*, and therefore in the ISO/IEC 10646 and Unicode code charts, where the middle vertical stroke is different in the two characters. Modern sources are inconsistent in the way that these two characters are written:




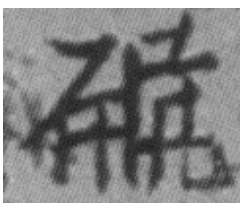
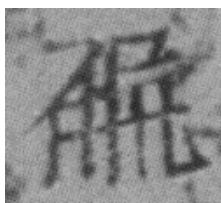
Character (current glyph)	Nishida 1966	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+174F3 𪛗	 7-11f	 2092	 1078	 1154/ 1210	 5179	 4336	no change
U+181B2 𪛗	 80-068	 5234	 4059	 4261/ 	 5171	 0984	

Original Tangut sources also show a mixture of glyph forms with long and short middle vertical strokes for U+174F3 and U+181B2 (see next page for examples). However, within a single source the two characters are written the same. *Sea of Characters (Wenhai)*, *Homophones (Tongyin)* Editions B and D, *Mixed Characters (Zazi)*, and *Proverbs* show a short vertical stroke for both characters; whereas only *Homophones (Tongyin)* Edition A shows a long a vertical stroke for both characters. In texts that only have U+181B2, *Pearl in the Palm (Zhangzhongzhu)* consistently writes it with a short middle vertical stroke, but *Odes* consistently writes it with a long middle vertical stroke.

It seems that both ways of writing the characters (with a long or a short middle vertical stroke) are acceptable, but the two characters should be written consistently with respect to each other. As *Sea of Characters*, *Homophones* Edition B, *Mixed Characters*, *Proverbs*, and *Pearl in the Palm* all write U+181B2 with a short middle vertical stroke, we propose changing the glyph for U+181B2 to match U+174F3, as shown in Table 1 above.








<i>Wenhai 1</i> 22.261	<i>Wenhai 1</i> 6.261	<i>Zazi</i> 17A0303	<i>Proverbs</i> 15B0703-04	<i>Proverbs</i> 26A0104
				
U+174F3	U+181B2	U+181B2 U+174F3	U+181B2 U+174F3	U+181B2




<i>Tongyin A</i> 12A31	<i>Tongyin B2</i> 13A21	<i>Tongyin D</i> 13A21	<i>Tongyin A</i> 33A77	<i>Tongyin B2</i> 35B24
				
U+174F3 U+181B2	U+174F3 U+181B2	U+174F3 U+181B2	U+181B2 U+174F3	U+181B2 U+174F3

<i>Zhangzhongzhu</i> A 13:1D	<i>Zhangzhongzhu</i> A 17:3B	<i>Zhangzhongzhu</i> A 22:5D	<i>Odes No. 3</i> 04A0514	<i>Odes No. 4</i> 03A0605
				
U+181B2	U+181B2	U+181B2	U+181B2	U+181B2




3.7 U+181C0

Character (current glyph)	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+181C0 	 5203	 4079	 4275/4422–4423	 0586	 0525	



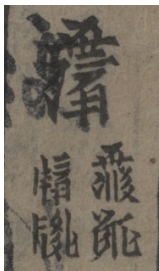


U+181C0  is an uncommon character that only occurs in a very few Tangut sources. The code chart glyph does not exactly match the form given in any original Tangut source, as the right hand component is different. Li Fanwen’s 2008 *Tangut-Chinese Dictionary* has  on the right side, whereas Tangut sources either have  or . As  is attested in two sources (*Homophones B* and *Odes #3*) and  in only one source (*Homophones A*), we propose changing the glyph for U+181C0 to have  on the right side. There is no change in stroke count.

<i>Tongyin A</i> 36A33	<i>Tongyin B2</i> 36B63	<i>Odes No. 3</i> 04A0316
		
U+181C0	U+181C0	U+181C0

3.8 U+18488

Character (current glyph)	Sofronov 1968	Li Fanwen 1986	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	Proposed New Glyph
U+18488 	 5185	 4119	 4237/4384	 1295	 1510	

U+18488 is written incorrectly in Kychanov 2006 and Li Fanwen 2008 as 𠂔 radical plus 7 strokes, whereas it should be 𠂔 radical plus 8 strokes, as shown in Han Xiaomang 2004. Tangut sources all show that the bottom left component should be 𠂔, and *Sea of Characters* gives the character construction as the surrounding part of 𠂔 and the right side of 𠂔.

Tongyin A 41B34	Tongyin B2 42A45	Wenhai 1 10.252	Wenhai 1 76.251	Wenhai 1 79.231
				
U+1756E	U+1756E	U+1756E	U+1756E	U+1756E

4. *Tangut Data*

The following three entries in TangutSrc.txt (ISO/IEC 10646) and TangutSources.txt (Unicode) need to be modified as shown below:

U+17378	kTGT_MergedSrc	L2008-0486
U+17D36	kRSTUnicode	47.9
U+17D36	kTGT_MergedSrc	N1966-018-083
U+17D36	kRSTUnicode	206.13
U+18488	kTGT_MergedSrc	L2008-1510
U+18488	kRSTUnicode	325.13

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6. *Tangut Sources*

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Mixed Characters (Zazi). [*s̥ə r̥i̯e*] *ndi̯ ndza* [𐰇𐰏𐰔] 𐰇𐰏𐰔 [Mixed Characters [of Three Parts of the Universe] = *Sāncái zázi* 三才雜字]. Blockprint Edition. Institute of Oriental Manuscripts of the Russian Academy of Sciences (Saint Petersburg, Russia). Tangut fond. Pressmark Tang 19/1, old inventory № 210. In: Terentiev-Katansky 2002. p. 213–240.

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Proverbs. *s̥iew s̥iow k̥ə ph̥iow ndew̥ li̯e* 𐰇𐰏𐰔𐰏𐰔𐰕𐰏𐰔𐰕𐰏𐰔 [Newly Collected Brocade Matching Proverbs = *Xīn jí jīn chéngduì yànyǔ* 新集錦成對諺語 or *Xīn jí jīn hécí* 新集錦合辭]. Institute of Oriental Manuscripts of the Russian Academy of Sciences (Saint Petersburg, Russia). Tangut fond. Pressmark Tang 35/1, old inventory № 765.

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