#### JTC1/SC2/WG2 N4588R2 2014-10-01

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

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Title:	Tangut glyph corrections
Source:	Andrew West, Viacheslav Zaytsev, Sun Bojun, Michael Everson
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	R1 (2014-09-21): expanded
	R2 (2014-10-01): incorporates changes suggested in N4640

#### 1. Introduction

We have carried out a review of the set of Tangut characters included in ISO/IEC 10646:2014 PDAM2 (see N4585), focussing particularly on whether the glyph forms in the font used for the code chart are correct, and in accord with the glyph shape in original Tangut texts. We have manually checked the glyph shape of all characters that have different stroke counts in Li Fanwen 2008 compared with Han Xiaomang 2004 and 2013, as this may be indicative of an incorrect glyph used in the source font.

We have identified sixty-one characters which have a glyph shape that is significantly different from the glyph normally found in primary Tangut sources, and which need to be corrected before encoding. The proposed glyph corrections are of three types:

- Radical or component glyph is incorrect in all instances, and all characters with this radical or component need to be modified (see Table 1 below);
- Inconsistent use of glyph forms for the same component, and characters need to be harmonized to use the same component glyph (see Table 2 below);
- Corrections to glyphs for individual characters (see Table 3 below).

In most cases the required glyph change means that the affected character also needs to be reordered. In addition to reordering 47 of the 61 characters with glyph changes, sixteen additional characters need to be reordered because they were misidentified with the wrong radical/component in N4522. Therefore a total of 63 characters need to be reordered.

We have also identified one additional character that needs to be added to the repertoire of 6,125 Tangut ideographs proposed in N4522 (see 2.33).

Table 4 provides the corrected glyph and radical/stroke data and any required reordering for each character. In total changes are required for 78 characters:

- 47 characters need a glyph change and consequent reordering;
- 14 characters need a glyph change but no reordering;
- 16 characters need reordering but no glyph change;
- 1 character needs to be added to the repertoire.

Section 2 of this document provides glyph images for each affected character, taken from a variety of printed, manuscript and epigraphic texts, as evidence for the correct glyph form of the character.

Section 3 retrospectively provides evidence for glyph corrections that had already been applied in N4522 (i.e. before PDAM2 was issued). This is provided for information only, and no further action is required.

Section 4 discusses a number of cases where the original Tangut sources are inconsistent, and it is difficult to determine the correct glyph form. This is provided for possible discussion by experts, but no changes are recommended at the current time.

**NB** In all cases code points prefixed by U+ in this document refer to code points of characters in the PDAM2 ballot (see N4585 for a list of the Tangut characters in the PDAM ballot). These code points are off by one compared with N4522.

N4522 Radical	L2008 Radical/ Component Glyph	Corrected Radical/ Component Glyph	Characters Affected	Old Glyph	New Glyph	Details
nduicai	Component diypn	Component Giyph				2.1
			U+173D0 (L3340)	娰	娥	2.1
R171	半 (Faturalizas)	丰 (4 strokes)	U+173E3 (L2220)	煝	孀	2.2
KI/I	半(5 strokes)	F (4 strokes)	U+1743B (L4921)	蒻	蒻	2.3
			U+1807E (L5933)	畅	移	2.4
			U+174D6 (L4968)	輆	輚	2.5
			U+1791C (L3784)	毵	毵	2.6
		7	U+182F3 (L5870)	睃	骸	2.7
			U+182F4 (L5937)	睃	訤	2.8
R255	*		U+182F5 (L5909)	骮	餆	2.9
K255	半(6 strokes)	者(5 strokes)	U+182F6 (L5934)	鞙	鞙	2.10
			U+182F7 (L5938)	骸	馟	2.11
			U+182F8 (L5975)	髾	髾	2.12
			U+182F9 (L5832)	霄	馟	2.13
			U+186C2 (L4011)	輎	탺	2.14
DOC	¥	3	U+17E93 (L2352)	徦	徦	2.15
R306	§ (7 strokes)		U+18522 (L1763)	鬷	鬷	2.16

# Table 1 : Radical/Component Glyph Corrections

N4522 Radical	Glyph Forms for the Same Component	Preferred Glyph	Characters Affected	Old Glyph	New Glyph	Details
			U+177BE (L4340)	풿	瀐	
	+		U+17A43 (L3302)	娥	鍬	
N/A	(5 strokes) (5 strokes)	ŧ	U+17A8C (L2647)	皴	頦	2.17
	1 (5 Strokes)		U+17A8D (L3674)	纐	꺯	
			U+17AE5 (L2245)	靋	貗	
			U+17384 (L4459)	援	棧	
	‡ (3 strokes) ‡ (3 strokes)	‡	U+17497 (L4836)	腹	腹	2.18
			U+179E7 (L3708)	狨	娥	
N/A			U+180B8 (L5207)	鎃	巯	
			U+182D3 (L5201)	瓶	瓶	
			U+183C5 (L5304)	煭	煭	
			U+1879C (L1583)	嚴	艱	
			U+178E0 (L2746)	銚	釽	_
	,		U+179B5 (L3580)	猟	猟	
N/A	(2 strokes)	Ī	U+17AD6 (L2883)	繝	貚	2.19
	(2 strokes)		U+17EC4 (L2445)	刹	纐	
			U+17F15 (L2545)	紁	絼	

## Table 2 : Radical/Component Glyph Harmonization

Character	Note	Old Glyph	New Glyph	Details
U+18221 (L1266)	Radical 220 🕺 (6 strokes) changed to 🕺 (7 strokes).	磃	奫	2.20
U+18562 (L5542)	Move to a new radical $\check{\mathbb{R}}$ (8 strokes).	鬬	鱊	2.21
U+18702 (L0470)	Move to radical R453 륆 (9 strokes), and delete R420 륆 (8 strokes).	瀫	颥	2.22
U+17FF4 (L3589)		縑	縑	2.23
U+173C3 (L2463)	Two dots belong to the left side component, which is a new radical (5 strokes).	娰	紁	2.24
U+18024 (L3933)	Right component changed from $ e (3) $ strokes) to $ i (3) $ strokes).	莊	祚	2.25
U+1835F (L5533)	Right component changed from ∄ (4 strokes) to ∄ (4 strokes).	翸	鯏	2.26
U+17F18 (L3753)	Right component changed from	貕	紱	2.27
U+1791F (L3804)	Right component changed from 省 (6 strokes) to	鋨	狨	2.28
U+179C6 (L2754)	Middle component changed from 룹 (6 strokes) to 룹 (6 strokes).	繉	繉	2.29
U+17A4E (L3597)		繸	娫	
U+177AD (L4251)	Left or bottom left component changed from 炙 (4 strokes) to 炙 (4 strokes).	巍	巍	2.30
U+17514 (L4904)		巍	巍	
U+17BCF (L5836)		瓶	瓶	
U+17BD0 (L5950)		稪	稪	
U+17BD8 (L5839)	Component 犭 (4 strokes) changed to 扌 (3 strokes).	籸	퐩	2.31
U+17DB7 (L4498)		戦	翪	
U+185E7 (L1851)		靜	郬	

## Table 3 : Individual character corrections

Character	Note	Old Glyph	New Glyph	Details
U+1725D (L0896)		郄	那	
U+1759F (L1536)		襏	襏	
U+17763 (L4393)		辚	鼘	
U+177A4 (L4402)	Component ≱ (4 strokes) changed to ≱ (2	鞯	鞯	2.24
U+17BD5 (L5837)	strokes).	辊	辊	2.31
U+17BD2 (L5948)		糈	耔	
U+17BD3 (L5951)		稪	秡	
U+17BDB (L5956)		辫	쯁	
U+17200 (L1177)	Two dots instead of one dot	鼐	鼐	2.32
U+17A55 (L2093)	Dot at top of vertical stroke seems to be a mistake	鎃	繉	2.19

In N4522 there are twenty-three characters with the  $\ddagger$  component, but this component is inconsistently treated as either 2 strokes or three strokes. Seven characters (U+1764A [L1010], U+17C62 [L1452], U+178C1 [L2797], U+17404 [L3392], U+17975 [L3654], U+17DC0 [L4497], U+17805 [L4585]) are ordered as  $\ddagger$  = 2 strokes, but the following sixteen characters are ordered as  $\ddagger$  = 3 strokes, and the first fourteen of them are incorrrectly intermixed with the  $\ddagger$  radical:

- U+175D3 (L5955) 释

- U+175D9 (L5913) 왡
- U+175DB (L5958) 擁

- U+175E6 (L5985) 辚
- U+17896 (L3778) ()

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For consistency these sixteen characters should be reordered to reflect their correct stroke count, and fourteen of them moved to a new 3 radical.

The following reordering of the 505 radicals used in N4522 are required in response to the changes given in Tables 1-3:

- R001-R014  $\Rightarrow$  R001-R014
- Insert R015 ≱ (new radical)
- R015-R021  $\Rightarrow$  R016-R022
- R022-R026  $\Rightarrow$  R024-R028
- R027  $\ddagger \Rightarrow$  R023  $\ddagger$
- R028-R108  $\Rightarrow$  R029-R109
- R109-R157  $\Rightarrow$  R111-R159
- Insert R160 兌 (new radical)
- R158-R170  $\Rightarrow$  R161-R173
- R171 ¥ ⇒ R110 ≹
- $R172-R195 \Rightarrow R174-R197$
- R196-R219  $\Rightarrow$  R199-R222
- R220 ∛ ⇒ R305 ∛
- R221-R254  $\Rightarrow$  R223-R256
- R255 ¥ ⇒ R198 ≹
- R256-R289  $\Rightarrow$  R257-R290
- R290-R302  $\Rightarrow$  R292-R304
- R303-R305 ⇒ R306-R308
- R306 § ⇒ R291 §
- $R307-R399 \Rightarrow R309-R401$
- R400-R419  $\Rightarrow$  R403-R422
- Delete R420 着
- R421-R505  $\Rightarrow$  R423-R507

**NB** In the above list and elsewhere in this document, the radical number (Rxxx) refers to the radical number given in the kRSTUnicode field of TangutSrc.txt.

Character	Old Glyph	New Glyph	New R	adical, S	Reordering	
(H2-0284)		骸	R008	7	BBCCCQC	after U+17131
U+17200 (L1177)	虠	鼐	R014	13	EACCQDDDCBFAA	after U+1720E

#### **Table 4 : Character Corrections**

Character	Old Glyph	New Glyph	New R	adical, S	Stroke Count and Sort Key	Reordering
U+1725D (L0896)	殢	灖	R017	9	JCABBBBHB	after U+17251
U+17384 (L4459)	捘	棧	R023	9	ABBDCGCCQ	after U+1734F
U+173C3 (L2463)	娰	溅	R160	10	CCQDDBCCCQ	after U+17FFD
U+173D0 (L3340)	娰	娥	R036	10	CCQGBAACCQ	after U+173C6
U+173E3 (L2220)	旂	煽	R036	12	CCQGBAAAEABE	after U+173E0
U+1743B (L4921)	蒻	蒻	R041	9	DCAGBAAJC	after U+1742B
U+17497 (L4836)	腹	蒑	R041	13	DCABAABDCGCCQ	after U+17494
U+174D6 (L4968)	藈	輚	R041	13	DCAGBAAACCQCQ	after U+174B4
U+17514 (L4904)	巍	蘷	R041	17	DCACCCQCCCQDCAMCD	(unchanged)
U+1759F (L1536)	裧	殺	R045	10	EANHBCCQCQ	after U+17593
U+175D3 (L5955)	释	释	R015	6	НВБААВ	after U+17227
U+175D4 (L5981)	菞	耢	R015	7	HBDCJCC	after U+17227
U+175D5 (L5835)	瓶	瓶	R015	8	НВАВГААС	after U+17227
U+175D6 (L5846)	蕱	帮	R015	8	НВАЕАВЕА	after U+17227
U+175D8 (L5982)	輚	輚	R015	8	HBDCGCCQ	after U+17227
U+175D9 (L5913)	乵	乵	R015	8	HBGAABMC	after U+17227
U+175DA (L5911)	梑	梑	R015	9	HBCCQCQMC	after U+17227
U+175DB (L5958)	稱	稱	R015	9	HBKDBOEAA	after U+17227
U+175DC (L5992)	뙒	뙒	R015	9	HBOGDCBBE	after U+17227

Character	Old Glyph	New Glyph	New R	adical, S	Reordering	
U+175DD (L5838)	萙	萙	R015	10	HBADACCQMC	after U+17227
U+175E0 (L5918)	糀	糀	R015	10	HBDABEAMCD	after U+17227
U+175E3 (L5896)	虩	虩	R015	12	HBCCCQDDAABE	after U+17227
U+175E6 (L5985)	辚	纐	R015	14	HBCCQCQDCABEAA	after U+17227
U+175E7 (L5952)	癥	蘈	R015	15	HBGABBAABEEACCQ	after U+17227
U+17763 (L4393)	蕛	鼘	R060	13	ABBBHBOGDCBBE	after U+17706
U+177A4 (L4402)	鞯	鞯	R060	15	ABBBHBCCCQEAAAB	after U+17770
U+177AD (L4251)	巍	蘷	R060	18	ABBBCCCQCCCQDCAMCD	(unchanged)
U+177BE (L4340)	藏	菝	R060	19	ABBBCCCQABAAADACCCQ	(unchanged)
U+17896 (L3778)	偝	鄁	R074	11	ССВВСВАААНВ	after U+17891
U+178E0 (L2746)	鄬	釽	R076	9	СССДАВВМС	after U+178C8
U+1791C (L3784)	毵	毵	R076	9	CCCQGBAAA	after U+178EA
U+1791F (L3804)	鋨	狨	R076	9	CCCQGBCCQ	after U+178EB
U+179B5 (L3580)	猟	猟	R076	12	CCCQABDCGBFA	after U+17991
U+179C6 (L2754)	繉	繉	R076	12	CCCQEABABEMC	after U+179C8
U+179E7 (L3708)	狨	娥	R076	13	CCCQAABDCGCCQ	after U+179DC
U+17A43 (L3302)	揪	鍬	R076	14	CCCQABAAACCQCQ	after U+17A37
U+17A4E (L3597)	繸	嬘	R079	14 CCCQCCCQDCAMCD		after U+17B0E
U+17A55 (L2093)	鎃	奫	R076	13	СССQВААААВЕМС	after U+179EA

Character	Old Glyph	New Glyph	New R	adical, S	Stroke Count and Sort Key	Reordering
U+17A8C (L2647)	皴	頦	R076			after U+17A84
U+17A8D (L3674)	嬘	繸	R076	15	CCCQABAAADCGCCQ	
U+17ACE (L3351)	쟳	쯇	R076	15	CCCQGABBHBCCQCQ	after U+17AAB
U+17AD6 (L2883)	ű	鸑	R076	17	CCCQABBABBBEABEAA	after U+17AD0
U+17AE5 (L2245)	靋	貗	R076	18	CCCQABAAAABFAACCCQ	(unchanged)
U+17BCF (L5836)	瓶	秖	R048	7	GCBABFA	after U+175D1
U+17BD0 (L5950)	頪	稪	R048	7	GCBGCCQ	after U+175D2
U+17BD2 (L5948)	糈	精	R015	7	НВЕААВЕ	after U+17227
U+17BD3 (L5951)	粄	蓛	R015	7	HBEACCQ	after U+17227
U+17BD5 (L5837)	辊	辊	R015	8	HBAEABFA	after U+17227
U+17BD8 (L5839)	籸	糀	R048	11	GCBAABBBBFA	after U+175DC
U+17BDB (L5956)	쯁	쯁	R015	11	НВСССQЕАААВ	after U+17227
U+17DB7 (L4498)	載	載	R131	12	ABBBBGCBCCCQ	(unchanged)
U+17E93 (L2352)	徦	徦	R153	11	CCBBBGCQGCQ	(unchanged)
U+17EC4 (L2445)	梸	觚	R154	12	CCBEACCCQABB	after U+17EC2
U+17F15 (L2545)	絼	緪	R156	11	CCCQBCCCQAE	(unchanged)
U+17F18 (L3753)	緩	貕	R156	R156 12 CCCQBDCACCCQ		after U+17F1D
U+17FF4 (L3589)	縑	縑	R159	159 16 CCQCQBDCAKDBBBMC		after U+17FF1
U+18024 (L3933)	計	莊	R165	8	DABEABAA	(unchanged)

Character	Old Glyph	New Glyph	New Radical, Stroke Count and Sort Key			Reordering
U+1807E (L5933)	畅	移	R110	R110 6 GBAAJC		after U+17CBD
U+180B8 (L5207)	鎃	巯	R178	12	DCCCQAABABFC	(unchanged)
U+18221 (L1266)	奫	磃	R305	16	ACCCCQBEAAKDBBBB	after U+18508
U+182D3 (L5201)	瓶	瓶	R252	13	DCABEAAABABFC	(unchanged)
U+182F3 (L5870)	睃	骸	R198	9	GBAAACCCQ	
U+182F4 (L5937)	睃	輚	R198	10	GBAAACCQCQ	
U+182F5 (L5909)	骮	캍	R198	11	GBAAACCCQMC	
U+182F6 (L5934)	鞙	鞙	R198	11	GBAAAEABEAA	after U+18194
U+182F7 (L5938)	骸	馟	R198	11	GBAAAKDDCCQ	
U+182F8 (L5975)	髾	馘	R198	13	GBAAADCACCCQB	
U+182F9 (L5832)	뙘	靜	R198	14	GBAAAAABBBDCBE	
U+1835F (L5533)	翸	餠	R265	10	DCBECCBEAA	(unchanged)
U+183C5 (L5304)	襚	煭	R271	11	DCGCCQAABBB	after U+183BF
U+18522 (L1763)	鬷	N.	R291	13	GCQGCQBDCGCCQ	after U+184B8
U+18562 (L5542)	鱊	鱊	R402	17	DCABCCQBEAAKDBBBB	after U+186D5
U+185E7 (L1851)	靜	郬	R350	10	EAABBAEGCB	(unchanged)
U+186C2 (L4011)	詊	롺	R393	R393 13 DABAAABEGBAAA		(unchanged)
U+18702 (L0470)	瀫	瀫	R455	R455 16 EAAKDBBBABCCCCQB		after U+18777
U+1879C (L1583)	載	載	R470	19	ABEAAABBBAAABDCGCCQ	(unchanged)

#### 2. Evidence for Correct Glyphs

This section provides images of each character as it appears in the following manuscript, printed or epigraphic texts:

- Sea of Characters (Wenhai 文海) [printed edition, comprising vol.1 (level tone characters) and vol.3 (miscellaneous characters)]
- Precious Rhymes of the Sea of Characters (Wenhai Baoyun 文海寶韻) [manuscript edition]
- Homophones (Tongyin 同音):
  - 。 A: Tang. 18/1 [Inv. no. 207] (甲種本)
  - o B1: Tang. 18/2 [Inv. no. 208] (乙種本)
  - 。 B2: Tang. 18/3 [Inv. no. 209] (乙種本)
  - o B3: Tang. 18/7 [Inv. no. 4775] (乙種本)
  - o C: Tang. 18/4 [Inv. no. 2619] (丙種本)
  - o D: Tang. 18/15 [Inv. no. 8365] (丁種本)
- Dissected Rhymes of the Five Sounds (Wuyin Qieyun 五音切韻) [Edition D]
- Pearl in the Palm (Fan-Han Heshi Zhangzhongzhu 番漢合時掌中珠)
- Analects (Lunyu 論語)
- Miscellaneous Characters (Zazi 雜字)
- Great Ode (Dashi 大詩)
- Ode on Reason [proverbs] (Daolishi 道理詩)
- Ode on Monthly Pleasures (Yueyueleshi 月月樂詩)
- Newly Collected Grains of Gold (Xinji Suijin Zhizhangwen 新集碎金置掌文)
- Dharani-sutra of the Victorious Buddha-Crown (Foding Zunsheng Tuoluoni 佛頂尊勝陀羅尼經) engraved on the east wall of the Cloud Platform at Juyongguan
- Dharani-Sutra of the Tathagata Heart (Rulaixin Tuoluoni Jing 如來心陀羅尼經) engraved on the west wall of the Cloud Platform at Juyongguan

# 2.1 L3340

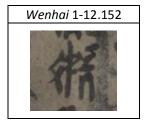
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
救	婌	秾	煍	娰	娰	娥

Tongyin A 34A17	Tongyin B2 34B21	Wenhai 1-30.211	Wenhai 3-5.211
秋	救循	N	が放きる

# 2.2 L2220

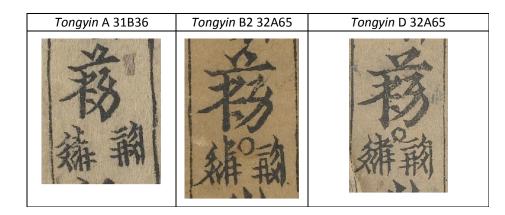
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
編	祈	頯	榍	煝	孀	孀

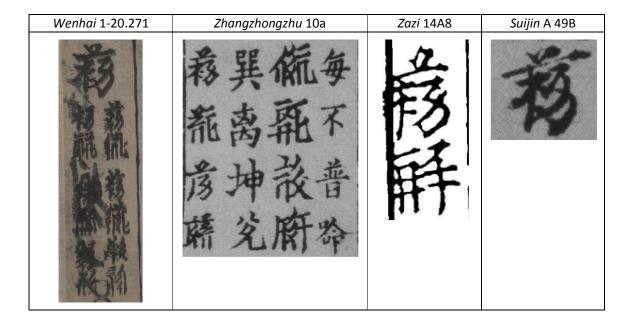




## 2.3 L4921

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
前	蔚	蒻	潮	蒻	蒻	蒻





## 2.4 L5933

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
移	移	杨	犓	畅	钧	移



Wenhai 1-20.262	Wenhai 1-20.261	<i>Wenhai Baoyun</i> 1.09b	Wuyin Qieyun D 23
*3 務補 根義補報 · 藏報	X	ね。物	

## 2.5 L4968

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	截	蕟	襏	較	較	較



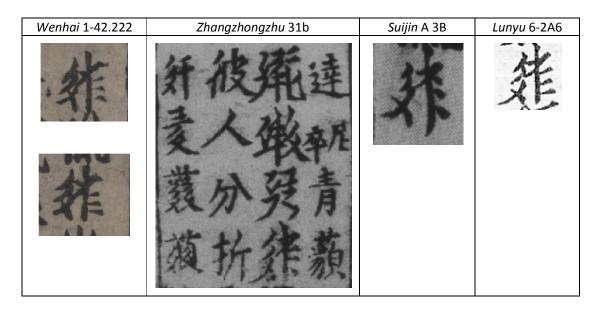
 Wenhai Baoyun 2.8a
 Zazi 16B7

 Image: Constraint of the second se

# 2.6 L3784

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
袜	錢	貄	祥	毵	毵	毵





## 2.7 L5870

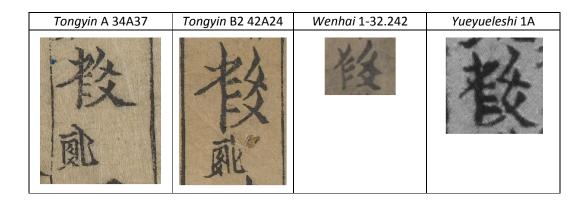
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
极	訤	衫	睃	睃	睃	骸

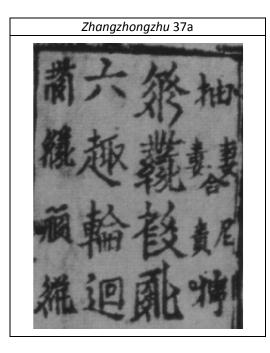


Wenhai 1-56.162	Wenhai 1-57.162	Wenhai 1-57.162	<i>Dashi</i> 2b	Lunyu 6-4A5
极	极	改	校	核

# 2.8 L5937

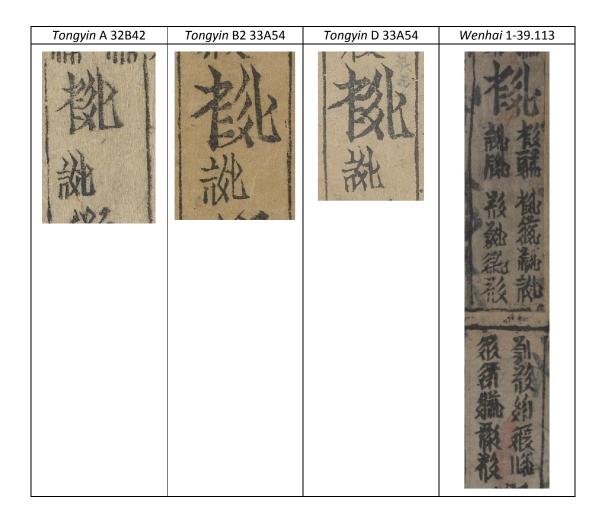
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
投	發	訤	榽	睃	睃	訤





## 2.9 L5909

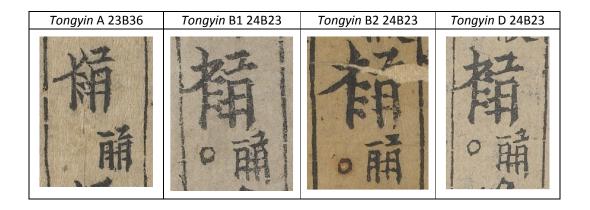
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
嵇	觀	裞	梑	骮	骮	梑



Wenhai 1-10.242	Wenhai 1-65.233
観	赵

## 2.10 L5934

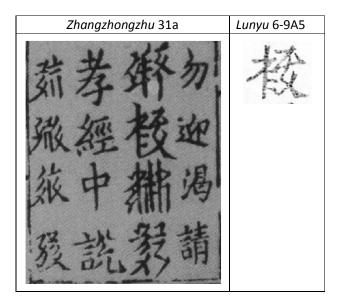
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	稱	稱	뛲	鞙	鞙	開



# 2.11 L5938

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
睃	赘	餃	睃	骸	骸	馟





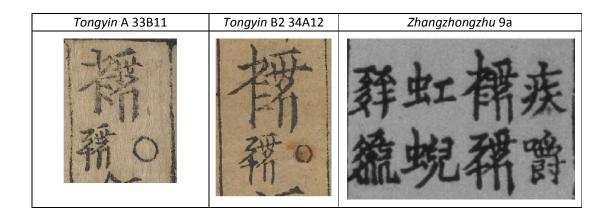
# 2.12 L5975

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	樹	戫	新	髾	髾	髾

Tongyin A 17B13	Tongyin B2 18A46	Tongyin D 18A46	Wenhai 1-71.111
諸で	「な	诸。故	お 教靴 補魏 敬秘羅

# 2.13 L5832

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
褶	鍒	帮	뙘	靜	靜	靜



# 2.14 L4011

Nishida	Sofronov Han Xiaomang		Kychanov Li Fanwen		PDAM	New Glyph	
1966	1968 2004		2006 2008		Glyph		
	舴	靔	嘗	詊	詳	齚	



# 2.15 L2352

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph	
1966	1968	2004	2006	2008	Glyph		
	禐	徦	徦	í	í	í	



# 2.16 L1763

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	艱	毲	R.	刻	裂	N N N N N N N N N N N N N N N N N N N

Tongyin A 52B71	Tongyin B1 53A41	Wenhai 1-39.173	Wenhai 1-49.251	Wenhai 1-54.242
教教	殺我	艱	設	被

Zhangzhongzhu 11a	<i>Dashi</i> 6b	Suijin A 63A
驗問觀增	AL.	致

#### 2.17 L2245, L2647, L3302, L3674, L4340

L2008	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L0662	藏	献	祓	藏	菔	菔	
L2245		邈	獿	獿	豲	쨿	퉳
L2647	狻	缞	絨	粮	纐	纐	頦
L3302		缀	襏		絨	緻	緂
L3674	狻	缞	絨	瀨	纐	꺯	頦
L4340		雜	藧	蘒	苂	擬	擬

From the examples shown below we believe that the glyph shape for the middle component of L0662 is the most common form for all six characters, and we therefore recommend changing the glyphs for L2245, L2647, L3302, L3674 and L4340 to match L0662.

	Tongyin A	Tongyin B1	Tongyin B2	Tongyin D	Wenhai	Other
	23B22	29A58	29A58	29A58	1-41.172	
L0662 献	藏語	藏	藏記	藏	の設施設	
	43A54		43B73		1-57.162	
L2245 瘫	粮		類後		魏	
	23B18	24A72	24A72	24A72	1-42.222	Dashi 5a
L2647	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	我都	城補	我練	1-57.162	救
					教	
	23B27	24A78	24A78	24A78	1-92.151	Zazi 9B7
L3302	教	一般	我	投資機	袋 報報	殺

	Tongyin A	Tongyin B1	Tongyin B2	<i>Tongyin</i> D	Wenhai	Other
L3674	23B26 次後 一次後	24A77	24A77	24A77	1-92.142	
L4340 藏	22A65 就 能	23A44	23А44	23A44 武 截		Zazi 6B6

## 2.18 L1583, L3708, L4459, L4836, L5201, L5207, L5304

L2008	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L0528		誗	刑	脷	勈	脷	
L0861		<b>南</b> 俳	亷	荆俑	舺	舺	
L1583	戡	皷	酿	軍援	駁	駁	駁
L2853	絣	練	全	瘷	箫	箫	
L3505	朡	腹	服	സ	膨	膨	
L3511		爞	譺	潇	顪	巓	
L3708	截	嬘	纀	裞	絨	狨	狨
L4376		鄰	蔛	襋	荈	苂	
L4459	援	糭	拔	棧	援	援	拔
L4836	腹	度	蒑	牋	腹	腹	菔

L4999	巍	義	燕	義	巍	巍	
L5201		訫	瓶	誮	瓶	瓶	艞
L5207	辄	豘	颒		鎃	鎃	狐
L5304	鋓	煭	煭	刹	刻	첼	煭
L5734	艞	პ花	縑	貅	絩	銚	
L5769		巍	襚	豵	荻	錵	

The characters in the above table have a mixture of  $\ddagger$  and  $\ddagger$  glyph forms as left hand or middle components, but the original Tangut sources do not indicate any such distinction. The character constructions in *Sea of Characters* also indicate that no distinction should be made:

Therefore, we suggesting harmonizing the glyphs of the characters in the above table so that the seven characters with a  $\ddagger$  component are modified to use  $\ddagger$  instead.

	Tongyin A	Tongyin B2	Tongyin C	<i>Tongyin</i> D	Wenhai	Other
L0528 剤	33A35	33B44		33B44	3-4.242	
	34B14	35A13		·派	1-89.141	
L0861 前		· · ·			那般	
L1583	18B42	19A62 19A62 補礼		19A62		
L2853 ⁄奸	29A56	30A22	30A22	30A22	1-60.152	

	Tongyin A	Tongyin B2	Tongyin C	Tongyin D	Wenhai	Other
L3505 版	22B28	23B13	rongym e	23B13	1-90.112	other
L3511 機	28B45	29A48	29A48	29A48	、靴	
L3708 <u> </u>	5B14			6A74	1-27.262	Juyongguan West 6
L4376	15A45	16A27		16A27	1-69.171	

	Tongyin A	Tongyin B2	Tongyin C	Tongyin D	Wenhai	Other
L4459 孩	5A56 後 後			6A48		Juyongguan East 27
L4836 <i>醆</i>	42B65 1 度 道	43B21 「「「「「「「「」」」 「「」」」」			1-69.252	
L4999 英语	21B21 滚浪 液	22A68		22A68	1-67.271	
L5201 瓶	32B18	33A37 新能 藏		33A37	3-15.243	

	Tongyin A	Tongyin B2	Tongyin C	Tongyin D	Wenhai	Other
L5207 巯	16A31	17A12		17A12		Zhangzhongzhu B 5B 兼星新術 兼宿義迎
L5304 <i></i>	13B77	14857		14B57	1-67.221 () () () () () () () () () () () () ()	
L5734 <i>刘</i> 祧	16A32	17A13		17A13		
L5769 刻後	22A56	23A35		23A35	1-17.142	

2.19	L2093, L2445, L2545, L2746, L2883, L3580
------	--

L2008	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L2093	癙	纁	瓴	氚	鎃	鎃	繉
L2445		紋	綱	銜	觚	鋓	觚
L2342	縬	겏	絥	溆	貕	紁	
L2545			銜		溆	紁	豥
L2746	郤	銚	釽	釽	刻化	釽	釽
L2883		繡	纇	貓	貚	釽	瓤
L3580		旒	猟	谻	猟	猟	猟

Li Fanwen 2008 uses the glyphs i and  $\bar{1}$  inconsistently for the same component. The primary Tangut sources indicate that  $\bar{1}$  is the correct glyph form, so we propose changing four of the characters in the above table to use  $\bar{1}$  instead of i.

In the case of L2545 &, as the corresponding form with 1 has a separate entry in Li Fanwen's dictionary as L2342 &, we propose changing its glyph to use the form given in Han Xiaomang 2004.

In the case of L2093, the dot above the vertical stroke seems to be a mistake in the one instance of the character in *Wenhai*, and we therefore propose changing the glyph to follow the form given in *Tongyin* A edition, with no dot or horizontal stroke above the vertical stroke.

	Tongyin A	Tongyin B2	Tongyin C	Tongyin D	Wenhai	Other
L2093 须	48A58	48B52			1-75.232	
L2445 利	25B22	26A64		26A64	1-21.231	
L2342 《叙	53B52				1-57.271 介介. 茶前 脱脱	
L2545 《紁						Zazi 16A3

	Tongyin A	Tongyin B2	Tongyin C	<i>Tongyin</i> D	Wenhai	Other
L2746 刻化	16B41	17B14		17B14	1-76.171	
	25B68	26B38	26B38	26B38		
L2883 刻算	4件。	4件。膨	4件。	離戦		
	29B73	35A51			1-73.251	Zazi 16A6
L3580 猟	编	编			新花 翁 龜	摇

# 2.20 L1266

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
癫	獼	奫	貐	猵	爴	磃

Tongyin A 8B57	Tongyin B2 9B16	Tongyin D 9B16	<i>Wenhai</i> 1-35.132	Wenhai 1-26.32	<i>Wenhai</i> 1-90.172
		新 新 派	新 翻說 編編 發調 說沒沒沒有我		颈

### 2.21 L5542

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	<b>犮</b> 屚	戫	虈	鷟	鬬	籯



The correct structure of L5542 can also be seen from its *Homophones* annotation character , L1835  $\vec{m}$ , where the two components are swapped horizontally.

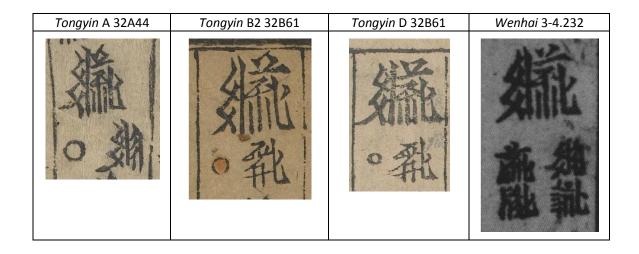
# 2.22 L0470

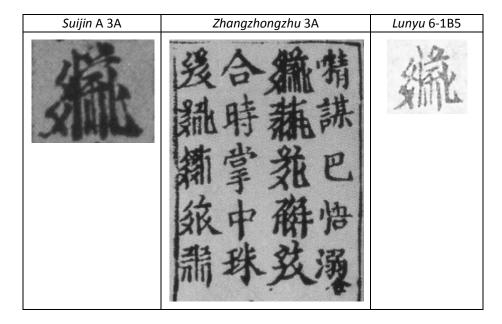
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	叡	瀫	瀫	衫	衫	颥



### 2.23 L3589

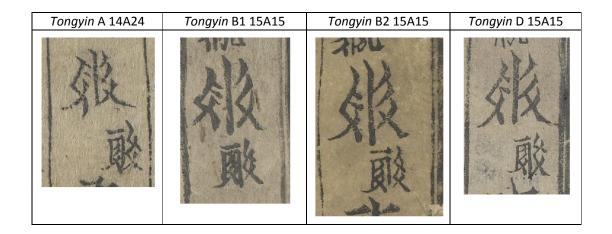
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
巍	瀛	鎃	鎃	鎃	鎃	鎃

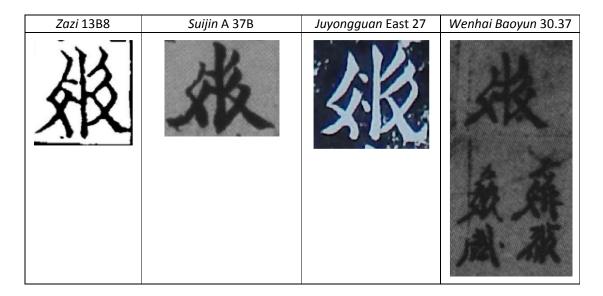




#### 2.24 L2463

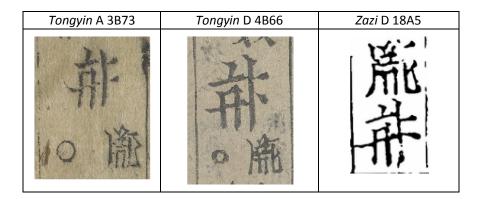
Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
溅	逖	巛	縱	娰	娰	紁





#### 2.25 L3933

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
并	舯	莊		計	計	訲



L3933 is the only character with this right hand component, which is written slightly differently in Li Fanwen 2008 and Han Xiaomang 2004. Examination of original Tangut sources indicates the glyph shape given in Han Xiaomang 2004 is correct, and that it is the same as the left hand component  $\ddagger$ .

#### 2.26 L5533

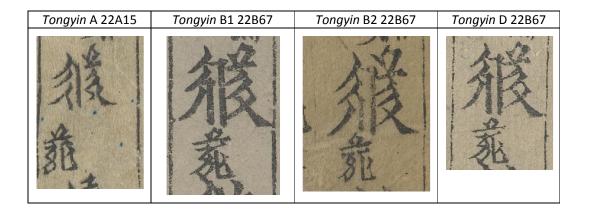
	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L5533	朔	娴	娴	娴	翸	翸	餌
L3167		鋧	谻	谻	谻	谻	



### 2.27 L3753

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
翪	狼	褑	貘	緵	緩	紱

In Li Fanwen 2008 and Han Xiaomang 2004 the right hand component of L3753 is written as  $\[5mm] \[5mm]$ (6 strokes), whereas in Sofronov 1968 and Kychanov 2006 the right hand component is written as  $\[5mm] \[5mm] \[\smm] \[5mm] \[5mm] \[smm] \[smm] \[smm]$ 



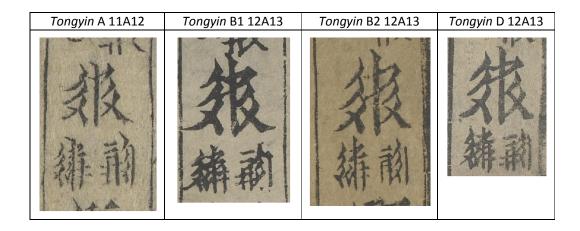
Wenhai 1-8.252	Wenhai 1-16.231	Wenhai 1-19.262	Wenhai 1-24.241	Wenhai 1-26.243
根	援	猴	很	王

Wenhai 1-52.262	Wenhai 1-55.262	Wenhai 1-77.161	Wenhai 3-19.251	Wenhai Baoyun 2-12B2
报	禄	极		粮



#### 2.28 L3804

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	掖	秡	溉	狘	狘	狨





L3804 is the only character with this right hand component. All examples in original Tangut texts have a glyph form with one less stroke than given in Han Xiaomang 2004, Kychanov 2006 and Li Fanwen 2008.

#### JTC1/SC2/WG2 N4588

### 2.29 L2754

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New Glyph
1966	1968	2004	2006	2008	Glyph	
	鎃	繉	灜	繉	釽	繉



### 2.30 L3597, L4251, L4904

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L3597	縦	娫	紱	絨	縌	絨	娫
L4251		礙	첋	巍	鐩	鐩	鐩
L4904		凝	巍	Ŵ	巍	巍	蘂

These three characters are not very common, but in all sources other than the *Tongyin* A edition the bottom left component is  $x \equiv 1$  rather than  $x \equiv 1$  as given in L2008.

	Tongyin A	Tongyin B1	Tongyin D	Wenhai	Zazi
	2B11	3A78	3A78		5A3
L3597	鐵藏	燃融	(A) (A) (A)		继
	2B13	3B12	3B12		6B6
L4251 蔬	蒸雜	魏燕	滋義		燕

	Tongyin A	Tongyin B1	Tongyin D	Wenhai	Zazi
	2B12	3B11	3B11	1-28.221	12B7
L4904 <i>蔬</i>	藏藏	魏	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	藏	森

# 2.31 L0141 ... L6073

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L0141	菝	殺	栽	澱	瑕	殿	
L0896		ᅏ	翠	る世	郊	那	游
L1010	荫	禰	膌	禘	脪	脪	
L1452	亵	薮	蓛	輚	較	較	
L1536	瑖	舕	談	殺	談	议	談
L1850	祁	誹	辭	副	耏	郬	
L1851		肅	浳	郬	靜	靜	靜
L1875	莳		邗	邗	邗	靜	
L2797		郄	絖	鈋	絩	錷	
L3351	嬢	鎟	瘷	滚	纐	鑅	

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L3392	報	義	窥	巍	巍	巍	
L3654	搦	游,	纐	XX	纐	紼	
L3709		鱫	欲核	縱	縱	縱核	
L3778		紺	艄	鄁	鄁	艄	
L3945	祧	誗	訛	訛	邟	訛	
L4383		#	₩ŧ	Ÿ	##	#¥	
L4384	糀		糀	瓶	靴	靴	
L4392		蕛	鞯	韬	韬	韬	
L4393		糚	蕛	鞹	鞹	鞹	鞘
L4402		蔱	鞯	韃	鞯	鞯	鞯
L4497	鞔	亵	羢	襚	摐	摐	

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L4498	救	救	鞖	靫	黻	散	₩ 教
L4585	豏	融	醚	刚	凤北	刚	
L5001		蘋	荻		颏	頦	
L5002				<b>X</b>	颏	颏	
L5019	英税	蘒	蘒	巍	巍	離	
L5206		魏	纐	閷	巍	巍	
L5802		對	挙	斜	詳	刻	
L5834	耗	狍	牦		瓶	瓶	
L5835		袍		瓶	瓶	辄	
L5836				瓶	瓶	瓶	扟
L5837			뙦	籸	辊	辊	辊

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L5838		规	莸	揪	萩	萩	
L5839		稗	笩	籸	甁	瓶	穲
L5840		梑	秾	翔	艞	艞	
L5841	秖	税	甁	頖	秖	瓶	
L5842	巍		纐	翔	獺	獭	
L5845	袹	种	袹	轩	秤	轩	
L5846	槅	둮	켞	精	幕	羂	
L5847	鐟	额	额	翔	颒	纐	
L5874	NA NA	邦	¥V	粎	彩	彩	
L5875	投	校	羧	粮	秡	秡	
L5893		樾		粮	艞	艞	

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L5895		衚	抓	耞	衚	耞	
L5896	椼	襚	纐	纐	貁	貁	
L5910	亃	秘	豵	翔	桃	梑	
L5911	秘	梑	豵	翔	梑	梑	
L5912			襚	粌	襚	襚	
L5913	靴	昶	왞	犐	왞	乵	
L5918	糀	濪	糀	糋	糀	襱	
L5946		靴	靴	靴	沎	沎	
L5948		菥	糈	精	糈	糈	精
L5949	鹴	辅	糥	糏	輛	輛	
L5950	殺	夜	鞖	粮	移	稪	稪

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L5951		较	衩	粮	秡	秡	蓛
L5952	穱	癥	糫	粮	耲	癥	
L5953	襏	赮	驋	粮	赧	赮	
L5955	释	秤	裈	料	释	释	
L5956		揵	辉	料	猴	猴	稺
L5957	癖	栩	纐	糣	쯁	쯁	
L5958	稱	桶	藩	粷	稱	稱	
L5980			幇	精	鞘	捎	
L5981	菞	耢,	耢	耢	菞	耢	
L5982	輚	稜	袯	戦	輚	輚	
L5984		稜	韬	粮	赮	瀫	

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L5985	辚	纐	糨	糨	纐	纐	
L5992		粥	貅	浙	뙒	뙒	
L6073	羧				糭	糉	

The 68 characters in the table above have a mixture of three similar components:  $\ddagger$ ,  $\ddagger$  and  $\ddagger$ . In some modern sources (e.g. Nishida 1966, Sofronov 1968) these three components are listed as separate radicals, whereas in some other modern sources (e.g. Li Fanwen 2008, Han Xiaomang 2013) these three components are grouped together under a single radical. Although N4522 distinguishes  $\ddagger$  as a radical,  $\ddagger$  and  $\ddagger$  are incorrectly mixed together. Examination of original Tangut materials indicates that Nishida and Sofronov were correct in distinguishing the three components.

That these three components should not be mixed together is indicated by the character constructions given in *Sea of Characters* (see images under *Wenhai* column in the table below) where characters with one of these three components are always derived from another character that shares the same one of these three components:

- L0141 鞵 is constructed from L5875 核 (both 扌)

- L1851 誹 is constructed from L5875 救 (both 孝)
- L3351 嬢 is constructed from L1452 莪 (both 扌)
- L3392 森 is constructed from L5911 揪 (both 孝)
- L3654 紼 is constructed from L5981 涁 (both ≯)
- L4384 糀 is constructed from L5946 靴 (both 半)
- L4497 韈 is constructed from L5911 揪 (both 孝)
- L4585 就 is constructed from L2797 挑 (both 孝)
- L5206 巍 is constructed from L5841 轾 (both 半)

- L5842 獭 is constructed from L5834 靴 (both 半)
- L5846 捐 is constructed from L5918 撤 (both 考)
- L5847 辦 is constructed from L5845 辆 (both 才)

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- L5911 揪 is constructed from L5913 科 (both 孝)
- L5913 耗 is constructed from L5911 税 (both 孝)
- L5949 翻 is constructed from L5953 襏 (both 才)

- L5953 襏 is constructed from L5875 教 (both 才)
- L5957 搦 is constructed from L5950 赘 (both 才)

- L5985 辚 is constructed from L5911 梑 (both 孝)

After reviewing original Tangut sources for the 68 characters with one of these three components we have determined that the following changes are required to 29 characters:

- 16 characters which correctly have the <sup>‡</sup> component in the PDAM font are ordered in N4522 as if they had the <sup>‡</sup> component (one stroke more), and should be reordered to reflect the correct component (L3351, L3778, L5835, L5838, L5846, L5896, L5911, L5913, L5918, L5952, L5955, L5958, L5981, L5982, L5985, L5992);
- 8 characters with the <sup>\*</sup> component in N4522 and Li Fanwen 2008 should be changed to use the <sup>\*</sup> component (L0896, L1536, L4393, L4402, L5837, L5948, L5951, L5956);
- 5 characters with the <sup>\*</sup>/<sub>1</sub> component in N4522 and Li Fanwen 2008 should be changed to use the <sup>‡</sup> component (L1851, L4498, L5836, L5839, L5950).

These changes result in the following changes in radical:

- 14 characters under the 27 radical are moved to a new 27 radical;
- 4 characters under the <sup>≱</sup> radical are moved to the <sup>‡</sup> radical;
- 3 characters under the 2 radical are moved to the 2 radical.

	Tongyin A	Tongyin B2	<i>Tongyin</i> D	Wenhai	Other	Other
	11A45	12A45	12A45	1-19.171		
7	一般	歌	亚	要		
L0141	汉	12	-72	-12		
一般	题!	教	霰	越教		
(correct)			1	氟亂		

	Tongyin A	Tongyin B2	<i>Tongyin</i> D	Wenhai	Other	Other
才 L0896 <i>郊</i> (wrong)	23A41 了了了。 一次了了。	24A24 <b>芬芬</b>	24424	1-48.261		
才 L1010 T (correct)	43B51	44A55 清晴 截				
才 L1452 段 (correct)	16B74 液 減 酸 酸	20B36 成代	20B36 夜雨	1-28.231	Zazi 15A2	Dashi 1A8 Dashi 1A8
才 L1536 秋 (wrong)	40B13	40B61 秋 版		Wenhai 1- 62.213		
¥ L1850 『≯ (correct)	47B41	48A31			Daolishi 8A4	Dashi 6A2

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
才 L1851 祥 (wrong)	53B71			1-74.141	Zazi 15A3	Suijin 6B32 Suijin 6B32 Suiji
才 L1875 开才 (correct)				1-82.131		Wenhai Baoyun 61.53
才 L2797 述 (correct)				1-12.151	Lunyu 6-9A7	Suijin 7B310
才 L3351 J (correct)	45A77 获 载	45B73		1-54.261	Daolishi 2B2	Suijin 1B1

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
衤	35A78	36A34		1-15.151		
L3392	歌	教		<b>王</b> 公下		
籁	蒙	「義		微義		
(correct)				辄礼		
才 L3654	44A26	44B31		3-09.121	Zazi 14B6	Suijin 5A54
娣	刻	(綱		杨春	-	
(correct)				麗龍		
¥	25B25			1-39.251		
L3709	郑			和汉		
襚	語つ			楼稳		
(correct)				配報		
衤	16B66	17B42	17B42			
L3778	捕	婚	格			
嵴	78	一路	译			
(correct)		一、伟也	品			
¥	50A66	50B52		1-73.212	Zazi 18B4	
L3945	前他	THE		in	<b>TAK</b>	
訛	凝	新		1110	1 min	
(correct)						

	Tongyin A	Tongyin B2	<i>Tongyin</i> D	Wenhai	Other	Other
半	51A47					
L4383 業	華華					
(correct)	0 240					
*	50A61			1-43.141		
L4384	蔀			乳		
靴	靛			机蔬		
(correct)	- 2.0.2 -			醌瓠		
*	50A62	50B56				
L4392	输	一辆				
节	劉船	副				
(correct)	1 200 1					
才 L4393 蒋 (wrong)	50B34 辩 致	51A17 		1-42.121		
(wrong)	23B31	24B12	24B12	1-84.272		
才 L4402 蒋 (wrong)	蕃	一群	耕耕	1-33.121		

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
才 L4497   糀 (correct)	33B54 教	34A15		3-05.152		Lunyu 6-5B8
才 L4498 戦 (wrong)	55B38			1-19.171 1-59.141		
才 L4585 成化 (correct)	11B32	12B28 成 成	12B28	1-26.222		
<b>孝</b> L5001 <i>茶</i> (correct) 半 L5002 <i>茶</i> (correct)	46B38	47A35		1-59.141		Daishi 3A1

	Tongyin A	Tongyin B2	<i>Tongyin</i> D	Wenhai	Other	Other
≯	24A78	25A63	25A63		Zazi 17B5	
L5019	「茶」	THE	蒲		旗	
義	7112	「弦	系		1710	
(correct)	一般	×4	XD			
*	54A24			3-20.171		
L5206				NOT OF STREET		
巍						
(correct)						
半	16B36	17A78	17A78	1-79.121		
L5802	1 XX	家	邦	-Xe		
謎	オリ	オ	天影	31		
(correct)	1 AL		L'AL			
半	50A64	50B51		1-71.272	Zazi 8B6	Suijin 3A12
L5834	麻	「酒」		ti	不	和
瓶	1 版	Tru		1460	714	714
(correct)	30	38				
衤	24B51	25B27	25B27			
L5835	杨	和	和			
瓶	14	17	「這			
(correct)	INE	I SIITL	IIII			

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
尹						
L5836						
瓶						
(wrong) [variant of L5845]						
≯						Zhangzhongzhu A 6B
L5837						14
辊						44
(wrong) [variant of L5846]						110
		38A58		3-18.151		
衤		孤		祝		
L5838		-170		170		
蓛				孤端		
(correct)				胤亂		
衤	53B53			1-18.113	Zazi 15A8	
L5839	一種				扭	
笩	TA			716	714	
(wrong)	Y.					
衤	25B43	26B14	26B14	1-20.113		Daolishi 4A7
L5840	1981	一夜儿	1XX	书轮		X
艞	弃	一種。	我。	而教		1140
(correct)	a Na	18	121	展記		

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
半	24A77	25A62	25A62	1-89.141		Suijin 3A11
L5841	北	和	1H	舟		At.
瓶	滅	膨	出	110		11100
(correct)	六段		12			
*	55A68			3-22.151	Lunyu 6-7B6	Zhangzhongzhu A 9B
L5842 7獟	丧			The second	A.	湘
(correct)	(L5198)					
才 L5845	54B32			1-33.142	Suijin 8B65	Zhangzhongzhu B 26B
袹	松			1-82.131	-	11
(correct)				科		
才 L5846	45B55	46A46		1-82.261	Lyunyu 6-4B5	Daolishi 4A8
载 (correct)		和		稱拋雜		Dashi 2A1
						AT

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
才 L5847 秡 (correct)	05B15 茶件 花		06A75	1-27.271 1-82.131		
半 L5874 半 (correct)	50A65	50B53				
才 L5875 救 (correct)	53B54			1-33.142	Daolishi 4A8	Suijin 3B68
半 L5893 猴 (uncertain) [error for						

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
半 L5895 1 抓 (correct)	47B63	48447		1-73.212		
才 L5896 (correct)	37A78	38A26 载 概 0		1-62.111		
才 L5910 秋 (correct)	21A23	21B72 教徒	21872	1-25.221	Zazi 12B3 Zazi 12B4	Suijin 6A23 Suijin 6A23 Suiji
才 L5911 税 (correct)	24B48	25B26 秋秋 下下	25B26 秋礼 下下	1-24.231	Zazi 5A7	Daolishi 1A4

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
半 L5912 税 (correct)	25B23 税 離					
才 L5913 祥 (correct)	50B57	51А53		1-85.251	Zazi 13B7	Suijin 9B19 Dashi 4B6
才 L5918 梳 (correct)	30A62 书述	31A23	31A23	1-39.131	Daolishi 4B1	Suijin 9B39
半 L5946 半 能 (correct)	50A63 半社 載	50B48		1-89.141		

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
≠ L5948 精	51A51	51B46		3-21.142	Zazi 14B7	
(wrong)	1 ANNA	50440				
才 L5949 桶剂 (correct)	49B56 補精 凝蕪	50A48		1-10.131		
孝	04A63		05A57	1-33.142	Zazi 15A3	Suijin 10A56
1 L5950 考え (wrong)	报 後		我我	衣無認	夜	极
才 L5951 权 (wrong)	44A27 表 文	44B32 载 动。		3-09.131		
声	14B33	15B21	15B21	1-62.131	Dashi 4B2	Daolishi 1B7
L5952 積	粮	粮	報	藏	藏	語
(correct)	報	·激·	鹿。			TIP

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
才 L5953	49B55 社 後	50A47		1-10.122		
币 (correct)	教	孩		<b></b> 酸秋 <b> </b>		
才 L5955 择 (correct)	46A13	46A73 书子 稿		3-09.222		
才 L5956 猴 (wrong)	22B36 祥 0 辨	23B18	23818	1-84.272		
才 L5957 (correct)		31867	31B67	1-82.131 祥祥 祥祥 群 截 颠		
才 L5958 種 (correct)	46A14	46A74		3-20.111		

	Tongyin A	Tongyin B2	<i>Tongyin</i> D	Wenhai	Other	Other
半 L5980 半荒 (correct)	25А36	26A12	26A12			
才 L5981 税 (correct)	44A28	44B28		3-09.113	Daolishi 1A1	Suijin 2B63 Zhangzhongzhu A 10B
才 L5982 (correct)	16B68 液 養	17843	17B43 作表 版表			Daolishi 5B8
才 L5984 (correct)	37А47	37B67		1-54.241 1-66.211		

	Tongyin A	Tongyin B2	Tongyin D	Wenhai	Other	Other
巿	31B43	32A71	32A71	1-20.142		
L5985	一冊	孫	森	邪用		
纐	源 0	語の	瀬の	影税		
(correct)	inin-	onx	No.	瓢瓢		
尹	50B33	51A25		1-36.142		
L5992	新	新		-271		
뙒	1 1	南				
(correct)	BI	一次一				
¥	25B72					
L6073	我					
糭	(箱					
(correct)						

### 2.32 L1177

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	PDAM	New
1966	1968	2004	2006	2008	Glyph	Glyph
	扉	鼐	蘒	鼐	鼐	鼐

Tongyin A 14A34	Tongyin B1 15A11	Tongyin B2 15A11	<i>Tongyin</i> D 15A11	Wenhai 1- 63.271	Wenhai 1- 77.123
藏	福電	孫	元藏	森	窥



Kychanov 2006 and Li Fanwen 2008 both show a single dot on the bottom left component, but the original Tangut sources all show that the bottom left component has two dots. This is confirmed by the character construction given in *Wenhai Baoyun*, where L2463 % is described as "bottom of 'toil' [L1177], right of 'to love''' 雍徹藏邈.

#### 2.33 L1947 and L2354

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
N/A			H2 0284				顺
L1947		熣	<b>川</b> (紅 H2 0285	阍	版	版	
L2354		顺	<b>IIXI</b> H2 0286	阆	阆	阆	

Tongyin A 4B48	Tongyin D 5B44	Wenhai Baoyun 29.69	Yueyueleshi 3B	Wenhai 1- 27.251	Wenhai 1- 45.161
家	南新	No is	物	家	[[]
H2 0284	H2 0285	H2 0284	H2 0285	H2 0286	H2 0286
	L1947		L1947	L2354	L2354

However, Kychanov 2006, Li Fanwen 2008 and other sources only include the two variant character forms, and do not include the correct character form (H2 0284). In this case it would be inappropriate to change the glyph of either L1947 or L2354 to the form shown in H2 0284, as that would destabilize the source mapping for these two characters, so the best solution would be to add a new Tangut ideograph to the repertoire that maps to H2 0284 (kTGT\_MergedSrc = H2004-B-0284).

### 3. Previous Changes to Glyph Forms

This section lists glyph changes that have made to characters prior to N4522, and which are already incorporated into the PDAM charts for Tangut. These are changes to obvious mistakes in Li Fanwen 2008, and both cases the correct glyph is given in Li Fanwen 1997 and most other modern sources. Evidence for the correct glyph form is provided here retrospectively for reference, and no further action on these characters is required.

### 3.1 L0949

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	Li Fanwen	PDAM
1966	1968	2004	2006	1997	2008	Glyph
	魏	藣	滚	誮	藏	藏



## 3.2 L2834

Nishida	Sofronov	Han Xiaomang	Kychanov	Li Fanwen	Li Fanwen	PDAM
1966	1968	2004	2006	1997	2008	Glyph
屐	屐	腵	まえ	鼥	鼥	腵

Tongyin A 19B62	Tongyin B2 20A67	Tongyin D 20A67	Wenhai 1-42.272
嚴潮	酸補朝	殿	1 發展 酸硫新磷

### 4. Uncertain Glyph Forms

This section lists some characters where the correct glyph form cannot be determined with certainty. These are provided for possible discussion by experts, but unless further evidence can be adduced it is probably best to leave the glyph forms as they are in the PDAM charts.

L2008	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L4448	舭	訛	亂	訛	訛	訛	
L4443		赧	赧	繝	赧	赧	
L2800	繖	郗	鎌	貒	貅	飊	
L5467		秙	旆	擜	旆	旆	

### 4.1 L2245, L2647, L3302, L3674, L4340

All characters with the  $\frac{1}{4}$  component are written as 6 strokes without a dot terminator on the first stroke, but three out of the four characters with the  $\frac{1}{4}$  component are written as 5 strokes with a dot terminator on the first stroke in some primary Tangut sources.

	Tongyin A	Tongyin B2	Tongyin C	Tongyin D	Wenhai	Other
L4448 (dot)	27828	28A46	28A46	28A46	1-32.231	
L4443	50A28	50B22				
L2800 嫌 (dot ?)	46A24 《秋山 礼 魏	46B13 永計 献辨				
L5467 芥肃 (dot)	46A28	46B15 予許 私 航				

# 4.2 L0150 ... L5461

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L0150	萧	NE	졲	N III		<b>N</b>	
L0462		潇		蒸		詞	
L0638		敽	<b>新</b> 新	ZIX	訤	訤	
L0982			<b>竉</b> 竉	誕	瓢	毹	
L1445		幕	蓊		コーデー	孟	
L1986	膆	床	脪		膈	膈	
L2296		潇	绿	刻	纁	纁	
L3884	萧	雪	禘	靜	蕭	蕭	
L4382		薚	薚	類	撛	蘃	
L5012	蕭	薚	蕬	奫	藐	藐	

	Nishida 1966	Sofronov 1968	Han Xiaomang 2004	Kychanov 2006	Li Fanwen 2008	PDAM Glyph	New Glyph
L5054	萧	营用	蓔	黨	Ĭ₩	黨	
L5155	稱	稨	禘	Î	褊	觽	
L5461		蒸	鷋	貛	貘	貘	

The 13 characters with the  $\overline{\mathbb{M}}$  component (Radical R309) may be written with an extra dot as  $\overline{\mathbb{M}}$ , but original Tangut sources are inconsistent, and so it is not clear whether the dot is correct or a mistake. A possible solution to this issue would be to define variations sequences for dotted and dotless forms.

	Tongyin A	Tongyin B1	Tongyin B2	Tongyin D	Wenhai	Other
L0150	23B74	29A61	29A61	29A61	1-64.251	
L0462 ?ଲ	16A22		16B73	16B73	1-70.242 <b>1-36.163</b>	

	Tongyin A	Tongyin B1	Tongyin B2	Tongyin D	Wenhai	Other
L0638 荒久	13B56 飛 の 新	14B32	14B32	14B32	1-44.231 1-57.163 1-65.112 1-65.112	
L0982 希能	17A46 新能	20842	20B42	20842		Wenhai Baoyun 103 shang
L1445 鼒	50A72		50B57			

	Tongyin A	Tongyin B1	Tongyin B2	Tongyin D	Wenhai	Other
L1986 乕	16B51		17823	17823	1-83.211 1-89.172	
L2296 <i>《</i> 萧	23B73	24B54	24B54	24B54		
L3884 益	27B14	28A34	28A34	28A34		Zazi 17A2 新新
L4382 禁	23875 満 戦の	24B55	24B55	24855		

	Tongyin A	Tongyin B1	Tongyin B2	Tongyin D	Wenhai	Other
	36A63		37A18		1-7.212	Zazi 13A2
L5012 蕵	ううない		蒲		1-55.272	船額
	36A62		37A21		1-7.213	
L5054 薷	JUAU2		STALL 章章章		17.213	
L5155 ॉ孫	21831	22A78	22A78	22A78	1-69.212 新教教	
					1-80.271	

	Tongyin A	Tongyin B1	Tongyin B2	Tongyin D	Wenhai	Other
	48A45	48B37	48B37		1-77.262	
L5461	「新	精青	語言		「ないない」	
					1-65.112	
					潇	