

Old Chinese **sm*- and the Old Tibetan Word for ‘Fire’

Nathan W. Hill

(Department of Linguistics and Department of China & Inner Asia
SOAS, University of London)

Abstract

Several sinologists have compared Chinese 焜 *xjwǐjX* ‘burn’ or 火 *xwǎX* ‘fire’ to an Old Tibetan word *smye* ‘fire’. No such Old Tibetan word exists. Instead, *mye* is the Old Tibetan word for fire and *smye*, also spelled *dmeh*, means ‘stain, impurity, sin’. Tibetan evidence in this case does not support a reconstruction **sm*- in Old Chinese.

Keywords

Old Tibetan, Old Chinese, fire, *s*- prefix, Or. 15000/265

Résumé

Plusieurs sinologues ont tenté de rapprocher les formes 焜 *xjwǐjX* «brûler» et 火 *xwǎX* «feu» du chinois de la forme *smye* du tibétain ancien. Il s'avère que cette dernière forme en tibétain n'a pas le sens de «feu». En effet, le mot en tibétain ancien pour «feu» est *mye*; la forme *smye*, également orthographié *dmeh*, renvoie quant à elle au mot «impureté, péché». Ainsi, les données du tibétain ne sauraient conforter la reconstruction **sm*- du chinois archaïque.

Mots-clés

tibétain ancien, chinois archaïque, feu, le préfixe *s*-, Or. 15000/265

Among Sinologists there is a widespread belief that Old Tibetan has a word *smye* ‘fire’; Gong (2002[1995]: 83), Schuessler (2009: 288) and Mei

¹⁾ Here I acknowledge my gratitude to the British Academy for support in the course of the research that led to this paper. I also acknowledge my gratitude to an anonymous reviewer for the suggestion that Thomas (1935-1963) was the source form which *smye* ‘fire’ entered the Sinological literature.

(2012: 7) cite such a word,² comparing it to Chinese 焜 *xjwǐjX* ‘burn’ or 火 *xwaX* ‘fire’.³ These authors provide no discussion of *smye* ‘fire’, and make no reference to Tibetan documents or lexicographical resources. A number of citations from Old Tibetan documents make clear that *mye* is the usual Old Tibetan word for ‘fire’.⁴

- (1) *rgyal-mtsan* *ba-dan* *mar-mye* *dkyil-hkhor* *bśos* *sañ*
 victory.banner pendant butter.lamp maṇḍala offering.cake beer libation
spos *chab-las* *stsogs-pha*
 incense water-ABL etc.
 ‘victory banner, pendant, butter lamp (lit. ‘butter-fire’), maṇḍala, offering cake, beer libation, incense, water, etc.’ (Prayers for the foundation of De ga yu tshal, PT 16, folio 24 recto, l. 3)
- (2) *mar-mye* *gsol-phas-na* *hgro-ba* *thams-cad-kyi*
 butter.lamp offering-LOC creature all-GEN
ma *rig-paḥi* *mun-nag* *btsalte*
 NEG knowing-GEN ignorance dissipate
 ‘when offering butter lamps (lit. ‘butter-fire’) the dark ignorance of all creatures dissipates’ (PT 16, folio 31 verso, l. 2)
- (3) *lha* *Ho-de Guñ-rgyal-gyi* *zal-nas*
 god Ho-de Guñ-rgyal-GEN face-ABL
rgyal-po *lhas* *mdzad-na* *zal* *mtho /*
 king god-AGN do-CVB face high
rgyal rgyal *ḥbañs-rjes* *mdzad-na* *go* *mtho*
 king subject-AGN do-CVB face (?) high
lha *yul-na* *mye* *ḥbar*
 god land-LOC fire burn
myi *yul-na* *glu* *len*
 person land-LOC song take

² Mei’s write “WT me < mye < smye ‘fire’” (2012: 7). This form of presentation is ambiguous as to whether he regards *smye* as an attested form or a reconstruction, but since he does not mark it with an asterisk, he probably intends it as an attested form.

³ Chinese romanization conforms to Baxter’s (1992) Middle Chinese transcription. Because the value of the Tibetan evidence for the Old Chinese initial is under discussion, it is prudent to avoid citing an Old Chinese reconstruction.

⁴ In citations of Tibetan texts, PT refers to the shelf number ‘Pelliot tibétain’ of documents held at the Bibliothèque nationale de France, IOL Tib J refers to the shelf number ‘India Office Library Tibetan J’ of documents held at the British Library, and Or. Refers to the shelf number ‘Oriental’, documents also held at the British Library. All of the documents cited here hail originally from cave 16 of the 莫高 Mògāo caves near 敦煌 Dūnhuáng. This cave was closed in 1006 (Rong 1999-2000).

'The sister of Mdaḥ-śa-grī-ba, named Pur-pa-la, had shaggy hair that hung down to the ground; her skin was vile and rough like the hide of a sow, her eyes blazed with fire, and fiery grease dripped from her mouth.' (Rama A, IOL Tib J 737-1, ll. 119-121, cf. de Jong 1989: 22)

- (7)
- | | | | | | |
|---------------------|-----------------------|--------------------|----------------|----------------------|-----------------|
| « <i>bdagi</i> | <i>pa</i> | <i>g'zug-ma-la</i> | | | |
| « me-GEN | father | tail-ALL | | | |
| <i>ras</i> | <i>yug</i> | <i>ston-gis</i> | <i>dkris</i> / | | |
| cotton | cloth | thousand-AGN | wind | | |
| <i>mar</i> | <i>sran</i> | <i>khri-ḥi</i> | <i>nañ-du</i> | <i>bcug-nas</i> / | |
| butter | ounce | thousand-GEN | inside-TRM | place-CVB | |
| <i>mye</i> | <i>btan-ste</i> | <i>bkuṃ</i> » | <i>žes</i> | <i>gsol-pa-dañ</i> / | |
| fire | send-CVB | kill » | quote | asking-ASS | |
| <i>Ha-nu-man-ta</i> | <i>yañ</i> | <i>de</i> | <i>bžin</i> | <i>bggis-nas</i> / | |
| Hanuman | also | that | like | do-CVB | |
| <i>mye</i> | <i>ḥbaḥr-ba-dañ</i> / | <i>mjug-ma</i> | <i>yug</i> | <i>ces</i> | <i>byaste</i> / |
| fire | burning-ASS | tail | cloth | quote | do-CVB |
- 'My father's tail was wrapped in a thousand pieces of cloth and then stuck into ten thousand ounces of butter. Fire was then lit and he was killed.' They did the same to Hanumanta. The fire burned and he shook his tail vigorously.' (Rama A, IOL Tib J 737-1, ll. 269-271, cf. de Jong 1989: 35)

When the word *smye* does occur it does not mean 'fire'. In example (8) Dotson translates 'sores'.

- (8) *Smra-bon-ziñ-ba-yis* /
Smra-bon-ziñ-ba-AGN
- | | | | |
|------------|-------------|------------------|----------------|
| <i>kha</i> | <i>smye</i> | <i>gañs-la</i> | <i>bgrus</i> / |
| mouth | sore | snow-ALL | wash |
| <i>lag</i> | <i>smye</i> | <i>mtsho-las</i> | <i>bkrus</i> |
| hand | sore | lake-ABL | wash |
- '(The healer) Smra-bon-ziñ-ba washes (the patient's) mouth sores in snow and washes his hand sores in the lake.' (PT 1285, ll. 41-42, cf. Dotson 2008: 44, n. 16)

A translation 'stain' would also work, and perhaps take better account of the washing; such a translation also fits example (9).

- (9) *smye* *gtor-gyi* *sñin-po-la* /
stain dispel-GEN heart-ALL
om a ḥbri te hum phād //
- 'For the essence which dispels stains, "Om ajite (?) hūm phat'." (IOL Tib J 149.2, folio 13 verso, l. 5, cf. Dalton and van Schaik 2006: 24)

Example (10) incontrovertibly confirms a meaning ‘stain’ or ‘defilement’.

(10) <i>phu</i>	<i>na-re //</i>			
older.brother	said			
<i>ruñ</i>	<i>myi</i>	<i>ruñ-la /</i>		
appropriate	NEG	appropriate-ALL		
<i>dogs-par</i>	<i>ma</i>	<i>byasna /</i>		
heeding-TRM	NEG	do-CVB		
<i>srid-gyi</i>	<i>dkrugs-mar</i>	<i>hgyuro //</i>		
governance-GEN	agitated	become		
<i>zas-la</i>	<i>dog-par</i>	<i>ma</i>	<i>byasna //</i>	
food-ALL	heeding-TRM	NEG	do-CVB	
<i>dugis</i>	<i>srog</i>	<i>yal-to</i>		
poison-AGN	life	loose		
<i>chuñ-ma-la</i>	<i>dog-par</i>	<i>ma</i>	<i>byas-na //</i>	
wife-ALL	heeding-TRM	NEG	do-CVB	
<i>rogs</i>	<i>gyuro //</i>			
friend	become			
<i>gtshari</i>	<i>smye-la</i>	<i>dog-par</i>	<i>ma</i>	<i>byasna /</i>
clean	stained-ALL	heeding-TRM	NEG	do-CVB
<i>myi</i>	<i>ñan-par</i>	<i>skyeħo //</i>		
person	bad-TRM	born		
<i>grañ</i>	<i>dro-la</i>	<i>dog-par</i>	<i>ma</i>	<i>byas-na //</i>
cold	warm-ALL	heeding-TRM	NEG	do-CVB
<i>myi</i>	<i>nad-du</i>	<i>gyuro //</i>		
person	illness-TRM	become		

‘The older brother said: he who takes no heed for appropriate and inappropriate will be agitated in governance; he who takes no heed for food will lose his life by poison; he who takes no heed of wives will be a friend; he who takes no heed for clean and **stained**, (that) man takes vile rebirth; he who takes no heed of cold and warm, (that) man becomes ill.’ (Dialogue of two brothers, PT 1283, ll. 297-300)

It is tempting to tie *smye* with *dme(h)*, a word which refers to a class of grievous polluting crimes including incest, fratricide, and “impurity between members of religious fraternities” (Dotson 2009: 95 note 183). Dotson translates the one clear occurrence of this word in the *Old Tibetan Annals* as ‘fratricide’.

- (11) *bya.gagĭ* *lo.la:* *bab.ste/*
 bird-GEN year-ALL fall-CVB
btsan.po. *Ñen.kar.na.* *bźugs.šĭi/*
 emperor Ñen.kar-LOC remain-CVB
blon. *chen.po:* *Btsan.sña:dañ/*
 minister big Btsan.sña:-ASS
Mañ.ñen.stag.tsab: gñĭs/ ***dmeħ:*** *byuñ/*
 Mañ.ñen.stag.tsab: two fratricide arise
Šañs:gyĭ. *Sum.chu.bor/* *blon.* *chen.pho.* *Btsan.sña: gum/*
 Šañs:-GEN Sum.chu.bo-TRM minister big Btsan.sña: die
 ‘[685-686] It fell on the year of the bird. The Btsan-po [emperor] resided in Ñen-kar and fratricide arose between Chief minister [Mgar] Btsan-sña and [Mgar] Mang-ñen Stag-tsab, the two. Chief minister Btsan-sña died at Sum-chu-bo in Šañs.’ (*Old Tibetan Annals*, IOL Tib J 750, ll. 90-91, cf. Dotson 2009: 95)

The meaning ‘fratricide’ is made in explicit in two passages related to laws governing hunting accidents.

- (12) // *gñan-ba-dañ /* *mdaħs* *rñul-phas /* *phog-na /*
 relative-ASS arrow-AGN shoot-CVB strike-CVB
dmer *brtsi-ba-dañ* *myi*
 fratricide-TRM counting-ASS NEG
brtsĭ-baħi *khrims-la / : / /*
 counting-GEN law-ALL
źañ-lon *chen-po* *man-cad /*
 minister big downward
dmañs *mthaħ-ma* *yan-cad /*
 masses common upward
ri-dags-la *stsogs-pa-/la /* *mdaħs* *rñulde /*
 animal-ALL etc.-ALL arrow-AGN shoot-CVB
phu *nu-bo* *nañ /*
 older.brother younger.brother among
gcĭg-gis *gcĭg* *bkum-na /*
 one-AGN one die-CVB
dmer *brtsĭ-ba-dañ* *myĭ* *brtsĭ-ba* *ni/*
 fratricide-TRM counting-ASS NEG counting TOP
thoñ-myĭħi *khrims-gyi* *nañ-na /*
 homicide-GEN law-GEN among-LOC
nu-bo *nañ /* *gcĭg-gis* *bkumste /*
 younger.brother among one-AGN kill-CVB
dmer *brtsĭ-ba-dañ* *myi* *brtsĭ-bai /*
 fratricide-TRM counting-ASS NEG counting-GEN
khrims-kyi *yĭ-ge* *bźin* *gcado /*
 law-GEN text according cut

'The law as to whether or not to count it as **fratricide** when an arrow, shot (?), strikes a relative—From ministerial rank⁵ down to the common masses, when shooting (?) at game etc. with an arrow, if between an older and younger brother one is killed, as to whether or not to count it as **fratricide**, [it is decided according to] the law of homicide, when someone kills the younger brother it is decided according to the law which (decides) whether it is to be counted as **fratricide** or not.' (PT 1071, recto, ll. 325-328, cf. Richardson 1998: 155)

(13)	<i>gñen-ba</i>	<i>nañ</i>	<i>mdaḥ</i>	<i>riul-/bas</i>	<i>phog-na /</i>
	relative	among	arrow	shoot-CVB	strike-CVB
	dmer	<i>brtsi-ba-dañ /</i>	<i>myĩ</i>	<i>brtsiḥ-baḥĩ</i>	<i>khirms-la ///</i>
	fratricide-TRM	counting-ASS	not	counting-GEN	law-ALL
	<i>žañ-lon</i>	<i>chen-po</i>	<i>man-chad /</i>		
	minister	big	downward		
	<i>dmañs</i>	<i>tha-ma</i>	<i>yan-chad /</i>		
	masses	common	upward		
	<i>ri-ḥdags-las</i>	<i>stsogs-pa-la /</i>	<i>mdaḥ</i>	<i>riul-te /</i>	
	animal-ABL	etc.-ALL	arrow	shoot-CVB	
	<i>phu</i>	<i>nu-po</i>	<i>nañ</i>		
	older.brother	younger.brother	among		
	<i>gcig-gis /</i>	<i>gcig</i>	<i>mgum-na /</i>		
	one-AGN	one	die-CVB		
	dmer	<i>brtsi-ba-dañ /</i>			
	fratricide-TRM	counting-ASS			
	<i>myi</i>	<i>brtsi-ba</i>	<i>ni /</i>		
	not	counting	TOP		
	<i>thon-myiḥi</i>	<i>khirms-gyĩ</i>	<i>nañ-nah //</i>		
	homicide-GEN	law-GEN	inside-LOC		
	<i>phu</i>	<i>nu-po</i>	<i>nañ</i>		
	older.brother	younger.brother	among		
	<i>gcig-gis</i>	<i>gcig</i>	<i>mgum-ste /</i>		
	one-AGN	one	die-CVB		
	dmer	<i>brtsi-ba-dañ /</i>			
	fratricide-TRM	counting-ASS			
	<i>myĩ</i>	<i>brtsi-ba-ḥi /</i>			
	not	counting-GEN			
	<i>khirms-gyi</i>	<i>yi-ge /</i>	<i>bžin-ḥdu /</i>	<i>gcod-to /</i>	
	law-GEN	text	according-TRM	decide	

'The law as to whether or not to count it as **fratricide** when an arrow, shot (?), strikes a relative. From ministerial rank down to the common masses, when shooting (?) at game etc. with an arrow, if between an older and younger brother one dies, as to whether or not to count it as **fratricide**, [it is decided according to] the

⁵) For a discussion of *žañ-lon* compare Dotson (2004, esp. pp. 79-82).

law of homicide, when someone kills the older or younger brother it is decided according to the law which (decides) whether it is to be counted as **fratricide** or not.' (PT 1072, 48-51)

One instance of *dme* in the *Sum-pa Mother's Sayings* clearly does not mean 'fratricide', but rather a spiritual defect.

- (14) *lhas* *ma* *bžes-par* *lug* *bšas-pa* *ni /*
 god-AGN NEG eating-TRM sheep slaughtering TOP
dmer *hgyur-ro //*
 stain-TRM become
 'A slaughtered lamb the god does not eat, it becomes a (ritual) stain.' (Sum-pa Mother's Sayings, IOL Tib J 730, ll. 24-25)

All of the phonological or orthographic variations between the two words have parallels in other lexemes. For variation among *s-*, *r-*, and *d-*, one can point to examples such as the class of gods *Dmu*, *Rmu*, *Smu* (cf. Coblin 1987), the word 'knee' *pus-mo*, *dpus-mo*, *spu-smo* (cf. Hill 2007: 488), or the clan name *Dbah*, *Rba*, *Sba* which gave rise to the well-known eponymous historical text the *Dbah bžed*, *Rba bžed*, *Sba bžed* (Diemberger and Wangdu 2000: x et passim). Zhang provides a number of examples of *s-* / *d-* variation including *sbon*, *dbon* 'grandson', *sma*, *dmaḥ* 'low', and *skrum*, *dkrum* 'meat' (2009: 176). In general Old Tibetan has *my-* before the front vowels *-i-* and *-e-* where classical Tibetan has simple *m-* (e.g. Classical Tibetan *mi*, Old Tibetan *myi* 'person', Classical Tibetan *med*, Old Tibetan *myed* 'no exist'). There are however a limited number of words that have *m-* before front vowels in Old Tibetan. Temple points to *dmeḥ* as the only example in the corpus of texts which he studies where *m-* does not palatalize before a front vowel (2012: 28 et passim). Laufer had previously to *men-tog* 'flower' as another such example (1914: 99). Two other words also show a pronounced tendency to not palatalize, namely *bud-med* 'woman' and *phra-men* 'gilt silver' (cf. Takata 2006: 164, Dotson 2007: 8 note 7).⁶ Although the reasons why *dmeḥ*, *men-tog*,

⁶ In the Old Tibetan Documents Online (OTDO, <http://otdo.aa.tufs.ac.jp>, accessed 19 Nov. 2012) *bud med* occurs 35 times (PT 1047 x22, PT 1283 x5, PT 2204c x1, IOL Tib J 740 x7) against *bud myed* 18 times (PT 1047 x10, PT 1073 x1, PT 1287 x1, PT 1297.2 x1, IOL Tib J 730 x1, IOL Tib J 734 x4). Note that PT 1047 has both *bud med* (x22) and *bud myed* (x10). In OTDO *phra men* occurs 16 times (PT 1071 x13, PT 1072 x1, PT 1089 x2) and *phra myen* occurs once (PT 1071).

bud-med, and *phra-men* tend not to palatalize remain for the moment obscure, the presence of the -y- medial in *smye* in no way weighs against its identification with *dmeḥ*. Fluctuation in the presence of final -ḥ is so common in Old Tibetan as to require no comment here (cf. Hill 2005: 115-118).

Jäschke (1880) gives the word *rme-ba*, with the variant spellings *dme-ba* and *sme-ba*, as having the three definitions ‘spot, speck, mark’, ‘detestable sin’, and ‘uncleanliness of food’. Thus, the word, together with its variable spellings, is also known in later documents.

The words *smye* and *dmeḥ* appear to be in complementary distribution with *smye* in PT 1285, IOL Tib J 149.2, and PT 1283, but *dme(ḥ)* in IOL Tib J 750, PT 1071, PT 1072, and IOL Tib J 730. This distribution supports the identification of the two spellings and opens the possibility that this variation in spelling is a *Merkmal*, which together with other criteria, could serve to stratify manuscripts diachronically.

Because those sinologists who cite a word *smye* ‘fire’ in Old Tibetan cite no document or Tibetan lexicographical work in support of this form, it is not possible to trace with certainty how this ghost made its debut. However, a probably source is F. W. Thomas’ treatment of Or. 15000/265.

- (15) *sman* *ḥdi-las* *lug-ril* *phyed* *tsam /*
 medicine this-ABL sheep.dung half mere
chu *ñuñ* *śas* *tsam-gi* *nañ-du /*
 water few some mere-GEN inside-TRM
tshe-gu *śig-gi* *nañ-du* [*smye*]-*la* *bżus* *bskol-te* *žu-ba-dañ*
 tube a-GEN inside-TRM [fire]-ALL dissolve boil-CVB melting-ASS
 ‘Of this medicine [taking] as much as half a sheep’s dung, in just a little water, in a small tube (*tse-gur*), boil it over the fire (read: *mye-la* ?) until it dissolves (*bżus-bskol*).’ (Thomas 1935-1963: vol. ii, pp. 397-398, Thomas’ transcription and translation)⁷

The reading *smye*, marked by brackets, is insecure with *rmye* and *sgye* also offered as possible readings in a footnote. A supplementary note to this passage writes with more certainty “*smye* (*mye*) for *me* (*mye*) ‘fire’”

Note that PT 1071 has both *phra men* (x13) and *phra myen* (x1).

⁷ Takeuchi transliterates *sman ḥdi-las lug ril phyed tsam / chu ñuñ śas tsam-gi nañ-du / tshe gu śig-gi nañ-du myi-la bżus bskol-te žu-ba-dañ* (1997-1998: 119, #366).

(Thomas 1935-1963: vol iii, p. 104). Referring to this passage, *smye* ‘fire’ is included in the glossary with the laconic entry “*smye* = *mye* ‘fire’” (Thomas 1935-1963: vol. III, p. 166).

A digital image of the document under magnification appears instead to present the straightforward *mye* where Thomas reads *smye* (cf. Figure 1)

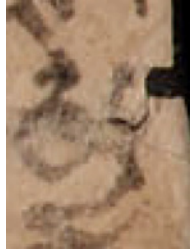


Figure 1: The akṣara which Thomas reads *smye*

This akṣara shows none of the horizontal shift in the alignment of the stack that one can witness in examples of *sm-* in the same document; it is overall quite similar to other examples of *my-* (cf. Figure 2).



(a) *smon* (l. 2)

(b) *sman* (l. 3)

(c) *myi* (l. 3)

(d) *myi* (l. 5)

Figure 2: Other examples of *sm-* and *my-* in Or. 15000/265

Also seeing *my-* rather than *smy-*, Takeuchi reads the akṣara as *myi* (1998: 119, #366). Nonetheless, the vowel diacritic in Table 1 is distinct from the ‘i’ seen in Table 2 (b and c) and ‘fire’ makes better sense in the passage than ‘person’ (*myi*) or ‘not’ (*myi*). In short, Thomas is correct to understand this word as ‘fire’, but the text does not read *smye* but simply *mye*. The inclusion of a word *smye* ‘fire’ in Thomas’ glossary is a mistake.

Mei (2012) invokes the sequence **sm-* > *x-* in Old Chinese to account for 諧聲 *xiéshēng* contacts between words with Middle Chinese *m-* and words with Middle Chinese *x-* (e.g. 滅 *mjiet* < **mjiat* ‘destroy’, 威 *xjwiet* < **smjiat* ‘extinguish, destroy’). Mei reconstructs 燬 *xjwǐjX* ‘burn’ as **smjədx*, and pointing to purported Old Tibetan *smye* ‘fire’, regards the *s-* in Old Chinese as “confirmed by comparative evidence” (2012: 7). In fact *smye* ‘fire’ is a ghost word; the real word for fire in Old Tibetan, namely *mye*, provides no support for an *s-* prefix in Old Chinese. In contrast, Sagart and Baxter (2012) reconstruct such instances of *x-* with **ŋ-* (i.e. 滅 *mjiet* < **met* ‘destroy’ and 威 *xjwiet* < **ŋmet* ‘extinguish, destroy’). Sagart (1999: 159) reconstructs 燬 *xjwǐjX* < **^bhmij?*, which in the current system of Baxter and Sagart would be **ŋaj?*; in their system **sm-* exists, but develops into Middle Chinese *s-* rather than *x-* (Sagart and Baxter 2012). Discussions of the merits and demerits for **sm-* as a solution for problems in Old Chinese phonology will doubtless continue apace, but an Old Tibetan word *smye* ‘fire’ need have no place in these discussions for the simple reason that such a word does not exist.

References

- Baxter, William H. (1992). *A Handbook of Old Chinese Phonology*. Berlin: Mouton de Gruyter.
- Coblin, W. South (1987). A note on Tibetan *mu*. *Linguistics of the Tibeto-Burman Area* 10.1: 166-168.
- Coblin, W. South (1991). A study of the Old Tibetan Shangshu paraphrase. *Journal of the American Oriental Society* 111.2: 303-322, and 111.3: 523-539.
- Dalton, Jacob P. and Sam van Schaik (2006). *Tibetan Tantric Manuscripts from Dunhuang: A Descriptive Catalogue of the Stein Collection at the British Library*. Leiden: Brill.
- Dotson, Brandon (2004). A note on *zhang*: Maternal relatives of the Tibetan royal line. *Journal Asiatique* 292.1-2: 75-99.
- Dotson, Brandon (2007). Divination and law in the Tibetan Empire: The role of dice in the legislation of loans, interest, marital law and troop conscription. *Contributions to the Cultural History of Early Tibet*. Matthew T. Kapstein and Brandon Dotson, eds. Leiden: Brill. 3-77.
- Dotson, Brandon (2008). Complementarity and opposition in Early Tibetan ritual. *Journal of the American Oriental Society* 128.1: 41-67.
- Gong Hwang-cherng 龔煌城 (2002[1995]). The system of finals in Proto-Sino-Tibetan. *The Ancestry of the Chinese Language*. William S. Y. Wang, ed. (Journal of Chinese linguistics. Monograph series 8) Berkeley: Project on Linguistic Analysis, University of California: 41-92. (reprinted in: *Hanzangyu Yanjiu Lunwenji* 《漢藏語研究

- 論文集》/ *Collected Papers on Sino-Tibetan Linguistics*. Taipei: Zhongyang Yanjiuyuan Yuyanxue Yanjiusuo Choubeichu 中央研究院語言學研究所籌備處, 79-124.
- Hill, Nathan W. (2005). Once more on the letter α . *Linguistics of the Tibeto-Burman Area* 28.2: 111-141.
- Hill, Nathan W. (2007). Aspirated and unaspirated voiceless consonants in Old Tibetan. *Language and Linguistics* 《語言暨語言學》 8.2: 471-493.
- de Jong, Jan Willem (1989). *The Story of Rāma in Tibet: Text and Translation of the Tunhuang Manuscripts*. Stuttgart: F. Steiner.
- Laufer, Berthold (1914). Bird divination among the Tibetans (Notes on Document Pelliot No. 3530, with a Study of Tibetan Phonology of the Ninth Century). *T'oung Pao* (Second Series) 15.1: 1-110.
- Mei, Tsu-Lin 梅祖麟 (2012). The causative *s- and nominalizing *-s in Old Chinese and related matters in Proto-Sino-Tibetan. *Language and Linguistics* 《語言暨語言學》 13.1: 1-28.
- Richardson, Hugh (1998). Hunting accidents in Early Tibet. *High Peaks, Pure Earth: Collected Writings on Tibetan History and Culture*. London: Serindia Publications. 149-166.
- Rong Xinjiang (1999-2000). The nature of the Dunhuang library cave and the reasons for its sealing. *Cahiers d'Extrême-Asie* 11: 147-275.
- Sagart, Laurent (1999). *The Roots of Old Chinese*. Amsterdam: John Benjamins Publishing Co.
- Sagart, Laurent and Baxter H. William (2012). Reconstructing the* s-prefix in Old Chinese. *Language and Linguistics* 《語言暨語言學》 13.1: 29-59.
- Schuessler, Axel (2007). *ABC Etymological Dictionary of Old Chinese*. Honolulu: University of Hawai'i Press.
- Schuessler, Axel (2009). *Minimal Old Chinese and Later Han Chinese*. Honolulu: University of Hawai'i press.
- Takata Tokio 高田時雄 (2006). A note on the Lijiang Tibetan inscription. *Asia Major* (Third Series) 19: 161-170.
- Takeuchi Tsuguhito (1997-1998). *Old Tibetan Manuscripts from East Turkestan in the Stein Collection of the British Library*. Tokyo: The Centre for East Asian Cultural Studies for Unesco, The Toyo Bunko.
- Temple, Ross (2012). *Conditioning Environments of Old Tibetan Palatalization*. MA thesis, Indiana University.
- Thomas, F. W. (1935-1963). *Tibetan Literary Texts and Documents Concerning Chinese Turkestan*. London: Royal Asiatic Society.
- Wangdu, Pasang and Hildegard Diemberger (2000). *dBa' bzhed: The Royal Narrative Concerning the Bringing of the Buddha's Doctrine to Tibet*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Zhang, Jichuan 張濟川 (2009). *Zangyu Cizu Yanjiu* 《藏語詞族研究》 [A Study of Tibetan Word Family]. Beijing: Shehui Kexue Wenxian Chubanshe 社會科學文獻出版社.