

## Some Tibetan verb forms that violate Dempsey's law

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 Jakob Dempsey suggests that Tibetan *-i-* before velars often derives from an original *-e-* (Dempsey 2001: 217, 2003: 90, Hill 2012: 73, Hill 2013: 202-203).<sup>1</sup> Chinese cognates with the vowel *-e-* provide good motivation for this suggestion.<sup>2</sup>

Tib. གཅིག *gčig* < \*gčiek 'one' : Chi. 隻 *tsyek* < \*tek (1260c) 'one of a pair'

Tib. མཛིན *mjin* < \*mlin (Bodman's law) < \*mlieŋ 'neck' : Chi. 領 *ljengX* < \*reŋʔ (0823f)

OTib. མྱིང *myin* < \*mieŋ 'name' : Chi. 名 *mjieng* < \*C.meŋ (0826a)

Tib. འདྲེན *ldzin* < \*hdzeŋ 'quarrel, fight v.', Ch. 爭 *tsreang* < \*m-ts'reŋ (0811a) 'strife, quarrel'

Tib. རྩེན *rdzin* < \*rdzeŋ 'pond' : Chi. 井 *tsjengX* < \*C.tseŋʔ (0819a) 'well (n.)'

Tib. སྲིང་མོ *sriŋ-mo* < \*sreŋ-mo 'sister of a man' : Chi. 甥 *sraeng* < \*s.reŋ (0812g) 'sister's child'

The cases where Chinese has *-i-* before a velar show that this sound change is indeed a merger.

Tib. ཚེགས *tshigs* 'joint' : Chi. 節 *tset* < \*ts'ik (0399e) 'joint of

<sup>1</sup> This essay uses the Library of Congress system for transliterating Tibetan with the following changes: 'h' rather than apostrophe, 'č' rather than of 'c', and 'j' rather than 'j'. For Chinese I provide the character followed by Baxter's Middle Chinese (1992), an Old Chinese reconstruction taken from or compatible with the current version of Baxter and Sagart's system (2011), and the character number in Karlgren (1964[1957]). Like in Baxter's own recent work, for Middle Chinese I use 'ae' and 'ea' in place of his original 'æ' and 'ē'. I do not however following him is changing 'i' to '+'.  
<sup>2</sup> The same change occurs in the pre-history of Latin (e.g. Lat. *septingentī* 'seven hundred' < \*septem+centum, Lat. *tingō* 'moisten', versus Gk. τέγγω; Lat. *quīnque* 'five', Gk. πέντε, Skt. *pāñcan* cf. Leumann 1977: 45).

bamboo'

Tib. སྤྲུག *śig* 'louse' : Chi. 虱 *srit* < \*sri[k] (0506a) 'louse'

Tib. འཇམ་གྲུབ་ལྷོ་གྲུབ་ *hkhyig* 'tie, fasten, suffocate' : Chi. 縊 *'ejH* < \*q'ik-s (0849g) 'strangle'

Tib. ན་ཞིང་ *na-niñ* 'last year' : Chi. 年 *nen* < \*C.n<sup>5</sup>iŋ (0364a) 'harvest; year'

Tib. སྤུང་ *śiñ* 'tree' : Chi. 薪 *sin* < \*si[ŋ] (0382n) 'firewood'

Tib. སྤྲོད་ *sñiñ* 'heart' : Chi. 仁 *nyin* < \*niŋ (0388f) 'kindness'

Internal to Tibetan, Dempsey's law helps to explain the failure of some laterals to undergo Benedict's law (\*l- > ź-). If Benedict's law preceded Dempsey's law, one can explain why all instances of *li-* appear in words with velar finals. The words ཞིང་ *źiñ* 'field' and ལེངས་ *liñs* 'hunt' were originally \*liŋ (with \*liŋ a subphonemic pronunciation) 'field' and \*leŋs 'hunt'; after the application of Benedict's law they became \*źiŋ 'field' and \*leŋs 'hunt'; after the application of Dempsey's law they became the attested ཞིང་ *źiñ* 'field' and ལེངས་ *liñs* 'hunt'. Dempsey's law also accounts for the lack of palatalization in most words that contain the sequences *-di-* and *-ni-* (cf. Hill 2013: 202-203).

If all instances of inherited *-e-* before velars changed to *-i-*, then one expects to find no native Tibetan words that contain the sequences *-eñ* or *-eg*. Nonetheless, there are many such words, both nouns (འབྲེང་ *hbren* 'braid', ཟེང་ *phren* 'rosary', རྗེག་ *dreg* 'dirt', རྗེགས་ *dregs* 'pride', དེང་ *den* 'these days') and verbs (སྤྲོད་ *sreg* 'burn', གཤེགས་ *gśegs* 'go', འདོང་ *hden* 'go', སྤྲོད་ *sñeg* 'chase', སེང་ *señ* 'purify, clean'). Loanwords and analogical developments are the most common phenomena which lead to the apparent violation of exceptionless soundlaws (Campbell 2004: 16-120, esp. 109-111); few of the Tibetan words with rimes *-eñ* and *-eg* are obvious loanwords, consequently, it is likely that some of the exceptions are analogical developments.

Paradigms provide one source of inspiration for the creation of analogical forms. Tibetan nouns are invariant across the noun paradigm; examples of paradigmatic analogical changes in the nominal system will be difficult to find. However, Tibetan verbs have intricate inflectional paradigms that provide ample models for analogical innovations (Coblin 1976, Hill 2010: xv-xxii). The remainder of this essay explores analogical explanations for the forms སེང་ *señ* 'purify, clean', སྤྲོད་ *sñeg* 'chase', གཤེགས་ *gśegs* 'go, come', and ལྡེག་ *ldeg* 'teeter'.

The verb སེང་ *señ* 'purify, clean' is explainable as an alternative present to the verb (present) བསེས་ *sañs* / བསང་ *bsañ*, (past) བསངས་ *bsañs*, (future) བསང་ *bsañ*, (imperative) སོངས་ *soñs* 'cleans, purify'. Stems of this

verb are well known from Tibet's religious vocabulary, with *sañs* appearing in the compound *sañs-rgyas* 'buddha' and the stem *bsañs* used as a noun 'juniper fumigation ritual' in its own right. Analogy well motivates the form *señ* that violates Dempsey's law. A verb such as *byed*, *byas*, *bya*, *byos* 'do' serves as a convenient model: *byas* : *byed* :: *bsañs* : X, in which X was solved for with *señ*. The other two available present stems *sañs* and *bsañ* are also explainable as analogical developments. The stem *sañs* is arrived at through the removal of the *b-* past prefix. The past suffix *-s* was not removed because final *-s* may appear in present stems; compare *hčhags*, *bsags*, *bsag*, *śogs* 'confess'. The opposite strategy results in the present stem *bsañ*; in this case not the past suffix *-s*, but the prefix *b-* remains, this time on the model of a verb such as *bgro*, *bgros*, *bgro*, *gros* 'argue, discuss'. The existence of three alternative presents *señ*, *sañs*, and *bsañ*, and the ease with which analogy accounts for them both suggest that an inherited present was ousted from this paradigm. In this case the etymological present *gsiñ* < \**gseñ* 'strain, purify' occurs as an independent verb; the inherited paradigm was *gsiñ*, *bsañs*, *bsañ*, *soñs*.

The form *sñeg* 'chase' is also explainable as an analogical development. Although Hill gives separate verbs *√sñeg* (*sñeg*, *bsñegs*, *bsñeg*, *sñogs*) 'chase after' and *√sñag* (*sñog*, *bsñags*, *bsñag*, *sñogs*, 2010: 108-112), a single passage from the Old Tibetan version of the *Rāmāyaṇa* attests all four forms of this verb, yielding the paradigm *sñegs*, *bsñags*, *bsñag*, *sñogs*.

- (1) *rñ-po-čhe-ñi ri-dags śig byuñ-ba / lha-mos* « *jo-bo sñogs* » *śes gsol-pa-dañ / rgyal-po źal-nas /* « *ñu nñ bzlu-ba-ñi ri-dags yin-bas / bsñag-du myi ruñ-ste / ðđ sñegs-pa-ñi pyi-na / khyod ðphrog-pa ðoñ* » *źes bgyis-na / lha-mo mchid-nas* « *ri-dags kyis bslur ĵi mchis // ... rgyal-po źal-nas //* « *ñas ri-dags bsñag-gis // Lag-śa-na gar yañ ma-ñgro-bar // lha-mo sruñ-śig* » *čhes gsuñ-ste / ri-dags bsñagso //*

When a precious deer arose, the lady requested 'lord **chase** [imperative] (it)!. The king said, 'this is a deceitful deer, it is not appropriate to **chase** [future] (it)!. If I were to **chase** [present] it, thou wouldest be absconded.' The lady said, 'how can a deer be deceitful...' The king said, 'I will **chase** [future] the deer, but Lakṣaṇa, going nowhere, guard the lady!' He **chased** [past] the deer. (I.O.L. Tib J 0737.1, ll. 144-150, cf. de Jong 1989: 113)

Even if later texts do distinguish the verbs  $\sqrt{s}\dot{n}eg$  (སློག *sñeg*, བསློགས *bsñegs*, བསློག *bsñeg*, ལྷོགས *sñogs*) and  $\sqrt{s}\dot{n}ag$  (སློག *sñog*, བསློགས *bsñags*, བསློག *bsñag*, ལྷོགས *sñogs*), this passage makes clear that forms with the vowel 'e' started life in the present stem ལྷོགས *sñegs*. The reanalysis of the final -s as a past suffix allows for the creation of a new present ལྷོག *sñeg*, with the past བསློགས *bsñegs* and future བསློག *bsñeg*, deriving from this stem through the normal application of the affixes *b-* and *-s*. If the verbal root were in fact  $\sqrt{s}\dot{n}eg$ , the imperative would not undergo 'o' ablaut. However, the salience of 'o' for marking the imperative led to the suppletive borrowing of the original imperative instead of an ablautless form such as *\*sñegs*. These considerations demonstrate that the entire paradigm of  $\sqrt{s}\dot{n}eg$  is born from the present stem ལྷོགས *sñegs*, but this stem itself is a violation of Dempsey's law and requires explanation. The inherited present *\*sñigs* (< *\*sñegs*) was analogically restored to ལྷོགས *sñegs* just as གསེང *gsin* < *\*gsen* was replaced with སེང *sen*, but whereas གསེང *gsin* enjoyed a new life as a verb with specialized semantics, the attested verb  $\sqrt{s}\dot{n}ig$  'discard' (སློག *sñig*, བསློགས *bsñigs*, བསློག *bsñig*, ལྷོགས *sñigs*, cf. Hill 2010: 109) blocked this possibility for *\*sñigs*.

Although གཤེགས *gśegs* 'go, come' is an invariant verb already in Old Tibetan, there is evidence that it originates as a present stem. Jäschke points out that the form ལོག *śog*, synchronically the imperative of ལོང *loñ* 'come', is "properly" the imperative of གཤེགས *gśegs* (1881: 503). With the paradigm of a verb like  $\sqrt{lañ}$  'take' (ལེན *lend*, ལླངས *blañs*, ལླང *blañ*, ལོང *loñ*) 'take' in mind, one might speculate that གཤེགས *gśegs* originally had the following paradigm.

pres. གཤེགས *gśegs*  
 past. *\*bśags*  
 fut. *\*bśag*  
 imp. ལོག *śog*

Róna-Tas reconstructs an unattested form of this verb *\*gśags* on the basis of Balti dialect *śags* 'go' and the Monguor loan from Tibetan *śiaqla* 'pass away' (1966: 95 #670). In a review R. A. Miller highlights that "the Monguor form and the Balti reflex are particularly important since they give evidence for an original *\*a-grade*" (1968: 156). Sprigg confirms the Balti word *śags* with the meaning 'come, go, sit' (2002: 151).

Written Tibetan	Balti	English
རེག <i>reg</i>	<i>rjaxs</i>	'begin'
འཐེང <i>hthen</i>	<i>thjaŋ</i>	'limp'
ལྷེག <i>ldeg</i>	<i>ldjaqlджа</i>	'swinging up and down'
ཐེག <i>theg</i>	<i>thjaq</i>	'be able to list'

Table 1: The correspondence of Written Tibetan *-e-* to Balti *-ja-* (after Zemp 2006 qtd. in Jacques 2009)

The Monguor form supports the reconstruction of a nuclear vowel \**a*, but it is not entirely clear that Balti also supports this reconstruction. Jacques demonstrates that western Tibetic languages undergo a change of *e* > *ja* before velars (2009). In general the presence of medial *-j-* signals whether the Balti reflex derives from Tibetan *-e-* or *-a-*, thus Balti *thjaq* < Tib. ཐེག *theg* 'be able to list' versus Balti *thaqpa* < Tib. ཐག་པ་ *thag-pa* 'rope' (cf. Sprigg 2002: 163, 239). However, since *ś-* is already a palatal consonant this distinction does not manifest after this consonant; the vowel of Balti *śags* reconstructs to either \**-e-* or \**-a-* with equal ease.

Róna-Tas' reconstruction of a prefix \**g-* in the ancestor of Balti *śags* appears unmotivated. Eunice Jones, a linguist who has lived in Baltistan for many years, informs me that although some Balti dialects, such as that of Khapalu, retain many of the etymological cluster initials in verb stems, she is unaware of any dialect that has a cluster initial in the word *śaxpha* 'go' (imp. *śoxs*) (letter, 4 February 2013). Balti thus supports the reconstruction of a past stem \**śags* (or possibly \**śegs*) and an imperative \**śogs*.<sup>3</sup> More significant than the Balti form is the pronunciation of གཤེགས *gśegs* 'die' in Lhasa dialect as /`shaa/, which Kitamura renders orthographically as གཤགས *gśags* (1975: 60).

Even without evidence for pronunciation of the past with an 'a' vocalism, the absence of the *g-* prefix from the attested Tibetan imperative ལོག *śog* guarantees that the *g-* and the *-e-* of the form གཤེགས *gśegs* are derivational and not elements of the root. Furthermore, the 'e' vowel and the final *-s*, which takes the form *-d* after open syllables and grave consonants, seen in གཤེགས *gśegs* are characteristic of a present stem (cf. Coblin 1976: 51-54).

The invariant verb གཤེགས *gśegs* is a generalized present stem, but this stem itself is a violation of Dempsey's law and requires

<sup>3</sup> Bielmeier's grammar of Balti does not include this words (1985: 245).

explanation. The anticipated inherited form is \*gśigs (< \*gśegs), which is as far as known to me unattested in any meaning.

The only way to tie the two attested forms, གཤེགས *gśegs* and ལོགས *śog* is to suggest that there was once a verb with the paradigm \*gśegs, \*bśags, \*bśag, ལོགས *śog*, or, following the evidence of Balti for an unprefixated past, \*gśegs, \*śags, \*śag, ལོགས *śog*. Dempsey's law then led \*gśegs to become \*gśigs. Next, analogy replaced the present \*gśigs with གཤེགས *gśegs*, when \*(b)śags and \*(b)śag were still current. Finally, paradigmatic leveling led all stems except གཤེགས *gśegs* to fall into disuse; ལོགས *śog* remained as a suppletive member of another verb (viz. རོང *hoñ* 'come').

The doublet of verbs ལྷེག *ldeg* 'shake' and ལྷེག *ldig* 'shake' looks like another case in which Dempsey's law changed \*-eg to -ig, only to be counteracted by analogical restoration. The *Mdzañs blun* provides a clear example of ལྷེག *ldeg* meaning 'teeter'.

- (2) *lhalji pho-brañ kun ldeg-č'iñ g.yos-nas lha rñams dñañs-te  
bltas-na/ byañ-chub-sems-dpas lus-kyi pags-pa sbyin-par byas  
mthoñ-nas/*

All the palaces of the gods teetered and shook, when the gods, afear'd, looked, they saw that the Mahāsattva had offered the skin of his own body. (*Mdzañs blun*, Derge Kanjur, vol. 74 folio 172b)

The inherited present ལྷེག *ldig* occurs in the phrase མི་ལྷེག་པའི་ཚོས་ *mi ldig pañi chos* 'unwavering dharma' (cf. Derge Kanjur, vol. 40, p. 42a, vol. 45, p. 41a).

The presents ལྷེག *ldig* (inherited) and ལྷེག *ldeg* (renewed) should derive from a root √lag, with a paradigm that includes past \*blags, future \*blag, and imperative \*logs. The verb ལྷགས *blags* 'incline', seen in the phrase རྩ་བ་ལྷགས་ *rna-ba blags* 'incline one's ear' (cf. de Jong 1973), is semantically close enough to 'teeter', to warrant its interpretation as the past stem of ལྷེག *ldig* / ལྷེག *ldeg*. De Jong does not provide a textual citation for རྩ་བ་ལྷགས་ *rna-ba blags* 'incline one's ear', instead relying on the *Mahāvīyutpatti* and other lexical sources. Nonetheless, the Kanjur offers a number of attestations of རྩ་བ་ལྷགས་ *rna-ba blags* 'incline one's ear'.

- (3) *mdor-na dud-ñgro-ñi skye-gñas-su gtogs-pañi sems-can dag  
kyañ sgra sñān-pa de-la rna blags-te sñān-to// de-nas bčom-  
ldan-ñdas-kyis dge-sloñ rñams-la bkañ-stsal-pa/*



(*Vinaya-vibhaṅga*, Derge Kanjur, vol. 6, 24a-b, vo. 7, 4a-b)

Another use of ལྷགས *blags* is in the phrase མཆེ་མ་ལྷགས *mchi-ma blags*, which Btsan lha ñag dbañ tshul khrims equates with མཆེ་མ་ཤོར *mchi-ma śor* 'cry' (1997: 185). I wonder whether, the literal meaning 'for tears to teeter' might instead more precisely mean 'to hold back tears'. Example 7 is one of many attestations of མཆེ་མ་ཤོར *mchi-ma-śor* in the Kanjur that could be cited.

(7) *gcan-gzan-gyis khod ciñi phyir hdi ltar mi dgañ źes dris-na/*  
*mchi-ma blags-nas rgyas-par smras-pa dañ/*

When the creature asked 'why art thou unhappy like this', after crying, he explained in detail. (*Mdzangs blun*, Derge Kanjur, vol. 74 folio 172a)

It is difficult to locate unambiguous future stems of the verb in question. In example 8, མི་ལྷག *mi blag* 'not incline' is either a future or a present. If it is a present, then it is built analogically to the past ལྷགས *blags*, replacing the inherited present ལྷིག *ldig*.

(8) *kha-cig rna mi blag gus-par mi ñan-ciñ bkañ-ñan-pañi sems*  
*ñe-bar mi lñog-la/ čhos-kyi rjes-su lñhun-pañi chos-la nan-tan*  
*mi byed-na ...*

If someone does not incline his ear, does not listen, does not establish a loyal and obedient mind, and does not act diligently for dharma that accords with dharma...  
(*Aṣṭādaśasāhasrikā-prajñāpāramitā-nāma-mahāyāna-sūtra*, Derge Kanjur, vol. 31, page 76b)

The expected imperative \*logs appears not to occur. One might explain that 'teeter' is not a voluntary verb, but at least in English one can use the imperative 'incline thine ear unto my sayings' (Proverbs 4:20). With the orthographic form ལོགས *logs* in mind, it is perhaps not too far fetched to suggest that the noun ལོགས *logs* 'the side' is derived from the same root as this verb.

This investigation of exceptions to Dempsey's law permits the conclusion that the verbs མེར *sen* 'purify, clean', ལྷོག *sñeg* 'chase', གཤེགས *gśegs* 'go, come', and ལྷིག *ldeg* 'teeter' are analogical present formations; the inherited presents of these verbs, with *-i-* vocalism, have been replaced with the *-e-* vocalisms more typical of the present stem. The

inherited paradigms, together with brief remarks on subsequent developments, can be summarized as follows:

√sañ 'cleanse, purify'

pres. གསེང *gsin* (exists alongside the analogical སེང *sen*)

past བསངས *bsaṅs*

fut. བསང *bsaṅ*

imp. རོངས *soṅs*

√sñag 'chase, pursue'

pres. \*sñigs (replaced by analogical སྟླགས *sñegs*)

past བསྟླགས *bsñags*

fut. བསྟླག *bsñag*

imp. སྟླགས *sñogs*

√śag 'go'

pres. \*gśigs (replaced by analogical གཤེགས *gśegs*)

past \*(b)śags (replaced through paradigmatic leveling by

གཤེགས *gśegs*)

fut. \*(b)śag (replaced through paradigmatic leveling by གཤེགས *gśegs*)

imp. ཤོག *śog* (continues as imperative of རོང *hoṅ* 'come', replaced in this paradigm through paradigmatic leveling by གཤེགས *gśegs*)

√lag 'teeter, incline'

pres. ལྷིག *ldig* (exists alongside the analogical ལྷེག *ldeg*)

past ལྷགས *blags*

fut. ལྷག *blag* (?)

imp. \*logs (but cf. ལོགས *logs* 'side')

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