

# Gser-Rdo

## A new Tibetic language across the Rngaba-Dkarmdzes border

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Gserskad and Rdoskad are two recently uncovered Tibetic dialect chains spoken on the northern border of Rngaba (Aba) and Dkarmdzes (Ganzi) Prefectures in northwestern Sichuan. Despite their many points of difference and only partial intelligibility, Gserskad and Rdoskad show a special affinity to each other, as suggested in Sun (2006). The further idiosyncratic common lexical, phonological, and particularly morphological evidence highlighted in this article vindicate the close ties shared by Gserskad and Rdoskad as a distinct Tibetic language on a par with Amdo.

**Keywords:** Tibetic dialectology, shared innovation, verb stem ablaut, subgrouping

### 1. Introduction

The amazing internal diversity of Tibetic languages has been increasingly appreciated, and the documentation of Tibetic languages continues to receive scholarly attention (Tournadre 2014; Tournadre & Rigzin Karma 2015; Gawne 2016; Sun 2018; Zhang 2020).<sup>1</sup> Examples of recently discovered divergent Tibetic forms include Gserpa (色爾壩; Sun 2006) and Khalung (卡龍; Sun 2007), situated on the northern border of Rngaba and Dkarmdzes Prefectures in Sichuan. My follow-up fieldwork in recent years has considerably expanded knowledge about them. It can now be established that Gserpa and Khalung actually represent two Tibetic dialect chains spoken in geographically proximate but noncontiguous areas, known locally as Gserskad and Rdoskad. And, as this paper aims to demon-

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1. As well as a special issue of *Himalayan Linguistics* 19(1): Introduction to aspects of Brokpa grammar, devoted entirely to Brokpa Tibetan.

strate, Gserskad and Rdoskad comprise a distinct Tibetan language on a par with Amdo.

### 1.1 Gserskad and Rdoskad

Gserskad is distributed at Shelgrub Township (旭日鄉), Yangs'go Township (楊各鄉), Sbomda' Town (翁達鎮), and Rgyashod Township (甲學鄉) along the lower reaches of Gserchu River (色曲河) of eastern Gserthar County (色達縣) in Dkarmdzes Prefecture (甘孜州).

Further to the east is Rdoskad, spoken at Khalung Village (卡龍村) of Bugrje Township (吾依鄉), and Rkamda' (崗木達), Mesmda' (明達), and Bragmgo (章光) villages of Rkamda' Township (崗木達鄉) along the lower reaches of Rdokhog River (杜科河) of central Dzamthang County (壤塘縣) in Rngaba Prefecture (阿壩州). These locations are shown on the following map:

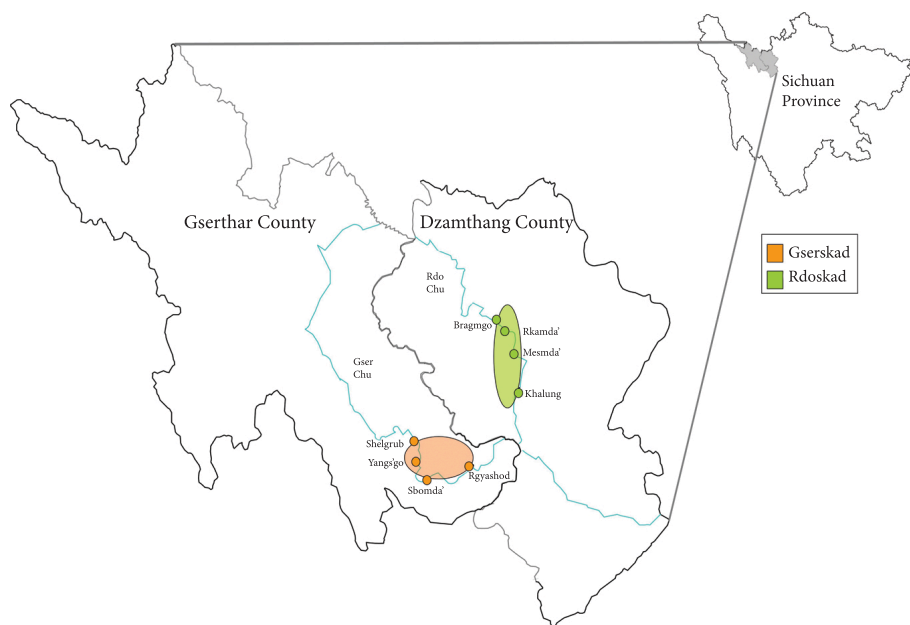


Figure 1. Distribution map of Gserskad and Rdoskad in Sichuan

Despite their many points of difference and limited intercommunicability on first contact, Gserskad and Rdoskad are closely related, as I suggested on morphological evidence (Sun 2006: 120). This article aims to further corroborate their intimate genetic affinity by providing additional lexical, phonological, and morphological commonalities between Gserskad and Rdoskad, represented respec-

tively by the varieties spoken at Rgyashod Hamlet (甲學寨) in Rgyashod Village<sup>2</sup> and Mdo Hamlet (門都寨) in Khalung Village.

This paper is structured as follows. In the remainder of the introduction, a comparative sketch of Gserskad and Rdoskad sound systems is provided to serve as a backdrop (§1.2). The main body of the paper is laid out in three sections, devoted to examining major lexical (§2), phonological (§3), and morphological (§4) innovations shared between the two target dialects to the exclusion of Amdo, the dominant language of the area. The concluding section sums up the mustered evidence for establishing the unity of Gserskad and Rdoskad, and discusses the implications of our study for the methodology of Tibetic subgrouping. This article is closed with appendices containing rhyme and onset correspondences between Gser-Rdo<sup>3</sup> and Old Tibetan and an English-Gser-Rdo comparative vocabulary.

## 1.2 Gser-Rdo phonological systems compared

Gserskad and Rdoskad share a similar phonological profile and a basic syllable canon (C)(C)V(C), although a diphthong *ie* created by sound change from OT <ag(s)/eg(s)/og(s)> in Gserskad introduced a marginal -VV structure into that dialect. Furthermore, Gserskad and Rdoskad show almost identical segmental phoneme inventories, sharing most of their onset consonants (Table 1), nuclear vowels (Table 2) and coda consonants (Table 3):<sup>4</sup>

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2. The Gserskad variety covered in this paper differs to some extent from that of Dgumda' Village (根達村) in Sbonda' Town described in Sun (2006). The Rdoskad data cited in both Sun (2007) and this present work represent the speech of Khalung Village in Bugrje Township. Gserskad and Rdoskad data are given in phonemic notation; Old Tibetan (OT) forms follows the Wylie standard transliteration system, enclosed in angular brackets. Unless otherwise noted, the comparative data on Byamsme 轄曼, Sastod 沙石多, and Takhog 達古 Tibetan, Northern (Rtsangkhog 宗科 variety), Western (Yongslagshis 尤拉西 variety), and Northwestern (Nyimo 宜木 variety) Horpa, and Tshobdun (Kakhyoris 嘎秋里 variety) and Showu (Zalacinkheb 中熱 variety) Rgyalrong are from my own fieldwork. Abbreviated glosses in this article follow the Leipzig Glossing Rules.

3. When referring to the two dialects as a unit, the collective label Gser-Rdo is used.

4. The plain voiced stops/affricates, the voiceless labiodental fricative *f*, and the voiceless trill *r* occur distinctively in onset clusters only; e.g. *rdu* 'stone' vs. *rtu* 'be emtry'; *fṣi* 'monkey' vs. *ptṣi* 'write'; *rṣa* 'be early' vs. *rṣa* 'drum'.

**Table 1.** Common Gser-Rdo simplex onset phonemes

<i>p</i>	<i>t</i>	<i>ts</i>	<i>tʃ</i>	<i>tʂ</i>	<i>c</i>	<i>k</i>	<i>q</i>
<i>pʰ</i>	<i>tʰ</i>	<i>tsʰ</i>	<i>tʃʰ</i>	<i>tʂʰ</i>	<i>cʰ</i>	<i>kʰ</i>	<i>qʰ</i>
<i>ᵑᵑʰ</i>	<i>ᵑᵑʰ</i>	<i>ᵑᵑʰ</i>	<i>ᵑᵑʰ</i>	<i>ᵑᵑʰ</i>	<i>ᵑᵑʰ</i>	<i>ᵑᵑʰ</i>	
<i>b</i>	<i>d</i>	<i>dz</i>	<i>dʒ</i>	<i>dʑ</i>	<i>ɟ</i>	<i>g</i>	
<i>ᵑᵑ</i>	<i>ᵑᵑ</i>	<i>ᵑᵑ</i>	<i>ᵑᵑ</i>	<i>ᵑᵑ</i>	<i>ᵑᵑ</i>	<i>ᵑᵑ</i>	
<i>f</i>	<i>s</i>		<i>ʃ</i>			<i>x</i>	<i>χ</i>
<i>vᵃ</i>	<i>z</i>		<i>ʒ</i>			<i>ɣ</i>	<i>ʁ</i>
<i>m</i>	<i>n</i>				<i>ɲ</i>	<i>ŋ</i>	
	<i>r</i>						
	<i>ʀ</i>						
	<i>l</i>						
	<i>ᵐᵐ</i>						
					<i>j</i>		

a. In Gserskad, the phoneme *v* is commonly realized as a labial approximant [ʋ].

**Table 2.** Common Gser-Rdo nuclear vowel phonemes

<i>i</i>		<i>u</i>
<i>e</i>	<i>ə</i>	<i>o</i>
	<i>a</i>	

**Table 3.** Common Gser-Rdo phonemic codas

<i>p</i>	<i>t</i>	<i>k</i>
<i>m</i>	<i>n</i>	<i>ŋ</i>
	<i>r</i>	
	<i>l</i>	

Gserskad and Rdoskad phonotactics and suprasegmental features are likewise highly comparable. Both dialects show a simple vocalic system but rather complex inventories of onset consonants. No contrastive use is made of vowel length, vowel nasalization, or tone.

The Gserskad and Rdoskad sound systems also diverge on several counts. Rdoskad has an additional fricative onset *ʂ* corresponding to the complex onset *rs* in Gserskad, and moreover distinguishes a uvular from a velar coda after the vowel *ə*;<sup>5</sup> e.g. *rək* ‘see’ vs. *rəq* ‘brass’, cf. Gserskad *rok* ‘see’ vs. *riɐ* ‘brass’. On the other hand, Gserskad has a seventh vowel phoneme *ɐ* in opposition to both *ə* and *a*, e.g. *rɐ* ‘copula’, *rə* ‘mountain’, *ra* ‘goat’, as well as a diphthong *iɐ*,<sup>6</sup> as in *riɐ* ‘brass’

5. The *ok* rhyme is also realized with a non-distinctive uvular coda [oq] in Rdoskad.  
6. Corresponding to the diphthong *ua* in the Sbomda’ variety of Gserskad (Sun 2006).

and *niv* ‘be black’. Above all, the phenomenon of *position-driven rhyme shift* is attested only to a small measure in Rdoskad but figures much more extensively in Gserskad, where certain rhymes obligatorily take altered forms at word medial position, typically in disyllabic compounds. The affected rhymes and their regular alternants in Rdoskad and Gserskad are presented and exemplified in Tables 4 and 5.<sup>7</sup>

**Table 4.** Position-driven rhyme alternation patterns in Rdoskad

Word final			Word medial	
<i>i</i> (< OT <i>e</i> )	<i>ltfi</i> ‘tongue’	→	<i>e</i>	<i>ltfe-n<sup>g</sup>u</i> ‘tongue tip’
<i>u</i> (< OT <i>o</i> )	<i>su</i> ‘tooth’		<i>o</i>	<i>so-rcəq</i> ‘tartar’

**Table 5.** Position-driven rhyme alternation patterns in Gserskad

Word final			Word medial	
<i>a</i>	<i>ya</i> ‘fox’	→	<i>e</i>	<i>ye-lpie</i> ‘foxskin’
<i>i</i> (< OT <i>e</i> )	<i>myi</i> ‘fire’		<i>ə</i>	<i>myə-ltʃi</i> ‘flame’
<i>u</i> (< OT <i>o</i> )	<i>rdu</i> ‘stone’		<i>o</i>	<i>rdo-lep</i> ‘stone slab’
<i>ie</i>	<i>tʃ<sup>h</sup>ie</i> ‘blood’		<i>ek</i>	<i>tʃ<sup>h</sup>ek-rtsa</i> ‘blood vessel’
<i>ie</i>	<i>zie</i> ‘bovine’		<i>ok</i>	<i>zok-rɲok</i> ‘bovine hoof’
<i>ok</i>	<i>ɣnok</i> ‘eye’		<i>ək</i>	<i>ɣnək-rpə</i> ‘eyelid’
<i>at</i>	<i>rkat</i> ‘voice’		<i>et</i>	<i>rkət-rok</i> ‘language’
<i>et</i>	<i>ljet</i> ‘be heavy’		<i>ət</i>	<i>ljət-pə</i> ‘heavy + NMLZ’
<i>an</i>	<i>rman</i> ‘medicine’		<i>en</i>	<i>rmen-k<sup>h</sup>ok</i> ‘medicine pouch’
<i>en</i>	<i>ftʃen</i> ‘cloud’		<i>ən</i>	<i>ftʃən-kar</i> ‘white cloud’
<i>on</i>	<i>vdon</i> ‘seven’		<i>ən</i>	<i>vdən-tʃ<sup>h</sup>ə</i> ‘seventy’
<i>ap</i>	<i>k<sup>h</sup>ap</i> ‘needle’		<i>ep</i>	<i>k<sup>h</sup>ep-rkət</i> ‘needle and thread’
<i>ep</i>	<i>nep</i> ‘west’		<i>əp</i>	<i>nəp-ptʃ<sup>h</sup>ie</i> ‘west direction’
<i>am</i>	<i>lam</i> ‘road’		<i>em</i>	<i>ləm-jok</i> ‘travel permit’
<i>em</i>	<i>c<sup>h</sup>em</i> ‘home’		<i>əm</i>	<i>c<sup>h</sup>əm-tso</i> ‘household’
<i>om</i>	<i>rnom</i> ‘oil’		<i>əm</i>	<i>rnam-tʃə</i> ‘oil odor’
<i>ar</i>	<i>mar</i> ‘butter’		<i>er</i>	<i>mər-kə</i> ‘melted butter’
<i>er</i>	<i>rcer</i> ‘be sour’		<i>ər</i>	<i>rcər-pə</i> ‘sour + NMLZ’
<i>al</i>	<i>pal</i> ‘wool’		<i>el</i>	<i>pəl-k<sup>h</sup>ok</i> ‘box containing wool’
<i>el</i>	<i>rɲel</i> ‘silver’		<i>əl</i>	<i>rɲəl-mgar</i> ‘silversmith’

7. These alternation patterns are to be contrasted with those given in my earlier study (Sun 2006: § 3.1.2) on the Sbodma variety.

2. Non-Amdo Gser-Rdo vocabulary

The two target dialects diverge considerably from Amdo in vocabulary. While Gserskad and Rdoskad also differ lexically from each other to a smaller extent,<sup>8</sup> they share a number of lexical items unrelated to the commonly attested Amdo forms (represented by Rkakhog 紅原),<sup>9</sup> as in the following sample:

Table 6. Gser-Rdo vocabulary distinct from Amdo

	Gserskad	Rdoskad	Etymology	Amdo (Rkakhog)
‘hole’		<i>q<sup>h</sup>uvə</i>	?	<i>ton</i> <dong>
‘armpit’	<i>qə-tə-ʒap</i>	<i>tsə-qə-ʒap</i>	Rgyalrongic <sup>a</sup>	<i>mtʃ<sup>h</sup>en</i> <mchan>
‘buttocks’		<i>ˈp<sup>hi</sup>-ˈngu</i>	<‘phongs.go> <sup>b</sup>	<i>on-go</i> <ong.go>
‘left(hand)’	<i>no-</i>	<i>nəŋ-</i>	?	<i>h<sup>h</sup>on</i> <g.yon>
‘right(hand)’	<i>tʂo-</i>	<i>tʂəŋ-</i>	?	<i>h<sup>h</sup>ji</i> <g.yas>
‘skin’ [N]		<i>ʃa-k<sup>h</sup>a</i>	<sha.ʔ>	<i>x<sup>h</sup>e-rcə</i> <sha.skyi>
‘bladder’		<i>pək-si</i>	Rgyalrongic <sup>c</sup>	<i>h<sup>h</sup>gaŋ-lə</i> <lgang.li>
‘fart’ [N]	<i>mtʃ<sup>h</sup>en</i>	<i>ʃʃən</i>	<phyen>	<i>h<sup>h</sup>jak</i> <g.yag>
‘cat’		<i>tsə-kə</i>	?	<i>lə-lə</i> <li.li>
‘pigeon’		<i>mə-kə</i>	Rgyalrongic <sup>d</sup>	<i>hək-ron</i> <phug.ron>
‘butterfly’	<i>p<sup>h</sup>el-bə</i>	<i>p<sup>h</sup>al-bə</i>	Rgyalrongic <sup>e</sup>	<i>wʃe-mə-lep-tse</i> <phye.ma.leb.rtse>
‘leaf’		<i>rba-la</i>	Rgyalrongic <sup>f</sup>	<i>lo-mə</i> <lo.ma>
‘hemp’	<i>tər-kə</i>	<i>tar-ke</i>	?	<i>h<sup>h</sup>so-mə</i> <gtso.ma>
‘awn’		<i>p<sup>h</sup>ə-ma</i>	?	<i>p<sup>h</sup>tʂe-mə</i> <gra.ma>
‘flour’	<i>rdʒan</i>	<i>rdʒen</i>	<rjen> ‘coarse flour’	<i>wʃe</i> <phye>
‘breakfast’	<i>k<sup>h</sup>e-psal</i>	<i>k<sup>h</sup>a-ʃʃal</i>	<kha.ʔ>	<i>naŋ-tʃe</i> <nangs.ja>
‘you’ [SG]		<i>ho</i>	?	<i>c<sup>h</sup>o</i> <khyod>
‘anything’		<i>mtʃ<sup>h</sup>ot</i>	?	<i>tʃaŋ</i> <cang>

8. Some examples are: (G)serskad *k<sup>h</sup>o-χə* (R)doskad *li-po* ‘body’; (G) *ˈbə-rnɪe* (R) *ɣa-ˈndʒe* ‘earthworm’; (G) *vdə-fi* (R) *zet-pə* ‘broom’; (G) *v-tsi* (R) *mə-ˈndʒa-va-tə* ‘very’; (G) *vje/vje/ci* (R) *le/le/tʃi* ‘do (an act)’; (G) *ji* (R) *ki* ‘ergative/genitive case’; (G) *vdie* (R) *ni-ɣo* ‘agentive nominalizer’. Rdoskad, and to a lesser extent Gserskad, exhibit a number of substratum lexical items from rGyalrongic languages spoken in its vicinity (Sun 2007:324); e.g. (R) *pə-ku* (cf. Showu *pə-ku*) ‘owl’; (R) *qa* (cf. Showu *qə*) ‘wheat’.

9. Data are from Hua (2002), representing the speech of Zangsdkar 壤口 Village, transcriptions are slightly adjusted.

Table 6. (continued)

	Gserskad	Rdoskad	Etymology	Amdo (Rkakhog)
‘be angry’	<i>r̥ɲi</i> <sup>n</sup> <i>c<sup>hi</sup>ie</i>	<i>r̥ɲəŋ</i> <sup>n</sup> <i>c<sup>h</sup>əq</i>	<snying, khyag>	<i>fo lan</i> <spo.lang>
‘be hungry’		<i>pt̚ɕe</i>	<bkres>	<i>rtok</i> <ltogs>
‘be good’	<i>n<sup>h</sup>d̥ʒok</i>	<i>n<sup>h</sup>d̥ʒək</i>	?	<i>vzaŋ</i> <bzang>
‘burn’ [INTR]	<i>n<sup>h</sup>d̥ʒen</i>	<i>n<sup>h</sup>d̥ʒən</i>	?	<i>n<sup>h</sup>ber</i> <‘bar>
‘chase’	<i>χɲat</i>	<i>χɲet</i>	?	<i>n<sup>h</sup>det</i> <‘ded>
‘chop’		<i>χsi</i>	<gsil> ‘cleave; cut to pieces’	<i>h<sup>h</sup>ʃak</i> <gcag>
‘climb’		<i>kor</i> ; <i>md̥ʒar</i>	?	<i>n<sup>h</sup>go</i> <‘go>
‘close’ (door)		<i>n<sup>h</sup>dan</i>	probably related to <gdan.bu> ‘door crossbar’	<i>rjak</i> <rgyag>
‘hang’ [VT]		<i>pkal</i>	<bkal>	<i>h<sup>h</sup>ner</i> <?>
‘hide oneself’		<i>qap</i>	probably related to <gab>	<i>h<sup>h</sup>lep</i> <?>
‘overflow’	<i>ɕmal</i>	<i>ɕmel</i>	?	<i>mtʃ<sup>h</sup>ər</i> <‘phyur>
‘sink’	<i>r̥ɲok</i>	<i>r̥ɲək</i>	<snyigs>	<i>nəp</i> <nub>
‘tread’	<i>χt̥ʃər</i>	<i>χt̥ʃər</i>	<gcir> <sup>g</sup>	<i>rdzə</i> <rɖzi>
‘wear (bangle)’	<i>pt̥ie</i>	<i>pt̥əq</i>	<btags>	<i>kon</i> <gon>
‘knead’		<i>f<sup>h</sup>ol</i>	<sno>? <sup>h</sup>	<i>rdzə</i> <rɖzi>
‘lose’	<i>rdep</i>	<i>rdəp</i>	<rdib>	<i>hem</i> <pham>
‘fall down’	<i>n<sup>h</sup>d̥ʒəl</i>	<i>n<sup>h</sup>d̥ʒəl</i>	<‘gril>	<i>lok</i> <log>
‘hear’		<i>t<sup>h</sup>or</i>	<tshor>	<i>ko</i> <go>
‘have diarrhea’	<i>p<sup>h</sup>o</i> - <i>va</i> <i>ɕɲo</i>	<i>p<sup>h</sup>o</i> - <i>va</i> <i>ɕɲəŋ</i>	<pho.ba.gnyang>	<i>wʃa</i> <bshal>
‘grind; mill’	<i>ɕdɐl</i>	<i>ɕdəl</i>	relatable to <gtul>	<i>n<sup>h</sup>t<sup>h</sup>ak</i> <‘thag>

a. Cf. Showu *təqətsəvjə* ‘armpit’ (thanks to Shang Li for drawing my attention to this).

b. The first syllable may be relatable to Showu *tə-m<sup>h</sup>p<sup>h</sup>ú<sup>s</sup>*, Northern Horpa *m<sup>h</sup>p<sup>h</sup>ú* ‘buttock’.

c. A loan from Rgyalrongic. Cf. Northern Horpa *páks<sup>h</sup>i* ‘bladder’.

d. A loan from Rgyalrongic. Cf. Northwestern Horpa *məkə* ‘pigeon’.

e. A loan from Rgyalrongic. Cf. Showu *p<sup>h</sup>albūm*, Northern Horpa *p<sup>h</sup>wálbə* ‘butterfly’.

f. A loan from Rgyalrongic. Cf. Northern Horpa *lbá<sup>s</sup>lā<sup>s</sup>* ‘leaf’.

g. OT ‘squeeze, press’.

h. The etymology seems likely, but the Gser-Rdo lateral coda is unexpected.

Of the Gser-Rdo lexical forms dissimilar to Amdo, some reflect separate roots from the Tibetic lexical stock, such as ‘fart [N]’ and ‘sink’; others are imported from neighboring rGyalrong and Horpa languages, such as ‘bladder’ and ‘pigeon’; still others are of obscure origin, and probably represent distinct Gser-Rdo lexical innovations, such as ‘chase’ and ‘knead’.

3. Gser-Rdo phonological developments

Despite their general phonological conservatism reminiscent of Amdo, Gserskad and Rdoskad did not participate in primary Amdo sound changes. Furthermore, they have in common a number of non-Amdo phonological innovations as well as phonological irregularities. These are discussed in turn below.

3.1 Amdo sound changes not attested in Gser-Rdo

3.1.1 *Kr*- clusters became postalveolar/palatal affricates

The Old Tibetan (OT) onset clusters of the type *Kr*- (velar stops plus medial *-r*-) typically shifted, in nonliterary words at least, to palatal or postalveolar affricates in all known varieties of Amdo, suggesting an early merger into *\*Ky*- (Hua 1983: 44–45). This characteristic sound change did not apply to Gser-Rdo, where *\*Kr*- turned into retroflexed affricates instead.

Table 7. Developments of *Kr*- in Gser-Rdo versus Amdo

	Gserskad	Rdoskad	Amdo (Rkakhog)
‘blood’ <khrag>	tʂʰiɐ	tʂʰəq	cçʰak
‘knife’ <gri>		tʂə	cçə
‘go’ <gro>		ʳdzu	ʳjo

3.1.2 Softening of labial stops

The softening of OT simplex labial stops to spirants or approximants is another well-known Amdo sound change. This did not happen either in Gser-Rdo, where labial stops remain unchanged:

Table 8. Developments of labial stops in Gser-Rdo versus Amdo

	Gserskad	Rdoskad	Amdo (Rkakhog)
‘interstice’ <par>		par	wer
‘pig’ <phag>	pʰiɐ	pʰəq	hak
‘descend’ <babs <sub>[PST]</sub> >		pap	wep

3.1.3 Fate of the OT complex onset *sbr*-

Two divergent developments of the OT cluster onset *sbr*- were observed among various Amdo dialects depending on whether the rhotic medial was elided or not (Hua 1983: 46). The early loss of *-r*- yielded *sb*-, which went to *yb*- (as in Gcantsha



尖扎) and weakened further to  $\gamma w$ - (as in Rmachu 瑪曲) or  $^h w$ - (as in Byamsme). Alternatively, the  $-r$ - survived leading to  $wr$ - (as in Rkakhog) or even a simple  $r$ - (as in Themchen 天峻). In Gserskad, OT  $sbr$ - is reflected by a labialized affricate  $vdz$ - (paralleling  $spr$ - >  $ftʂ$ -); in Rdoskad, OT  $sbr$ - turned into  $vz$ -, with loss of  $-r$ - and metathesis of the OT cluster elements  $s$ - and  $b$ -.

### 3.1.4 Merger of OT $-ang$ and $-ing$ into $-aŋ$

The OT rhyme  $-ing$  characteristically merged into  $-ang$  in Amdo. However, the Gser-Rdo reflexes of the two proto rhymes remain separate.

**Table 9.** Fate of  $-ang$  and  $-ing$  rhymes in Gser-Rdo versus Amdo

	Gserskad	Rdoskad	Amdo (Rkakhog)
‘be long’ <ring>		<i>ri</i>	<i>raŋ</i>
‘wood’ <shing>		<i>ʃi</i>	<i>x<sup>h</sup>aŋ</i>
‘plain’ <thang>	<i>t<sup>h</sup>o</i>	<i>t<sup>h</sup>əŋ</i>	<i>t<sup>h</sup>aŋ</i>
‘grassland’ <spang>	<i>rpo</i>	<i>rpəŋ</i>	<i>faŋ</i>

### 3.1.5 Loss of lateral coda

The OT rhymes ending in  $-l$  normally turned into open rhymes in Amdo.<sup>10</sup> In Gser-Rdo, however,  $-l$  still survives as a separate coda in contrast with  $-t$ , the regular reflex of OT  $-d$ .

**Table 10.** Fate of the OT lateral coda in Gser-Rdo versus Amdo

	Gserskad	Rdoskad	Amdo (Rkakhog)
‘wool’ <bal>		<i>pal</i>	<i>wa</i>
‘grease’ <tshil>	<i>ts<sup>h</sup>ɐl</i>	<i>ts<sup>h</sup>əl</i>	<i>ts<sup>h</sup>i</i>
‘snake’ <sbrul>	<i>vdzɐl</i>	<i>vzəl</i>	<i>wru</i>
‘basket carried on back’ <slɛl.po>		<i>səl-pə</i>	<i>s<sup>h</sup>i-wo</i>
‘boil (liquid)’ <skol>		<i>ʃkol</i>	<i>rku</i>

### 3.1.6 Coalescence of root syllable and nominal suffixes $-ba/-bo$

A number of commonplace OT nouns consist of nominal stems plus semantically opaque suffixes  $-ba$  and  $-bo$ ; for example <du.ba> ‘smoke’ containing the stem

10. Presumably via an unattested intermediate stage with compensatory lengthening of the nuclear vowels (Gong 2016: §3). In some varieties of Amdo, a secondary  $-l$  came into being from OT  $-d$ .

<du> ‘smoke’ (cf. <du.khug> ‘tobacco pouch’ and <du.khung> ‘chimney’). Across the Amdo areas, such disyllables contracted into monosyllables, more thoroughly in some varieties than in others. However, Gser-Rdo consistently shunned this innovation, maintaining the original disyllabic structure.

**Table 11.** OT Disyllabic nominals with suffix *-ba/-bo* in Gser-Rdo versus Amdo

	Gser-Rdo	Amdo (Rkakhog)
‘pillar’ <ka.ba>	<i>ka-va</i>	<i>ka</i>
‘flea’ <lji.ba>	<i>ldʒa-va</i>	<i>rdʒo</i>
‘smoke’ <du.ba>	<i>tə-va</i>	<i>tə</i>
‘navel’ <lte.ba>	<i>ltə-va</i>	<i>rte</i>
‘lungs’ <glo.ba>	<i>ʁlo-va</i>	<i>ʁlɔ</i>
‘nephew’ <tsha.bo>	<i>tsʰa-və</i>	<i>tsʰu</i>

3.2 Characteristic Gser-Rdo sound changes

Gserskad and Rdoskad have both initiated particular sound changes that set them apart from each other, examples include:

- a. merger of OT *i*, *u* and *e* in certain closed rhymes in Gserskad (e.g. *ptɕər* <btsir> ‘squeeze out’, *rcər* <skyr> ‘be sour’, *χsər* <gser> ‘gold’) but not in Rdoskad (e.g. *ptsər* <btsir> ‘squeeze out’, *rcər* <skyr> ‘be sour’, *χsər* <gser> ‘gold’)
- b. merger of OT *og(s)* with *ag(s)* and *eg(s)* in Gserskad (e.g. *pʰiɐ* <phogs> ‘salary’, *pʰiɐ* <phag> ‘pig’, *tə-tɕiɐ* <du.dreg> ‘soot’) but not in Rdoskad (e.g. *pʰok* <phogs> ‘salary’, *pʰəq* <phag> ‘pig’, *tə-tɕəq* <du.dreg> ‘soot’)
- c. merger of OT *in/im* with *en/em* and OT *un/um* with *on/om* in Gserskad (e.g. *χtfən* <gcin> ‘urine’, *ʱben* <’ben> ‘target’, *vdən* <bdun> ‘seven’, *rton* <ston> ‘autumn’, *ʒəm* <zhim> ‘be tasty’, *səm* <sems> ‘target’, *χsom* <gsum> ‘three’, *tom* <dom> ‘Asiatic black bear’) but not in Rdoskad (e.g. *χtfən* <gcin> ‘urine’, *ʱben* <’ben> ‘target’, *vdən* <bdun> ‘seven’, *rton* <ston> ‘autumn’, *ʒəm* <zhim> ‘be tasty’, *səm* <sems> ‘target’, *χsəm* <gsum> ‘three’, *tom* <dom> ‘Asiatic black bear’)
- d. merger of *phy-* and *by-* in Rdoskad (e.g. *ffok* <phyug> ‘be rich’, *ffa* <bya> ‘bird’) but not in Gserskad (e.g. *ptʰok* <phyug> ‘be rich’, *ptʰa* <bya> ‘bird’).

Owing to these differences in phonological diachrony, plus their general conservatism, Gserskad and Rdoskad do not manifest much in the way of common non-Amdo phonological innovations, except for the following few.

### 3.2.1 Voiceless trill in consonant clusters

The Gser-Rdo reflexes of the OT onset type *sN-* (*s-* plus nasal stop) regularly turned into voiced nasals preceded by a voiceless trill *r̥-*, yielding distinctively devoiced trills in consonant clusters. The fate of the OT onset type *sN-* is quite different in the documented Amdo varieties, where OT *sN-* commonly turned into pre-aspirated but *voiced* nasals (e.g. Byamsme, Dpa'ris; Wang 2016: §7.1) or voiceless *r̥* or *ʃ* followed by voiceless nasals (e.g. Rkakhog; Hua 2002) which may further develop into simplex voiceless nasals (Themchen; Haller 2004).

A parallel set of Gser-Rdo onset clusters showing contrastive trill voicing is *rl-* versus *r̥l-*, where the origin of the devoiced *r̥-* is still mysterious.

**Table 12.** Phonemic trill voicing in Gser-Rdo onset clusters

	Gserskad	Rdoskad	Amdo (Rkakhog)
'nose' <sna>	<i>r̥na</i>		<i>r̥n̥e</i>
'ear' <rna>	<i>rna-va</i>	<i>rna-ki</i>	<i>rna</i>
'testicle' <r̥l̥g.rdo>	<i>r̥l̥ək-rdu</i>		<i>ʰl̥ək-rdo</i>
'wind' <rlung>	<i>rlu</i>		<i>vlɔŋ</i>

### 3.2.2 Merger of OT *db-* and *sb-* onset clusters

In Gser-Rdo, the OT onset clusters *db-* and *sb-* merged in non-literary words, with the voiced labial stop *-b-* softened into *-v-*.

**Table 13.** Merger of OT *db-* and *sb-* onset clusters

	Gserskad	Rdoskad	Amdo (Rkakhog)
'breath' <dbug>	<i>rvok</i>	<i>rvək</i>	<i>ək</i>
'frog' <sbal.pa>	<i>rvel-pa</i>	<i>rval-pa</i>	<i>wra-we</i>

## 3.3 Common Gser-Rdo phonological irregularities

Shared phonological irregularities supply critical evidence for genetic affinity. Gserskad and Rdoskad may be phonologically idiosyncratic in their own ways; examples include Gserskad *rsən-mu* <sen-mo> in lieu of expected †*sən-mu* 'nail (body part)';<sup>11</sup> Rdoskad *rtso-me* <sro-ma> in lieu of expected †*ʃo-ma* 'nit'. However, the two dialects display a number of common exceptions to sound correspondences.

11. The dagger symbol † indicates expected but unattested forms, following a usage introduced by Guillaume Jacques.

**Table 14.** Shared Gser-Rdo violations of phonological correspondences

	Gserskad	Rdoskad
‘lean on’ <khen>	<i>q<sup>h</sup>an</i> (expected: † <i>k<sup>h</sup>en</i> )	
‘wing’ <gshog.pa>	<i>ffoχa</i> (expected: † <i>χfoχa</i> )	
‘scrotum’ <rliḡ.pa>	<i>rlə-xa</i> (expected: † <i>rlə-xa</i> )	
‘colostrum’ <sprɪ>	<i>χtɕə</i> (expected: † <i>ftɕə</i> )	
‘kidney’ <mkhal.ma>	<i>mk<sup>h</sup>i-lə</i> (expected: † <i>mk<sup>h</sup>ɛl-lə</i> )	<i>mk<sup>h</sup>i-lə</i> (expected: † <i>mk<sup>h</sup>al-lə</i> )
‘buzzard’ <glag>	<i>χliɐ</i> (expected: † <i>ɛliɐ</i> )	<i>χləq</i> (expected: † <i>ɛləq</i> )
‘groan’ < <sup>ʔ</sup> khun>	<i>mk<sup>h</sup>on</i> (expected: † <i><sup>ʔ</sup>k<sup>h</sup>on</i> )	<i>mk<sup>h</sup>ən</i> (expected: † <i><sup>ʔ</sup>k<sup>h</sup>ən</i> )
‘thumb’ <mthe.mo>	<i>t<sup>h</sup>ə-mi</i> (expected: † <i>mt<sup>h</sup>ə-</i> )	<i>t<sup>h</sup>ɛ-mu</i> (expected: † <i>mt<sup>h</sup>ɛ-</i> )
‘poplar’ <lcang.ma>	<i>ldʒo-ma</i> (expected: † <i>ltʃo-</i> )	<i>ldʒəŋ-ma</i> (expected: † <i>ltʃəŋ-</i> )

While some of the above may be explicable as common borrowings from Amdo (e.g. the dairy term ‘colostrum’), or retention of archaic onset features (e.g. the *m*-cluster element in ‘groan’), other shared Gser-Rdo phonological irregularities further buttress their special genetic affinity.

4. Gser-Rdo morphological developments

Common morphological innovations are highly prized in establishing genetic affinity. Indeed, Gserskad and Rdoskad also share a number of non-Amdo features in their nominal and verbal morphology. These range from structure of verbal constructions (§ 4.1), morphemes for instantiating morphological categories (§ 4.2), and stem formation strategies (§ 4.3).

4.1 Zero subordinator in syntactic causative and purposive constructions

Amdo Tibetan typically requires the presence of subordinators in periphrastic causative and purposive constructions, as illustrated by these Byamsme examples:<sup>12</sup>

- (1) [*x<sup>h</sup>ɛ=tə taptɕ<sup>h</sup>əyɛ tʃəy də*]=*yen* *<sup>n</sup>dʒəy*  
meat=DET a.while a.bit cook=CAUS cause  
‘Let the meat cook for some more time!’

12. This Amdo variety is spoken in western Mdzoddge County, Sichuan Province. My data represent the speech of Hrura Village 河拉村 in Byamsme Town 轄曼鎮.

- (2) *ŋe<sup>h</sup> labraŋ=ε [ɲə zəɣ=ε t<sup>h</sup>əɣ]=nε<sup>h</sup> dʒə-nə*  
 1SG Blabrang=DAT person INDF=DAT meet=PURP go-EGOPHORIC  
 ‘I am going to Blabrang to meet someone.’

However, no overt subordination marking is allowed in Gser-Rdo, suggesting a further degree of clausal union:

- (3) a. Gserskad  
*ŋe<sup>h</sup> n<sup>h</sup>də=lə ɣman<sup>h</sup> t<sup>h</sup>u ptʃiɣ-ja*  
 1SG:ERG 3SG=DAT medicine drink cause:PST-FIRSTHAND.EVIDENTIAL  
 b. Rdoskad  
*ŋe<sup>h</sup> n<sup>h</sup>də=la ɣman<sup>h</sup> t<sup>h</sup>u ptʃiɣ-va*  
 1SG:ERG 3SG=DAT medicine drink cause:PST-FIRSTHAND.EVIDENTIAL  
 ‘I made him/her drink medicine.’
- (4) a. Gserskad  
*tə ptʃakə ɲu t<sup>h</sup>e-ja*  
 3SG thing buy go:PST-FIRSTHAND.EVIDENTIAL  
 b. Rdoskad  
*ti ptʃakə ɲu t<sup>h</sup>e-va*  
 3SG:ERG thing buy go:PST-FIRSTHAND.EVIDENTIAL  
 ‘He/she went away to buy something.’

## 4.2 Dissimilar grammatical morphemes

In many cases, the grammatical morphemes employed in Gser-Rdo for coding morphological categories differ from those commonly found in Amdo.

Take nominal cases for example. In Amdo, genitive, ergative, and instrumental cases are typically realized by the same syncretized form =<sup>h</sup>kə (with its positional allomorphs =ɣə, =<sup>h</sup>gə, vowel ablaut, etc.). Gserskad and Rdoskad, however, distinguish an instrumental case =*ke* distinct from ergative-genitive case forms (Gserskad =*ji/ti*, Rdoskad =*ki*).<sup>13</sup> The Amdo dative-allative case of uncertain origin takes the form of =ε (or =*a*, depending on dialect) as well as vocalic alternation (e.g. Byamsme *ŋe* ‘I [ABS]’ → *ŋa* ‘I [DAT/ALL]’; whereas the Gser-Rdo dative-allative case forms (Gserskad =*lə*, Rdoskad =*la*) came from the OT locative-allative-dative <la>.<sup>14</sup>

13. In Gserskad, the ergative-genitive case shows two case forms distinguished by number: singular =*ji* and plural =*ti*.

14. This form also serves for the locative case in Gserskad; in Rdoskad, a distinct form =*a* marks the locative case.

Verbal evidentiality provides more striking non-Amdo grammatical features of Gser-Rdo, where all the principal evidential markers are distinct from their Amdo equivalents, as shown below:

Table 15. Major evidential markers in Gser-Rdo versus Amdo

	Gserskad	Rdoskad	Amdo (Byamsme)
Egophoric			<i>nə</i>
Direct	<i>ja</i>	<i>va</i>	<i>tʰe</i>
Indirect	<i>sə</i>	<i>fə</i>	<i>zəɣ</i>
Immediate		<i>tu</i>	<i>ʰkə</i>

Notably, the egophoric and direct (past sensory) categories syncretized into a single ‘firsthand’ category in Gser-Rdo, marked by suffixes (G) *-ja* (R) *-va* completely unrelated to the Amdo egophoric and direct evidential suffixes. The Rdoskad form *-va* is however clearly cognate with the direct evidential *-wə* in Takhog Tibetan of Khrochu County (personal fieldwork). Linking the indirect (post-facto access) evidential markers *-sə* in Gserskad and *-fə* in Rdoskad to Amdo *-zəɣ* seems risky, since neither the onsets nor the rhymes correspond.<sup>15</sup>

4.3 Shared verb stem innovation

Old Tibetan verbs display at most four separate stems. As widely observed (Li 1933; Jäschke 1954; Chang Shefts & Chang 1982; Qu 1985; Zeisler 2009; Tournadre 2016), verb stem variation tends to be reduced or even eliminated in the spoken dialects. The so-called future stems ( $\Sigma_{[FUT]}$ ) appear to have all but disappeared (but see § 4.3.1 below), and the past stems ( $\Sigma_{[PST]}$ ) frequently replaced the present stems ( $\Sigma_{[PRS]}$ ).

Standing out from all other Tibetic languages, Gser-Rdo reversed the tide and *expanded* verb stem variation by creating secondary past stems (§ 4.3.1; cf. Sun 2006: § 4.2; Sun 2007), and imperative (§ 4.3.2) stems.

4.3.1 Innovated past stems

Many common transitive verbs in Gser-Rdo distinguish three separate stems, superficially resembling Amdo. However, Gser-Rdo present stems frequently

15. Associating the suffix *-tu* with the Lhasa immediate evidential *-tùʔ* <‘dug> would be ill-advised for the same reason.

reflect OT past rather than present stems.<sup>16</sup> And, whereas stem distinctions were leveled in favor of past stems in dialects like Lhasa, Gser-Rdo preserved paradigm complexity by applying innovative ablaut to the past-turned-present stems, deriving new past stems, as depicted below:

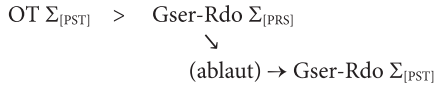


Figure 2. Gser-Rdo innovative past stem ablaut I

The fate of the OT verb ‘cover’ serves to illustrate. In both Gser-Rdo and Lhasa, the OT past stem <bkab> (reflected by Gser-Rdo *pkap* and Lhasa *káp*) usurped the present stem *’gebs*. In Lhasa, *káp* is used as a syncretized present-past stem, whereas in Gser-Rdo *pkap* serves as present stem only, out of which the new past stem *pkep* was innovated via ablaut *a* → *e*.

Divergent ablaut behavior in the two dialects is normally attributable to different reflexes of OT rhymes. OT <ang(s)>, for example, went to *-o* in Gserskad and *-əŋ* in Rdoskad, feeding into distinct past stem ablaut patterns; thus, Gserskad and Rdoskad present stems *”p<sup>h</sup>o* and *”p<sup>h</sup>əŋ* ‘shoot’ (< OT past stem <’phangs>) gave rise to their respective past stems *”p<sup>h</sup>e* (via *o* → *e* ablaut) and *”p<sup>h</sup>iŋ* (via *ə* → *i* ablaut).

The sweeping usurpation of OT present stems by past stems is not completely thoroughgoing in Gser-Rdo, as there are cases where the OT *present* stem won out as input to the past stem ablaut rule:

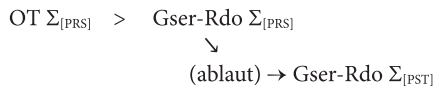


Figure 3. Gser-Rdo innovative past stem ablaut II

Consider for instance the Gser-Rdo present stems *”khal* ‘spin’ and *rpor* ‘move [TR]’, which directly inherited the OT present stems <’khal> and <spor>, from which the novel past stems *”k<sup>h</sup>el* and *rper* were derived by the ablauts *a* → *e* and *o* → *e*.

More striking still, the OT *future* or even *imperative* stems occasionally survived as Gser-Rdo present stems:

16. Stems of a given verb are enumerated in the order present/past/imperative. Stem etyma are determined on the basis of rhyme and onset correspondences between Gser-Rdo and OT, summarized in Appendices A and B.

$$\begin{array}{ccc} \text{OT } \Sigma_{[\text{FUT}]/[\text{IMP}]} & > & \text{Gser-Rdo } \Sigma_{[\text{PRS}]} \\ & \searrow & \\ & (\text{ablaut}) \rightarrow & \text{Gser-Rdo } \Sigma_{[\text{PST}]} \end{array}$$

Figure 4. Gser-Rdo innovative past stem ablaut III

The Gser-Rdo present stems *ptsu* ‘boil (solid foods)’ and *tʂə* ‘ask, inquire’, for example, reflect the OT future stems <btso> and <dri>. The ablauts *u* → *e* and *ə* → *i* then converted the respective future-turned-present stems to the innovative past stems *ptse* and *tʂi*.

On the other hand, Gserskad *sət* and Rdoskad *set*, present stems of the verb ‘tease’, exemplify the OT imperative stem <sed> supplanting the original present stem <gsed>. Likewise, the regular ablaut *e/e* → *i* subsequently turned the imperative-turned-present stems into the attested past stem *sit*.

The ablaut patterns of Gserskad and Rdoskad summarized below are strikingly similar, with largely identical input as well as output vowel grades. Importantly, the same ablauts operate regardless of the OT sources of the input stems.

Table 16. Gser-Rdo verb stem ablaut patterns

Input grade ( $\Sigma_{[\text{PRS}]}$ )	Output grade ( $\Sigma_{[\text{PST}]}$ )	Examples
<i>a</i>	<i>e</i>	<i>ffal</i> → <i>ffel</i> ‘rinse’
<i>i</i>	<i>e</i>	<i>fsi</i> → <i>fse</i> ‘mix’
<i>u</i> (< OT -o)	<i>e</i>	<i>p<sup>hu</sup></i> → <i>p<sup>he</sup></i> ‘pour out’
<i>o</i> (< OT -or/ol)	<i>e</i>	<i>fkol</i> → <i>fel</i> ‘boil (liquid)’ <i>fkor</i> → <i>fker</i> ‘cause to spin’
<i>u</i> (< OT -ung(s))	<i>i</i>	<i>n<sup>hu</sup></i> → <i>n<sup>hi</sup></i> ‘drink’
<i>o</i> (< OT -on)	<i>i</i>	<i>vdzon</i> → <i>vdzin</i> ‘light (fire)’
<i>ə</i>	<i>i</i>	<i>ptf<sup>hə</sup></i> → <i>ptf<sup>hi</sup></i> ‘wipe’
(G) <i>e</i> / (R) <i>e</i>	<i>i</i>	(G) <i>tet</i> (R) <i>tet</i> → <i>tit</i> ‘drive (cattle)’
(G) <i>e</i> / (R) <i>ə</i> (< OT -in/im)	<i>i</i>	(G) <i>vʒen</i> (R) <i>vʒən</i> → <i>vʒin</i> ‘give’
(G) <i>o</i> / (R) <i>ə</i> (< OT -ug(s)/ig(s)/un/um)	<i>i</i>	(G) <i>fnon</i> (R) <i>fənən</i> → <i>f<sup>nin</sup></i> ‘suckle’ (G) <i>pcok</i> (R) <i>pəkək</i> → <i>p<sup>cik</sup></i> ‘tie up’
(G) <i>iə</i> (< OT -ag(s)/og(s))	<i>ək</i>	<i>ptf<sup>iə</sup></i> → <i>ptfək</i> ‘break (sth stiff)’ <i>f<sup>sie</sup></i> → <i>f<sup>sək</sup></i> ‘accumulate’
(R) <i>əq</i>	<i>ək</i>	<i>ptf<sup>əq</sup></i> → <i>ptfək</i> ‘break (sth stiff)’
(R) <i>ok</i>	<i>ək</i>	<i>f<sup>sok</sup></i> → <i>f<sup>sək</sup></i> ‘accumulate’

As contended in an earlier paper (Sun 2007: §5), the Rdoskad (and also Gserskad) innovative past stem ablaut was probably induced by contact from the



neighboring Showu (a.k.a. Zbu) Rgyalrong language,<sup>17</sup> which boasts an even more elaborate ablaut system serving the same grammatical function (Sun 2004: § 1.2; Gong 2018: § 6), as seen in the following examples of Showu past stem formation:  $rn\dot{i}_{[PRS]} \rightarrow rn\bar{e}_{[PST]}$  ‘approach’;  $vlj\bar{e}_{[PRS]} \rightarrow vlj\dot{i}_{[PST]}$  ‘unload’. Presumably, the ablaut patterns  $i \rightarrow e$  and  $e \rightarrow i$  were introduced by erstwhile bilingual speakers into Gser-Rdo via proportional analogy shown in the table below.

**Table 17.** Importation of stem ablaut patterns via four-part analogy

Showu Rgyalrong		Gser-Rdo Tibetan	
$vlj\bar{e}_{[PRS]} \rightarrow vlj\dot{i}_{[PST]}$	‘unload’	=	${}^n\dot{t}en_{[PRS]} \rightarrow X_{[PST]}$ ‘pull’ X = ${}^n\dot{t}hin$
$rn\dot{i}_{[PRS]} \rightarrow rn\bar{e}_{[PST]}$	‘approach’	=	${}^ndzi_{[PRS]} \rightarrow X_{[PST]}$ ‘scold’ X = ${}^ndze$

### 4.3.2 Innovated imperative stems

The OT imperative stems often survived in Gser-Rdo, examples include the imperative forms *rkom* ‘make dry’ and *rɣe* ‘parch’, which straightforwardly inherit the OT imperative stems <skoms> and <rɣos>. However, Gser-Rdo characteristically created a host of secondary forms to displace the original imperative stems. Several strategies were employed to generate novel imperative forms.

#### 4.3.2.1 Stem blending

This type of morphological innovation was rule-governed in an interesting way. Specifically, the new imperative stems were *hybrid forms* composed of onsets which continue the OT imperative stem onsets in combination with rhymes copied from the modern past stems. Consider the three distinct stems of the Gser-Rdo verb ‘hold’. The present stem *vzu* came from the OT past stem <bzung(s)>, based on which the past stem *vzi* was created via ablaut  $u \rightarrow i$  (see Table 16 above). The imperative stem *zi* (in lieu of expected  $\dot{t}zu$  reflecting the OT imperative stem <zung(s)>) is a blend comprising onset of the OT imperative stem *z-* and rhyme *-i* of the innovated past stem *vzi*. Further examples of this fascinating phenomenon are given below.

#### 4.3.2.2 Labiality reduction

Another set of secondary imperative forms were brought about by eliminating a labial consonant inherent to the root onset. The scenario can be illustrated with

17. Showu Rgyalrong is spoken to the south of the Rdoskad area in Dzamthang County. Among the six villages of Bugrje 吾依 Township where my Rdoskad consultant originates, for example, three are Showu-speaking.

Table 18. Gser-Rdo blended imperative stems

	Onset of OT imperative stem	Rhyme of Gser-Rdo past stem	Gser-Rdo imperative stem
‘bind’	<i>tʰ</i> - <chings>	- <i>e</i> < <i>ptʰe</i> >	→ <i>tʰʰe</i> (expected: † <i>tʰʰi</i> )
‘spread (mats)’	<i>tʰ</i> - <things>	- <i>e</i> < <i>pte</i> >	→ <i>tʰʰe</i> (expected: † <i>tʰʰi</i> )
‘shoot’	<i>ʰp</i> - <‘phongs>	- <i>e</i> < <i>ʰpʰe</i> >	→ <i>ʰpʰe</i> (expected: † <i>ʰpʰu</i> )
‘sell’	<i>tʰʰ</i> - <tshongs>	- <i>i</i> < <i>ptʰʰi</i> >	→ <i>tʰʰʰi</i> (expected: † <i>tʰʰʰu</i> )

the Gserskad verb ‘scratch (to stop an itch),’<sup>18</sup> with present stem *ptʰʰok* from OT past <phrugs>, past stem *ptʰʰik* resulting from *o* → *i* ablaut, and innovated imperative stem *tʰʰok* created by trimming the labial consonant *p*- off the expected reflex of the OT imperative <phrugs> †*ptʰʰok*. This process of back formation, disrupting the otherwise regular correspondence OT <phr> : Gser-Rdo *ptʰʰ*-, probably occurred on analogy with verbs like *ffal/ffel/fol* <bshal/INNV<sup>19</sup>/shol> ‘rinse’ and *ptsal/ptsel/tshol* <bsal/INNV/tshol> ‘seek’, where the absence of the labial prefix is justified etymologically.

Sometimes labiality could also be analogically replaced by the rhotic *r*-through folk etymology. Consider the Gser-Rdo verb ‘install’ showing present stem *ftʰsat* from OT past stem <sprad>, past stem *ftʰset* via *a* → *e* ablaut, and innovated imperative stem *rtʰsot* (contra expected reflex †*ftʰsot* of OT <sprod> as per OT <spr> : *ftʰs* correspondence) in which the labial consonant of the root onset, instead of simply eliding, was superseded by *r*-. The apparently irregular imperative form *rze*<sub>[IMP]</sub> ‘tailor’ in lieu of expected †*vze* < OT <bzos> can be similarly accounted for. The analogical model in this case was probably provided by stem sets like *fkol/fkel/rkol* <bskol/INNV/skol> ‘boil’ and *fkam/fkem/rkom* <bskams/INNV/skoms> ‘make dry’ where the rhotic element is expected.

4.3.3 Shared extension of stem formation patterns

Shared exceptions in morphology supply strong evidence for close genetic relationships. Sporadic examples include the Gser-Rdo past-stem form *cʰe* ‘take away’ with unexpected absence of coda -*r* (cf. OT <khyer>, Rkakhog Amdo *cʰer*). However, more remarkable shared irregularities involve the application of stem formation devices beyond their expected scope.

18. The slightly different Rdoskad stem forms *ptʰʰək/ptʰʰik/tʰʰək* were derived in a similar fashion.  
19. Secondary verb stems arising from innovative stem-building strategies are marked with the abbreviation INNV (short for ‘innovated’).

The effects of the past-stem ablaut discussed in §4.3.1 have reached verbs with identical OT present and past stems, further proliferating stem variation in Gser-Rdo. Thus, ablaut  $a \rightarrow e$  turned Gser-Rdo *gar*<sub>[PRS]</sub> into *ger*<sub>[PST]</sub> ‘forge (metal)’ though OT had only a single stem <mgar> for present, past, as well as future; ablaut  $o/\partial \rightarrow i$  derived *thik*<sub>[PST]</sub> from (G) *thok*<sub>[PRS]</sub> and (R) *thak*<sub>[PRS]</sub> ‘touch’, *rim*<sub>[PST]</sub> from (G) *rom*<sub>[PRS]</sub> and (R) *rəm*<sub>[PRS]</sub> ‘incubate’, despite the invariant OT stems <thug> and <rum>.

Moreover, the prefix *b-* employed in the formation of OT past and future stems turned up in Gser-Rdo past-turned-present stems (e.g. *fnal*<sub>[PRS]</sub> ‘make sleep’ from OT <bsnyal<sub>[PST]</sub>>) as well as their secondarily derived past stems (e.g. *fnel*<sub>[PST]</sub>). The labial prefix was however overgeneralized to etymologically unwarranted cases; e.g. *vni*<sub>[PRS]</sub> ‘dream’ < OT <rmis<sub>[PST]</sub>>; (G) *vjok*<sub>[PRS]</sub> (R) *vjak*<sub>[PRS]</sub> ‘run’ from OT <rgyug(s)<sub>[PST]</sub>>.<sup>20</sup>

## 5. Conclusions

This article offers an in-depth look at Gserskad and Rdoskad, two discrete yet closely related Tibetic forms of northwestern Sichuan. Fresh linguistic data are amassed to demonstrate that the two target dialects possess not only a highly analogous phonological profile, but also a good deal of common lexical, phonological, and morphological innovations that set them apart from the areally dominant Amdo language.

Among the Gser-Rdo commonalities examined, those that pertain to morphosyntax are particularly striking, ranging from specific constructions, grammatical morphemes, and verb stem multiplication patterns. With reference to verb stem alternations, the following are worthy of special note:

- a. Creation of secondary past stems marked predominantly by ablaut grades *i* and *e*
- b. Reincarnation of OT future stems as modern present stems
- c. Creation of secondary imperative stems through blending and analogical labiality reduction
- d. Generation of stem variation where none existed in OT

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20. Other miscellaneous shared irregular imperatives include (G) *lok*<sub>[IMP]</sub> (R) *lak*<sub>[IMP]</sub> ‘pour into’ in lieu of expected (G) *†vlok* (R) *†vlak* (OT <blug(s)>), and (G) *siv*<sub>[IMP]</sub> (R) *sok*<sub>[IMP]</sub> ‘bake; roast; burn’ in lieu of expected (G) *†rsiv* (R) *†səq* (OT <sregs>).

These shared morphosyntactic developments, hitherto attested nowhere else in Tibetic, offer compelling comparative evidence that Gserkad and Rdoskad cohere to constitute an independent Tibetic language, for which the label Gser-Rdo seems appropriate.

As for any possible next of kin for Gser-Rdo, the geographically proximate and *prima facie* comparable Amdo language naturally pops to mind. In fact, an attempt has already been made to link them up, without rigorous justification, as a geolinguistic continuum termed “North Eastern Section” (Tournadre 2014: 122). However, the highly idiosyncratic innovations plus absence of many diagnostic Amdo linguistic features in Gser-Rdo call into question in what sense Gser-Rdo constitutes a “continuum” with Amdo. I hope this paper has demonstrated the need for all future Tibetic subgrouping endeavors to take into account the disparate evolutionary paths Gser-Rdo and Amdo underwent to shape their distinct sound systems, vocabulary, and grammar.

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Abbreviations

G	Gserkad	OT	Old Tibetan
HON	honorific	R	Rdoskad
INNV	innovated	v	verb
N	noun		

Appendix A. OT sources of Gser-Rdo rhymes

Provided below are the major correspondences between Gserkad and Rdoskad rhymes and their Old Tibetan sources. With rhymes exhibiting regular position-driven alternations, both alternants are given. For example, the OT open rhyme *a* is reflected by *-a* and *-v-* in Gserkad at word-final and word-medial positions, respectively.

Gserskad	Rdoskad	OT
-a, -e-	a	a
ə	ə	i, u
-i, -ə-	-i, -e-	e
-u, -o-	-u, -o-	o
i	i	i'u, e'u
-ie, -ek-	əq	ag(s), eg(s)
-ok, -ək-	ək	ig(s), ug(s)
-iv, -ok-	ok	og(s)
o	əŋ	ang(s) <sup>a</sup>
i	i	ing(s)
u	u	ung(s), ong(s) <sup>b</sup>
i	əŋ/i	eng(s)
-at, -et-	at	ad
-et, -ət-	ət	id, ud
-et, -ət-	et	ed
ot	ot	od
-an, -en-	an	an
-en, -ən-	ən	in
-on, -ən-	ən	un
-en, -ən-	en	en
-on, -ən-	on	on
-ap, -ep-	ap	ab(s)
-ep, -əp-	əp	ib(s), ub(s)
-ep, -əp-	ep	eb(s)
op	op	ob(s)
-am, -em-	am	am(s)
-em, -əm-	əm	im(s)
-om, -əm-	əm	um(s)
-em, -əm-	em	em(s)
-om, -əm-	om	om(s)
e	e	as, es, os <sup>c</sup>
-i, -ə-	i	is, us
-ar, -er-	ar	ar
-er, -ər-	ər	ir, ur
-er, -ər-	er	er
or	or	or
-al, -el-	al	al

Appendix A. (continued)

Gerskad	Rdoskad	OT
- <i>ɐl</i> , - <i>əl</i> -	<i>əl</i>	<i>il</i> , <i>ul</i>
- <i>ɐl</i> , - <i>əl</i> -	<i>el</i>	<i>el</i>
- <i>ɐl</i> , - <i>əl</i> -	<i>ol</i>	<i>ol</i>

- a. In a number of lexical items, OT *ang(s)* changed to *e* in both Gerskad and Rdoskad, e.g. *ts<sup>h</sup>e* <tshang> ‘nest’; *rt̚ʂe* <skrang> ‘swell, become swollen’. This irregular change also applied to Gerskad *me* – but not Rdoskad *məŋ* – from OT *mang* ‘be many/much’. In Gerskad literary words, OT *ang(s)* went to *oŋ*, e.g. *zoŋ* <zangs> ‘copper’.
- b. /oŋ/ in literary words, e.g. *toŋ* <dung> ‘conch’; *rtōŋ* <stong> ‘thousand’.
- c. /u/ in literary words, e.g. *tʃ<sup>h</sup>u* <chos> ‘dharma’; *ts<sup>h</sup>u* <tshos> ‘dye’.

Appendix B. OT sources of Gser-Rdo onsets

The principal OT sources of Gser-Rdo onsets are listed in two parts below.<sup>21</sup> Part A contains onset correspondences shared between the two dialects; idiosyncratic Gerskad and Rdoskad onset developments are presented in Part B.

Part A. Shared Gser-Rdo onset developments

Gser-Rdo	OT	Gser-Rdo	OT
<i>p</i>	<i>p</i> , <i>b</i>	<i><sup>n</sup>tʃ<sup>h</sup></i>	<i>ʰch</i>
<i>lp</i>	<i>lp</i>	<i>mdʒ</i>	<i>mj</i>
<i>rp</i>	<i>sp</i>	<i><sup>n</sup>dʒ</i>	<i>ʹj</i>
<i>χp</i>	<i>dp</i>	<i>rdʒ</i>	<i>rj</i>
<i>p<sup>h</sup></i>	<i>ph</i>	<i>ldʒ</i>	<i>lj</i>
<i><sup>n</sup>p<sup>h</sup></i>	<i>ʹph</i>	<i>f</i>	<i>sh</i> , <i>shw</i>
<i><sup>n</sup>b</i>	<i>ʹb</i>	<i>ff</i>	<i>bsh</i>
<i>rv</i>	<i>sb</i> , <i>db<sup>a</sup></i>	<i>χf</i>	<i>dpy</i> , <i>gsh</i>
<i>lv</i>	<i>lb</i>	<i>ʒ</i>	<i>zh</i> , <i>zhw</i>
<i>m</i>	<i>m</i>	<i>vʒ</i>	<i>bzh</i>
<i>rm</i>	<i>rm</i>	<i>ɛʒ</i>	<i>gzh</i>
<i>ʁm</i>	<i>sm</i>	<i>t̚ʂ</i>	<i>gr</i> , <i>dr</i>
<i>ɛm</i>	<i>dm</i>	<i>pt̚ʂ</i>	<i>bkr</i> , <i>grw</i> , <i>pr</i> , <i>br</i>
<i>t</i>	<i>t</i> , <i>d</i> , <i>dw</i>	<i>ft̚ʂ</i>	<i>spr</i>
<i>rt</i>	<i>rt</i> , ( <i>b</i> ) <i>st</i>	<i>rt̚ʂ</i>	<i>dkr</i> , <i>skr</i>
<i>lt</i>	<i>lt</i>	<i>t̚ʂ<sup>h</sup></i>	<i>khr</i>

21. Exceptional correspondences, some of which may be due to dialect borrowings (e.g. *χt̚ʂə* <spri> ‘colostrum’, a possible loan from Amdo; the expected Gser-Rdo reflex being *†ft̚ʂə*), are excluded.

## Part A. (continued)

Gser-Rdo	OT	Gser-Rdo	OT
$\chi^t$	<i>gt</i>	$pt\zeta^h$	<i>phr^b</i>
$t^h$	<i>th</i>	$mt\zeta^h$	<i>mkhr, 'phr</i>
$mt^h$	<i>mth</i>	$^n t\zeta^h$	<i>'khr</i>
$^n t^h$	<i>'th</i>	<i>mdz</i>	<i>'br</i>
<i>md</i>	<i>md</i>	<i>vdz</i>	<i>sbr</i>
<i>vd</i>	<i>bd; brd</i>	<i>rdz</i>	<i>sgr</i>
<i>rd</i>	<i>rd, sd</i>	$\varepsilon dz$	<i>dgr</i>
<i>ld</i>	<i>ld</i>	$^n dz$	<i>'gr, 'dr</i>
$\varepsilon d$	<i>gd</i>	<i>c</i>	<i>gy</i>
$^n d$	<i>'d</i>	<i>fc</i>	<i>spy</i>
<i>s</i>	<i>s</i>	<i>rc</i>	<i>rky, sky</i>
<i>fs</i>	<i>bs</i>	$\chi c$	<i>dky</i>
$\chi^s$	<i>gs</i>	$c^h$	<i>khy</i>
<i>z</i>	<i>z</i>	$mc^h$	<i>mkhy</i>
<i>vz</i>	<i>bz</i>	$^n c^h$	<i>'khy</i>
$\varepsilon z$	<i>gz</i>	<i>mj</i>	<i>mg, 'by</i>
<i>n</i>	<i>n</i>	<i>vj</i>	<i>brgy, sby</i>
<i>mn</i>	<i>mn</i>	<i>rj</i>	<i>rgy, sgy</i>
<i>rn</i>	<i>rn</i>	$^n j$	<i>'gy</i>
$^r n$	<i>sn</i>	<i>j</i>	<i>ny</i>
$\varepsilon n$	<i>gn</i>	<i>mjn</i>	<i>my, mny, m</i> (before OT -i and -e)
<i>r</i>	<i>r</i>	<i>fjn</i>	<i>smy, sm</i> (before OT -i and -e)
<i>l</i>	<i>l</i>	<i>rjn</i>	<i>rny, rm</i> (before OT -i and -e)
<i>vl</i>	<i>bl, brl</i>	$^r j$	<i>sny, smy</i>
<i>rl</i>	<i>rl</i>	$\varepsilon j$	<i>gny</i>
$\varepsilon l$	<i>kl, gl</i>	<i>j</i>	<i>y</i>
$\chi l$	<i>kl, gl</i>	$\varepsilon j$	<i>gy, dby</i>
$l_{\circ}$	<i>sl, lh</i>	<i>k</i>	<i>k, g</i>
$fl_{\circ}$	<i>bsl</i>	<i>pk</i>	<i>bk</i>
<i>ts</i>	<i>ts</i>	<i>rk</i>	<i>dk, (b)rk, (b)sk</i>
<i>pts</i>	<i>bts</i>	<i>lk</i>	<i>lk</i>
<i>rts</i>	<i>rts, rtsw</i>	$k^h$	<i>kh</i>
<i>lts</i>	<i>sl</i>	$mk^h$	<i>mkh</i>
$\chi ts$	<i>gts</i>	$^n k^h$	<i>'kh</i>
$ts^h$	<i>tsh</i>	<i>mg</i>	<i>mg</i>
$^n ts^h$	<i>'tsh</i>	<i>rg</i>	<i>dg, rg, sg</i>
$mts^h$	<i>mtsh</i>	$^n g$	<i>'g</i>
<i>mdz</i>	<i>mdz</i>	<i>y</i>	<i>'</i>

Part A. (continued)

Gser-Rdo	OT	Gser-Rdo	OT
<i>rdz</i>	<i>rdz</i>	<i>ŋ</i>	<i>ng</i>
<i>ldz</i>	<i>zl</i>	<i>mŋ</i>	<i>mng</i>
<i>rdz</i>	<i>rdz</i>	<i>lŋ</i>	<i>lng</i>
<i>ʳdz</i>	<i>ʳdz</i>	<i>rŋ</i>	<i>dng, rng</i>
<i>tʃ</i>	<i>j</i>	<i>rŋ</i>	<i>sng</i>
<i>ptʃ</i>	<i>bc</i>	<i>q</i>	<i>?</i>
<i>ltʃ</i>	<i>lc</i>	<i>qʰ</i>	<i>khw</i>
<i>χtʃ</i>	<i>gc</i>	<i>χ</i>	<i>h</i>
<i>tʃʰ</i>	<i>ch</i>	<i>ʁ</i>	<i>db</i>
<i>mtʃʰ</i>	<i>ʳphy, mch</i>		

- a. G *ʁv*, R *ʁ* in literary words, e.g. G *ʁəŋ-tʃʰa*, R *ʁvo* <dbang(.cha)> ‘power’.  
b. The correspondence is true of Rdoskad only. The OT complex onset *phr-* gave either *ptʂ* (*ptʂok* <phrug> ‘young animal’) or *mtʂʰ* (*mtʂʰe-χa* <phrag.pa> ‘shoulder’).

Part B. Distinct Gserskad and Rdoskad onset developments

Gserskad	OT	Rdoskad	OT
<i>/ʁv/</i>	<i>db</i>	<i>/rv/</i>	<i>sbr</i>
<i>/rs/</i>	<i>sr</i>	<i>/vz/</i>	<i>sbr</i>
<i>/ptʃ/</i>	<i>by</i>	<i>/r/</i>	<i>rw</i>
<i>/χtʃ/</i>	<i>dpy</i>	<i>/fʃ/</i>	<i>by, phy</i>
<i>/ptʃʰ/</i>	<i>phy</i>	<i>/χʃ/</i>	<i>dpy</i>
<i>/mtʂʰ/</i>	<i>phr</i>	<i>/ptʂʰ/</i>	<i>phr</i>
<i>/rʏ/</i>	<i>rw</i>	<i>/mdz/</i>	<i>mgr</i>
<i>/ʏ/</i>	<i>w</i>	<i>/ʂ/</i>	<i>sr</i>
		<i>/rts/</i> (rare)	<i>sr</i>
		<i>/x/</i>	<i>sh</i>
		<i>/ʁ/</i>	<i>w</i>

Appendix C. English-Gser-Rdo vocabulary

This comparative vocabulary contains around 1,400 selected common lexical items in Gserskad (G) and Rdoskad (R) Tibetan, with syllable breaks to facilitate morpheme identification. Distinct dialect forms for a given entry are presented in the order G → R. No labels are given when both dialects use identical forms. Chinese glosses are added to clarify the meanings of certain lexical items. The corresponding OT forms are enclosed in angle brackets. The Gser-Rdo past verb stems are by and large secondarily created via ablaut on the basis of present stems, which go back to OT past (the majority case) as well as other stem forms. The origins of present stems are indicated when they do not inherit the OT present stems.



abandon, give up; (G) *fcer/fcir/rcer* (R) *fcer/fcir/rcer* <bskyur<sub>[PST]</sub>/INNv/skyur>  
 abdomen; *pʰo-tʃu* <pho.chung>  
 ablative case marker; (G) *no-ne* <nang.nas> (R) *nəŋ-a* <nang.ʔ>  
 acclivity 上坡; *la* <la>  
 accumulate; [INTR] (of water) (G) *ʳcʰɛl* (R) *ʳcʰəl* <'khyil>; [TR] (G) *fsie/fsək/sie* (R) *fsok/fsek/sok* <ʔbsog/INNv/sog(s)>  
 Adam's apple; (G) *o-mdet* (R) *u-mdət* <ol.mdud>  
 add, increase; *fnan/fnen/rnon* <bsnan<sub>[PST]</sub>/INNv/snən>  
 afternoon; (G) *ptʰə-tʃu* <phyi.dro> (R) *rgonj-rka* <dgong.ʔ>  
 afterwards; (G) *ti mtʃʰu-ne* <de'i.mphro.nas> (R) *ti mtʃʰu-ni* <de'i.mphro.ʔ>  
 agentive nominalizer; (G) *-vdiə* <bdag> (R) *-ji-yo* <gzi>  
 agate bead 天珠; *ʷzə* <gzi>  
 agricultural area; *ronj-sa* <rong.sa>  
 agriculturalist Tibetan; (G) *ronj-va* (R) *ronj-ŋa* <rong.pa>  
 air, breath; (G) *rvok* (R) *rvək* <dbugs>  
 air dry; *fkam/fkem/rkom* <bskams<sub>[PST]</sub>/INNv/skoms>  
 alcoholic drink; (fermented) (G) *tʃʰo* (R) *tʃʰəŋ* <chang>; (distilled) (G) *e-rie* (R) *a-rəq* <a.rag>  
 algae; (G) *tʃʰə-tʃie* (R) *tʃʰə-tʃəq* <chu.dreg>  
 all; (G) *kʰe-tso*, *kʰə-yo* (R) *tʃʰa-ka*, *kʰa-tʃəŋ* <yang>  
 also, likewise; (G) *ji* (R) *ja* <yang>  
 aluminum; (G) *χa-joŋ* (R) *ha-jəŋ* <ha.yang>  
 amber; (G) *rpe-fel* (R) *rpu-fi* <spos.shel>  
 amulet box; (G) *ke-və* (R) *ka-yə* <ga'u>  
 and; *ta* <dang>  
 animal fat, grease; (G) *tʃʰɛl* (R) *tʃʰəl* <tshil>  
 angle; (G) *mtʃʰok-ŋu* (R) *mtʃʰok* <rgya.tshigs>  
 ankle; (G) --- (R) *rja-tʃʰək* <rgya.tshigs>  
 ant; (G) *tʃok-ma* (R) *tʃok-ma* <grog.ma>  
 anus; (G) *ʷzo* (R) *ʷzəŋ* <gzhang>  
 anvil; (G) *tʰo-tsa* (R) *tʰe-tse* <pe>  
 anything; *mtʃʰot*; *tʃʰə-pe*  
 apply, smear; *fka/fki/rki* <bsku<sub>[FUT]</sub>/bskus/skus>  
 argali; (G) --- (R) *ŋjan* <gnyan>  
 arm (including hand); *la-χa* <lag.pa>; (upper arm) (G) *χpu-pa* <dpung.pa> (R) *χpu-la* <dpung.ʔ>  
 armpit; (G) *qə-tʃə-ʒap* (R) *tʃə-qə-ʒap* <ʔ.zhabs>  
 arrive; *tʰon* <thon>  
 arrow; *mda* <mdaʔ>  
 ashes; (G) *tʰal-va* (R) *tʰa-la* <thal.ba>  
 ask, inquire; *tʃə/tʃi/tʃi* <drɪ<sub>[FUT]</sub>/INNv/dris>  
 ask (of sb), request; (G) *re-va vjap* (R) *re-va rjap* <re.ba.ryab>  
 ask for sth (e.g. from a neighbor); (G) *ltso/ltse/rtse* (R) *ltʃəŋ/ltʃəŋ/rtʃəŋ* <slang/INNv/INNv>  
 assemble; [INTR] *ʳdi* <ʳdus>; [TR] (G) *vədzom/vədzim/rədzom* (R) *vəzəm/vəzim/rəzəm*<sup>22</sup>  
 at all; (G) *ʳdi-ne* (R) *ʳde-ni*

22. Related to OT <ʳdzom>, but the rhymes do not correspond (ʔ <ʳdzum> expected).

at once; (G) *mdzok-mje* (R) *ta-ta* <da.da>; *ta-ji* <da.ʔ>  
 aunt; (G) *e-ni* (R) *a-ni* <a.ne>  
 auspiciousness; (G) *ptʃə-fi* (R) *ptʃa-fi* <bkra.shes>  
 autonym of dialect; (G) *fʃsər-rkat* <gser.skad> (R) *rdo-rkat* <rdo.skad>  
 autumn; *rton* <ston>  
 awl; (G) *ʳbok* (R) *ʳbək* <'bug>  
 awn (of highland barley); *pʰə-ma*  
 ax; (G) *rte-ri* (R) *rta-ri* <sta.re>  
 baby; (G) *rlə-nə* (R) *ʒa-ʒi* <ʷnəŋ-rnə <zha.byis.ʔ.ʔ>  
 back; *rjap* <rgyab>  
 bag, pouch; *kʰək-ma* <khug.ma>; (of leather) *rdzə-va* <sgro.ba>; (of yak hair) (G) *rji* <sgye> (R) *rje-la* <sgye.lu>; (yarn sidebag) (G) *rja-la* <sgye.lu> (R) *rje-po* <sgye.po>  
 bake, roast, burn; (G) *fsie/fsək/sie* (R) *fsəq/fsek/sok* <bsregs<sub>[PST]</sub>/INNv/INNv>  
 bald person; (G) *ʳgo-vjə* (R) *ʳgo-vji* <mgo.ʔ>  
 bamboo; *ʳnək-ma* <smyug.ma>  
 bandit; (G) *tʃə-χa* (R) *tʃə-χa* <jag.pa>  
 bark [V]; (G) *zok* (R) *zək* <zug>  
 barley; (G) --- (R) *so-va* <so.ba>  
 barren bovine or horse; *rka-ʳba* <skam.pa>  
 basket carried on back 背囊; *səl-pa* <slel.po>  
 bastard; (G) *ptʃə-vrok* (R) *ʳfi-vrak* <byi.phrug><sup>23</sup>  
 bat; (G) --- (R) *ver-və* (from Rgyalrongic, cf. Showu *ɛʷərvə*)  
 bathe; (G) *kʰə-χə ptʃə* <<khog.ʔ.bkru> (R) *li-tʃi le* <lus.khrus.las>  
 be (copular verb); (G) *re* (R) *re* <red>; (egophoric) (G) *jen* (R) *jən* <cin>  
 be able (to do sth); (G) *tə* (R) *tʰəp* <thub>  
 be able to hold or contain; (G) *tʃʰet* (R) *xət*  
 be able to lift; (G) *cʰie* (R) *cʰəq* <khyag>  
 be accomplished; (G) *ʳdzep* (R) *ʳdzəp* <grub>  
 be afraid; (G) *rtʃie* (R) *rtʃəq* <skrag>  
 be alive, living; *χson* <gson>; [NMLZ] (G) *χsə-ʳbə* (R) *χson-ʳbə* <gson.po>  
 be allowed, may; (G) *jan* <nyan>; *tʃʰie* (R) *tʃʰok* <chog>  
 be angry; (G) *ʳni* *ʳcʰie* (R) *ʳnəŋ* *ʳcʰəq* <snying.khyag>  
 be ashamed; (G) *mjə-ka kʰer* (R) *mjə-ka kʰər*<sup>24</sup>  
 be auspicious; (G) *ptʃə-fi* (R) *ptʃa-fi* <bkra.shes>  
 be bad; (G) *a-qʰi*; *rdə-xə* <rdugs.pa> (R) *mə-lom*; *rzan*  
 be bashful; *ŋu tʃʰa* <ngo.tsha>  
 be big; *tʃʰi* <che>; [NMLZ] (G) *tʃʰət-pə* (R) *tʃʰe-pə* <chen.po>  
 be bitter; *qʰa* <kha>; [NMLZ] *qʰa-və* <kha.bo>  
 be black; (G) *nie* (R) *nəq* <nag>; [NMLZ] (G) *ne-χə* (R) *nə-χə* <nag.po>  
 be blind; *ʒar* <zhar>

23. A rare example of word-internal preservation of OT labial stop + *r*- cluster <phr>. Another example is *a-vra* <a.bra> 'pika'.

24. Perhaps relatable to <mi.kha> 'slander' (observation due to Guillaume Jacques, p.c.).

be blue; *rŋu* <sngo>; [NMLZ] (G) *rŋan-nb* (R) *rŋon-pə* <sngon.po>  
 be brittle, crisp; (G) *tʰok* (R) *tʰəq*; [NMLZ] (G) *tʰok-mu* (R) *tʰəq-mu*  
 be cautious; (G) *bze-bzep vje* <gzab.gzab bya> (R) *bzap-bzap le* <gzab.gzab las>  
 be clean; *χtso* <gtsang>; [NMLZ] *χtso-ma* <gtsang.ma>  
 be coarse-grained; (G) *rtsep* (R) *rtsap* <rtsub>; [NMLZ] *rtsep-pə* <rtsub.po>  
 be cold; (G) *ʰchie* (R) *ʰchəq* <ʰkhyag>  
 be comfortable, be happy; (G) *rcet* (R) *rcət* <skiyd>  
 be complete; (G) *mtsʰoŋ* (R) *tʰəŋ* <tshang>  
 be completed; *tʰar* <tshar>  
 be cooked; *tʰe* <tshos>  
 be cool; (G) *fsəl* (R) *fsəl* <bsil>; [NMLZ] *fsəl-mu* <bsil.mo>  
 be crazy, be insane; *fju/fje* <smyo/smyos>  
 be deaf; *yon* <on>  
 be deep; *zap* <zab>; [NMLZ] (G) *zep-mu* (R) *zap-mu* <zab.mo>  
 be delayed, be held up; *ʰgor* <ʰgor>  
 be difficult; *rka-ŋal tʰi* <dka.ŋal.che>  
 be dislocated (of joints); (G) *tʰəok pet* (R) *tʰək pət* <tshigs.bud>  
 be drunk; (G) *və* (R) *və* <bzi>  
 be early; *rŋa* <snga>; [NMLZ] *rŋa-mu* <snga.mo>  
 be easy; *ltsa* <sla>; [NMLZ] (G) *ltse-mu* (R) *ltsa-mu* <sla.mo>  
 be empty; *rtu* <stong>  
 be fast; (G) *myie* (R) *myok* <mgyogs>; [NMLZ] *myo-χa* <mgyogs.pa>  
 be fat; *tʰu* <tsho>; [NMLZ] (G) *tʰə-nb* (R) *tʰə-nb* <tshon.po>  
 be few, little; *ju* <nyung>; [NMLZ] (G) *ju-ju* <nyung.nyung> (R) *joŋ-ŋa* <nyung.ba>  
 be fine-grained; *ʒə* <zhib>; [NMLZ] *ʒə-yə* <zhib.ʔ>  
 be flat, level; (G) *lep-lep* (R) *lep-lep* <leb.leb>  
 be fresh; *χsar* <gsar>  
 be full (from eating); (G) *vje* (R) *vjak* <rgyags>  
 be glad; *rga* <dga>  
 be good; (kind-hearted); (G) *vzo* (R) *vzəŋ* <bzang>; (of fine quality); (G) *ʰdʒək*; *mtsʰar* <mtshar> (R) *tʰə*; *ʰdʒək*; *mtsʰar* <mtshar>  
 be grey; *rca* <skya>; [NMLZ] (G) *rca-rca* <skya.kya> (R) *rca-və* <skya.bo>  
 be hard; (G) *rsa* (R) *ša* <sra>; [NMLZ] (G) *rse-mu* (R) *ša-mu* <sra.mo>  
 be heavy; (G) *ldʒet* (R) *ldʒət* <ljid>; [NMLZ] *ldʒət-pə* <ljid.pa>  
 be high; *mtʰu* <mtho>; [NMLZ] (G) *mtʰə-nb* (R) *mtʰə-nb* <mtho.po>  
 be hot; (of objects) *tʰa* <tsha>; (of sensation) *tʰu* <dron>; [NMLZ] (G) *tʰə-nb* (R) *tʰə-nb* <dron.po>; (of weather) *ja-ma* *tʰu* <nyi.ma.dro>  
 be hungry; *pʰse* <bkres>  
 be ill, sick; *na* <na>  
 be late; *mtʰə* <ʰphyi>  
 be left behind 落下; *li* <lus>; (G) *rdʒet* (R) *rdʒet* <rjed>  
 be left behind 剩下; (G) *lie* (R) *laq* <lhag>

be lightweight; (G) *jo* (R) *jəŋ* <yang>; [NMLZ] (G) *jo-mu* (R) *jəŋ-mu* <yang.po>  
 be long; *ri* <ring>; [NMLZ] *ri-pə* <ring.po>  
 be loose; *lot* <lhod>; [NMLZ] *lot-mu* <lhod.mo>  
 be low; *ɛma* <dmə>; [NMLZ] (G) *ɛme-mu* (R) *ɛma-mu* <dmə.mo>  
 be many, much; (G) *me* (R) *məŋ* <mang>; [NMLZ] (G) *me-pə* <mang.po> (R) *məŋ-ŋa* <mang.ba>  
 be old; (of objects) *rŋi* <rnying>; [NMLZ] *rŋi-pa* <rnying.pa>; (of people) *rge* <rgas>  
 be over (of a meeting); *ce*  
 be pointed, sharp; *rnu* <rno>; [NMLZ] (G) *rnən-bə* (R) *rnən-pə* <rnən.po>  
 be red; *ɛmar* <dmə>; [NMLZ] (G) *ɛmər-pə* (R) *ɛmar-və* <dmə.po>  
 be rich; (G) *ptʰok* (R) *pfək* <phyug>; [NMLZ] (G) *ptʰə-xə* (R) *pfə-xə* <phyug.po>  
 be ripe; (of fruits) (G) *fŋan* (R) *tʰe* <tshos>; (of crops) (G) *fŋan* (R) *ʰgu tʰon*  
 be scattered; *ʰthor* <ʰthor>  
 be short; *tʰu* <thung>; [NMLZ] (G) *tʰu-tʰu* <thung.thung> (R) *tʰoŋ-ŋa* <thung.ba>  
 be skilled; *mkʰe-rpa* <mkhas.pa>  
 be slippery; (G) *ʒet* (R) *ʒət*<sup>25</sup>  
 be slow; *tal* <dal>; [NMLZ] (G) *tel-mu* (R) *tal-mu* <dal.mo>  
 be small; *tʰu* <chung>; [NMLZ] (G) *tʰu-tʰu* <chung.chung> (R) *tʰoŋ-ŋa* <chung.ba>  
 be smooth; *ʰdʒam* <ʰjam>; [NMLZ] *ʰdʒə-nb* <ʰjam.po>  
 be soft; *rŋə* <snyi>; [NMLZ] *rŋə-mu* <snyi.mo>  
 be sour; (G) *rcer* (R) *rcar* <skyr>; [NMLZ] (G) *rcər-pə* (R) *rcər-və* <skyr.po>  
 be spicy; (G) *tʰa* <tsha>; [NMLZ] *tʰə-və* <tsha.bo>  
 be sticky; (G) *ner* (R) *tam*; [NMLZ] (G) *nər-mu* (R) *tam-tfan-tə*  
 be straight; (G) *tʰo* (R) *tʰəŋ* <drang>; [NMLZ] (G) *tʰo-mu* (R) *tʰəŋ-mu* <drang.mo>  
 be sturdy; *fisan* <btsan>; [NMLZ] *fisan-nb* <btsan.po>  
 be sweet; *mŋar* <mngar>; [NMLZ] (G) *mŋər-pə* (R) *mŋər-və* <mngar.po>  
 be tall (of stature); (G) *kʰə-χə ri* <khog.ʔ.ring> (R) *pʰoŋ-vi ri* <phong.ʔ.ring>  
 be tasty; (G) *ʒem* (R) *ʒəm* <zhim>; [NMLZ] *ʒəm-nb* <zhim.po>  
 be thick (of e.g. ropes) 粗; *rvom* <sbom>; [NMLZ] (G) *rvəm-nb* (R) *rvom-nb* <sbom.po>  
 be thick (of e.g. wood planks, hair of head) 厚, 密; (G) *ʰthok* (R) *tʰək* <ʰthug>; [NMLZ] *tʰə-xə* <ʰthug.po>  
 be thick (of liquid food; e.g. soup) 濃; (G) *rqa* (R) *nər* <nur>; [NMLZ] (G) *rqa-mu* (R) *nər-mu* <nur.mo>  
 be thin (of e.g. boards) 薄; (G) *rsap* (R) *šap* <srab>; [NMLZ] (G) *rsap-rsap* (R) *šap-šap* <srab.srab>  
 be thin (of e.g. gruel) 稀; (G) *fəl* (R) *fəŋ*; [NMLZ] (G) *fəl-mu* (R) *fəŋ-mu*

25. Cf. Rkakhog Amdo ʒət.

be thin (of e.g. ropes) 細; *mtšʰa* <'phra>; [NMLZ] (G) *mtšʰa-mtšʰa* <'phra.'phra> ~ *mtšʰe-mu* <'phra.mo> (R) *mtšʰa-və* <'phra.bo>  
 be thin, sparse 稀疏; (G) *rsap* (R) *šap* <srab>; [NMLZ] (G) *rsap-rsap* (R) *šap-šap* <srab.srab>  
 be thirsty; *rkom* <skom>  
 be tight; (G) *tam* <dam>; [NMLZ] (G) *te-ʰba* <dam.po>  
 be tightly packed, be crowded; (G) *χtfer* <gcir> (R) *ptfər* <bcir>  
 be used to, be accustomed to; *lop* <lob>  
 be white; *kar* <dkar>; [NMLZ] (G) *ker-pə* (R) *kar-və* <dkar.po>  
 be wide; *zi tʰi* <zheng.che>  
 be wrong, be mistaken; *nor* <nor>  
 be yellow; (G) *ser* (R) *ser* <ser>; [NMLZ] (G) *sar-bə* (R) *ser-və* <ser.po>  
 bead; (G) *mə-tok* (R) *mə-tək* <mu.tig>  
 bear; (black bear, *Ursus thibetanus*) *tom* <dom>; (brown bear) (G) *tšan-mu* (R) *tšet-mu* <dred.mong>; (bear gallbladder) *tom-mtšʰi* <dom.mkhris>  
 beard lichen, tree moss 松蘿; (G) *tʰo-val* (R) *tʰəŋ-val* <thang.bal>  
 beard, moustache; (G) *kʰe-rpə* (R) *kʰa-rpə* <kha.spu>  
 beast of prey; *χtfa-ʰdzan* <gcan.gzan>  
 beat (of pulse); *ʰpʰar* <'phar>  
 beat up; (G) *vdu/vdi/rdi* <brdungs/INNV/INNV> (R) *χjat/χjet/χjot*  
 become fermented; *fɲal* <bsnyal>  
 become less in quantity due to vaporization; (G) *tʰie* (R) *ʰtʰaq*  
 become moldy; (G) *kʰə-mok tʰie* (R) *qʰə-mək tʰie*  
 bed; (G) *ɲel-tšʰə* (R) *ɲal-tšʰə* <nyal.khri>  
 bee; *pu-ma* <sbrang.ma>  
 beg (as a beggar does); *fɲəo/fɲe*/(no imperative stem) (R) *fɲəŋ/fɲeŋ*/(no imperative stem) <sprang/INNV>  
 beggar; (G) *fɲəo-pə* (R) *fɲəŋ-və* <sprang.po>  
 believe; (G) *vden-lə vzu* <bden.la bzung<sub>[PST]</sub>> (R) *vden-na vzu* <bden.na bzung<sub>[PST]</sub>>  
 bell (a liturgical instrument); *tšal-və* <dril.bu>  
 bell metal; *lə* <li>  
 bellows; *kʰol-mu* <khol.mo>  
 belly; *ʰəo-və* <pho.ba>  
 bend down; (G) *rger/rgr/rgr* (R) *rgr/rgir/rgr* <sgur/INNV/sgur>  
 bend (sth pliable); (G) *pkok/pkik/kʰok* (R) *pkək/pkik/kʰək* <bkug<sub>[PST]</sub>/INNV/khug>  
 bharal (*Pseudois nayaaur*) 岩羊; (G) --- (R) *rna-va* <rna.ba>  
 bind, tie up; (~ a person or an animal) (G) *pcok/pcik/cʰok* (R) *pcək/pcik/cʰək* <bkyigs<sub>[PST]</sub>/INNV/khyigs>; (~ an object); *ptfi/ptfe/tʰe* <bcings<sub>[PST]</sub>/INNV/INNV>  
 birch; (white birch) (G) *rta-χa* <stag.pa> (R) *ze*; (Chinese red birch, *Betula albosinensis*); (G) *ʰəor-fi* (R) *ʰəor-fi* <?.shing>  
 birch bark; (G) *rta-lpie* <stag.lpag> (R) *ze-lpag* <?.lpag>

bird; (G) *ptfa* (R) *ffa* <bya>; (small-size bird) (G) *ptfi* (R) *ffi* <bye'u>  
 bit 馬嚼鐵; (G) *rsap-ltfe* (R) *šap-ltʰəq* <srab.lcags>  
 bite; (of animals) (G) *ʰtʰa/ʰtʰe/tʰu* <čʰal/čhos/INNV> (R) *ʰmak/ʰmik/ʰmək* (cf. OT <rmug>; (of people) (G) *ʰdzat/ʰdzet/ʰdzot* (R) *sə-qʰop le* <so.ʔ las>; (bite off a piece) (G) *kʰa-ʰba ptfat/ptfet/tʰot* <kham.pu. bcad<sub>[PST]</sub>/INNV/chod> (R) ---  
 black kite (*Milvus migrans*) 黑鷹; (G) *yol-va* (R) *bu-lə*  
 blacksmith; (G) *gar-va* (R) *gar-ra* <mgar.ba>  
 bladder; *pək-si* (cf. Northern Horpa *páksʰi*)  
 bleat; *ʰba* <'ba>  
 blind person; *lu-va* <long.ba>; (blind in one eye only) (G) *zar-va* (R) *zar-ra* <zhar.ba>  
 blister; (G) *tʰə-ver* (R) *tʰə-yər* <chu.bur>  
 blood; (G) *tšʰie* (R) *tšʰəq* <khra>  
 blood pheasant (*Ithaginis cruentus*) 血雉; *lo-fa*  
 blood vessel; (G) *tšʰek-rtsa* (R) *tšʰəq-rtsa* <khra.rtsa>  
 bloom; *kʰa kat*  
 blow (send a stream of air from mouth; ~ a wind instrument); (G) *χper/χpir/χper* (R) *χpər/χpir/χpər*<sup>26</sup>  
 blow nose; (G) *ɲap ptser/ptsir/tšʰer* <sna> btsir<sub>[PST]</sub>/INNV/tshir> (R) *ɲap χpər/χpir/χpər* <sna>?>  
 blow pipe (made of rhubarb stem) 吹火筒; *tu-vət*  
 boat; *tšə* <gru>; (large boat) (R) *əzəŋ* <gzings>  
 body; (G) *kʰə-χə* <khog.ʔ>; *li* <lus> (R) *li-po* <lus(po)>  
 boil [N] 疔; (G) *ələn-va* (R) *rja-tol*  
 boil [V]; (~ solid food) *ptsu/ptse/tšʰe* <btso<sub>[FUT]</sub>/btsos/tshos>; (~ liquid) *fkol/fkel/rkol* <bskol<sub>[PST]</sub>/INNV/skol>  
 boil over; (G) *mtʰer* (R) *mtʰər*  
 bolt (door); *ʰtʰar/ʰtʰer/ʰtʰor*  
 Bon religion; (G) *pən-ʰbə* (R) *pon-bə* <bon.po>  
 bone; *rə-rpa* <rus.pa>  
 borrow (objects of all kinds); *ɲjar/ɲjer/ɲjor* <gyar/INNV/gyor>  
 bosom; (G) *rom* (R) *rəm* <rum>  
 botfly, gadfly 牛虻; (G) *tse-ʰbə* (R) *xə-vdzoŋ* <sha.brang>  
 bottle; (G) *rtok*; *rtək-ʰbə* (R) *rtək-ʰbə* <?.bu>  
 bottle; (G) *fol-dam* (R) *xel-tam* <shel.dam>  
 bounce, leap (of a flea); *jar* <yar>  
 bovine animal (under genus Bos); (G) *zie* (R) *zok* <zog>  
 bow (weapon); *əzə* <gzhu>  
 bow drill; (G) *rkol-ʰbok* <?.bug> (R) *χsor-ʰbək* <gsor.bug>  
 bowl; (generic) (G) *ʰə-rə* <phor.ba> (R) *tfa-ni* <ca.ne>; (wooden) (G) *fi-tʰen* (R) *fi-tʰan*; (ceramic) (G) *ker-jol* (R) *kar-jol* <dkar.yol>  
 box; *rgam* <sgam>

26. Cf. Western Horpa *χpər* 'blow'.

- box; (for tsampa) *rtsam-pagam*; (round box for tsampa) (G) *per-və* (R) *pa-rə*; (bamboo box for butter) (G) *mər-por* (R) *mar-por* <mar.phor>
- bracelet; (G) *lek-ɛdok* (R) *ləq-ɛdok* <lag.gdub>
- braid, plait [N]; (of a male person) (G) *rəl-pa* (R) *ral-pa* <ral.pa>; (of a woman) (G) ---; (R) *rtša-flat* <skra.ʔ>; *pot-rtša* <bod.skra>; [V] braid, plait, weave (e.g. a basket); (G) *fla/fle/ʔle* <bsla/bslas/ʔ> (R) *flat/flet/lot*
- brain; (G) *ɛlet-pa* (R) *ɛlat-pa* <klad.pa>
- branch, twig; (G) *rə-lie* (R) *ra-ləq* <ra.lag>
- brass; (G) *riə* (R) *rəq* <rəg>
- bread; (G) *kor-va* (R) *ko-ra*; cf. Amdo <ko.re>
- break [INTR]; (of sth pliable) *tʃʰat* <chad[<sub>PT</sub>]; (of sth stiff) (G) *tʃʰie* (R) *tʃʰəq* <chag[<sub>PT</sub>]; (of sth pliable) *ptʃat/ptʃet/tʃʰot* <bcad[<sub>PT</sub>]/INN/cho>; (~ sth stiff) (G) *ptʃie/ptʃək/tʃʰie* (R) *ptʃəq/ptʃek/tʃʰok* <bcag[<sub>PT</sub>]/INN/cho>
- breakfast; (G) *kʰe-psal* (R) *kʰa-ffal*
- breast; *nə-ma* <nu.ma>
- bride; *mna-ma* <mna.ma>; (before wedding) (G) *pak-ma* (R) *pəq-ma* <bag.ma>
- bridge; *za-nba* <zam.pa>; (log bridge) *ɛdu-zam* <sdong.zam>
- bridle; (G) *rsap* (R) *šap* <srab>
- broad bean; (G) *rsən-ma* <sran.ma> (R) *nəq-rgi*
- broom; (G) *vda-fi* (R) *zet-pə*
- brother; (elder) (G) *v-pə* (R) *a-pə* <a.bu>; (younger) (G) *v-ɛə* (R) *a-ɛə*; <sup>27</sup> (man's brother) (G) *xə-jii* (R) *xa-jii*; (woman's brother) (G) *mji-pə* (R) *mjəŋ-və* <ming.bo>; (sworn brother) *mna-ja* <mna.ʔ>
- bruise; (G) *tʃʰəq-ʔmok* (R) *tʃʰəq-ʔməq* <khrag.smug>
- bucket, barrel; (G) *zo-va* <zo.ba> (R) *tʃʰə-zom* <chu.zom>; (milk bucket) *vʒo-zi* <bzho.ze'u>; (supporting ring placed under barrel when carried on back) (G) *tʃʰə-kor* (R) *tʃʰə-kor* <chu.ʔ>; (barrel hoop) *zom-rtʃi* <zom.dkris>
- buckwheat; (G) (not grown locally) (R) *tʃa* <bra>
- build a fire, start a fire by burning firewood; (G) *ʔbet/ʔbit/ʔbet* (R) *ʔbət/ʔbit/ʔbət* <ʔbud/INN/ʔbud>
- bump; (G) *rtʃe-ʔber* (R) *rtʃe-ʔbar* <skrang.bur>
- bun with filling; (G) *pə-lqa* (R) *mok-mok* <mog.mog>
- burn [INTR]; (G) *dʒen* (R) *dʒen*
- burn [TR]; (burn sth unwanted) (G) *ɛvat/ɛvit/ɛvat* (R) *fʃəq/fsek/sok*; (burn offerings) (G) *fʃie/fʃək/sie* (R) *fʃəq/fsek/sok*
- burnt offering; *rdze* <rdzas>; (comprising only various grains) *mdzə-ʔna* <ʔbru.sna>
- bury; (~ an object) *sə-ʒap* *pkap/pkep/kʰop* <bkab[<sub>PT</sub>]/INN/khobs>; (~ a corpse) (G) *ɛnan/ɛnen/ɛnon ɛnan/ɛnen/ɛnon* <gnan[<sub>FUT</sub>]/INN/gnon>; *sə-ʔdep* *vje* (R) *sa-ʔdep* <sa.ʔ.byə.las>
- but; (G) *tsi-nə* (R) *ta*
- butter; *mar* <mar>; (melted ~) (G) *mər-kə* (R) *mar-kə* <mar.khu>
- butterfly; (G) *pʰel-bə* (R) *pʰal-bə* (< Rgyalrongic. Cf. Showu *pʰalbūm*)
- buttermilk 酪漿; (G) --- (R) *yo-fəŋ* <ɔ.ʔ>
- buttocks; (G) *ʔpʰi-ʔgu* (R) *pʰi-ʔgu* (cf. Showu *tə-mphūʔs*, Northern Horpa *mpʰū*)
- buy; (G) *ju/ju/je* <nyo/INN/nyos> (R) *ju/je/je* <nyo/nyos/nyos>
- buzzard (*Buteo buteo*) 鵟; (G) *χlie* (R) *χləq* <glag>
- calf (body part) 小腿肚; *ja-le* <nywa.ʔ>
- calf (R) (under one year old) *pi-lə* <be'u.li>
- call (sb); (G) *ʔbot/ʔbet/pe* (R) *ʔbot/ʔbet/ʔbot* <ʔbod/INN/ʔbod<sup>28</sup>>
- camel; *rja-moŋ* <rnga.mong>
- care for, take care of; (G) *ʔtsʰet/ʔtsʰet* <ʔ> (R) *ʔtsʰu/ʔtsʰe/ʔtsʰe* <ʔtsho/ʔtshos/ʔtshos>
- carpenter; *ʃi-vzu* <shing.bzo>
- cascade; (G) *tʃʰə-ptʃar* (R) *tʃʰə-ffar* <chu.phyar>
- castrate; (~ a horse) (G) *kʰap* *ʔpʰo/ʔpʰe/ʔpʰe* <ʔphangs/INN/INN> (R) *fʃəŋ-ʔgu* *pʰət/pʰit/pʰət* <ʔphud[<sub>PT</sub>]/INN/phud>; (~ a bovine) (G) *kʰap* *ʔpʰo/ʔpʰe/ʔpʰe* <ʔphangs/INN/INN> (R) *nor-sa* *vʒəq/vʒek/ʒok* <nor.ʔ>
- bzhag[<sub>PT</sub>]/INN/zhogs>
- cat; *tsa-kə*; (kitten) (G) *tsa-ptʃok* <ʔphrug> (R) *tsə-pə* <ʔ.bu>
- catch fire; (G) *tsʰok* (R) *tsʰək*
- catch up with; (G) *rdza* *tʃʰot* (R) *tʃa* *tʃʰot*
- caterpillar; (G) *rtʃe-ʔbə* (R) *rtʃa-ʔbə* <rtswa.bu>
- cause, make; (G) *ptʃok/ptʃik/tʃʰok* (R) *ptʃək/ptʃik/tʃʰək* <bcug[<sub>PT</sub>]/INN/cho>
- cave; *qʰu-və*
- cave in; (G) *rdəp* (R) *rdəp* <rdib>; (~ without the structure collapsing) (G) *ʔnok* (R) *ʔnək* <snigs>
- cave overhang; (G) *ptʃək-qʰu* (R) *ptʃəq-qʰu* <brag.khung>
- ceiling; (G) *ɛnam-tʃan* (R) *ɛnam-rjan* <gnam.ʔ>
- center; (G) *χci*; *χcel-kʰok* (R) *χci* <dkyil.ʔ>
- centipede; (G) *rte-vdʒel-va* (R) *rta-vzəl* <rta.sbrul.ba>
- certainly; *le* <las>
- change [INTR]; (G) *ʔjər* (R) *ʔjər* <gyur>
- change [TR]; *vjər/vjir/rjər* <bsgyur[<sub>PT</sub>]/INN/sgyur>
- chant (mantra); (G) *fʃie* <bsngags[<sub>PT</sub>]; (R) *fʃəq/fʃek/ʔʃok* <bsngags[<sub>PT</sub>]/INN/sngogs><sup>29</sup>
- charcoal; (G) *sol-va* (R) *so-la* <sol.ba>; (live charcoal) (G) *mja-χtʃol* (R) *mje-χtʃol* <me.ʔ>
- chase; (G) *χnat/χnet/χnot* (R) *χnet/χnit/χnot*
- cheat; (G) *ʔgu* *ɛjiv/ɛjek/ɛjiv* (R) *ʔgu* *ɛjok/ɛjek/ɛjok* <mgo.g.yogs/INN/g.yogs>
- cheek; *ʔdza-ʔba* <gram.pa>; (cheekbone 顴骨) (G) *mkʰar-va* (R) *mkʰa-va* <mkhur.ba>
- cheese; (G) *tʃʰar-va* (R) *tʃʰə-va* <chur.ba>
- cherry; (G) --- (R) *rta-ʔam*

28. Irregular imperative; expected form *pot*.

29. Nominal use in standard dictionaries.

27. Cf. Showu Rgyalrong -*ɛə* 'younger sibling'.

chest 胸; (G) *pt̥so* (R) *pt̥səŋ* <brang>  
 chest, trunk; *rgam* <sgam>  
 chew; *ldat/ldet/ldot* <ldad/INNv/ldod>  
 child; (boy or girl) (G) *ʒa-ʒe* (R) *ʒa-ʒi* <zha.byis>;  
 (son or daughter) (G) *pə-rjet* (R) *pə-rjat*  
 <bu.gyud>  
 chin; (G) *mə-ni* (R) *ma-ni* <ma.ne>  
 China oak 青剛櫟; (G) *pi-lu* (R) *pe-lu* <be.lo>  
 Chinese; *rja* <rgya>  
 Chinese monal (*Lophophorus lhuysii*) 綠尾虹雉; (G)  
 --- (R) *tsə-kor*  
 Chinese writing; (G) *rjə-jok* (R) *rja-jək* <rgya.yig>  
 chisel; (G) *pʰək-bzi* <pʰug(s).zong> (R) *ta-tər* (<  
 Rgyalrongic; Showu *tət̥t̥ər*); (point chisel used by  
 masons) (G) *bzi* (R) *bzoŋ* <gzong>  
 choke; *ʂlu*; (choke on sth solid) *vne*; (choke on sth  
 sharp which may scrape the throat) (G) *ʃiv* (R)  
*ʃəʒ*  
 chopper (for cutting firewood) 柴刀; (G) *fən-to* (<  
 Rgyalrongic; Showu *fəntw̥e*) (R) *kə-tʰo*  
 chopping board 案板; (G) *χtəp-ke* <gtubs.ʔ> (R)  
*χsem-ʂdan*  
 chopsticks; (G) *zə-ter* (R) *za-tʰər* <za.thur>  
 cinnabar; *mtsʰal* <mtshal>  
 claw, talon; (G) *rver-mu* (R) *rvar-mu* <sbar.mo>  
 clay; (G) *rdza-sa* <rdza.sa> (R) *sa-rdza* <sa.rdza>  
 cliff; (G) *pt̥ʂek-kʰa* <brag.tkha> (R) *kat-kʰa*  
 <gad.tkha>  
 climb up (e.g. a tree); *mdʒar/mdzər/mdʒor*  
 clitoris; (G) *pt̥fə-li* (R) *ʃfa-li* <bya.li>  
 cloak; (G) *la-va* <la.ba> (R) *re-la* <ras.la>  
 close [v]; (~ door) *ʰdan/ʰden/ʰdon*; (~ eye or mouth)  
 (G) *ptsom/ptsim/tsʰom* (R) *ptsəm/ptsim/tsʰəm*  
 <btsums<sub>[PST]</sub>/INNv/tshums>  
 cloth; *re* <ras>  
 clothes; (G) *ko-ze* <ʔ> (R) *kon-pa* <gon.pa>  
 cloud; (G) *ʃt̥ʂən* (R) *ʃt̥ʂən* <sprin>  
 cobweb; (G) *tsa-la-qe-pe-pe-rvə-tiv* (R) *ʰba-ʰgək* <ʰbu.ʔ>  
 coil around; *ʃt̥ʂə* <bkri>  
 collapse, become dismantled; (G) *ʒok* (R) *ʒək* <zhig>  
 color; (G) *mdiv* (R) *mdo-ʂa* <mdog.kha>  
 colostrum, first milk 初乳; *χt̥ʂa* <dpr̥i>  
 column 縱列; (G) *mt̥ʂi* (R) *mt̥ʂəŋ* <phreng>  
 comb [v]; *ʃʃat/ʃʃet/ʃot* <bshad<sub>[PST]</sub>/INNv/shod>  
 come; (G) *yu/yi/ʃiv* (R) *yu/yi/ʃok* <ong/INNv/shog>  
 come loose; (G) *ʒok* (R) *ʒək* <zhig>  
 come off (of color); (G) *mdiv lat* (R) *mdok lat*  
 <mdog.lad>  
 come to a boil; (G) *kʰol* <khol> (R) *ʂd̥ə/ʂdi* <gdu/  
 gdu>  
 common cattle 黃牛; (G) *pə-ʂlo* <ba.glang> (R) *pa-  
 cə-ʂləŋ-rəʒər*; (ox) (G) *ʂlo-vi* <glang.ʔ> (R) *ʂləŋ-  
 ŋə* <glang.bu>; (cow) (G) *pə-ci* <ba.ʔ> (R) *va-  
 lə-ma*; (calf) (G) *pə-vi* <ba.ʔ> (R) *ʂləŋ-pt̥ʂəq*  
 <glang.phrug>  
 common silverweed 鵝絨委陵菜, 人參果; *t̥ʂo-ma*  
 <gro.ma>  
 comparative case marker; -ve  
 compare; (G) *χt̥ʂep/χt̥ʃip/χt̥ʂep* (R) *χt̥ʂəp/χt̥ʃip/χt̥ʂəp*  
 <gshib/INNv/gshib(s)>  
 compete with; (G) *vder/vdir/vder* (R) *vdar/vdir/vdər*

complementizer of causative complement clauses; (G)  
 -ka (optional with transitives; not used with  
 intransitives) (R) -ka  
 conifer (except junipers); (G) *nie* (R) *naq* <nags>  
 conifer cone; (G) *cʰə-ya-le* (R) *naq-ki cʰə-ya*  
 connecting morpheme in verb + resultative structure;  
 (G) -ve (R) -tə  
 cook [N]; *tʃa-ma* <ja.ma>  
 copper; (G) *ʒəŋ* (R) *ʒəŋ* <zangs>  
 coral; (G) *pt̥ʃə-rə* (R) *ʃʃə-rə* <byu.ru>  
 corner; (G) *qet* (R) *qət*  
 corpse; *ru* <ro>  
 count, calculate; *ʃtsə/ʃtsi/rt̥si* <brtsi<sub>[FUT]</sub>/brtsis/rt̥si>  
 cover [VT]; *pkap/pkep/kʰop* <bkab<sub>[FUT]</sub>/INNv/khops>  
 cow dung; (G) *r̥na-va* (R) *lt̥ʃa-va* <li.ba>; (dried ~)  
 (G) *lt̥ʃa-va* <li.ba> (R) *ʂoŋ-ŋa*  
 cow pen; (G) *mkʰu* (R) *mkʰoŋ*  
 crack, form a crack; *ke* <gas>; (form a smaller fissure)  
 (G) *sel* (R) *sel<sup>ʰo</sup>*  
 cranium 頭蓋骨; *tʰot-por* <thod.phor>  
 crawl; (G) *ʰbu-ʰdze vje* (R) *ʰbu-l̥ba le*  
 cream; (G) *kʰəχ-pt̥ʂə* <ʔ.spr̥i> (R) *pt̥ʂə-ʃma*  
 <spr̥is.ma>  
 creek; (G) *tʰə-liv* (R) *tʰə-ləq* <chu.lag>  
 crops; (G) *lo-tiv* (R) *lo-tʰok* <lo.tog>  
 crossbow 弩弓; *tu-ʂʒə* <ʔ.gzhu>  
 crossbreed between cattle bull and female dzo; (G) ---  
 (R) (offspring of a female dzo) *rto-li* <rtol.le>;  
*tsa-le* <ʔ.le>, including the following:  
 (crossbreed between male yak and female dzo)  
*tsa-kar* <ʔ.dkar>; (crossbreed between a bull  
 and a female dzo) *tsa-naq* <ʔ.nag>; (crossbreed  
 between *tsa-kar* and male yak) *rtu-ʂʒəq*  
 <rtol.gay>  
 crow; *qʰa-ta* <khwa.ta>; (thick-billed crow *Corvus*  
*macrorhynchos*) (G) *pʰo-riv* (R) *pʰo-rok*  
 <pho.rog>  
 crupper-strap 後轡; (G) *ʃnet* (R) *ʃnet* <smed>  
 cuckoo 杜鵑鳥; (G) *kʰə-vjək* (R) *kʰə-vjək* <khu.byug>  
 curved; *cʰok* <khyog>  
 cushion; *rtan* <stan>  
 cut; (with a sliding motion) (G) *χt̥ʂep/χt̥ʃip/χt̥ʂep*  
 <gtubs/INNv/gtubs> (R) *χsem/χsim/χsem*;  
 (~ with axe; chop) *χsi/χse/χse*; (~ into pieces;  
 mince) (G) *ʰt̥hiv* <thag> (R) *ʰt̥həq/ʰt̥hek/tʰok*  
 <thag/INNv/INNv>; (~ paper, cloth) *t̥ʂa/t̥ʂe/t̥ʂe*  
 <dra<sub>[FUT]</sub>/dras/dros>  
 cymbal; *tʰa-ləŋ*  
 dance [N]; *t̥ʂo* <bro>; [v] *t̥ʂo ʰt̥ʃam/ʰt̥ʃem/ʰt̥ʃom*  
 <bro.cham/INNv/choms>  
 dare; *pʰot* <phod>  
 darken; (G) *mə ʰdzək* (R) *mən ʰdzək*  
 dative-allative case marker; (G) -la (R) -la <la>  
 daughter; (G) *pə-mu* <bu.mo> (R) *ʒe-mu* <byis.mo>  
 daughter-in-law; *mna-ma* <mna.ma>  
 dawn, daybreak; (G) *far-rca-tə yu-tiv* (R) *xar-rca-ve*  
*yu-ti*  
 daytime; *jən-kar* <nyin.dkar>

30. Cf. OT <ser.ka> ‘fissure’.

dead; (G) *jə-pə* (R) *xə-pə* <shi.pa>  
 deaf person; (G) *yən-va* (R) *yə-na* <on.pa>  
 declarative verb form; (G) *V-li/vdie* + copula (R)  
*V-ni/cə* + copula  
 declivity 下坡; (G) *tʰer* (R) *tʰər* <thur>  
 defecate; (G) *rcə-ɣa pto/pte/tʰu* (R) *rcə-ɣa pʈəŋ/ptəŋ/*  
*tʰu* <skyag.pa btang<sub>[PST]</sub>/INNv/thongs>  
 decline; (G) *kʰa-vle tə* (R) *kʰa-vle rgət*  
 decree, order; *pka* <bka>  
 deer; *ja-va* <shwa.ba>  
 definite marker; *-tə* <de>  
 deity; *la* <lha>; (female deity) (G) *lɛ-mu* (R) *la-mu*  
 <lha.mo>; (local guardian deity) (G) *ɛʒə-vdie*  
 (R) *ɛʒə-vdaq* <gzhi.bdag>  
 demon; (G) *vdet* (R) *vdat* <bdud>; (one-legged  
 demon) 獨腳鬼 (G) *tʰi-ro rko-ji-ma* (R) *tʰi-ra*  
*(rkəŋ-ji-ma)*  
 descend; (G) *ʰbap/ʰbap/pop* <ʰbab/ʰbab/bobs> (R)  
*pap/pap/pop* <bab<sub>[PST]</sub>/bab/bobs>  
 dew; *zəl-tʰə* <zil.chu> ~ *zəl-pa* <zil.pa>; (melted from  
 frost) (G) *pə-zəl* (R) *pa-zəl* <ba.zil>  
 dhole 洞; (G) *ʰpʰer-va* (R) *ʰpʰa-ra* <ʰphar.ba>  
 diaphragm; (G) --- (R) *mtʃʰən-rə* <mchin.ri>  
 die; (G) *jə* (R) *xə* <shi>  
 die out (of fire); *te*  
 difference; (G) *čʰat* (R) *čʰat-par* <khyad.(par)>  
 dig; *rku/rke/rke* <rko/brkos/rkos>  
 dike, embankment; (G) *tʰə-rə* <chu.rags> (R) *tʰə-*  
*ffəq* <chu.rags>  
 dine, eat meal; (G) *zə-ʰtʰu vje* (R) *za-ʰtʰu le*  
 <zaʰ.thu.byas>; *za-ma za* <za.ma.za>  
 dip; (G) *fap/fep/fop* (R) *fəp/fəp/fəp*  
 direct and egophoric evidential marker; (G) *-ja* (R)  
*-va*  
 direction; (G) *ptʃʰie* (R) *ffok* <phyogs>  
 dirt; (built up on skin 體垢) (G) *tʃə-mie* (R) *tʃə-məq*  
 <dri.ʰmag>; (accumulated smoke dirt on ceiling  
 煙垢) *tət-qa* <dud.ʔ>  
 disappear; *jal* <yal>  
 dispatch; (G) *pto/pte/tʰu* <btang<sub>[PST]</sub>/INNv/thongs>  
 (R) *mŋəq/mŋek/ŋok* <mngag/INNv/INNv>  
 divide, distribute; *vgu/vge/rge* <bgo<sub>[FUT]</sub>/bgos/INNv>  
 do (sth); (G) *vje/vje/ci* <bya<sub>[FUT]</sub>/byas/ʔ>;<sup>31</sup> (R) *le/le/*  
*tʃi* <las/las/ʔ>  
 do labor; (G) *le-rka le* <las.ka las> (R) *le-rka le/le/tʃi*  
 <las.ka las/las/ʔ>  
 doctor; *rman-pa* <sman.pa>  
 dog; (G) *čʰə* (R) *čʰə* <khyi>; (puppy) (G) *čʰə-ptʃok*  
 <khyi.phrug> (R) *čʰə-ya* <khyi.gu>  
 donkey; (G) *pu-və* <bong.bu> (R) *voŋ-lə* <bong.li>  
 door; (G) *rgu* (R) *rgo* <sgo>  
 downstairs; (G) *kʰə-ʒap* (R) *ʒap* <(khang.)zhabs>

dragon; (G) *mdzok* (R) *mdzək* <ʰbrug>  
 dragonfly; (G) --- (R) *tʃʰə-tsaq* <chu.ʔ>  
 drain, strain 濾; (G) *ptsie/ptsək/tʃʰie* (R) *ptsaq/ptsiq/*  
*tʃʰok* <btsags<sub>[PST]</sub>/INNv/tshogs>  
 draw or gather together; (G) *som* (R) *səm* <zum>  
 dream; [N] (G) *vŋi-lam* (R) *rma-lam* <rmi.lam>  
 dream [V]; (G) *vŋə-lam vŋi* <rmi.lam rmi<sub>[PST]</sub>> (R)  
*rma-lam vŋi* <rmi.lam rmi<sub>[PST]</sub>><sup>32</sup>  
 dream of; *vŋi* <rmi<sub>[PST]</sub>>  
 dredge; (G) *ɣə/ɣje/ɣje* <bshangs<sub>[PST]</sub>/INNv/INNv>  
 (R) *ɣəŋ/ɣjeŋ/ɣjəŋ*  
 <bshangs<sub>[PST]</sub>/INNv/gshong(s)>  
 drink; *ʰtʰu/ʰtʰi/ʰtʰu* <thung/INNv/thungs>  
 drip (as of blood, etc.); (G) *zie* (R) *zəq* <zag>  
 drive (animal); (G) *tet/tit/tet* (R) *tet/tit/tet*  
 <ded<sub>[PST]</sub>/INNv/ded>  
 drool; (G) *kʰe-lə* <kha.ʔ> (R) *mtʃʰəl-lə* <mchil.ʔ>  
 dropping (of a sheep/goat); *rəl-ma* <ril.ma>  
 drum; *rŋa* <rnga>  
 drying rack for harvested grains; (G) *rkor* (R) *ra-zor*;  
*ta-ra* (< Showu Rgyalrong *terē*)  
 dust; (G) *rđel* (R) *rđəl* <rđul>  
 dusty gale; (G) *tʰel-va* <thal.ba> (R) *rđəl-mar*  
 <rđul.ʔ>  
 dye; (G) *tʃʰot* <ʔ> (R) *tʃʰu* <tshos>  
 dzo (cross between a bull and a female yak); (G) ---  
 (R) *rŋa-vran*; (male ~) *mdzu* <mdzo>;  
 (female ~) *mdza-mu* <mdzo.mo>; (~ calf) *rga-*  
*lə* <rga.li>  
 ear; (G) *rna-va* <rna.ba> (R) *rna-ki* <rna.ʔ>  
 ear, spike 穗; *rŋi-ma* <snye.ma>  
 eared pheasant (*Crossoptilon crossoptilon*) 馬雞; (G)  
*ptʃʰe-vo* (R) *ffə-vo* <bya.ʔ>  
 earth, soil, ground; *sa* <sa>; (black-colored soil) (G)  
*se-nie* (R) *sa-naq* <sa.nag>  
 earthworm; (G) *ʰbə-rnie* <ʰbu.ʔ> (R) *ʰə-ʰdʒe* (<  
 Showu *ʰe-ʰdʒe*)  
 earwax; (G) *rne-rcie* <rna.rkyag>; *rne-rpop* (R) *rna-*  
*rpop* <rna.rbabs>  
 east; (G) *far* (R) *xar* <shar>  
 eat; *za/ze/zu* <za/INNv/zos>; (~ meat) *ʰtʃʰa/ʰtʃʰe/*  
*ʰtʃʰu* <čʰa/čʰos/čʰo>; (~ meat on bones) (G)  
*ptie/ptək/tʃʰie* (R) *ptok/ptek/tʃʰok*; (~ apples or  
 maize) (R) *qʰop/qʰep/qʰop*; (~ powdery food)  
 \*gam/\*gem/\*gom <gam/INNv/goms>  
 eaves; *tʃə-dap*  
 eight; (G) *vjet* (R) *vjet* <brgyad>  
 eighteen; (G) *ptʃo-vjet* (R) *ptʃo-vjet* <bcu.brgyad>  
 eighty; (G) *vje-tʃə* (R) *vja-tʃə* <brgyad.cu>  
 elbow; (G) *tʃə-mŋer* (R) *čə-ptʃəq* <gru.ʔ>  
 elephant; (G) *ɛlən-tʃʰen* (R) *ɛlən-tʃʰen*  
 <glang.po.che>  
 eleven; *ptʃək-tʃə* <bcu.ʔ>  
 emperor; (G) *ku-ma* (R) *koŋ-ma* <gong.ma>  
 empty out 騰空; (G) *kʰom/kʰəm/kʰom* (R) *kʰom/*  
*kʰim/kʰom*  
 enemy; (G) *ɛdza* (R) *ɛdza-ja* <dgra.ya>

31. The Gserskad forms for 'do' are irregular. Some Tibetan dialects show a palatal glide *j*-onset in the present and past stems of 'do' <byed>, <byas>; e.g. Byamsme Amdo *jet*, *ji*, Sastod *jeʔ*, *ji*; as if from a simplex glide onset <y>. Gserskad is unique in also preserving the labial element <b> as *v*-.

32. The Gserskad form shows an excrescent labial *v*-.

enough; (G) *do* (R) *daŋ* <daŋ>  
 entangle; (G) *fnie/fnak/fnie* (R) *fnok/fnik/rnok*  
 <bsnogs<sub>[PST]</sub>/INNV/snogs>; (become entangled)  
 (G) *nie* (R) *nok*  
 enter with body bent; (G) *dzal/dzil/dzel* (R) *dzəl/*  
*dzil/dzəl* <dzul/INNV/dzul>  
 entrust (sth to sb); *ptfol/ptfel/tfhol*  
 <bcfol<sub>[PST]</sub>/INNV/chol>  
 ergative case marker; (G) *-ji* <†yis> (with a plural  
 agent) *-ti* <?> (R) *-ki* <gis>  
 escape; flee; *mdze/mdze/tsʰe* <bros/INNV/phros>  
 esophagus; (G) *mjæt-tie* (R) *mjæt-taq* <mid.thag>  
 even; (G) *ne* <naʼi> (R) *ldak-ki...ja*  
 even though; *ru*  
 every day; (G) *jæn næn-ma* <†nyin.nyin.ma> (R)  
*jæn-cəŋ* <nyin.ʔ>  
 every night; (G) *nep nāp-mu* <†nub.nub.mo> (R)  
*nāp-cəŋ* <nub.ʔ>  
 every year; (G) *lu lo-me* <†lo.lo.ʔ> (R) *lo-cəŋ* <lo.ʔ>  
 evil spirit causing disease; *gdon* <gdon>  
 ewe (female sheep); (G) *mē-mu* (R) *ma-mu*  
 <ma.mo>  
 except; (G) *mān-li* <min.ʔ> (Cf. Sastod Tibetan of  
 Khrochu County *mān-li*) (R) *mān-pa*  
 <†min.pa>  
 exchange, barter; *vzi/vze/rdze* <brjes<sub>[PST]</sub>/INNV/rjes>  
 excrement; (G) *rca-ɣa* (R) *rcə-ɣa* <skyag.pa>; (in  
 watery form) (G) *ɣjo-pa* (R) *ɣjəŋ-ja*  
 <†gnyang.pa> (cf. <rnyang.mo>)  
 exist 有, 在; (G) *yu* (R) *jo* <yod>; (negated) (G) *mjue*  
 (R) *me* <med>  
 exit; (G) *bet/pet/pet* <†bud/bud/bud> (R) *pət* <bud>  
 expand; (of fermented dough) (G) *pʰel* (R) *pʰel*  
 <†phel>; (increase in size after cooking or  
 soaking) (G) *pe* <dbos> (R) *rtse* <skrang>  
 experiential aspect marker; *mju* <myong>  
 eye; (G) *ɣnok* (R) *ɣnak* <dmyig>  
 eyebrow; *rdza-ma* <rdzi.ma>  
 eyelash; *ɣnak-rpə* <dmyig.spu>  
 eyelid; *ɣnak-fa* <dmyig.sha>  
 face; (G) *ŋu* (R) *kʰa-ŋu* <(kha).ngo>  
 falcon; *tʰa* <khra>  
 fall asleep; (G) *ɣnet/ɣnit* (R) *ɣnət/ɣnit* <gnyid/INNV>  
 fall behind; *li* <lus>  
 fall down; (G) *dzəl* (R) *dzəl* <gril>  
 fall from height; *ju* <lung>  
 falling rock 落石; (G) *rva* (R) *ɣap* <rbab>  
 false; (G) *rdzən-ma* <rdzun.ma> (R) *rdzən-ʰba*  
 <rdzun.ba>  
 family (spouse and children); (G) *ɣze-tsʰo* (R) *ɣza-*  
*tsʰəŋ* <bzaʼtshang>  
 far; (G) *thie ri* (R) *thəq ri* <thag.ring>  
 fart; [N] (G) *mtʰen* (R) *ffən* <phyen>; [V] (G) *mtʰen*  
*pto* (R) *ffən ptaŋ* <phyen.btang>  
 father; *pʰa* <pha>; (term of address) *a-pʰa* <a.pha>  
 feather; (G) *ptfe-rpə* (R) *ffa-rpə* <bya.spu>  
 feel bloated; *rve* <sbos>  
 feel embarrassed, uneasy; (G) *ɣtfu* (R) *ɣtfoŋ*  
 feel numb; (G) *vdzet* (R) *rvət* <sbrid>  
 fellow traveler, companion; *ro-ɣa* <rogs.pa>  
 felt carpet; *bol* <†bol>

female; *mu* <mo>  
 fence; (of firewood sticks) *ko-tso*; (of wickers) *ra-va*  
 <ra.ba>  
 ferment [TR]; *fjal/fjel/ɣjol* <bsnyal/INNV/snyol>  
 ferry; *tʰə-kʰa* <gru.kha>; (wadable area in a river) (G)  
*rap-qa* (R) *rap-kʰa* <rab.kha>  
 field; *ʒi* <zhing>; (farming land) (G) *sə-ʒi* (R) *sa-ʒi*  
 <sa.zhing>  
 fifteen; *ptfo-lha* <bcu.lnga>  
 fifty; (G) *lhp-ptfə* (R) *lha-ptfə* <lnga.bcu>  
 fifty-one; (G) *lhp-ptfə ŋa-ɣtsə* (R) *lha-ptfə ŋa-ɣtsə*  
 <lnga.bcu.nga.ʔ>  
 file (tool); *sok-vdar* <sog.bdar>  
 fill in (a pit); *fjam/fjem/ɣjom*  
 <bsnyams<sub>[PST]</sub>/INNV/snyoms<sup>33</sup>>  
 filter, strain; (G) *ptsie/ptsak/tsʰie* (R) *ptsəq/ptsek/*  
*tsʰok* <btsags<sub>[PST]</sub>/INNV/tshogs>  
 find; (G) *lan* <lon> (R) *tsʰət*  
 finger; *dzə-yə* <mdzug.gu>; (index finger) (G) *ku-*  
*dzok* (R) *koŋ-dzək* <gong.mdzug>; (middle  
 finger) (G) *ɣci-dzok* (R) *ɣci-dzək*  
 <dkiyl.mdzug>; (ring finger) (G) *jo-dzok* (R)  
*jop-dzək* <?.mdzug>; (pinky) *dzək-tfʰu*  
 <mdzug.chung>  
 finger span 拃; (G) *ku-mtʰu* (R) *mtʰu* <(?)mtho>  
 finger width 指寬; *sor* <sor>  
 finish, be over; *tshar* <tshar>  
 fir 冷杉; (G) *rdzok* (R) *rdzəq*  
 fire; *mji* <me>  
 firepit, trivet (makeshift – consisting of three rocks);  
 (G) *mā-rjet* <me.sgyid> (R) *rjet-pə* <sgyid.bu>  
 firewood; *fi* <shing>; *bat-ca* <†bud.rgyu>  
 firewood stack; (G) *fi-rtso* (R) *fi-rtək* <shing.ʔ>  
 firewood stick; *ɣə-ɣa* <dbyug.pa>  
 fish; (G) *jie* (R) *ja* <nya>  
 fist; (G) *kʰə-tser* (R) *kʰə-tsʰər* <khu.tshur>  
 five; *lha* <lnga>  
 flag; *tar* <dar>  
 flame; (G) *mja-ltʰi* (R) *mje-ltʰi* <me.lce>  
 flash (of lightning); (G) *ɣlie* *ʰjet* (R) *ɣlok-ʰə* <glog.ʔ>  
 flea; *ldzə-va* <lji.ba>  
 flint; (G) *rdo-kar* (R) *rdot-kar* <rdo.dkar>; (as a set  
 with spunk and steel) (G) *mja-rdu* (R) *mje-rdu*  
 <me.rdo>  
 floe (unformed ice in river); *tfʰə-ŋne* <chu.ʔ>  
 flood; (G) *tfʰə-lie* (R) *tfʰə-lok* <chu.log>; (large,  
 causing disaster) *tfʰə-tʰan* <chu.than>  
 flour; (G) *rdzan* (R) *rdzen* <rjen>  
 flower; (G) *mi-tie* (R) *mi-tok* <me.tog>  
 flute; (horizontal) (G) *mtʰək-ɣli* <†phred.gling> (R)  
*ɣli-va*; (vertical) *ɣli-va* <gling.bu>  
 fly [V]; (G) *pʰer* (R) *pʰər* <†phur>  
 fly[N] 蒼蠅; (G) *vdzo-va* <sbrang.ʔ> (R) *yo-ze* (<  
 Rgyalrongic; Showu wuzē)  
 flying squirrel 鼯鼠; (G) *ptfa-ma-ptfi* (R) *ffa-ma-ffi*  
 <bya.ma.bye'u>  
 foal; *rti-tsi* <rt'e'u.ʔ>

33. The imperative is irregular, expected form is  
*ɣjom*.

foam, bubble; (G) *lva-va* (R) *lvo-va* <lbu.ba>  
 fog, mist; *ɣmā-xa* <smug.pa>  
 fold; (G) *lie* (R) *lok* (cf. <lɔab>)  
 fontanel; (G) --- (R) *ɖlat-kʰu* <klad.ʔ>  
 food; (G) *zɛ-cə* (R) *za-cə* <za.rgyu>  
 foodstuff, grain; (G) *mdzə-rok* (R) *mdzə-rək*  
 <'bru.rigs>; (G) *mdzə-ne* <'bru.nas>  
 fool, idiot; *rku-pə* <ʔ.pa> (cf. Rgyalrongic?; cf. Western  
 Horpa *rko*; Northern Horpa *lɛubə* 'dumb'; cf.  
 <lkuɡ.pa> 'mute, stupid person')  
 foot; (G) *rko-gu* (R) *rkəŋ-gu* <rkang.mgo>  
 forbear, endure; (G) *rsan/rsen/rson* (R) *šan/šen/son*  
 <sran/INNV/sron>  
 force one's way into; (G) *rdzep/rdzip/rdzɛp* (R)  
*rdzep/rdzip/rdzɛp*  
 ford [N]; *tɕə-kʰa* <ʔ.kha>; (wadable section of a  
 stream) *rap-kʰa* <rab.kha>  
 forehead; *tʰot-pa* <thod.pa>  
 forest; (G) *niv*; *nɛk-fok* (R) *naq*; *naq-fək* <nags.ʔ>  
 forget; (G) *rdɕet* (R) *rdɕet* <brjed>  
 forty; (G) *vɕə-ptɕə* (R) *vɕə-ptɕə* <bzhi.bcu>  
 forty-one; (G) *vɕə-ptɕə ɕe-ɕtsə* (R) *vɕə-ptɕə ɕe-ɕtsə*  
 <bzhi.bcu.zhe.ʔ>  
 four; (G) *vɕə* (R) *vɕə* <bzhi>  
 fourteen; *ptɕi-vɕə* <bcu.bzhi>  
 fox; (G) *ya* (R) *ɣa* <wa>  
 friend (of opposite sex); (G) *vzo-sa* (R) *vzəŋ-sa*  
 <bzang.sa>  
 frighten; (G) *rtɕie pci/pce/cʰe* (R) *rtɕəq pci/pce/cʰe*  
 <skrag.ʔ>  
 frog, toad; *rval-pa* <sbal.pa>  
 frost; (G) *pe-mu* (R) *pa-mu* <ba.mo>  
 fruit, wild berry; (G) *fi-tiv* <shing.tog> (R) *si-tʰok*  
 <sil.tog>  
 frying wok; (G) *rŋo-rtsoŋ* <rngo.slang> (R) *qo-lo* <  
 Showu Rgyalrong *qolō*)  
 full (from eating); (G) *vɣie* (R) *vɣəq* <brgyags>  
 fumigate; (G) *ftok/ftik/rtok* (cf. OT <bduɡ(s)>) (R)  
*ta-rdək le* <du/INNV las>; *vdək/vdik/rdək*  
 <dbuɡ/INNV/INNV>  
 gall 樹癭; (G) *fi-lva* (R) *fi-lva* <shing.lba>  
 gall (bladder); *mtɕʰə-rpa* <mkhri.spa>  
 gambling tool; *fu* <sho>  
 garbage; (G) *rdel* (R) *rdəl* <rdul>  
 garlic; (G) *rgok-le* <sgog.ʔ> (R) *cʰəm-rgok*  
 <khyim.sgog>  
 genitive case marker; (G) *-ji* <yi> (R) *-ki* <gi>  
 gesture; (G) *vda* (R) *laq-vda* <(lag).brda>  
 ghost; *dzɕi* <'dre>; (female ~) (G) *dzə-mu* (R) *dzɛ-*  
*mu* <'dre.mo>  
 gift; *pʰa-nbap*; *nbap-ka*  
 ginger; *tfa-rga* <skya.ga>  
 girl; *ɕə-mu* <byis.mo>; (polite) *mo-sar* <mo.gsar>  
 girth 馬肚帶; *ɕlu* <glo>  
 give; (G) *vɕen/vɕin/tɕʰen* <sbyin/INNV/?> (R) *vɕən/*  
*vɕin/ɕən* <sbyin/INNV/INNV>  
 give birth; (~ to a baby) *rce* <skyes>; (~ to piglets)  
 (G) *rtsep* (R) *rtsep*  
 glacier; (G) *kəŋ-rə* (R) *kəŋ-rə* <gangs.ri>  
 glass; (G) *fol* (R) *fəl* <shel>  
 glowworm; (G) *ɕsi-və mɣə-nbar* <ʔ.me.'bar> (R) *nbə*  
*mɣi-nbət* <'bu.me.'bud>  
 glue; (G) *fɕen* (R) *fɕən* <spyin>

go, leave; *dzu/tʰe/su* <'gro/?>song>  
 go away (imperative use only); (G) *zɛr* <zur<sub>[IMP]</sub>> (R)  
*ɛnon*; *te-li*  
 go in a single file; *ɕfar/ɕfer/ɕfor* <gshar/INNV/gshor>;  
 (R) *ɕfar/ɕfer/ɕfor* <gshar/INNV/gshor>; *mtɕʰəŋ*  
*vdzək-e* *dzu* <'phreng.bsgrig.ʔ.gro>  
 go out of order; (G) *tɕʰie* (R) *tɕʰəq* <chag>  
 go through; (G) *ɕɣiv/ɕfək/ɕɣiv* (R) *ɕfək/ɕfək/ɕfok*  
 go to bed, lie down to sleep; *ɣal/ɣel/ɣol*  
 <nyal/INNV/nyol>; (put to bed) *fɣal/fɣel/ɣol*  
 <bsnyal<sub>[PST]</sub>/INNV/INNV>  
 goat; (G) *ra ~ ra-ma* (R) *ra-ma* <ra.(ma)>; (kid) *ri-tsi*  
 goiter; (G) *rka-lva* (R) *lva* <lba.(ba)>  
 gold; (G) *ɕser* (R) *ɕser* <gser>  
 gong; *mkʰa-rɣa* <'khar.rnga>  
 good-looking; (G) *jiv* (R) *ɣəq* <yag>  
 government official, chieftain; *ɕpon* <dpon>  
 grab; (seize, catch); (G) *dzɛ/'dɕi/'dɕi* <ʔ> (cf. <'ju>  
 'seize') (R) *vzu/vzi/vzi*  
 <bzung<sub>[PST]</sub>/INNV/INNV>; (~ a handful of sth)  
 (G) *fɣap/fɣep/ɣpəp* (R) *ɣpəp/ɣpəp/ɣpəp*  
 <bsnyabs<sub>[PST]</sub>/INNV/snyobs>  
 grandfather; (G) *v-mɣi* (R) *a-mɣi* <a.myes>  
 grandmother; *a-vi*  
 grandson; (G) --- (R) (referred to by grandmother) *a-*  
*vi-lo*; (referred to by grandfather) *a-mɣi-lo*  
 grass, fodder grass; *rtsa* <rtswa>  
 graupel 霰; (G) *kʰə-pʰe* (R) *kʰə-pʰəŋ* <ʔkha.'phang>  
 green; (G) *ldɕoŋ-kʰə* (R) *ldɕəŋ-kʰə* <ljang.khu>  
 green onion, scallion; *tsoŋ* <tsong>  
 grind; (mill) (G) *tʰie* <thag> (R) *tʰəq/tʰek/tʰok*  
 <thag/INNV/thogs>; (~ herbs) (G) *ɛdel/ɛdil/*  
*ɛdel* (R) *ɛdəl/ɛdil/ɛdəl*  
 gristle, cartilage; (G) *ɕtsim-ɕtsim* (R) *qʰa-cʰəm*  
 groan; (G) *mkʰon* (R) *mkʰən* <'khuŋ>  
 ground; (G) *se-tiv* (R) *sa-tʰok* <sa.thog>  
 grow; *rce* <skyes>  
 gruel (~ of rice); (G) *mdze-tʰok* (R) *mdze-tʰəq*  
 <'bras.thug>  
 guard [V]; (G) *fɕu/fɕi/rɕi* (R) *fɕu/fɕe/ɕe*  
 <bsrungs<sub>[PST]</sub>/INNV/INNV>  
 guest; (G) *dzə-n'dok* <ʔ> (R) *mdzon-pə* <mgron.po>  
 gums; (G) *ɣɣel* <rnyil> (R) *rni*  
 gun, firearm; (G) *pe* (R) *pu* <bu>  
 gunpowder; (G) *pe-ɣman* (R) *pu-ɣman* <bu.sman>  
 hail 冰雹; (G) *sər-va* (R) *se-ra* <ser.ba>  
 hair; *ɣpə* <spu>  
 hair of head; *rtɕə* <skra>  
 half; (of a solid object or a sum of money) (G) *ke-ji*  
 (R) *kʰa-ji* <kha.ʔ> (cf. Rkakhog Amdo *kʰa-zi*);  
 (of contents in a container) (G) *ptɕʰat* (R) *ffet*  
 <phyed>  
 halter 籠頭; (G) *mtʰer* (R) *mtʰər* <mthur>  
 hamlet; (G) *tɕu-pa* (R) *tɕəŋ-va* <grong.ba>  
 hammer [N]; *tʰo-va* <tho.ba>  
 hammer (metal at a smithy) [V]; *'gar/'ger/'gor* <ʔ>  
 (cf. <mgar> 'smith; forge')  
 hand; (G) *lək-gu* (R) *ləq-gu* <lag.mgo>; (left ~) (G)  
*no-liv* (R) *nəŋ-ləq* <ʔ.lag>; (right ~) (G) *tɕə-liv*  
 (R) *tɕəŋ-ləq* <ʔ.lag>; (back of hand) (G) *lək-rɣap*  
 (R) *ləq-rɣap* <lag.rgyab>  
 handle; (hilt) *jə-va* <yu.ba>; (of a cup) *lu* <lung>



- hang; (suspended in air) *pkal/pkel/k'hol*  
<bkal<sub>[PST]/INNV/khol>; (against a surface) (G)  
*pkal/pkel/k'hol* <bkal<sub>[PST]/INNV/khol> (R) *ptəq/*  
*ptek/t'hok* <btags<sub>[PST]/INNV/thogs></sub></sub></sub>
- hang oneself; (G) *χfəŋ* <dpyong> (R) *χfəŋ/χfəŋ/χfəŋ*  
<dpyangs<sub>[PST]/INNV/dpyongs></sub>
- hat; *ʒa* <zhwa>
- hatch, come out of (an egg); *k'hā kat*
- have a fever; (G) *ts'hē-mtʰər yu* (R) *ts'hā-mtʰər jo*  
<ts'ha.ʔ.yod>
- have a fight, have an argument; (G) *ⁿdzi-re vje*  
<dzing.ʔ.byā> (R) *ⁿdze-rjəq le* <d'zing.gyag.las>
- have a spasm; (G) *ptʰe-lji ⁿtʰen* (R) *ffa-lji ⁿtʰen*  
<ʔ.then>; (have leg cramps) (G) *jia-le vne* (R)  
*jia-le vne* <nywa.ʔ.ʔ>
- have diarrhea; (G) *p'hō-va ɣno* (R) *p'hō-va ɣnəŋ*  
<pho.ba.gnyang>; (polite) *p'hō-va vda/vde*
- have free time; *k'hōm* <khom>
- have sex; *ɣjap/ɣjep/ɣjop* <g.yabs<sub>[PST]/INNV/g.yobs></sub>
- he, she; (proximal) *ⁿdā* <dī> (proximal ERG/GEN  
case) *ⁿdī* <dī's>; <dī'ī>; (distal) *tā* <de>; (distal  
ERG/GEN case) *tī* <de'is>; <de'ī>
- head; *ⁿgu* <mgo>; (back of head) (G) *ⁿgo-rjap* (R)  
*ⁿgu-rjap* <mgo.rgyab>; [HON] (G) *ɣvā* (R) ---  
<dbu>
- headwater; *tʰā-ⁿgu* <chu.mgo>
- hear; *ts'hōr* <tshor>
- heart (organ); (G) *ɣni* (R) *ɣnəŋ* <snying>; (abstract  
sense) (G) *sem* (R) *sem* <sems>
- hearth, cooking range; (G) *tʰəp-ku* (R) *tʰap-ka*  
<thab.ka>; (stone edge of hearth) *ko-rcor*;  
(upper side of hearth) *ko-yu*; (lower side of  
hearth) (G) *ko-ye* (R) *ko-ⁿgap*
- heel; (G) *ptʰā-rti* (R) *ffa-rti* <phyi.rting>
- hemp 大麻; (G) *ter-kā* (R) *tar-ke*
- herd 放牧; *ts'hū/ⁿts'hē/ⁿts'hē* <tsho'/tshos'/tshos>
- herder; (G) *rdzā-γə* (R) *rdzā-vā* <rdzi.bo>
- here; *ⁿde* <dīr>
- hero; (G) *χpē-ṭhi* (R) *χpa-ṭhi* <dpa.thul>
- herpes zoster 帶狀皰疹; (G) --- (R) *ɣnen*
- hide 皮子; *ko-va* <ko.ba>
- hide; (~ oneself) *qap/qep/qop* (cf. <gab>); (~ sth)  
(G) *rva/rve/rve* <sba<sub>[FUT]/INNV/sbos> (R) *fku/*  
*fki/rki* <bskungs<sub>[PST]/INNV/INNV></sub></sub>
- highland barley; *ne* <nas>
- hipbone; (G) *χtʰā* (R) *χfā* <dpyi>
- hip joint 髖關節; (G) *χtʰā-ⁿgu* (R) *χfā-ⁿgu* <dpyi.mgo>
- hit, strike; (G) *vjap/vjep/rjop*  
<brgyab<sub>[PST]/INNV/rgyob> (R) *rjap/rjep/rjop*  
<INNV/INNV/rgyob></sub>
- hit (a target); (G) *p'hē* (R) *p'hok* <phog>
- hoe; (R) *rko-ma* <rko.ma> (R) *ɣʒo-rā* <gzhor.bu>;  
(for digging fritillaria bulbs) (G) *ɣʒo-rā*  
<gzhor.bu> (R) *pi-ɣʒor* <ʔ.gzhor>; (for breaking  
clods) *pu-rdi*
- hog badger 豬獾; (G) *tʰā-ⁿba* <grum.pa> (R) *sa-blok*  
<sa.ʔ>
- hold; (G) *ⁿdʒə/ⁿdʒi/ⁿdʒi* <ʔ>; *vzu/vzi/zi* (R) *vzu/vzi/*  
*zi* <bzung<sub>[PST]/INNV/INNV></sub>
- hold tightly onto sth (also means to climb a wall or  
cliff); *ɣor/ɣer/ɣor*
- hole; *q'hū-vā* (cf. <khung.bu>); (small hole) *pā-γə*  
<bug.bu>
- home; (G) *c'hēm* (R) *c'hēm* <khyim>; (one's parental  
home) *ji-va* <yul.pa>
- hometown; (G) *roŋ-sa* (R) *rəŋ-sa* <rang.sa>;  
(ancestral place) (G) *p'hē-jel* (R) *p'hā-jəl*  
<pha.yul>
- honey; (G) *pu-vdʒoŋ* (R) *pu-vdʒoŋ* <ʔ.sbrang>  
~ *vdʒoŋ-rtśā* <sbrang.rtsi>
- hoof; (G) *ɣnā-xa* (R) *ɣnāk-xa* <rmig.pa>
- hooked; (G) *kok* (R) *kək* <gug>
- hoopoe 戴勝; (G) *ptʰā pax-fet* (R) *pəq-fət-rtəq-ral*
- horizontal; (G) *mtʰet* (R) *mtʰet* <phred>
- horn, antler; (G) *ɣya* (R) *ra* <rwa>
- horse; *rta* <rta>; (~ dung) (G) (individual lump) *rte-  
lve*; (accumulated) *rte-lēt* <rta.lud> (R) *rti-lve*
- horse's mane; (G) *rte-zi* <rta.ʔ> (R) *ɣjok-ma*  
<rmgog.ma>
- horseshoe; (G) *ɣnāk-ltʰie* (R) *ɣnāk-ltʰəq* <rmig.lcags>
- host, master; (G) *vde-γə* <bdag.po> (R) *c'hām-vdāq*  
<khyim.bdag>; (cf. K' owner' *vda-γə* <bdag.po>)
- hot pepper, chili; (G) *χo-tsa* (R) *ts'hā-lpe*
- hot spring; (G) *ts'hē-tʰā* (R) *ts'hā-tʰā* <tsha.chu>
- house; (G) *k'hō-pa*; (R) *k'həŋ-va* <khang.pa>; (animal  
enclosure on first floor) (G) *ʒap-k'hō* (R) *ʒap-  
k'həŋ* <zhabs.khang>; (living room on first floor)  
(G) *ko-ka* (R) *ko-k'hā*
- household; (G) *c'hām-tso* (R) *c'hām-tsəŋ*  
<khyim.tshang>; (referring to location) (G) *ts'hē-  
sa* (R) *se-zā-ra*
- how; (G) *ⁿtʰā-ra* (R) *tʰi-mi*
- how many, how much; (G) *tʰi-mā-tsā* (R) *tʰi-mi-tsā*
- human being, person; *mjā* <mi>
- hunchback; (G) *ɣgər-vā* (R) *ɣgər-rā* <sgur.bu>
- hundred; (G) *vja* (R) *vja* <brgya>; (one hundred and  
one) (G) *vja ta χtsā* (R) *vja ta χtsā*  
<brgya.dang.ʔ>
- hundred thousand; (G) *ⁿbom* (R) *ⁿbām* <'bum>
- hurt, ache; *na* <na>; (feel sharp pain) (G) *ɣzer* (R)  
*ɣzer* <gzer>
- husband; (G) *mjā-tonj* (R) *mjā-təŋ* <mi.ʔ>
- I; *ŋa* <nga>; (ERG/GEN case) *ŋe* <ngas>; <nga'ī>
- ice; *tar* <dar>; (ice forming on surface of water) (G)  
*tʰā-rvom* (R) *tʰā-rəm* <chab.rom>; (unformed  
ice in river) (G) *tʰā-rne* (R) *ffəŋ*
- ice bridge; (G) *ter-zam* (R) *tar-zam* <dar.zam>
- if; (G) *nā* (R) *na* <na>
- illness; *nat* <nad>
- immediate evidential marker; *-tu*
- imminent future marker; *-tʰē*
- imperfective verb form; (G) *v<sub>[PRS]</sub>-fə* *γo* (R) *v<sub>[PRS]</sub>-fā*  
*jo*; (past imperfective) (G) *v<sub>[PST]</sub>-tā* *γo* (R)  
*v<sub>[PST]</sub>-le jo*
- in a while; (G) *tʰep-tsā* (R) *tʰap-tsā*
- incense; (G) *rpe* (R) *rpu* <spos>
- inchworm; (G) *ⁿbā-mthō-ⁿdʒal* <'bu.mtho.jal> (R)  
*ⁿbā-ⁿdom-ⁿdʒal* <'bu.dom.jal>
- indefinite article; *-tsā* (cf. <cig>)
- indirect evidential marker; (G) *-sā* (R) *-fā*

- infect [TR]; *fkə/fki/rki*  
insect, worm; *ʰbə* <'bu>  
insert, stick into; (G) *ptsok/ptsik/tsʰok* (R) *ptsak/ptsik/tsʰak* <btsg(s)/INNv/tshugs>  
inside [N]; (G) *no* (R) *nəŋ* <nang>  
install; *fṣat/fṣet/rtṣot* <sprad/INNv/INNv>  
instrumental case marker; (G) *-kʰe* (R) *-ke*  
interest 利息; (G) *rcet* <skyed> (R) *rji-ʰpʰi*  
interrogative prefix; *a-*  
interstice; *par* <bar>  
intestines; *rjə-ma* <rgyu.ma>; (large intestine) *rjə-ʰar* <rgyu.dkar>; (small intestine) (G) *rjə-nie* (R) *rjə-naq* <rgyu.nag>  
invert, upend 倒扣; (G) *rvep/rvip/rvep* (R) *rvap/rvip/rvap* <sbus/INNv/sbus>  
iron; (G) *rtfje* (R) *ltfəq* <lcsags>; (pig iron) *tṣʰu* <khro>  
itch; *za* <za>  
jewel; (G) *rəm-ʰba-tfʰi* (R) *rən-ʰbo-tfʰi* <rin.po.che>  
jew's harp 口弦; *kəy-za*  
join (a group); (G) *zok/zik/zok* (R) *zək/zik/zək* <zhugs/INNv/zhugs>  
joint; (G) *tsʰok* (R) *tsʰak* <tshigs>  
jump; (G) *mtfʰu/mtfʰe/mtfʰe* <mchong(s)/INNv/INNv> (R) *ldəŋ/ldiŋ/ldoŋ* <lding/INNv/ldongs>; (~ into river or down a high place to kill oneself) (G) *rtfep/rtfip/rtfep* (R) *rtfep/rtfip/rtfep*  
juniper; (*Juniperus tibetica*) *fə-xa* <shug.pa>; (prickly ~) (G) *tsʰər-fək* (R) *ra-fək* <?.shug>  
just now; *tʰam* <tham>  
key; (G) *ldə-mjok* (R) *ldə-mjək* <lde.mig>  
kidney; *mkʰi-lə* <mkhal.li>  
kill; *fṣat/fṣet/sot* <bsad[<sub>FS</sub>]/INNv/sod>  
kindling 火引子; (G) *mjə-sa* (R) *mje-sa* <me.sa>  
king; (G) *rjal-bə* (R) *rjal-və* <rgyal.bu>  
kiss; *kʰa fcal/fcel/rcol* <kha bskyal[<sub>FS</sub>]/INNv/skyol>  
knead (dough); *fnol/fnel/fnol*  
kneading basin; *ʰzu-pa* <gzhong.pa>  
knee 膝部; (G) *pə-rju* (R) *pə-rju* <pus.mo>; (knee pit 膝窩) (G) *rjət-qo* (R) *rjət-ʰo* <sgyid.khung>; (kneecap 膝蓋) (G) *ʰpʰo-lu* (R) *pə-rju* *ʰpʰəŋ-lu* <pus.mo.phang.lo>  
knife; *tṣə* <gri>; (small knife with which to cut and eat meat) *tṣə-tfʰu* <gri-chung>; (dagger) *tṣə-tʰu* <gri.thung>  
knot; *mdət-pa* <mdud.pa>  
know (a fact, a person); *ku* <go>  
know (how to do sth); *fe* <shes>  
koklass pheasant (*Pucrasia macrolopha*) 勺雞; (G) --- (R) *rja-fṣa tṣə-ʰor*  
labor [N]; *le-rka* <las.ka>  
lad, young chap; *zə-lə* <zha.li>; (polite) *ʰo-sar* <pho.gsar>  
ladder; *rke* <skas>  
ladle; (of metal) (G) *rcie* (R) *rcok* <skyogs>; (of wood; dipper) *tʰə-ʰə* <thom.bu>; (of birch bark) *co-qo*  
lake; *mtsʰu* <mtsho>  
lama; (G) *vla-ma* (R) *vla-ma* <bla.ma>  
lamb; *la-ya* <lu.gu>
- lambskin; *tsʰa-rə* <tsha.ru>  
lame person, cripple; (G) *zə-və* (R) *zə-ya* <zha.bu>  
lamp; *mtfʰo-myi* <mchod.me>  
language; (G) *rkət-rok* (R) *rkət-rək* <skad.rigs>  
lap; (G) *po* (R) *pəŋ* <pang>  
larch, yellow pine (*Larix gmelinii* Rupr.) 落葉松; (G) *tʰo-mo* (R) *tʰəŋ-mu* <thang.mo>  
last night; (G) *mdo* (R) *mdəŋ* <mtsʰan> <mdang.mtshan>; (night before last) (G) *kʰer-nep* (R) *kʰar-nəp* <khar.nub>; (second night before last) (G) *ʰzər-nep* (R) *ʰzər-nəp* <gzhes.nub>  
latrine; (G) *tʰep-ko* (R) *tʰep-kə* <chab.khang>  
laugh; (G) *vgat/vget/rgot* (R) *vgat/vget/rgot* <bgađ[<sub>FS</sub>]/INNv/rgod>  
laughing thrush; (Elliot's laughing thrush, *Garrulax elliotii*) 橙翅噪眉; (G) *qʰa-la* (R) *qʰa-le*; <sup>34</sup> (giant laughing thrush, *Garrulax maximus*) 大噪眉; (G) *wə-rdzie* (R) *va-rdzep* <sup>35</sup>  
law; (G) *tṣʰem* (R) *tṣʰəm* <khirms>  
lay, spread (e.g. a carpet); *pti/pte/tʰe* <bting(s)[<sub>FS</sub>]/INNv/INNv>  
lay (eggs); (G) *vzie* <bzhag> (R) *ptəŋ* <btang>  
lead [V]; (G) *ʰtṣʰet* (R) *tṣʰət* <'khrid>  
lead (metal) [N]; *zə-ji* <zha.nye>  
lead rope; (G) *kʰa-mda* <kha.mda> (R) *ṣap-mda* <srab.mda>  
leader in a village; *ʰgo-pa* <'go.pa>  
leaf; (G) *lo-ma* <lo.ma> (R) *rba-la* (< Rgyalrongic; cf. 'greens' lo-ma)  
lean against; (G) *qʰan/qʰən/qʰan* (R) *qʰen/qʰin/qʰen* <?> <sup>36</sup>  
learn, study; (G) *vjo/vje/rje* (R) *vjəŋ/vjen/rjəŋ* <sbyang/INNv/INNv>  
learn to be wary (of an animal); *ʰmi* <dmus>  
left(side); *xjon* <gyon>  
leg (including foot); (G) *rko-pa* (R) *rkə-ŋa* <rkang.pa>  
legend, epic story; *rdzəŋ* <sgrung>  
leopard (*Panthera pardus*); (G) *ʰzək* (R) *ʰzək* <gzig>  
leopard cat (*Prionailurus bengalensis*) 豹貓; (G) *sa-ta-ca-le* (R) *tsa-ta-tṣʰa-le*  
leprosy; *mdze* <mdze>  
lever; (G) *dʒe-kjək* (R) *dʒa-kjək* <'ja.g.yug?>  
lick; (G) *ldie/ldək/ldie* (R) *ldəq/ldək/ldək* <ldag/INNv/ldog(s)>  
lid; (G) *kʰe-lep* (R) *kʰa-lep* <kha.leb>  
lie, tell lies; *χlop/fjat/fjet/fot* <gshob bshad[<sub>FS</sub>]/INNv/shod>  
lie, falsehood; *χlop* <gshob>  
life; (G) *rsie* (R) *ʰok* <sgrog>  
life-span; *tsʰi* <tshe>  
lift, raise; (G) *pcie/pcak/cʰie* (R) *pcəq/pcek/cʰok* <bkyags[<sub>FS</sub>]/INNv/khyogs>  
light [N]; *yot* <'od>

34. Cf. Showu Rgyalrong *qʰalē*.35. Cf. Showu Rgyalrong *qʰalēwārza*

36. Cf. the invariant OT verb &lt;khen&gt;.

light (a fire), kindle; (G) *vdzon/vdzin/dzon*  
 <bsgron<sub>[PST]</sub>/INNV/INNV> (R) *vdzon/vdzin/*  
*rdzon* <bsgron<sub>[PST]</sub>/INNV/sgron>  
 lightning; (G) *xliv* (R) *xlök* <glog>  
 limb; (G) *rka-liv* (v3a) (R) *rkañ-ləq* (v3a)  
 <rkang.lag.(bzhi)>; (of four-legged animals or  
 tables) *sə-ki* <sug.ʔ>  
 line up; (in a row) *tšal vdzok/vdzik/rdzok* (R) *tšal*  
*vdzək/vdzik/rdzək* <gral  
 bsgrigs<sub>[PST]</sub>/INNV/sgrigs>; (in a single file) (G)  
*mtšhi vdzok/vdzik/rdzok* (R) *mtšhəñ vdzək/*  
*vdzik/rdzək* <phreng bsgrigs<sub>[PST]</sub>/INNV/sgrigs>  
 lion; *sə-ʔgi* <seng.ge>  
 lip; (G) *kʰe-fa* (R) *kʰa-fa* <kha.sha>  
 listen; (G) *nan/nen/non* (R) *nen/nin/non*  
 <nyan/INNV/nyon>  
 live, dwell; (G) *ʔdok/ʔdik/ʔdok* (R) *ʔdək/ʔdik/ʔdək*  
 <ʔdug/INNV/ʔdug>  
 liver; *mtʃən-ba* <mchin.pa>  
 livestock, domestic animals; (G) *rgo-ziv* (R) *rgo-zok*  
 <sgo.zog>  
 lizard; (G) *lje* <ʔ> (R) *ptšəq-vzəl* <brag.brul>  
 load (a pack animal); *pkal/pkel/kʰol*  
 <bkal<sub>[PST]</sub>/INNV/khol>  
 load carried on back; *kal* <khal>  
 locative case marker; (G) *-lə* <la> (R) *-a*; (indicating  
 unspecified, vague locations) *-je*  
 lock [N]; (G) *bzə-kʰok* <ʔ> (R) *za-tšhi* <zwa.ʔ>  
 locust, grasshopper; (G) *a-χcok* (R) *a-χcəq*  
 loess; *sə-kar* <sa.dkar>  
 look at, watch; *lta/lte/lte* <lta/INNV/ltos>  
 lose (~ sth) (G) *ʔbor* <ʔbor> (R) *por* <bor<sub>[PST]</sub>>;  
 (~ capital in business) (G) *rdep* (R) *rdəp*  
 <rdib>; (~ money by paying more than one  
 should) *pʰam* <pham>  
 lose consciousness, faint; (G) *ko-pə* *ʔbet*  
 <dbang.po.ʔbud> (R) *koñ-ʔbə xo* <dbang.po.ʔ>;  
 (suffer epilepsy or a stroke and ~) (G) *tšep* (R)  
*tšəp*  
 louse; (G) *fok* (R) *fək* <shig>  
 love dearly, adore; *χtfe* <gces>  
 lower lip; *ma-kʰa* <ma.kha>  
 lower part; *ɾmat* <smad>  
 lower reaches of river; *tʃə-ɾɾja* <chu.rnga>  
 lunatic; (G) *fɾan-va* (R) *fno-na* <smyon.pa>  
 lunch; (G) *tše-tfa* (R) *tše-tʃhə* <ʔa./chu>; (another  
 meal eaten in the afternoon) (G) *ɾam-tʃhət* (R)  
*rgoñ-tʃhə* <dgong.chu>  
 lungs; *blo-va* <glo.ba>  
 lynx 猞猁; *ɾjə* <dbyi>  
 maggot; (G) *fe-ʔbə* (R) *xa-ʔbə* <sha.bu>  
 magpie; (G) *tʃek-tʃhə-ma* (R) *ffja-čʰa-ma*  
 make; (~ furniture) *fišat/fišet/rtšot*  
 <sprad/INNV/INNV>; (~ food; ~ sth with mud)  
*ptʃa/ptʃe/tʃhə* <bca<sub>[FUT]</sub>/INNV/chos>; (~ clothes,  
 a tent) (G) *vzu/vzi/rze* (R) *vzu/vze/rdze* <bzo/  
 bzos/INNV>  
 make a detour; (G) *fkor-ve* *ʔdzu* (R) *fkor-e* *ʔdzu*  
 <skor.ʔgro>

make a racket; (G) *ɾer pci/pce/čʰe* (R) *ɾar pci/pce/čʰe*  
 <ʔur.ʔ>  
 make (sb carry e.g. a letter to sb else); (G) *fker/fkir/*  
*rker* (R) *fkar/fkir/rkar* <bskur<sub>[PST]</sub>/INNV/skur>  
 male; *pʰu* <pho>  
 malt; (G) *rvo-ma* (R) --- <sbang.ma>  
 man (male person); (G) *mɾa-ton* (R) *mɾa-təñ*  
 manage to do sth; (G) *V-čə rət* (R) *V-čə ret*  
 mantra; (G) --- (R) *ɾɾəq* <sngags>  
 manure; (G) *let* (R) *lät* <lud>  
 mare; *rgon-ma* <rgod.ma>  
 mark [N]; (G) *rtie* (R) *rtəq* <rtags>  
 marmot (Marmota himalayana) 旱獭; (G) *ptʃə-čʰet*  
 (R) *ffə-čə-ma* <byi.ʔ><sup>37</sup>  
 marrow; (G) *rko* (R) *rkañ* <rkang>  
 marsh, wetland; *na-va* <na.ba>  
 mask; (G) *ʔgo-ʔbie* (R) *ʔbaq* <(mgo).ʔbag>  
 meadow; (G) *rpo* (R) *ɾpəñ* <spang>  
 meal; *za-ma* <za.ma>  
 measure (grain); (G) *pcie/pcək/čʰie* (R) *ɾja-ma pčəq/*  
*pček/čʰok*  
 measure (length); pay back a debt; *ʔd3al/ʔd3el/ʔd3ol*  
 <ʔjal/INNV/ʔjol>  
 meat; (G) *fa* (R) *xa* <sha>; (lean meat) (G) *fe-ɾie* (R)  
*xa-ɾnəq*; (fat meat) (G) *tšʰel* (R) *tšʰəl* <tshil>  
 medicine; *ɾman* <sman>  
 melt; [INTR] *3ə* <zhu>; [TR] (G) *v3ə/v3i/3i* (R) *v3ə/*  
*v3i/3i* <bzhu<sub>[FUT]</sub>/bzhus/zhus>  
 merchant; (G) *tšʰu-pa* (R) *tšʰoñ-va* <tshong.pa>  
 message; (G) *mtšʰen* <phrin> (R) *rkat* <skad>  
 meteor hammer 流星錘; *ʔgo-rkor* <mgo.skor>  
 midge 蠓; (G) *tʰel-ptfi* (R) *ltʃəq-ʔbə*  
 milch cow; (G) --- (R) *v3o-ffək* <bzho.phyugs>  
 milk; [N] *yo-ma* <ʔo.ma>; (mother's milk) (G) *me-ɾu*  
 (R) *ma-ɾu* <ma.ʔ>  
 milk [V]; (G) *v3u/v3e/3e* (R) *v3u/v3e/3e*  
 <bzhos<sub>[PST]</sub>/INNV/zhos>  
 mill [N]; (G) *mtʃʰok* (R) *mtʃʰək* <mchig>  
 mine (mineral resources from ground); (G) *χter* (R)  
*χter* <gter>  
 mirror; *ɾo-lte* <ngo.ltas>  
 mix [TR]; (G) *fsi/fse/rse* (R) *fsi/fse/rtse*  
 <bsres<sub>[PST]</sub>/INNV/sres>; (become mixed) *ʔdze*  
 <ʔdres>; (mix flour and water to make dough)  
 (G) *fišok/fišk/rtšok* <INNV/INNV/dkrogs> (R)  
*v3ə/vzi/rdzi* <brdz<sub>[FUT]</sub>/INNV/rdzis>  
 mold [N] 模子; *rkol*  
 mole 鼯; *ɾme-va* <sme.ba>  
 mole rat (Myosorex fontanieri Milne) 鼯鼠; (G) *ptʃə-  
 lu* (R) *ffə-lu* <byi.long>  
 money; *kor-mu* <gor.mo>  
 monk; (G) *sar-mu* (R) *ser-mu*; (apprentice monk)  
 (G) *ptšə-pa* (R) *tsa-va* <grwa.pa>  
 monkey; *fiši* <spre.ʔu>

37. Cf. OT <byi.ba>. Gserskad *ptʃə-va* reflecting  
 <byi.ba> means 'mouse', whereas Rdoskad *ffə-va* from  
 <byi.ba> denotes 'rodents in general'.

moo; (G) *ɲer* (R) *ɲər* <ngur>; (of cattle, utter a threatening sound) (G) *ɣar* (R) *ɣar-lap le*  
moon; *ldza-va* <zla.ba>  
moonlight; (G) *ldze-yot* (R) *ldza-yot* <zla.ɔd>  
morning; (early morning) (G) *ɾɲe-mu* (R) *ɾɲa-mu* <snga.mo>; (till noon) (G) *ɾɲe-tsu* <snga.dro>  
morning glow, afterglow; *fiʂən-mar* <sprin.dmar>  
mortar; (G) *χton* (R) *χtən* <gtun>  
Moslem; *χu-χu*  
moss; (G) *ɲər-mi* (R) *ɲəl-mi*  
mother; *ma* <ma>; (term of address) *a-ma* <a.ma>  
mountain; *rə* <ri>; (mountain above village level) *rə-ɲgu* <ri.mgo>; (shady side of mountain) (G) *rsep* (R) *ʂap-kʰa* <srib.(kha)>; (sunny side of mountain) (G) *ɲen* (R) *ɲən-kʰa* <nyin.(kha)>; (mountainside) (G) *rə-rket* (R) *rə-rket* <ri.rked>; (mountain ridge) (G) *ɲek-kʰa* (R) *ɲə-ka zor-zor*; (mountain pass) (G) *ɣe* (R) *ɲbət*; (area with many boulders) *rdza* <rdza>  
mouse; (G) *ptʃə-va* <byi.ba> (R) *kʰəŋ-fʃə* <khang.byi>  
mouth; *kʰa* <kha>; (outer mouth) *mtʃʰə* <mchu>; (oral cavity) (G) *kʰe-no* (R) *kʰa-nəŋ* <kha.nang>  
move (an object; house); (G) *rpor/rper/rpor* (R) *rpor/rper/rpor* <spor/INNV/spor>  
move backwards; (G) *ptʃʰə-cet vje* (R) *fʃə-cet le* <phyi.gyed bya/las>  
mud; (G) *ɳde-ɳbie* (R) *ɳda-ɳbəq* <ɳam.bag>  
mudflow; (G) *tʃʰə-mdi* (R) *tʃʰə-lok*; (its dried traces) (G) *χtʂa* (R) *ka-χʃa*  
mule; *tʂi* <drel>  
muscle; (G) *ʃe-rgot* (R) *xa-rgot* <sha.ʔ>  
mushroom; (G) *ʃe-mu* (R) *ʃa-mu* <sha.mo>  
musk 麝香; (G) *ɂle-rtʂə* (R) *ɂla-rtʂə* <gla.rtsi>  
musk deer 麝; *ɂla-va* <gla.ba>; (Chinese forest musk deer, *Moschus berezovskii*) (G) *ɂle-nie* (R) *ɂla-nəq* <gla.nag>; (Himalayan musk deer, *Moschus chrysogaster sifanicus*) *ɂla-rcə* <gla.skya>  
mute person; (G) *lkək-pə* (R) *lkə-xə* <lkugs.pa>  
myself; (G) *ɲe-rə* (R) *ɲa-rə* <nga.rang>  
Naga (semi-divine race of half-human half-serpent beings) 那伽; 蛇神; *χlə* <klu>  
nail (body part); (G) *rsən-mu* (R) *sen-mu* <sen.mo>  
nail (tool); (G) *ɳdzər-ma* (R) *ɳdzer-ma* <ɳdzer.ma>  
name; *ɲɲi* <ming>  
nape; (G) *rka-rjap* <ske.rgyab> (R) *ɲɲa-ltəq* <gnya.ltag>  
nasal mucus, snot; *ɲnap* <snaɲ>; (clear, watery ~) (G) *ɾne-tʃʰə* (R) *ɾna-tʃʰə* <sna.chu>  
nasopharyngeal carcinoma 鼻咽癌; (G) *rsən* (R) *ʂən* <sɾin>  
navel, umbilical cord; *lte-va* <lte.ba>  
near; (G) *thie ɲi* (R) *tʰəq ɲi* <thag.nye>  
neck; *rki* <ske>  
necklace; (G) *rka-rjan* (R) *rke-rjan* <ske.rgyan>  
need (sth); *rge* <dgos>  
needle; *kʰap* <khab>; (eye of ~) *kʰap-rna* <khab.rna>  
negator; (imperfective) (G) *ɲɲə* (R) *ma* <mi>; (perfective) *ma* <ma>  
neigh; (G) *mtsʰer* (R) *mtsʰer* <tʂher>  
neighbor; *cʰəm-tsʰe* <khyim.mtshes>

nephew; *tʂa-va* <tsha.bo>  
nest; *tʂe* <tshang>  
nettle 荨麻; *tʂa* <zwa>  
new; (invariant form) *so-ma* <so.ma>  
night; (G) *mtsʰen* (R) *mtsʰan* <mtshan>; (midnight) (G) *mtsʰen-χci* (R) *mtsʰan-χci* <mtshan.dkyil>  
nine; *rgə* <dgu>  
nineteen; *ptʃə-rgə* <bcu.dgu>  
ninety; *rgə-ptʃə* <dgu.bcu>  
ninety-one; *rgə-ptʃə ko-χtʂə* <dgu.bcu.go.ʔ>  
nipple; *nə-ɲgu* <nu.mgo>  
nit 蠟子; (G) *rsə-me* (R) *rtso-me* <sro.ma>  
noise (made by people); (G) *ɲer* (R) *ɲər* <ur>  
nomad; (G) *mdzək-χa* (R) *mdzə-χa* <ɳbrog.pa>  
noon; *ɲən-χci* <nyin.dkyil>  
north; (G) *fʃəŋ* (R) *fʃəŋ* <byang>  
nose; *ɾna* <sna>  
nose ring; (G) *ɾne-rtʃə* (R) *ɾna-rtʃə* <sna.gcu>  
nostril; (G) *ɾne-qʰu* <sna.khung> (R) *ɾna-nəŋ* <sna.nang>  
not only; *ma-tsʰet* <ma.tshad>  
not until; (G) *ɾjep-te* (R) *ɾjap-te*  
notify, inform; *rkat vjap* <skad.brgyab>; (R) *rkat rjap* <skad rgyab>  
nun; *tʃə-mu* <jo.mo>  
oath; *mna* <mnaʔ>  
oats; (G) *jək-pə* (R) *jək-pə*; *jə-xə* <yug.po>; <yu.gu>  
occasionally; sometimes; *rkor-tʂi*  
odor, smell; *tʂə-ma* <dri.ma>  
offspring; (G) *ɾjet* (R) *ɾjət* <rgyud>  
often; (G) *nam jən-tie* <nam.in.ʔ> (R) *nam jən-na* <nam.yin.na>  
oil; (generic) (G) *ɾnom* (R) *ɾnəm* <snum>; (vegetable oil) (G) *mer-nie* (R) *mar-nəq* <mar.nag>; (oil floating on top of liquid) (G) *ʒie* (R) *ʒəq* <zhang>  
old person; (old man) (G) *rget-pə* (R) *rgat-pə* <rgad.po>; (old woman) (G) *rgen-mu* (R) *rgan-mu* <rgad.mo>  
one; *χtʂə*  
only; (G) *-ve ɲɲe* (R) *-ve me* <?.med>  
open [TR]; (~ a door) (G) *ptʃʰi/ptʃʰi/ʃe* (R) *fʃi/fʃe/ʃe* <phye/ɳstɳ/phye/INNV>; (open an umbrella) (G) *pʰok/pʰik/pʰok* (R) *pʰək/pʰik/pʰək*; (open mouth) (G) *kʰa ɂde* <kha.gdang> (R) *kʰa ɂdəŋ/ɂdəŋ/ɂdəŋ* <kha.gdang/INNV/gdongs>  
or; (G) *man-nə* (R) *mən-na* <min.na> (?)  
orphan; (G) *te-vrək* (R) *ta-vrək* <dwa.phrug>  
other; (opposed to 'self') *ʒzan* <gzhan>; (other people) (G) *kʰa-kʰa* (R) *kʰe-ra*  
otter; (G) *rsam* (R) *ʂam* <sram>  
outside; (G) *ptʃʰə-su* (R) *fʃə-su* <phyi.tsho>  
overflow; (G) *ɂmal* (R) *ɂmel*  
owl; (G) *ək-pa* <ug.pa> (R) *pə-ku*<sup>38</sup>  
pad, furnish with padding; *pti/pte/tʰe* <bting(s)/ɳstɳ/INNV/INNV>  
palate 硬顎; *rkan* <rkan>  
palm 手心; (G) *tʃʰə-pa* (R) *ɳtʃʰə-ɲa*

38. From Rgyalrongic; cf. Showu *páku* 'owl'.

paper; (G) *jok-və* (R) *jok-və* <shog.bu> ~ *jok-jok* <shog.shog>  
 parch; *rju/rje/rje* <rngo/brngos/rngos>  
 parching pan; (G) *rsa-ŋa* <slang.ʔ> (R) *rjo-rtsəŋ* <rngo.slang>; (spatula for parching) (G) *jok-ŋu* (R) *jok-le*  
 pare 削; (G) *vʒie/vʒek/ʒie* (R) *vʒok/vʒek/ʒok* <bzhogs<sub>[PST]</sub>/INNV/zhogs>  
 parent; *pʰa-ma* <pʰa.ma>  
 parrot; (G) *ptʃa ni-tso* (R) *ni-tso* <(bya).ne.tso>  
 paste [TR]; (G) *vjar/vjer/rjor* <sbyar/INNV/INNV> (R) *vjar/vjer/vjor* <sbyar/INNV/sbyor>; [INTR] (be pasted or stuck on sth) *mjar* <'byar>  
 pastoral area; (G) *mdzok-sa* (R) *ʔdzok-sa* <'brog.sa>  
 pastoralist Tibetan; *mdzo-ɣa* <'brog.pa>  
 pat, stroke; (G) *mjo/mje/mje* (R) *mjəŋ/mjən/ mjeŋ*  
 patient 病人; (G) *nat-pa* (R) *nat-pa* <nad.pa>  
 patina 銅鏽; *kja* <g.ya>  
 pay back debt; *tom* *dʒal/ʔdʒel/ʔdʒol* <dom ʔjal/INNV/ʔol>  
 peach; (G) *cʰə-li* (R) *cʰa-le*  
 peacock; (G) *rma-ptʃa* (R) *rma-ffja* <rma.bya>  
 peas; (G) *rsən-mdzi* (R) *ʂəm-ʔdʒi* <sran.'bras>  
 peasant, agriculturist Tibetan; *roŋ-pa* <rong.pa>  
 pen; *rjə-ɣə* <smyu.gu>  
 penis; *mdʒi* <mje>; (glans penis) (G) *mdʒa-ŋu* (R) *mdʒe-ŋu* <mje.mgo>  
 perform a contest; (G) *ʔdzam-vder vje* (R) *ʔdzam-vdər le* <gran.bsdur bya/las>  
 person; *mja* <mi>  
 pestle; (G) *rdo-ri* <rdo.ril><sup>39</sup> (R) *rdo-mdi* <rdo.ʔ>  
 pheasant 雉雞; (G) *rje-ptʃa* (R) *rja-ffja* <rgya.bya>  
 pick off; *fsal/fsel/sol* <bsal<sub>[PST]</sub>/INNV/sol>  
 pickaxe 刨鋤; (G) *ɣʒo-ɾa* <gzhor.bu> (R) *jər-ɣʒor* <yur.gzhor><sup>40</sup>  
 pierce, punch (a hole); (G) *pʰok/pʰik/pʰok* (R) *pʰək/pʰik/pʰək* <pʰug/INNV/pʰugs>  
 pig; (G) *pʰie* (R) *pʰaq* <pʰag>  
 pigeon; *mə-kə*<sup>41</sup>  
 pika 藏鼠兔; (G) *ptʃa* <bra>; *a-vra* (R) *a-vra* <a.bra>  
 pilgrim; (G) *v-rtʃot* (R) *a-rtfo*  
 pillar; *ka-va* <ka.ba>  
 pillow; *ʔgo-lje* <mgo.sngas>  
 pit; (G) *tu* (R) *toŋ* <dong>; (pit for storing food) (G) *ji-tu* (R) *jə-tu*  
 place; *sa* <sa>  
 placenta; *rtsa*  
 plain, flatland; (G) *tʰo* (R) *tʰəŋ* <thang>  
 planet; *ɣza* <gza>  
 plant [TR]; (plant seeds); *ptap/ptep/tʰop* <btap<sub>[PST]</sub>/INNV/thob>; (set a plant in the

ground) (G) *ptsok/ptsik/tʰok* (R) *ptsək/ptsik/tʰək* <btsugs<sub>[PST]</sub>/INNV/tshugs>  
 plate, dish; (G) *rder* (R) *rder* <sder>  
 play; *rtsi* <rtses>  
 plough [V]; *rnu/rme/rme* <rmo/rmos/rmos>  
 plough [N]; (G) *ɣfo-lə* <gshol.li> (R) *tʰu* <thong>  
 ploughshare; (G) *tʂʰo-tu* <ʔ> (R) *tʰu-su* <thong.so>; (new style, with pointed tip) (R) *ffja-mtʰə* <bya.mchu>  
 polecat 艾虎; (G) *rti-li qap-mdza* (R) *rti-li tʂəm-tsa*  
 polyp 息肉; *ptʃa-nə*  
 pond; (G) *tʰə-ʔcʰel*; (R) *tʰə-ʔcʰəl* <chu.khyil>; (R) *tʰə-qol* <chu.ʔ>  
 ponder 思考; (G) *ʔdon vjap* (R) *ʔdəŋ rjap* <'dang.rgyab>  
 poor; (invariable) *met-pə* <med.po>  
 poplar; (G) *ldʒo-ma* (R) *ldʒəŋ-ma* <lcang.ma>  
 popped grains; *je* <yos>  
 pot, jar; *rdza-ma* <rdza.ma>  
 potato; (G) *rje-tʂu* (R) *rja-tʂu* <rgya.gro>  
 pound, beat (a drum); (G) *vdu/vdi/rdi* (R) *vdu/vdi/rdi* <brdungs<sub>[PST]</sub>/INNV/rdungs>  
 pour; (into a container) (G) *vlok/vlik/lok* (R) *vlək/vlik/lək* <bługs<sub>[PST]</sub>/INNV/INNV>; (pour out sth unwanted); *pʰu/pʰe/pʰe* <pho<sub>[PST]</sub>/INNV/phos>  
 power; (G) *ɣvo* (R) *ɣəŋ-tʃa* <dbang.(cha)>  
 prepare a sleeping place; *ptja/ptfe/tʰe* <bca<sub>[FUT]</sub>/INNV/chos>  
 prepare to depart; (G) *ʔtsʰie/ʔtsʰək/ʔtsʰie* (R) *ʔtsʰəq/ʔtsʰek/ʔtsʰok* <'tshag/INNV/'tshogs>  
 present; give [HON]; (G) *ʔbel/ʔbil/ʔbel* (R) *ʔbəl/ʔbil/ʔbəl* <'bul/INNV/'bul>  
 press (a button); (G) *ɣnar/ɣnir/ɣnar* (R) *ɣnər/ɣnir/ɣnər*  
 press down with force; (G) *ɣnen/ɣnen/ɣnon* <gnan<sub>[FUT]</sub>/INNV/gnon> (R) *mnan/mnen/non* <mnan<sub>[PST]</sub>/INNV/non>  
 price; (G) *ku* (R) *koŋ* <gong>  
 prison; (G) *ptsən-kʰo* (R) *ptson-kʰəŋ* <btson.khang>; (R) *tʂəm-kʰəŋ* <khirms.khang>  
 probably; (G) *ɣa-ləm* (R) *ha-ləm*  
 prohibitive prefix; *ma* <ma>  
 prop up 支撐; (G) *ftən/ftin/rten* (R) *ftən/ftin/rten* <brten<sub>[PST]</sub>/INNV/rten>  
 psoriasis 牛皮癬; *rju* <rngo>  
 pull; (G) *ʔtʰen/ʔtʰin/ʔtʰen* (R) *ʔtʰen/ʔtʰin/ʔtʰen* <'then/INNV/'then>  
 pulse; *rtsa* <rtsa>  
 puppy; (G) *cʰə-ptʂok* <khyi.phrug> (R) *cʰə-ɣə* <khyi.gu>  
 pus; (G) *rnie* (R) *rnaq* <rnaq>  
 pus-filled sore 膿瘡; (G) *ɣlən-va* (R) *ɣlən-ʔba*  
 push; (~ along) (G) *tət/tit/tet* (R) *tət/tit/tet* <ded<sub>[PST]</sub>/INNV/ded>; (~ sth heavy) (G) *pʰer/pʰir/pʰer* <ʔ> (R) *mnan/mnen/mnon* <mnan<sub>[PST]</sub>/INNV/non>  
 put, place; (G) *vʒie/vʒək/ʒie* (R) *vʒaq/vʒek/ʒok* <bzhag<sub>[PST]</sub>/INNV/zhogs>  
 put (condiment, tea leaves, etc.) into; *ptap/ptep/tʰop*

39. The rhyme is irregular. Probably loaned from Amdo; cf. Rkakhog *rdo-ri*.

40. The etymon of *jər* as OT <yur.ma> 'weed' was suggested by Guillaume Jacques (p.c.).

41. From Rgyalrongic, cf. Northwestern Horpa *məkə* 'pigeon'.

- put in order, arrange; (G) *vdzok/vdzik/rdzok* (R) *vdzək/vdzik/rdzək* <bsgrigs<sub>[PST]</sub>/INNV/sgrigs>  
 put into (a container); (G) *ptfok/ptfik/tʰok* <bcug<sub>[PST]</sub>/INNV/chug> (R) *vda/vdi/rdi*; (put food into e.g. a bowl) (G) *vlok/lik/lok* <blugs<sub>[PST]</sub>/INNV/INN> (R) *ptʃə/ptʃi/tʰi* <bcu<sub>[FUT]</sub>/bcus/chus>  
 put out (a fire); (G) *pta/pte/tʰe* (R) *vda/vde/rde*  
 quake; (~ up and down) *ʰpʰar* <'phar> (shake sideways) (G) *ʰgel* (R) *ʰgal* <'gul>  
 quill; (G) *ptʃe-rdzu* (R) *ptʃa-rdzu* <bya.sgro>  
 quotative marker; *ze* <zer>  
 rabbit; *rə-yu* <ri.bong>  
 rain [N]; (G) *tʰer-pa* <char.pa> (R) *ɛnam* <gnam>  
 rain [V]; (G) *ɛnam* *ʰbap/pap* <gnam 'bab/babs> (R) *ɛnam pap* <gnam.babs>  
 rain and snow mixed 雨夾雪, 霏; *kʰa-tʰar* <kha.char>  
 rainbow; *ʰdʒa* <'ja>  
 raise; (~ hand) (G) *pcie/pcək/cʰie* (R) *pcəq/pcik/cʰok* <bkyags<sub>[PST]</sub>/INNV/khyogs>; (~ a flag) (G) *ptʃar/ptʃer/ptʃor* (R) *ʃfar/ʃfer/ʃor* <phyar<sub>[PST]</sub>/INNV/phyor>  
 raise, bring up, feed; (G) *χsu/χse/χse* <gso/gsos/gsos> (R) *χsu/χse/χsu* <gso/gsos/gso>  
 rake (for breaking clods); (G) *rvar-rzi* <sbar.ʔ> (R) *rvar-rdi* <sbar.ʔ>; (large wooden rake) (G) *ʃol-va* (R) *ʃo-la*  
 rash 疹子; *ʰbə-rə* <'bur.bu>  
 recall, remember; *tʃan* <dran>  
 recount; (~ a story) *ʃfat/ʃfet/ʃot* <bshad<sub>[PST]</sub>/INNV/shod>; (~ a happening) (G) *ca-mda vje* <?.bya> (R) *rka-tʃʰa ʃfat* <skad.cha.bshad>  
 recover from illness; (G) *nat se* <nad.sos<sub>[PST]</sub>>; (rarely used) *tʃie* (R) *tʃəq* <drag>  
 red-billed chough (Pyrrhocorax pyrrhocorax) 紅嘴山鴉; (G) *ltʃu-ka* (R) *ltʃu-kʰa* <lcung.ka>  
 reduce; (~ price or sum); *ʰəp/ʰep/ʰop*; (~ amount by taking away a portion) (G) *ʰət/ʰit/ʰet* (R) *ʰət/ʰit/ʰət* <phud<sub>[PST]</sub>/INNV/phud>  
 regain consciousness; (G) *toŋ* (R) *təŋ* <dwang>  
 region; (G) *ʃel, ʃəl-kʰie* (R) *ʃəl* <yul.ʔ>  
 reincarnated buddha 活佛; (G) *ʃtʃə-rkə* (R) *ʃtʃəl-rkə* <sprul.sku>  
 reins; (G) *rsap-rcie* (R) *ʃap-rcok* <srab.skyogs>  
 relative 親戚; *je-sa* <nye.sa>  
 release, let go; (G) *pto/pte/tʰu* <btang<sub>[PST]</sub>/INNV/thongs> (R) *mɲaq/mɲek/ŋok* <mngag/INNV/INN>  
 repair; (G) *le* <las> (R) *ptʃu/ptʃe/tʰu* <bco<sub>[FUT]</sub>/bcos/chos>  
 resemble, look like; (G) *rok* (R) *rək* <rig>  
 resin 松脂; (viscous liquid) (G) *ŋə-zie* (?) (R) *tʰəŋ-tʃʰə* <thang.chu>; (solid form) (G) *tʰo-tʃʰə* <thang.chu> (R) *qa-tʃʰi*<sup>2</sup>  
 respectively; *rə-sə-roŋ-sa*  
 rest [V]; *ŋal fsu/ʃse/se* <ngal bso<sub>[FUT]</sub>/bsos/sos>
- retract, draw in; (G) *vdie/vdəq/rdie* (?) (R) *ʃkəm/ʃkim/rkəm* <bskums<sub>[PST]</sub>/INNV/skums>  
 rhododendron; (G) *ə-co* (R) *rtəq-ma*; (Rhododendron parvifolium Adams) 小葉杜鵑 *sə-rə* <sar.ʔ>  
 rhubarb 大黃; (G) *ltʃem* (R) *ltʃəm* <lcum>  
 ribs; *rtʃə-yə* <rtsig.gu>  
 rice; *mdʒe* <'bras>  
 ridge, raised ground 坎; *kat-pa* <gad.pa>  
 right, correct; *nan* <nyan>  
 right(side); *ɛje* <g.yas>  
 rim 邊緣; *mtʰa-kʰa ʒo-ro-ro* <mtʰa.kha.ʔ>  
 ring 戒指; *ʰdzək-rtʃi* <mdzub.dkris>  
 rinse, flush; *ʃʃal/ʃʃel/ʃol* <bshal<sub>[PST]</sub>/INNV/shol>  
 rise, stand up; (G) *jar le* <yar.lang> (R) *ja-ra le* <yar.ʔ.lang>; *jər le* <yar.lang>  
 river; (G) *tʃʰə tʃʰət-pə* <chu.chen.po> (R) *tʃʰə tʃʰe-pə* <chu.che.po>  
 river bank; (G) *tʃʰə-zer* <chu.zur>; *tʃʰə-ʰdzam* <chu.gram>; *tʃʰə-kʰə* <chu.kha>  
 road; *lam* <lam>; (forked road) (G) *qʰe-mdu* (R) *qʰar-mdu* <?.mdo>; (narrow footpath) (G) *mtʃʰo* (R) *mtʃʰəŋ-lam* <phrang.lam>  
 rock; (G) *ptʃie* (R) *ptʃəq* <brag>  
 rod, stick; *ɛʒə-xa* <dbyug.pa>  
 roe deer (Capreolus pygargus) 狍子; *qʰa-fa* <kha.sha>  
 root; *rtʃə-va* <rtsa.ba>  
 rope (made of ox hair); *tʰə-yə* <thag.pa>  
 rosary; (G) *mtʃʰi-va* <phreng.ba> (R) *ptʃʰə-ŋa* <phreng.ba>  
 rot, spoil 腐爛變質; (G) *rel* (R) *rəl* <rul>  
 row; *tʃəl* <gral>  
 rub (to soften hide) (G) *mɲi/mɲi/mɲe* (R) *mɲi/mɲe* <mɲye<sub>[FUT]</sub>/mɲyes/mɲyes>  
 rub (where it hurts; rub clothing with hands when washing); (G) *ʰpʰer/ʰpʰir/ʰpʰer* (R) *ʰpʰər/ʰpʰir/ʰpʰər* <'phur/INNV/'phur><sup>43</sup>  
 ruminate 反芻; (G) *ldat pʰet* (R) *ldat pʰət* <ldad.phud>  
 run; (G) *vjok/vjik/rjok* (R) *vjak/vjik/rjak* <rɣyug/INNV/rɣyugs>  
 rust; *ptsa* <btʃa>  
 sacred place with healing powers; *ɛne* <gnas>  
 saddle; *rga* <sga>  
 salamander 蜥蜴; (G) *tʃʰə-vdzəl* (R) *tʃʰə-vzəl* <chu.sbrul>  
 salary; (G) *ʰɛie* (R) *ʰok* <phogs>  
 saliva; *mtʃʰəl-ma* <mtshil.ma>  
 salt; *tʃʰa* <tʃʰwa>  
 saltpeter 硝石; *pa-tsa* <ba.tʃʰwa>  
 same; *ʰdʒa-ʰdʒa* <dra.dra>  
 sand; (G) *ptʃi-ma* (R) *ʃfe-ma* <bye.ma>  
 sandalwood; *tʃə-dan* <tsan.dan>  
 sapling; (G) *ldʒo-və* (R) *ldʒəŋ-ŋə* <ljang.pa>  
 saw [N]; *sok-li* <sog.le>

42. From Rgyalrongic; cf. Showu *qetsi*.

43. Irregular imperative, as if from OT past stem &lt;phur&gt;.

say; (G) *vdza/vdze/rdze* <bzla<sub>[FUT]</sub>/bzlas/INNV> (R) *zer/vze/rdze* <zer/bzlas/INNV><sup>44</sup>  
 scab 痂; (G) *rmv-mgi* (R) *rma-mgi* <rma.?  
 scallion; *tsoy* <tsoy>  
 scar; (G) *rmv-rdza* (R) *rma-rdza* <rma.?  
 scarab 蜣螂; (G) *rja-<sup>na</sup>* (R) *vjaq-<sup>na</sup>* <?.byu>  
 scatter [VT]; *χtor/χter/χtor* <gtor/INNV/gtor>  
 school; *lop-tsa* <slob.grwa>  
 scissors, shears; (G) *tsan-to* (R) *χe-tsa*  
 scold, call names; *“dzi/“dze/“dze* <‘dzing/INNV/INNV>  
 scoop up; *ptā/ptfi/tfi* <bcu<sub>[FUT]</sub>/bcus/chus>  
 scratch (to stop an itch); (G) *ptš<sup>h</sup>ok/ptš<sup>h</sup>ik/tš<sup>h</sup>ok* (R) *ptš<sup>h</sup>ak/ptš<sup>h</sup>ik/tš<sup>h</sup>ak* <phrugs<sub>[PST]</sub>/INNV/INNV>  
 scrotum; *rla-xa* <rlig.pa>; (testicle) *rlak-rdu* <rlig.rdo>  
 sea buckthorn 沙棘; (G) *rte-ra* (R) *rta-ra* <star.bu>  
 seal, chop; *t<sup>hi</sup>* <thel>  
 see; (G) *rok* (R) *rak* <rig>  
 see off; *fcāl/fcel/rcāl* <bskya<sub>[PST]</sub>/INNV/skyol>  
 seed; (G) *se-von* (R) *sa-yon* <sa.bon>  
 seek, look for; *ptsal/ptsel/tshol* <btсал<sub>[PST]</sub>/INNV/tshol>  
 seep; (G) *fial/fitel* (R) *ptal/ptel*  
 select, elect; (G) *vdam/vdem/rdom* (R) *vdam/vdem/rdom* <bdams<sub>[PST]</sub>/INNV/INNV>  
 sell; *ptsu/ptsi/tš<sup>h</sup>i* <btsongs<sub>[PST]</sub>/INNV/INNV>  
 semen; (G) *qā-tfā* (R) *q<sup>h</sup>a-tf<sup>h</sup>a* <?.chu>  
 send for, ask to come help; (G) *mjje/mjñq/mjñe* <mngag/INNV/mngag> (R) *mjñq/mjñek/ñok* <mngag/INNV/INNV>  
 separate [TR]; (G) *χar pt<sup>hi</sup>/ptf<sup>h</sup>e/ptf<sup>h</sup>e* <?.phye<sub>[PST]</sub>/INNV/phye> (R) *χa ffi/fje/fje* <?.phye<sub>[PST]</sub>/INNV/INNV>  
 serow (*Capricornis sumatraensis*) 蘇門羚; (G) *fa-rja* (R) *xa-rja* <shwa.rgya>  
 servant; (G) *vjo-χā* (R) *vjok-pā* <g.yog.po>  
 set (e.g. a pot on the stove); (G) *ptsok/ptsik/tš<sup>h</sup>ok* (R) *ptsak/ptsik/tš<sup>h</sup>ak* <btсugs<sub>[PST]</sub>/INNV/tshugs>  
 set (of the sun); (G) *nep* <nub> (R) *rdal*  
 set fire to; (G) *mji vdzon/vdzin/rdzon* <me. bsgron<sub>[PST]</sub>/INNV/sgron> (R) *fśaq/fsek/sok* <bsregs<sub>[PST]</sub>/INNV/INNV>  
 set off (trap), trigger; *fial/fitel/rtol*  
 seven; (G) *vdon* (R) *vdan* <bdun>  
 seventeen; (G) *ptfā-vdon* (R) *ptfā-vdan* <bcu.bdu>  
 seventy; *vdan-tf<sup>h</sup>a ton-χtsā* <bdun.cu.don.?  
 sew; (G) *tsep/tšip/tšep* (R) *tšap/tšip/tšap* <drubs<sub>[PST]</sub>/INNV/drubs>  
 shade; (G) *tšām-nie* <grib.?  
 shadow; (G) *nāk-“dza* <?> (R) *tšāp-ma* <grib.ma>  
 shank 脛; (G) --- (R) *rdā-ñar* <rje.ngar>  
 shape; (G) *vjep* (R) *vjap* <dbyibs>  
 shave, scrape; (G) *vzar/vzer/zor* (R) *vzar/vzer/zor* <bzhar<sub>[PST]</sub>/INNV/INNV>  
 shear (wool); trim (twigs); (G) *mdzie/mdžak/mdžie* (R) *mdžaq/mdžek/mdžok*

sheath 鞘; (G) *fep* (R) *xap* <shubs>  
 sheep; (G) *lok* (R) *lak* <lug>; (lamb) *lā-yā* <lu.gu>  
 sheep and goat; (G) *re-lok* (R) *ra-lāq* <ra.lug>  
 sheepskin; (G) *pa-χa* (R) *pā-χa* <lpags.pa>  
 shin; (G) *ñā-xdu* (R) *ñā-xdu* <nywa.gdong>  
 shine (of the sun); (G) *far* (R) *xar* <shar>  
 shoe; *lam* <lham>  
 shoot at, fire at; (G) *“p<sup>h</sup>o/“p<sup>h</sup>e/“p<sup>h</sup>e* (R) *“p<sup>h</sup>əŋ/“p<sup>h</sup>in/“p<sup>h</sup>e* <phangs/INNV/INNV>  
 shoulder; (G) *mtš<sup>h</sup>a-χa* (R) *mtš<sup>h</sup>aq-k<sup>h</sup>a* <‘phrag.pa>; (~ joint) (G) *mtš<sup>h</sup>ek-tš<sup>h</sup>ok* (R) *mtš<sup>h</sup>aq-tš<sup>h</sup>ak* <‘phrag.tshigs>; (~ blade) *so-χa* <sog.pa>  
 shove; (G) *k<sup>h</sup>al-tu vje* (R) *k<sup>h</sup>al-tsok le* <?.bya/las>  
 show 展示; *ñan/ñten/rtan* <btan<sub>[PST]</sub>/INNV/ston>  
 shrew 鼯鼠; (G) --- (R) *tšā-yā-rta-rdāq*  
 shrine (room for worship; on third floor of a Tibetan house) (G) *mtf<sup>h</sup>ot-ko* (R) *mtf<sup>h</sup>ot-k<sup>h</sup>əŋ* <mchod.khang>  
 shudder; (G) *“c<sup>h</sup>ek “dar* (R) *“c<sup>h</sup>əq “dar* <‘khyag.dar>; (when startled) (G) *ṛji pka/pke/k<sup>h</sup>e* <snying ṛbka/bkas/khos> (R) *“dar-tš<sup>h</sup>əp* <dar.?  
 sickle; (G) *zor-va* (R) *zo-ra* <zor.ba>  
 side 脅部; (G) *slu* <glo>; *ptf<sup>h</sup>en* <mchan> ? (R) *slō-ji* <glo.?  
 side-swimmer (*Hyaella azteca*) 蝴蝶; (G) *tf<sup>h</sup>a-<sup>na</sup>-“go-ju* <chu.bu.mgo.?  
 (R) *ñā-cā-pāq* <nya> + Rgyalrong loan<sup>45</sup>  
 sideburns 絡腮鬍; (G) *rje-rtset* (R) *rja-ra* <rgya.?  
 sieve; (G) *tš<sup>h</sup>ie* (R) *tš<sup>h</sup>aq* <tshags>  
 silver; (G) *rñel* (R) *rñi* <dnug>  
 since, because; (G) *-mā-li* (R) *-ve*  
 sing a song; (G) *slā vlo/vle/li* <glu. blangs<sub>[PST]</sub>/INNV/?> (R) *slā vləŋ/vleŋ/lu* <glu. blangs<sub>[PST]</sub>/INNV/longs>  
 single, unmarried; (G) *mñā-rcō* (R) *mñā-rcəŋ* <mi.rkyang>; (single unmarried woman) *mo-rcəŋ* <mo.rkyang>  
 sink; (G) *ṛnok* (R) *ṛnak* <snyigs>; (sink into e.g. mud, flesh) (G) *zok* (R) *zāk* <zugs>  
 sinusitis 鼻竇炎; *kam*  
 sister; (elder) (G) *v-pā* (R) *a-tf<sup>h</sup>e* <a.che>; (younger) *v-ē*; (man's sister) (G) *rsi-mu* (R) *šəŋ-mu* <sring.mo>; (woman's sister) (G) *rpon* (R) *rpən* <spun>  
 sit; (G) *“dok/“dik/rdot* <‘dug/INNV/sdod><sup>46</sup> (R) *“dāk/“dik/“dāk* <‘dug/INNV/‘dug>  
 sit (on egg); cuddle; rom/rim/rom (R) *rām/rim/rām* <rum/INNV/rum>  
 six; (G) *tšok* (R) *tšāk* <drug>  
 sixteen; (G) *ptfā-tšok* (R) *ptfā-tšāk* <bcu.drug>  
 sixty; *tšāk-tfā* <drug.cu>  
 sixty-one; *tšāk-tfā re-χtsā* <drug.cu.re.?  
 skin; (covering the human body 皮膚) *fa-k<sup>h</sup>a* <sha.kha>; (whole skin of an animal; fur) (G)

44. The Rdoskad present stem is suppletive from <zer>.

45. Cf. Showu *cā-pāχ* ‘side-swimmer’, lit. ‘water pig’.

46. The Gserskad imperative stem is suppletive, from <sdod<sub>[IMP]</sub>> ‘live, stay, sit’.

*lpie*; (R) *lpag* <lpags>; (shed skin of a snake)  
 (G) *vdzəl-fon* (R) *vzəl-fən* <sbrul.shun>  
 skull; *ʔgo-rkam* <mgo.ʔ>  
 sky; *ʔnam* <gnam>  
 slate 片板岩; *ʔja-ma* <g.ya.ma>  
 slaughter, butcher; *ʔfa/ʔfe/ʔe* <bsha/bshas/shos>  
 sleepy sand 眼屎; (G) *ʔnak-rcie* (R) *ʔnak-rcaq*  
 <dmyig.skyag>  
 sling 甩石器; *ʔar-rdu* <ʔur.rdo>  
 slip from grip; (G) *for* (R) *xor* <short>  
 smell (emit an odor); *ʔsa-ma ʔʃu* <dri.ma.bro>;  
 (perceive an odor with the nose) (G) *ʔnam/*  
*ʔnem/ʔnom* <bsnams<sub>[PST]</sub>/INNV/snoms> (R)  
*ʔnam/ʔnim/ʔnam* <bsnums<sub>[PST]</sub>/INNV/snums>  
 smile; (G) *ʔdzom* (R) *ʔdzam* <dzum>  
 smoke [N]; *tə-va* <du.ba>  
 smoke (a cigarette) [V]; (G) *ʔʰen/ʔʰin/ʔʰen* (R)  
*ʔʰen/ʔʰin/ʔʰen* <ʰen/INNV/ʰen>  
 snail, slug; (G) *ʔdzə-ʔbə-le* (R) *a-rə-ra*  
 snake; (G) *vdzəl* (R) *vzəl* <sbrul>  
 snare; *ʔgə-ʔə*  
 snatch, rob; (G) *ʔʃʰie/ʔʃʰək/ʔʃʰie* (R) *ʔʃʰok/ʔʃʰek/*  
*ʔʃʰok* <phrogs<sub>[PST]</sub>/INNV/phrogs>  
 sneeze; (G) *vdzət-pa vje* <sbrid.pa bya> (R) *zət-pa le*  
 <ʔ.pa.las>  
 snow; *kʰa-va* <kha.ba>  
 soak; (G) *rvo/rve/rve* (R) *rvəŋ/rveŋ/rvoŋ*  
 <sbangs<sub>[PST]</sub>/INNV/sbangs>  
 soldier, army; (G) *ʔmie* (R) *ʔmaq* <dmag>  
 sole 腳底; (G) *rko-ʔap* (R) *rkeŋ-ʔap* <rkaŋg.zhabs>  
 something; *ʔək* <ciɡ>  
 son; (G) *pə* <bu> (R) *ʔə-lə* <zha.li>  
 son-in-law; (G) *ʔma-ʔa* (R) *ʔma-ʔa* <mag.pa>  
 song; *ʔlə* <glu>  
 soot; (G) *tə-ʔʃie* <du.dreg> (R) *ʔə-məq*  
 soul; (G) *ʔnem-fe* (R) *ʔnam-fe* <ɹnam.shes>; (spirit,  
 life force) *vla* <bla>  
 sound; *rdza* <sgra>  
 sound (a bell) [VT]; (G) *vdzʰie/vdzək/ldzʰie* (R) *vdzəq/*  
*vdzək/ldzək* <bsgrags<sub>[PST]</sub>/INNV/INNV>  
 south; *lu* <lho>  
 space for drying hay (on third floor of a Tibetan  
 house) *mdza*; (rack above this space) *qʰam*  
 spark; *ʔʰa-la*; (flying out of a fire) (G) *ʔmja-rtie* (R)  
*ʔmje-rtaq* <me.stag>  
 spear; (G) *mdu* (R) *mdoŋ* <mdong>  
 spider; (G) *ʔsə-lə-qa-pa* (R) *ʔtsə-ji-ra-ʔa*  
 spin (yarn); *ʔkʰal/ʔkʰel/ʔkʰol* <ʔkhal/INNV/ʔkhol>  
 spindle; (G) *ʔpʰo* (R) *ʔpʰəŋ* <ʔphang>; (spindle whorl)  
 (G) *ʔpʰo-lu* (R) *ʔpʰəŋ-lu* <ʔphang.lo>;  
 spine, backbone; (G) *rgal-va* <sgal.pa>; (R) *rgal-ʔʰək*  
 <sgal.tshigs>;  
 spit (sputum); (G) *ʔkʰe-let* *ʔpʰo/ʔpʰe/ʔpʰe*  
 <ʔphangs/INNV/INNV>; (R) *ʔkʰa-lat* *ʔʃəq/ʔʃjiq/*  
*ʔʃəq* <g.yug/INNV/g.yug>  
 spleen; (G) *mtsʰər-pa* (R) *mtsʰer-pa* <mtsher.pa>  
 split (e.g. bamboo); *pka/pke/kʰe* <ʔbka/bkas/khos>  
 spoon; (G) *kʰək-lo* (R) *kʰok-lo* <khag.lo>  
 spouse; (G) *ʔzə-riv* (R) *ʔza-rok* <bza.rogs>  
 spread (of a disease); *ʔge* <ʔgos>

spread (threshed crop) to dry in open air; (G) *ʔʰo-ma*  
*vdal/pte/ʔʰe* <thang.ma bdal<sub>[PST]</sub>/INNV/INNV>  
 (R) *ʔʰəŋ-ma vdal/pte/rdol* <thang.ma  
 bdal<sub>[PST]</sub>/INNV/INNV><sup>47</sup>  
 spring(time); (G) *ʔʃfet* (R) *ʔʃət* <dphiyd>  
 sputum; (G) *kʰe-let* (R) *kʰa-lat* <kha.lud>  
 squeeze out; (e.g. pus, toothpaste) (G) *ʔʃfer/ʔʃfir/ʔʃʰer*  
 (R) *ʔʃār/ʔʃfir/ʔʃʰār* <bcir<sub>[PST]</sub>/INNV/chir>;  
 (e.g. ~ excrement during defecation, ~ baby  
 during childbirth) (G) *ʔʃser/ʔʃsir/ʔʃʰer* (R)  
*ʔʃsər/ʔʃsir/ʔʃʰər* <btsir<sub>[PST]</sub>/INNV/tshir>  
 squirrel (*Callosiurus erythraeus*); (G) --- (R) *rdza-*  
*rdzə*  
 stab, jab; (G) *ʔʃsok/ʔʃsək/ʔʃʰok* (R) *ʔʃsək/ʔʃsik/ʔʃʰək*  
 <btsugs/INNV/tshugs>  
 stallion; (G) *ʔʃte-ʔʃsep* (R) *ʔʃsep* <(rta.)gseb>  
 stand; (~ up) *ʔar le* <ɹar.lang>; (maintain standing  
 posture) (G) *ʔar le-ve* *ʔdok* (R) *ʔar le-ve* *ʔdak*  
 <ɹar.lang.ʔ.dug>  
 star; (G) *rkeŋ-ma* (R) *rkar-ma* <skar.ma>; (shooting  
 star) (G) *rkeŋ-mda* (R) *rkar-mda* <skar.mda>  
 stay; (G) *ʔdok/ʔdik/ʔdok* (R) *ʔdok/ʔdik/ʔdak*  
 <dug/INNV/dug>  
 steal; *rka/rki/rki* <rku/brkus/rkus>  
 steam; (G) *ʔle-rpa* (R) *ʔloŋ-rpa* <ɹlang.pa>  
 steel (used with flint to kindle a fire); (G) *ʔmja-ʔʃa* (R)  
*ʔmje-ʔʃa* <me.cha>  
 stick insect 竹節蟲; (G) *mkʰen-ʔbə* (R) *mkʰan-ʔbə*  
 <ʔʔ.bu>  
 still, yet; (G) *ta-rə* (R) *ta-ru* <da.rung>  
 stir-fry, sauté; (G) *ʔʃser/ʔʃsir/ʔʃser* (R) *ʔʃsər/ʔʃsir/ʔʃsər*  
 <gsir/INNV/gsir><sup>48</sup>  
 stirrup; (G) *ʔop-ʔʃen* (R) *ʔop-ʔʃan* <yob.chen>  
 stomach; *ʔʰo-kʰa* <pho.kha>  
 stone; *rdū* <rdo>  
 stone slab 石板; (G) *ʔdo-lep* (R) *ʔdo-lep* <rdo.leb>  
 stop, cease; (G) *ʔdok/ʔdik/ʔdok* (R) *ʔdak/ʔdik/ʔdak*  
 <dug/INNV/dug>  
 storage room; (G) *ʔʃa-kʰo* (R) *ʔʃa-kʰəŋ* <rgyu.khang>  
 storm, gale; (G) *ʔʃlu-ʔʃʰep* (R) *ʔʃlu-ʔʃʰəp* <ɹlung.tshub>  
 story; (G) *ʔʃpi* <dpe> (R) *ʔna-ʔʃat* <gna.bshad>  
 strawberry; (G) *ʔʃək-lom* (R) *ʔga-ʔlāt*  
 street (R) (bazaar, market) *ʔʃəŋ-ra* <tshong.ra>  
 strength; (G) *ʔxet* (R) *ʔxet* <shed>  
 stretch out (e.g. hand); (G) *ʔʃo/ʔʃe/rce*  
 <brkyangs<sub>[PST]</sub>/INNV/INNV> (R) *ʔʃəŋ/ʔʃen/ʔʃoŋ*  
 <brkyangs<sub>[PST]</sub>/INNV/rkyongs>

47. Stem suppletion is noted in this verb. The Gserpa past and imperative stems are secondarily derived from *ʔti* <bting> 'spread' (q.v.). In Rdoskad, the past stem is suppletive in the same way, whereas the imperative stem *rdol* was innovated from the present stem *vdal* via *v* → *r* replacement as discussed in §4.3.2.2.

48. Original meaning is 'whirl something about; turn something quickly'.



string (beads); (G) *vʃə/vji/rji*  
 <brgyu[<sub>POST</sub>]/INN/rgyus> (R) *vʃən/vjin/rʃən*<sup>49</sup>  
 string made of oxhide; (G) *ⁿdzi-pa* <'brenɡ.pa> (R)  
*tʰə-ʃa* <thag.pa>  
 struggle, fight with contortions of the body; (G) *ⁿpʰie/*  
*ⁿpʰək/ⁿpʰie* <'phag/INN/ⁿphags> (R) *ⁿpʰəq/*  
*ⁿpʰəq/ⁿpʰəq* <'phag>  
 stutterer; (G) *ltʃə-lot* <lce.ʔ> (R) *tak-lo* <dig.lo>  
 subside (e.g. of a swelling); (G) *ʒəl* (R) *ʒəl* <zhuł>  
 suck; (G) *ⁿdʒep/ⁿdʒip/ⁿdʒep* (R) *ⁿdʒəp/ⁿdʒip/ⁿdʒəp*  
 <'jib/INN/ⁿjibs>  
 suckle, breastfeed [TR]; (G) *nə-ma fnon/fnin/fnon*  
 <nu.ma bsnun[<sub>POST</sub>]/INN/ⁿsnun/INN><sup>50</sup> (R) *nə-*  
*ma fñən/fnin/ⁿñən* <nu.ma  
 bsnun[<sub>POST</sub>]/INN/ⁿsnun>  
 suffer frost damage; *sat* <sad>  
 sugar, candy; (G) *vdzəŋ* <sbrang> (R) *pə-ram*  
 <bu.ram>; (crystal sugar) *kə-re* <ka.ra>  
 sulphur; *mə-zə* <mu.zi>  
 summer; *ɛʃar* <dbyar>  
 sun; *ɲə-ma* <nyi.ma>  
 sunbathe; (G) *ɲə-ma* <de <nyi.ma 'de> (R) *ɲə-ma le*  
 <nyi.ma lde><sup>51</sup>  
 sunlight; (beam of sunlight) (G) *ɲə-tok* (R) *ɲə-tək*  
 <nyi.thig>; (advancing sunlight utilized for  
 measuring time of day) (G) *ɲə-zer* (R) *ɲə-zər*  
 <nyi.zer>  
 supper; (G) *nəp-tʃə* (R) *nəp-tʃə* <nub.chu>  
 support (somebody with one's hands); *fcor/fcer/rcor*  
 <bskyor[<sub>POST</sub>]/INN/ⁿskyor>  
 surely; (G) *səm-tie* (R) *sem-təq* <sems.thag>  
 surroundings; (G) *mtʰa-(kʰa)*; (R) *mtʰa-kʰa*  
 <mthakʰa>  
 swallow [v]; (G) *myet* (R) *myət* <mid>  
 sway, shake; [INTR] (G) *ɛʃok* (R) *ɛʃək* <g.yug>; [TR]  
 (G) *ɛʃok/ɛʃik/ɛʃok* (R) *ɛʃək/ɛʃik/ɛʃək*  
 <g.yug/INN/ⁿg.yug>  
 sweat; (G) *tʰə-tok* <tsha.ʔ>; *ɲəʃ-tʰə* (R) *ɲəʃ-tʰə*  
 <bcu.chu>  
 sweep; (G) *ptʰie/ptʰək/ptʰie*  
 <phyags[<sub>POST</sub>]/INN/phyags> (R) *fʃəq/fʃek/fok*  
 <phyags[<sub>POST</sub>]/INN/INN>  
 sweets made from cheese 奶渣糕; (G) *tʰet* (R) *tʰət*  
 <thud>  
 swell, become swollen; *rʃe* <skrang>  
 swish; (G) *fi-lʃie* (R) *fi-lʃəq* <shing.lcag>  
 sword; (short) (G) *rpa-č'a* (R) *rca-pa*; (long) *ʃəŋ-ləŋ*  
 <shang.lang>

tadpole; (G) *tʰə-ⁿbə* 'go-rdɛ (R) *tʰə-ⁿbə* 'go-rdok  
 <chu.'bu.mgo.rdog>  
 tail; *ɲə-ma* <rnga.ma>; (tailbone) (G) --- (R) *ɲə-*  
*ɛom* <rnga.ʔ>  
 tailor; (G) *vzo-və* (R) *vzo-va* <bzo.ba>  
 take; (G) *vlo/vle/li* (R) *vləŋ/vle/lu*  
 <blangs[<sub>POST</sub>]/INN/longs>  
 take a step 跨步; (G) *kə-ⁿba vlo* <gom.pa blangs> (R)  
*ko-ⁿba rpu/rpe/rpe* <gom.pa spo/spos/spos>  
 take away, take thither; (G) *č'et/č'e/č'et* (R) *č'et/č'e/*  
*č'et* <khyer/INN/ⁿkhyer>  
 take out, drive out; (G) *pʰet/pʰit/pʰet* (R) *pʰət/pʰit/*  
*pʰət* <phud[<sub>POST</sub>]/INN/ⁿphud>  
 talk, converse; *ca-mda fʃat* <?.bshad>  
 tamarisk 紅柳; (G) *rpa-ⁿma* (R) *rpen-ma* <spen.ma>  
 tangkha (traditional Buddhist painting) 唐卡; (G)  
*tʰo-ka* (R) *tʰəŋ-kʰa* <thang.kha>  
 target; (G) *ⁿben* (R) *ⁿben* <'ben>  
 tartar 齒垢; (G) *so-rcie* (R) *so-rcəq* <so.skyag>  
 tax; *tʃ'al* <khral>  
 tea; *tʃa* <jə>; (milk tea) (G) *kər-ka* (R) *kar-ka*  
 <dkar.khu>  
 teach; (G) *ltsap/ltsap/ltsop* (R) *ʃtsap/ʃtsap/ltsop*  
 <bslabs[<sub>POST</sub>]/INN/ⁿslobs>  
 teacher (R) *rge-rgan* <dge.rgan>; *rlap-χpon*  
 <slob.dpon>  
 tear [TR]; (~ up) (G) *χtet/χtit/χtet*<sup>52</sup> (R) *χsem/χsim/*  
*χsem*; *χsem-jaq le*; (rip open) (G) *χtet/χtit/χtet*  
 (R) *χtet/χtit/χtet*; (~ off a part of) *χʃar/χʃer/χʃor*  
 tears (shed when weeping); *mtʃ'a-ma* <mchi.ma>;  
 (watery liquid secreted from eye) (G) *ɲəʃək-tʃə*  
 (R) *ɲəʃək-tʃə* <dmyig.chu>; (shed tears) (G)  
*ⁿdʒəl* (R) *ⁿdʒəl* <'brul>  
 tease (wool); (G) *set/sit/set* (R) *set/sit/set*  
 <sed[IMP]/INN/ⁿsed>  
 tell; (provide information) (G) *skat vje* <skad.byə>  
 (R) *rkat le* <skad.las>; cf. 'recount'  
 temple 太陽穴; (G) --- (R) *za-ju*  
 ten; *ptʃə* <bcu>  
 ten thousand; *tʃəʃə-(lə)* <khri.ʔ>  
 tenderloin; (G) *vʒie* (R) *nəŋ-vʒok*  
 tendon, sinew; (G) --- (R) *ɲə-ṛkal* (cf. OT  
 <rgyus.pa>)  
 tent; (G) *kər rter-su-ma* (R) *kər rtar-su-ma* <gur.ʔ>;  
 (yak-hair tent) *rva* <sbra>  
 tether; (G) *ptie/ptək/tʰie* (R) *ptaq/ptek/tʰok*  
 <btags[<sub>POST</sub>]/INN/ⁿthogs>  
 that; *tə* <de>; (ERG/GEN case) *ti* <de'i; de'is>; (that up  
 there) *jo-tə* <ya.de>; (that there: same level) *mo-*  
*tə* <ma.de>; (that down there) *pʰo-tə* <pha.de>  
 that day; (G) *ti-ñan-ⁿber* (R) *ti-ñan-par*  
 <de'i.nyin.par>  
 then; (G) *tə-ne* <de.nas> (R) *tə-ke* <de.ʔ>  
 these; [DU] *ⁿdā-ñi* <di.nyis>; [PL] (G) *ⁿdā-kʰo* (R) *ⁿdā-*  
*tʃʰa-ka* <di.ʔ>

49. The Rdoskad forms were created via analogy on the basis of a nominal OT form <rgyun> 'continuity' (derived from <rgyu> 'string together').

50. The Gserskad imperative *fnon* is a blend of the onset of the modern past stem *fñ-* plus *-on* from the OT imperative *snun* 'suckle'.

51. Preserving an older form of OT <lde>, <'de>, from pre-Tibetic *†ⁿle*.

52. Cf. OT <thed>; Rkakhog and Themchen Amdo *ʰtet*.

they; [DU] (G) *tə-ni* <de.nyis> (R) *tə-ni-rka* <de.nyis.ʔ>; [PL] (G) *tə-kʰo* (R) *tə-tʰa-ka* <de.ʔ>

thick liquid, liquid of a soup, semen; *kʰa-va* <khu.ba>

thicket; (G) *fi-rdzep* (R) *fi-tsʰap* <shing.ʔ>

thief; *rkən-ma* <rkun.ma>

thigh; *vla* <brla>

thimble; *tʰə-mu* <?.mo>

thing, object; (G) *ptʃa-ka* (R) *ptʃa-ka* <ca.lag>

think, hold an opinion; *ʃsam* <bsam>

thirteen; (G) *ptʃək-som* (R) *ptʃək-səm* <bcu.gsum>

thirty; *səm-tʃə* <sum.cu>

this; *ʔdə* <di>

thorn, splinter; *tsʰər-ma* <tsher.ma>

those; [DU] *tə-ni* <de.nyis>; [PL] (G) *tə-kʰo* <de.ʔ> (R) *tə-tʰa-ka* <de.ʔ>

thousand; *rtɔŋ* <stong>

thread (a needle); (G) *kʰap-rna vʃə/vji/rji* (R) *kʰap-rna vʃə/vji/rji* <khah.rna brgyu/brgyus/rgyus>

three; (G) *χsom* (R) *χsəm* <gsum>

thresher 連枷; *ʃjak-rkor* <dbyug.skor>

threshing ground (on third floor of a Tibetan house) (G) *ra-ka* (R) *tʃa-kʰa*

throat; (G) *lkok-ma* <lkog.ma> (R) *mjət-pa* <mid.pa>

throw at, throw away; (G) *ʃjok/ʃjik/ʃjok* (R) *ʃjak/ʃjik/ʃjak* <g.yug/INNV/g.yug>

thumb; (G) *tʰə-mi* (R) *tʰe-mu* <mthe.mo>

thunder; (G) *mdzok* (R) *mdzək* <'brug>

thunderbolt; (G) *tʰie* (R) *tʰok* <thog>

Tibetan; *pot* <bod>

Tibetan antelope (*Pantholops hodgsonii*) 藏羚羊; *χtsu* <gtsod>

Tibetan partridge (*Perdix hodgsoniae*) 高原山鶉; (G) *ʃso-χa* <ʔ> (R) *ʃə-χa* <sreg.pa>

Tibetan snow cock (*Tetraogallus tibetanus*) 淡雪雉; *ku-mu* <gong.mo>

Tibetan wild ass (*Equus kiang*) 西藏野驢; (G) *rcoŋ* (R) *rcəŋ* <rkYang>

tickle; (G) *qə-tʃə vje* (R) *tʃə-qə le* <ʔ.byas>

tiger; (G) *rtie* (R) *rtəq* <stag>

tighten (when biding sth); *vdam/vdem/rdom* <bsdams<sub>[PST]</sub>/INNV/sdom>

tin; *χʃa* <gshaʔ>

tinder, spunk 火絨; (G) *χtʃa-va* (R) *rtʃa-va* <spra.ba>

tip; (end of a long object) *ɲni* <sne>; (pointed tip) *ngu* <mgo>

today; *tə-ri* <de-ring>

together; (G) *ʃən-lə* <lhān.la> (R) *ʃān-na* <lhān.na>

tomb; (G) *tər-sa* (R) *tər-su* <dur.sa>

tomorrow; (G) *se-ɲen* (R) *se-ɲən* <sang.nyin>; (day after tomorrow) (G) *ɲne-ɲen* (R) *ɲne-ɲən* <gnangs.nyin>; (second day after tomorrow) (G) *ɲze-ɲen* (R) *ɲze-ɲən* <gzhes.nyin>

tomorrow night; (G) *se-nəp* (R) *se-nəp* <sang.nub>

tongs; (G) *rke-ʔba* <skam.pa> (R) *mje-rkam* <me.skam>

tongue; *ltʃi* <lce>; (tongue tip) (G) *ltʃə-ʔgu* (R) *ltʃi-ʔgu* <lce.mgo>

tonight; (G) *to-nəp* (R) *to-nəp* <do.nub>

too (much); *ɲa-ʔba*

tooth; *su* <so>; (incisor tooth) *ɾɲən-su* <sngun.so>; (molar tooth) (G) *ʔdzem-su* (R) *ʔdzam-su* <gram.so>

torch; (G) *χpel-ʔbar* (R) *χpal-ʔbar* <dpal'bar>

touch 觸碰; (G) *tʰok/tʰik/tʰok* (R) *tʰək/tʰik/tʰək* <thug/INNV/thug>

tow, drag; (G) *tʃet/tʃit/tʃet* (R) *tʃət/tʃit/tʃət* <drud<sub>[PST]</sub>/INNV/drud>

trace; *rdʒe* <rjes>; (trace of something which used to exist at a location) (G) *ʃel* (R) *xəl* <shul>

transport; *fca/fce/rce* <bskya<sub>[FUT]</sub>/bskyas/skyos>

travelling companion; (G) *ʔdzu-rie* (R) *ʔdzu-rok* <gro.rogs>

tread, step on; (G) *χtʃer/χtʃir/χtʃer* (R) *χtʃər/χtʃir/χtʃər* <gcir/INNV/gcir>

treasure (in a religious sense); *nor-və* <nor.bu>

tree; *ʃi* <shing>

tremble, shiver; *ʔdar* <dar>

tripe 牛肚; *tʃot-pə* <grod.pa>

trivet; (G) *rjət-pə* (R) *rjet-pə* <sgyed.bu>; (traditional style) (G) *mə-rjet* (R) *ma-rjet* <me.rgyed>

trough 槽; *ʃi-rku* <shing.rko>

true; (G) *tok-ma* (R) *taq-ma* <dag.mo>

tsampa (parched barley flour); *rtsa-ʔba* <rtsam.pa>

tsatsa (figurines made from bone ashes and clay); *ri-tʃa* <rus.tsha>; [HON] *ʔdon-tʃa* <gdung.tsha>

tufted deer (*Elophodus cephalophus*) 毛冠鹿; (G) *nek-rvi* (R) *naq-rvi* <nags.ʔ>

tumor; (G) *lva* (R) *lva* <lba>

turn, spin [INTR]; (G) *ʔdzen* (R) *ʔdzen*

turn, spin [TR]; *ʃkor/ʃker/rkor* <bskor<sub>[PST]</sub>/INNV/skor>

turn (sth) inside out; (G) *ptʃə-no vjer/vjir/rjer* (R) *ʃʃə-nəŋ vjer/vjir/rjer* <phyi.nang bsgyur<sub>[PST]</sub>/INNV/sgyur>

turn on (a light); (G) *ptʃi/ptʃe/ptʃe* <phye<sub>[PST]</sub>/INNV/phyes> (R) *ʃfi/ffe/fe* <phye<sub>[PST]</sub>/INNV/INNV>

turn over 翻面; (G) *vjər-lie vje* <bsgyur.log bya> (R) *ʃʃə-nəŋ vjer/vjir/rjer* <phyi.nang bsgyur<sub>[PST]</sub>/INNV/sgyur>

turn over (change position of body when lying) 翻身; (G) *ʔdzə-lie* *tʰen* <ʔ.log then> (R) *ʃʃok vʒi* <phyogs brjes>

turnip 蕪菁; (whole plant) *rə-le*; <sup>53</sup> (tuber) *rə-le* (greens) *ra-le lo-ma* <lo.ma>; (pickled greens) (G) *lo-rcer* (R) *lo-rcər* <lo.skyur>

turquoise 松石; *ʃə* <gyu>

turtle; *rə-rval* <rus.sbal>

turtledove; *pi-pi-tu-tu*

tusk, fang; (G) *mtʃə-va* (R) *mtʃə-va* <mche.ba>

twelve; *ptʃək-ɲi* <bcu.gnyis>

twenty; *ɲə-ʃə* <nyi.shu>

twenty-one; *ɲə-ʃə rtse-χtsə* <nyi.shu.rtsa.gcig>

twins; (G) *mtsʰi* (R) *mtsʰe-le* <mtsʰe.ʔ>

twist; (e.g. ~ a towel) *χtʃə/χtʃi/χtʃi* <gcu<sub>[FUT]</sub>/gcu/s gcu>; (~ yarn into thread) (G) *vdzom/vdzim/rdzom* (R) *vdzəm/vdzim/rdzəm*

53. From Rgyalrongic; Showu *ralē*.

two; *nyi* <gnyis>  
 umbrella; (G) *ɸdɔk* (R) *ɸdɔk* <gdugs>  
 uncle; (maternal) (G) *v-ɜɔ* (R) *a-ɜɔ* <a-zhang>;  
 (paternal) (G) *v-kʰə* (R) *a-kʰə* <a.khu>  
 underside; *ɜap* <zhab>  
 understand; *ku* <go>  
 unwind, untie, dismantle; (G) *ffɔk/ffik/ɸok* (R) *ffɔk/ffik/ɸɔk* <bshigs<sub>[PST]</sub>/INNV/shig>  
 upstairs; (G) *kʰə-tie* <khang.thog>; (R) *rtəŋ* <steng>  
 urine; (G) *ɸtʃən* (R) *ɸtʃən* <gcin>  
 use; (G) *ʰtʃəŋ/ʰtʃəŋ/ʰtʃəŋ* (R) *ʰtʃəŋ/ʰtʃəŋ/ʰtʃəŋ*<sup>54</sup>  
 uvula; (G) --- (R) *ɜɔŋ-ɾca*  
 valley; (large ~) (G) *kʰie* (R) *kʰok*; (small ravine); *lu-pa* <lung.pa>  
 valley's mouth; *mdu* <mdo>  
 vegetable; (G) *ldə-ʰbə* <ldum.bu> (R) *lo-ma* <lo.ma>;  
 (~ garden) (G) *tsʰe-ʒi* (R) *ɾpɔk-ʒi*  
 vermilion 硃砂; *mtsʰal* <mtshal>  
 vertical; (G) *cən-tʰer* (R) *cən-tʰer* <gyen.thur>  
 very; (G) *v-tsi(-va-tsə)*; *ŋen-pa* (R) *mə-ʰdʒa(-va(-tə)*  
 <mi.dra.ba(de)>; *tʰə-mu*  
 victory; *ɾjal* <rgyal>  
 village; *tsʰo-va* <tsʰo.ba>  
 voice; *ɾkat* <skad>  
 vomit; (G) *ɾcok* (R) *ɾcək* <skyug>  
 vow, swear; *mna fcal/fcel/ɾcol* <mnaʼ  
 bskyal<sub>[PST]</sub>/INNV/skyol>  
 vulture 秃鷲; (G) *(ptʃe)-rgot* (R) *(ffa)-rgod*  
 <bya.rgod>; (bearded vulture, *Gypaetus*  
*barbatus* 胡兀鷲) (G) *ku-toŋ* (R) *ku-jor* <go.ʔ>  
 (cf. OT <go.bo>)  
 vulva; *rtə* <stu>  
 wade; (G) *ʰbie/ʰbek/ʰbie* (R) *ʰbok/ʰbek/ʰbok*  
 <ʰbogs/INNV/ʰbogs>  
 wages; *ɜla* <gla>  
 waist; (G) *ɾkət-pa* (R) *ɾket-pa* <ɾked.pa>  
 wait; (G) *vgok/vgik/rgok* (R) *vgək/vgik/rgək*  
 <bsgugs<sub>[PST]</sub>/INNV/sgugs>  
 wake up; *sat* <sad>  
 wall; (G) *co* (R) *cəŋ* <gyang>  
 walnut; (G) *kʰe-ʰbə rta-rga* (R) *kʰa-ʰbə rta-rga*  
 <kham.bu.star.ga>  
 want; (desire to do sth) *fsam* <bsam>; (need to do  
 sth) *rge* <dgos>  
 warm oneself at fire, bake sth beside fire; (G) *fsu/ɸse/*  
*rse* (R) *fsu/ɸse/rtse* <bsro<sub>[FUT]</sub>/bsros/sros>  
 warp 經線; *ɾjə* <rgyu>  
 wart; (G) *ʰdʒə-ɾə* (R) *ʰdʒə-ɾə* <ɸder.pa>  
 wash; *ptʃə/ptʃi/ʰtʃi* <bkrū<sub>[FUT]</sub>/bkrus/khrus>  
 watch tower; *mkhar* <mkhar>  
 water; *tʰə* <chu>  
 water conduit 導水管; (G) *ɣe-ke* (R) *ɣa-kʰa* <wa.kha>  
 wave; (G) *tʰə-ɾlap* (R) *tʰə-ɾlap* <chu.ʔ><sup>55</sup>

54. Probably a loan from Rgyalrongic; cf. Showu *ntʰə*; Tshobdun *ntʰi*; Northern Horpa *ntsʰə*, Western Horpa *mtʰə*.

55. Cf. OT <chu.rlabs>.

we; [DU] *ɳə-ni* <nga-nyis>; [PL] (G) *ɳə-kʰo* <nga.ʔ>  
 (R) *ɳə-tʰə-a-ka* <nga.ʔ> (cf. Rkakhog Amdo *ɳə-tʰə-a-ka*)  
 wear; (G) *con/cin/con* <gyon/INNV/gyon> (R) *kon/kin/kon* <gon/INNV/gon>; (~ a bracelet) (G) *ptie/ptək/tʰie* (R) *ptəq/ptek/tʰok*  
 <btags<sub>[PST]</sub>/INNV/thog>  
 weasel; (Siberian weasel; *Mustela sibirica*) *rti-li* (cf. Northern Horpa *rtili*); (mountain weasel; *Mustela altaica*) (G) *rsen-mu lek-ker*  
 <sre.mong.lag.dkar> (R) *ʃe-moŋ* <sre.mong>  
 wedge 楔子; *cʰə* <ɸkhyi>; cf. <khyiʰu>  
 weeds; *ldə-ʰbə* <ldum.bu>  
 weep; *ɳə/ɳi/ɳi* <ngu/ngus/ngus>  
 weft 緯線; (G) *ɾpon* (R) *ɾpən* <spun>  
 west; (G) *nep* (R) *nəp* <nub>  
 what (interrogative pronoun); *tʃə-tsə* <ci.zig>  
 wheat; (G) *tsu* <gro> (R) *qa* <Rgyalrongic, cf. Zhongre *qā*)  
 wheat stubble 麥茬; *sok-rtsu* <sog.ʔ>  
 wheel; *kʰor-lu* <ʰkhor.lo>  
 when; (interrogative adverb) *nam* <nam>; (at the time when) (G) *tie* (R) *ti* <du>  
 where (interrogative adverb); (G) *ka-sə* (R) *ka-te* <ga.ʔ>  
 whey 乳清; (G) *ɾŋo-kə* <sngo-khu> (R) *tʰə-ka* <phyur-khu>  
 which (interrogative pronoun); (G) *ko-tə* (R) *ka-tə* <ga.ʔ>  
 while, all the while; *ʒor* <zhor>  
 whip; (G) *ltʃiek-tan* <lcag.ʔ> (R) *ltʃəq* <lcag>; (beat with whip); (G) *ltʃiek-fet vje* <lcag.shad.byə> (R) *ltʃəq-fat le* <lcag.shad.las>  
 whirlwind (lesser ~; dust devil); (G) *pa-la-pa-qe* (R) *pa-la tsʰap-jək*  
 whistle 吹口哨; (G) *fsə vje* (R) *fsə le* <Rgyalrongic; cf. Tshobdun *téfsi*> + <bya/las>; (blow ~ 吹哨子) (G) *vʒə-xat vje* (R) *vʒə-xa le* <?.bya/las>  
 white conch 白海螺; *toŋ-kar* <dung.dkar>  
 white grub 蛴螬; (G) --- (R) *ʰbə ka-la-rtəŋ-ɾdək*  
 who; *sə* <su>  
 why; (G) *tʰə-ɣa-ɾe* (R) *tʰə-ɣa-ɾe*  
 widow; *jək-sa-ma* <yugs.sa.ma>  
 wife; (G) *ɸtʃə-mu* <sprang.mo> (?) (R) *nəq-mu* <nag.mo>  
 wild boar; (G) --- (R) *pʰəq-rgot* <phag.rgod>  
 wild goose; (G) *cʰəŋ-cʰəŋ* <khrung.khrung> (R) *(ffa)-lcʰəŋ* <(bya).khrung>  
 wild yak; *mdzəŋ* <ʰbrong>  
 will-o'-the-wisp 鬼火; (G) *dʒə-mɳi* (R) *dʒe-mɳi* <ɸdre.me>  
 willow 高山柳; (G) *ɜlo-ma* (R) *ɜləŋ-ma* <glang.ma>  
 wind [N]; *ɾlu* <rlung>  
 wind (thread into a spool); (G) *tsə-ɣə vgu/vge/rge* (R) *tsə-ɣə vʒə/vʒi/ʒi*  
 wind (yarn); *ɸtʃə/ɸtʃi/rtʃi* <bkrū<sub>[PST]</sub>/INNV/dkris>  
 window; (G) *rke-rku* (R) *rka-rku* <dkar.khung>  
 windpipe; (G) --- (R) *u-ɾə*  
 wing; (G) *ɸfo-ɳa* (R) *ɸfo-ɳa* <gshog.pa>

- winnow; (G) *ptʰar/ptʰer/ptʰor*  
<phyar<sub>[PST]</sub>/INN/phyor> (R) *ffar/ffer/for*  
<phyar<sub>[PST]</sub>/INN/INN>
- winter; (G) *rgon* (R) *rgən* <dgun>
- wipe 擦拭; (G) *ptʰə/ptʰi/ptʰi* <†phyi/phyis/phyis>  
(R) *ffə/ffi/fi* <†phyi/phyis/INN>
- wipe out, erase 擦掉; (G) *pta/pte/ṭhe* (R) *vda/vde/rde*
- wither; (G) *rjæt* (R) *rjət* <rnyid>
- wolf; (G) *fco-kə* (R) *fcaŋ-kə* <spyang.khu>
- woman; (G) *ftʰo-mu* <?.mo> (R) *nəq-mu* <nag.mo>
- woodpecker; (G) *fi-ʰba-ṭo-qo* (R) *ffi-ʰba-ṭot-χtsok*
- wool; *pal* <bal>
- woolen raincoat; (G) *ptʰi-və* (R) *ptʰi-pa* <phying.pa>
- worship, go on pilgrimage; *mdʒal* <mjal>
- wound [N]; *rma-kʰa* <rma.kha>
- wrinkle; *ɣnər-ma* <gnyer.ma>
- wrist; (G) *lək-rki* (R) *laq-rki* <lag.ske>
- write; *ptʰə/ptʰi/tʰi* <bri<sub>[FUT]</sub>/bris/phris>
- writing, word, letter; (G) *ja-ki* (R) *ja-yi* <yi.ge>
- wrong [VT]; (G) *χle* (R) *χləŋ*
- yak; (G) *ɣjiv* <g.yag> (R) *mdʒə-ɣjəq* <ʰbri.g.yag>;  
(yak bull) (G) *ɣja-yə* <g.yag.bu> (R) *ɣjəq*  
<g.yag>; (uncastrated yak bull) *nor-ma*  
<nor.ʰma>; (female ~) *mdʒə* <mbri>; (~ calf  
under one year) *pi-la* <be'u.li>; (~ calf up to two  
years) *ja-rə* <ya.ru>
- yak and dzo hair (coarse and long); *rtsət-pa*  
<rtsid.pa>; (on tail) *rŋa-rtsət* <rnga.rtsid>
- yarn string for sewing; *rkət-pa* <skud.pa>
- year; lu <lo>; (this year) *to-tʰə* <do.tʰshig>; (last year)  
(G) *nan-lu* <?> (R) *na-ni* <na.ning>
- yeast; *pʰap* <phab>
- yesterday; (R) *kʰe-rtsə-ma* (R) *kʰa-rtsə-ma*  
<kha.rtsang.ʰma>; (day before yesterday) (G)  
*kʰe-rjə-ʰba* (R) *kʰa-rjə-ʰba* <khes.nyin.ʰpa>;  
(second day before yesterday) (G) *ɣʒə-rjə-ma*  
<gzhes.nyin.ʰma> (R) *ɣʒə-rjə-n-bar*  
<gzhes.nyin.ʰpar>
- yield (right of way to); (G) *vzer/vzir/zər*  
<bzur<sub>[PST]</sub>/INN/zur> (R) *zər/zir/zər*  
<zur<sub>[IMP]</sub>/INN/zur>
- yogurt; *zu* <zho>
- yoke; (G) *ɣjə-fi* (R) *ɣja-fi* <gnyəʰshing>
- you; ho; (ERG/GEN case) *he*
- you; [DU] (G) *hə-ji* <?.nyis> (R) *hə-ji-rka* <?.nyis.ʰ?>;  
[PL] (G) *hə-kʰo* (R) *hə-ṭʰa-ka*
- young adult; (male) *pʰo-sar* <pho.gsar>; (female) *mo-sar*  
<mo.gsar>
- young animal; (G) *ptʰok* (R) *ptʰək* <phrug>; (R) *pə*  
<bu>
- zipline; (G) *ptʰoŋ* (R) ---
- zodiac sign; (G) *lo-ŋni* (R) *lo-ŋŋəŋ* <lo.snying>

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