Preliminary notes on the languages of the Bumthang group

Boyd Michailovsky, Martine Mazaudon

HAL Id: **halshs-00259369**

https://shs.hal.science/halshs-00259369

Submitted on 28 Feb 2008

PRELIMINARY NOTES ON THE LANGUAGES OF THE BUMTHANG GROUP

Boyd MICHAILOVSKY and Martine MAZAUDON (CNRS, Paris)

1. The Bumthang languages

Bhutan is home to perhaps a dozen Tibeto-Burman languages; the three major ones, from west to east, are Dzongkha, the official language, linguistically a Tibetan dialect, Bumthap, and Sharchop (or Tshangla).

The main language of Central Bhutan, Bumthap, and its varieties or relatives may be referred to as the Bumthang group. This group is somewhat diverse. We will base our description on Kurtoep (Kt), the language of Dungkar and the Kurtoe ("upper Kuru Valley") region in Lhuntse district to the east of Bumthang, on which we collected data in Delhi in 1977-78. Bumthap proper (Bt) is the language of the four valleys of Bumthang district; we have a small amount of data, collected in Bhutan in 1986, on the dialects of Chume (Cm), Choekhor (Ck), and Ura (U) (the remaining valley is Tang). Kurtoep, Bumthap proper, and, by all reports, Khengke, to the south of Bumthang, are mutually intelligible. We have also included some preliminary material on a more divergent language, Mangdep[1], from Tangbi village in Tongsa district (see map), which may also belong to the Bumthang group.

The Bumthang languages are clearly closely related to Tibetan in addition to being heavily influenced by it, but we will show evidence that they are not Tibetan dialects, that is, unlike Dzongkha, they are not continuations of (roughly) the language reflected in the Tibetan writing system.
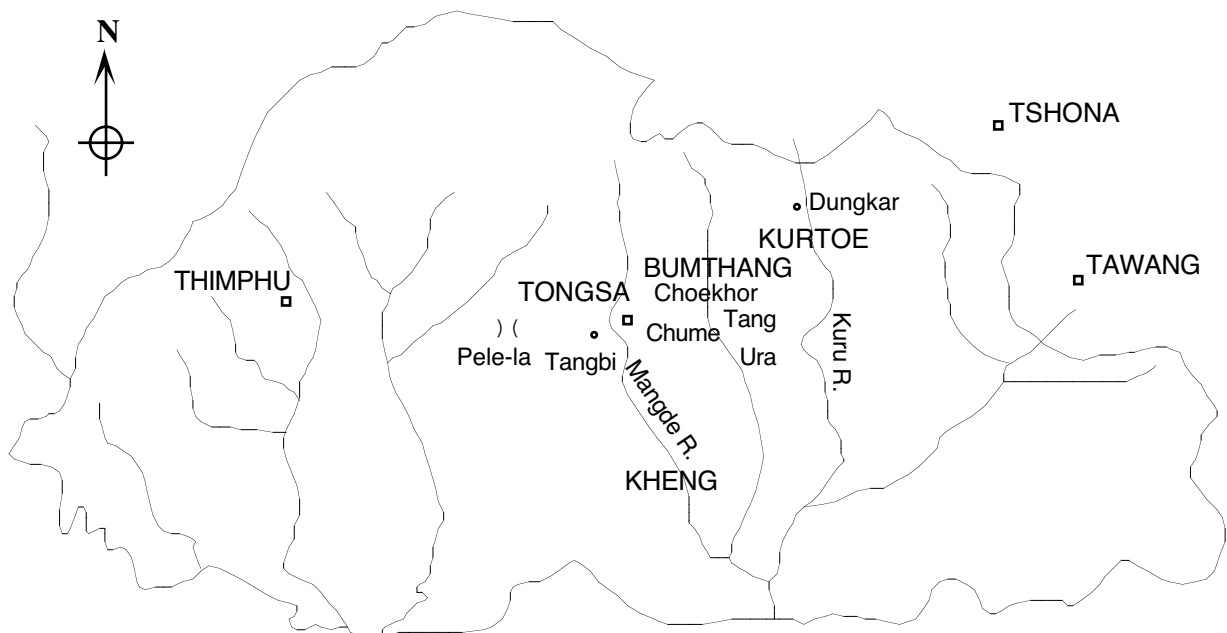
Map of Bhutan

1.1 Bumthang and Dakpa

The closest relative of the Bumthang group on which studies have been published is probably the Dakpa language spoken in the areas of Tawang in Arunachal Pradesh and Tshona in Southern Tibet, and in neighboring parts of Bhutan.[2] On the basis of Hodgson's (1853) vocabulary, Shafer (1954) published a short historical study and classification of this language, which he designated as "Dwags", following a Tibetan orthographic convention.[3]

Shafer noted traits in Dakpa which appeared to be archaic compared to Old Tibetan, and pointed out that several of these (e.g. nis '7') were shared by Jiarong and other Tibeto-Burman languages. These are traits retained from Tibeto-Burman, however, and not innovations, so their presence cannot be used as a basis for subgrouping within Tibeto-Burman. (Tibetan *bdun* '7', on the contrary, is an innovation, one of many that together define the Tibetan dialect group.) Thus, Shafer did not suggest that Dakpa and Jiarong were more closely related to each other than to Tibetan; indeed he put Tibetan and Dakpa together in one branch of his Bodish section, with Jiarong, Tamang/Gurung and Tshangla (less correctly Tsangla) as the other branches. The validity of this Bodish section itself (particularly concerning Jyarong) needs to be restudied using new data which has become available.
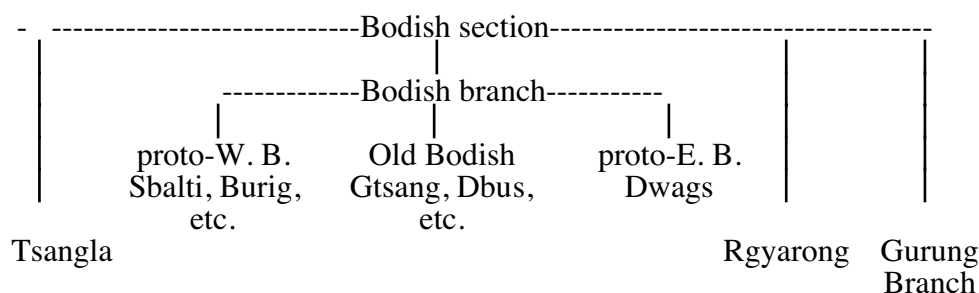
```
-  ---------------------------Bodish section-----------------------------------
    |                              |                          |        |
              -------------Bodish branch----------
              |              |              |
          proto-W. B.    Old Bodish    proto-E. B.
          Sbalti, Burig, Gtsang, Dbus,   Dwags
             etc.           etc.
  Tsangla                                            Rgyarong   Gurung
                                                                Branch
```

Fig. 1. Shafer's (1954/1966) classification of "Dwags" (Dakpa).

It will be clear from the data cited below that Bumthang and Dakpa are not the same language. Nevertheless they have much in common, and we can tentatively place them in the same subgroup.

In the present study we will present data from several forms of Bumthang[4], and offer comparisons with Dakpa, Written Tibetan (WT), and, when it provides information which can help us look further back than WT, with the Tamang-Gurung-Thakali-Manangba[5] group (TGTM), a somewhat conservative group of languages spoken in Nepal, which belongs in the Bodish Section but outside the Bodish Branch.

2. The Phonology of Kurtoep

The segmental phonology of the Bumthang languages, as exemplified by Kurtoep, is not untypical of languages of the Bodish Branch, with four series of consonants in the dento-palatal area (c,ts,ṭ,t), as against five in Central Tibetan (CT), two tonal registers, high and low, correlated with voicing oppositions in the initial consonant, and remnants of initial clusters. It is richer than CT or Dzongkha (Dz) and poorer than the neighboring TGTM Branch. Its array of final consonants is rich as compared to other modern Bodish Branch languages. Its vocalic system is only starting to complexify with the introduction of diphthongs, but without the multiplication of vowel qualities found in CT.

Initials:

high-toned	k	c	ç	ts	s	ṭ	t	p
high-toned	kh	ch		tsh		ṭh	th	ph
low-toned	g	ɟ	ẓ	dz	z	ḍ	d	b
high/low-toned	ŋ	ñ					n	m
high/low-toned	j	r	l					
low-toned				w				
mostly high-toned:	vocalic initials							

Initial clusters:

kw	pj	pr	pl
khw	phj	phr	
gw	bj	br	bl
(ŋw)	mj	mr	

Word-final consonants:

(k)	t	p
ŋ	n	m
	r	

Word-internally:

add	k	s

Vowels:

i   e   a   o   u

Diphthongs:

au, iu
ui ~ ü, oi ~ ö, ai ~ eː

Length:
On open syllables only, Kurtoep has a distinction between short smooth and long glottalized syllable-types. (This distinction is absent in Bumthap proper — see below.) In addition, the presence of a grammatical morpheme may lead to a long smooth syllable, as in /wiː/ [ɥiː] 'you' in the ERGATIVE-INSTRUMENTAL case.

Tone register (high vs low):
A high vs low contrast is found on words with nasal or continuant initials. Initial stops and sibilants also have distinctive tonal register, high for unvoiced (p, t, k, c, s, ç) and low for voiced (b, d, g, ɟ, z, ẓ). Voicing is often absent in pronunciation, leaving only the low tone to insure the contrast. Thus, ẓ- is usually pronounced ᴸç-.

Vocalic initials are generally high-register, but one word at least, Kt ᴸaːtom (Bt ᴸauja WT *wa*) 'jackal' is clearly low-register (and breathy, so that it could be transcribed as ᴸhauja). Words like wo 'that' could also be considered as having low-register vocalic rather than semivowel initials.

Typologically, the intersection of two tonal registers with a distinction between glottalized and smooth syllable types is typical of Tibetan dialects. We may note, however, that the opposition short/smooth vs long/glottalized only occurs on open syllables in Kurtoep, whereas in Central Tibetan it extends to nasal-ending syllables and in Dzongkha to all syllable types. Kurtoep and Bumthap also differ from Lhasa Tibetan and Dzongkha (as spoken by native speakers from west of the Pele-la) in the absence of a voicing opposition within the low register.

Some Kurtoe speakers have an initial high-register h- initial in at least some words where others have kh-; thus Kt, Bt khako 'up' is pronounced ᴴhako by some Kt speakers.

The palatal series is affricated in Kurtoep [tç...]. None of the group has an opposition between palatal stops (c, ch, ɟ) and palatalized affricates (tç, tçh, dẓ), as recorded in the Mama variety of Cuona Monpa (but not in Wenlang), and as we find in CT. The phonemes noted ç, ẓ are realized as retroflex [ʂ, ʐ] in Ck.

We will now discuss the origin of the present phonological system.

3. Topics in historical phonology

3.1 Finals

3.1.1 Word Finals

As noted above, the system of final consonants in Bumthang languages is relatively rich. These finals seem to reflect rather faithfully the Proto-Tibeto-Burman (PTB) finals as reconstructed by Benedict. Since WT (as opposed to modern CT) is also conservative in this respect, it can be a useful basis for comparison.

Old PTB finals *p, *t, *m, *n, *ŋ, and *r are kept in all Bumthang dialects. In Kurtoep, final *k, *s (for some speakers[6]), and *l are dropped, giving rise to a lengthening of the preceding vowel and a glottalized tone. In Bumthap proper *-k and *-s are retained (with *-s > -t in Choekhor), and there are no long glottalized finals:

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	PTB[7]
iron	ᴴlaːʔ	ᴴlak	ᴴlak	cak	lek⁵³	*lcags*	
blood	kaːʔ	kak	kak	kaː	ceʔ⁵³	*khrag*	
seven	ᴴniːʔ	ᴴnit	ᴴnis	ᴴnis	nis⁵⁵		s-nis
paddy	ᴸmraːʔ	ᴸmrat	ᴸmras			*'bras*	
barley	ᴸnaːʔ	ᴸnat	ᴸnas	ᴸnɛs	nʌʔ¹³	*nas*	
wool	beːʔ	bai	bai	bɛː		*bal*	
back	keːʔ	kai	kai	gɛːtshe		*sgal*	s-ga:l
kidney	kheːdoʔ	khai	kheːdo	khæːm	khɛː⁵⁵mʌ⁵³	*mkhal*	m-kal
silver	ᴸŋoi	ᴸŋoi	ᴸŋoi	ᴴŋüː		*dngul*	

3.1.2 Influence of finals on vowel quality

Palatalization of vowels before old dental finals is a typical CT feature. In languages of the Bumthang group, only *-l has such an effect, and this through the development of a diphthong (see Ck and Cm in 'wool', 'back' 'kidney', 'silver' above). Final *-t and *-n (which are retained) and *-s (whether retained or dropped) do not front the vowel. In the neigboring language of Mangdep, we can observe palatalization linked to an old *-s ('honey' and 'barley' below) or *-t ('to blow').

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Dz	Tam
barley	ᴸnaːʔ	ᴸnat	ᴸnas	ᴸnɛs	nʌʔ¹³	*nas*	³naː	
bee, honey	ᴸwaːʔ	ᴸwat	ᴸwas	ᴸjös				Gur ⁴kwe
stairs	kaːʔ	kat	kas			*skas*		
language	kat	kat	kat		ku⁵³	*skad*	¹keː	²kat
vulture	got		gotpa			*rgod*	³goeː	⁴kwat<*ᴮgrwat
to blow	but-	but-	but-	büʔ	phu⁵³	*'bud*		¹phut
medicine	ᴴman	ᴴman	ᴴman		mʌn⁵³	*sman*	¹men	¹man

An exception is Kurtoep ᴴjeːʔ 'right (side)', Bt ᴴjeba WT *g.yas*. The fronted pronunciation may be borrowed: note that *-s has a fronting effect in Central Tibetan but not in Dzongkha (¹yaːʔ).

3.1.3 Word-internal finals; chronology of composition

As is the case in CT or Dzongkha, composition often predates the phonological changes which affected the finals. Thus inside a word, syllable-final *-s and *-k are kept, even in Kurtoep (but *-s > -t in Choekhor):

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Tam
barley flour	ᴸnasphi					*nas, phye*	
body	ᴸluspu		ᴸluspu		lu¹³po⁵³	*lus-po*	³lwi
bone	ᴸrospa	ᴸrotpa	ᴸrosa	ᴸrotho		*rus-pa*	²nakhru
skin	pakpa	pakpa	pakpa	pogo	phe⁵⁵khu⁵³	*pags-pa*	

3.1.4 Verb root finals

Kurtoep verb roots are cited here in a morphophonemic transcription, e.g. blek- 'leave, put down', ᴴmul- 'sell'. In actually occurring verb forms, however, -k and -l do not appear word-finally, and non-front vowels in -l roots are fronted or diphthongized, whether the -l is dropped or not, thus: ᴴmuile 'sell!', ᴸŋat ᴴmemui 'I will not sell' (voir §5).

3.2 Vowel correspondences

3.2.1 Kurtoep o ~ WT *u*

Kurtoep and Bumthang vowels often correspond to identical vowels in WT. Shafer noted, however, that WT non-final high vowels often corresponded to mid vowels in Dakpa: WT iC, uC ~ Dakpa eC, oC. In Kurtoep and Bumthap, o is most often found to correspond with WT *u* , in final as well as non-final position. When we have evidence outside the group—here from Tamang—it points to proto-Bodish *u.

	Kt	Bt (Ck, Cm)	Mang	Dakpa	WT	Tam
grain, seed	bro	bro	bru	pru^{53}	*'bru*	PTB *mruw
fur	po	po	po	pu^{53}	*spu*	^{3}pu-^{2}tsham
son	bo	bodza	bɔs	pu^{13}	*bu*	
horn	ᴸro	ᴸro	ᴸrəu	ru:^{13}	*ru, rwa*	^{1}ru
wash	ʈho-	khro-, hro-	ʈho-	khruʔ^{53}	*'khrud-pa*	^{2}khru
manure	ᴸjot	ᴸjot		lon^{55}	*lud*	
six	ɖo:ʔ	grok, ᴸrok	ɖu:	kroʔ^{53}	*drug*	^{4}ʈu:
sheep	ᴸjo:ʔ	ᴸjok	ᴸlo:ʔ	jeŋ^{13}	*lug*	^{4}kju
poison	do:ʔ	dok		tu^{13}	*dug*	
drink	thoŋ-	thoŋ-	thoŋ-	toŋ^{55}	*'thung-ba*	^{2}thuŋ
load	khor	khor	khor		*khur*	

See also 'silver' (§3.1.1), 'bone' (§3.1.3), 'come off' (§3.3.1), 'sprout', 'thread', 'warm', 'sew' (§3.3.4), 'nine' (§3.4.3), 'extract' (§3.5 WT *'byung-ba*). This shift, however, is not without exception (e.g. 'blow' §3.1.2, 'cheese' §3.3.3, 'elbow', 'abrade' §3.3.4 'handle' §3.4 1), and can even be reversed:

	Kt	Bt (Ck, Cm)	WT	Tam
straw	su:ʔ	suk	*sog-ma*	
to hear	thu-	thu-	*thos-pa*	^{1}thai

3.2.2 Kurtoep e ~ WT *i* (after palatals)

Unlike the correspondence WT *u* ~ Kt o, for which no conditioning factor is known, the correspondence WT *i* ~ Kt e is less frequent and apparently related to the initial. In our material, the set of words showing this correspondence coincides almost exactly with the set in which a WT palatal initial (*c, ch, j, ny, sh, zh*) corresponds to a Kurtoep non-palatal (but note Kt ᴸmeŋ 'name' ~ WT *ming* below).

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT
sun	ᴸne	ᴸni	ᴸni	ᴸneceʔ	(plʌŋ^{53})	*nyi-ma*
heart	ᴴneŋ	ᴴneŋ	ᴴneŋ		niŋ^{53}	*snying*
day	ᴸnen	ᴸnen	ᴸnen	ᴸne:c	n̪in^{13}	*nyin-ma*
to die	se-	se-	se-	se	ɕi^{53}	*shi-ba*
louse	se:ʔ	sek	sek	se:ʔ	ɕeʔ^{53}	*shig*
tree	seŋ	seŋ	seŋ	sẽ:	ɕeŋ^{55}mʌ^{53}	*shing*
one	the:ʔ	thek	thek	the:	the:ʔ^{53}	*gcig*
urine	zeŋma	zeŋma	zeŋma		tɕhin^{53}	*gcin*
name	ᴸmeŋ	ᴸmeŋ	ᴸmeŋ	ᴸmiŋ	meŋ^{35}	*ming*

The same vowel correspondence obtains in three examples ('tasty', 'four', 'field') where Kurtoep l- corresponds to WT *zh-* (§3.4.2).

3.2.3 Kurtoep i ~ WT *u* (after palatal affricates)

Shafer noted the correspondence WT *-u* ~ Dakpa -i after palatal affricates, citing 'ten' and 'water'. These two items have -e in Bumthang, but the general correspondence of back to front vowels holds:

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Tam
ten	che	che	che	khɛpcɛʔ	tɕi^{53}	*bcu*	^{2}tsjui
water	khwe	khwe	khwe	khɛ̃:	tshi^{53}	*chu*	^{2}kjui
small	ciŋ-	ciŋ-	ciŋ-	chiŋ		*cung*	
lip	chi	chi	chi	chi	tɕhu^{55}tɔ^{55}	*mchu*	

See also 'bow' (§3.4.2). Exceptions: Kurtoep cut- 'braid' (WT *gcud-pa*), and chupa 'Tibetan robe' (probably a loan—WT *chu-pa*). After a non-palatal initial, Kurtoep (and Cm) thiŋku 'short', (Mang thiŋ-, Dakpa thuŋ^{55}-po^{53}, WT *thung-*) is possibly influenced by ciŋku 'small'.

3.2.4 Kurtoep u ~ WT *a* (in verbs)

In verbs, Kurtoep u often corresponds to WT *a*:

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT
eat	zu-	zu-	zu-	zu-	zʌ^{13}	*za-ba*
gnaw	chu-				chʌ^{53}	*cha'a-ba*
cut	chut-					*gcod-pa (CAD)*[8]
kill	sut-	sut-	sut-	sïʔ-	sɔt^{53}	*gsod-pa (SAD)*
weave	thuk-	thuk-	thuk-		kʌn^{55}the^{53}	*'thag-pa*
study	^{H}lup-	^{H}lup-	^{H}lup-		lop^{53}	*slob-pa (SLAB)*
sharpen	dur-	dur-	dur-		tor^{13}	*bdar-ba*
spin (thread)	khul-	khul-	khul-		che:^{55}	*'khal-ba*
hang	pjuŋ-	cuŋ-	cuŋ-			*dpyang-ba*
winnow		khrup-	hrup-	ʈhup-		*'khrab-pa*

3.2.5 Kurtoep i ~ WT *yV*

Kurtoep i often corresponds to WT medial *y* regardless of the following WT vowel, as in 'flour' (§3.1.3), 'hearthstone' (§3.5.2), and the following:

	Kt	Bt (Ck)	(Cm)	Dakpa	WT
wear	gin-	gin-	gin-	cen^{35}nʌ^{35}	*gyon-pa*
turn	gir-				*sgyur-pa*
cold	khik-	khik-	khik-	chek^{53}pʌ^{53}	*khyags-pa*
broom	phiksaŋ	phiksaŋ	phiksaŋ	tɕhʌp^{55}thʌm^{55}	*phyag-ma*

3.3 Initial clusters

Old PTB word-initial consonant clusters were reduced in all Bumthang dialects to a C or CC structure, but less drastically than in CT. In particular Labial + j, r, and l clusters exist in all dialects, to varying degrees. It is not always clear whether they are old or innovative.

3.3.1 Labial + l

Shafer noted that the word 'four' in Dakpa, as opposed to WT, retains PTB *l in the initial cluster bl-. The cluster, in this and other roots, may be a retention of *bl-, to judge by the realisation in other languages like those of the TGTM group, although examples are not numerous:

	Kt	Bt (Ck, Cm)	Mang	Dakpa	WT	Tam	PTB
four	ble	ble	brɛ:	pli⁵³	*bzhi*	⁴pli	b-liy
leaf	bla?ma	ᴴlamba	ᴴla		*'dap-ma*	³lapte	la/lap/pak
-ful, one-	-bleŋ	-bleŋ				¹pliŋ	bliŋ~pliŋ
come off	plot-	plot-			*'bud-pa*		
leave	blek-	blek-,lek-				¹leŋ	

3.3.2 Labial + j

Only a few medial j are found in Kurtoep, and only after initial labials. Other dialects lack Labial + j clusters.

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Tam
hang	pjuŋ-	cuŋ-	cuŋ-			*dpyang-ba*	
ashes	bja		thapɟa		plᴀ¹³		¹mephra
to call	bja-		ɟa-				
to get	ᴸmjan-	ᴸñoŋ-				*myong (MYANG)*	
swallow	ᴸmjot-		ᴸñot-		ɳut⁵³tho?⁵³	*mid-pa*	
arrow⁹	ᴸmja	ᴸmewa	ᴸña	ᴸmra	blᴀ⁵³	*mda'*	¹mja

We may also cite Kt pjo 'a lie' and bjo 'taro'.

3.3.3 Labial + r

Clusters of labial + r seem to have been the most stable across the family. See Kt bro 'grain, seed' and the following:

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT, (TGTM)
monkey	pra	pra	pra	pra	prᴀ⁵³	*spra*
finger	primaŋ	primaŋ	primaŋ		lᴀ?⁵³priu⁵³	(Tam ᴴprimci)
cheese	phrum	phrum	phrum	phrum		*phyur-ba*
to tear	phret-	phret-	phret-		phrɛ?⁵³	
tray	bra	bra	bra	brɛxɛp		
buckwheat	bra:ma	branma	branma	brɛ:m	pre:¹³tɕi⁵³ cᴀː⁵⁵pre⁵³	*bra* (Thak ³pre)
chest	braŋto	braŋdo	braŋdo	braŋko	prᴀŋ¹³	*brang-khog*
odor	bri	bri	bri		ṣi⁵³	*dri*
hunger	bru		bru			*bro-wa* 'taste'
ant	bruktila	bruktula	bruktula	butil	ṣuk⁵⁵pu⁵³	(Gur ²nabbru)
scratch	ᴸmrat-	brat-	brat-		(po?⁵³)	*'brad-pa*
paddy	ᴸmra:?	ᴸmrat	ᴸmras		(tem¹³)	*'bras*

3.3.4 Velar clusters

Only velar + w, of somewhat unclear origin, is found in a few Kurtoep examples:

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Tam	PTB
sprain	kwir-		gwir-			*sgyur-ba*¹⁰		
tooth	kwa	kwa	kwa	ᴴwa	wᴀ⁵³	*so*	¹swa	s-wa
dog	khwi	khwi	khwi	chö	chi⁵³	*khyi*	¹nakhi	kwiy
water	khwe	khwe	khwe	khɛ̃	tshi⁵³	*chu*	²kjwi	ti(y)/twiy
buy	ᴸŋwi-	ᴸŋwi-	ᴸŋwi-		ɳer¹³	*nyo-ba*		
two-	-gwa		-gwa		tɕhᴀ⁵³	*cha*		*Qiang* guə
tether	gwi-		gwe-					

Velar + r clusters usually followed an evolution similar to CT in Kurtoep, developing into an affricated retroflex series, while they were retained in Bumthang (Ck) and are realized as r in Cm. Thus Cm has high register ᴴr- and hr- corresponding to Ck kr-, khr-, while Cm ᴸr- corresponds to both Ck gr- and ᴸr-. Note that Kt sometimes has ᴴr- rather than ʈ- corresponding to Ck kr-.

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Tam
hair	ᴴra	kra	ᴴra	ᴴra	khrᴀ⁵³	*skra*	¹kra
thread	ᴴrotman	kronman	ᴴrotman	ᴴrɔp		*rgyud*	
village	ʈoŋ	kroŋ	ᴴroŋ		tʂoŋ¹³sep⁵³	*grong*	
dirt	ʈekpa	krekpa	ᴴrekpa	ɖɛkpɛʔ		*dreg-pa*	¹khiti
nit	ᴴrikar	kriwit	ᴴriwis	ᴴriula			
roll	ʈhil-	khril-	hril-			*'khril-pa*	
winnow		khrup-	hrup-	ʈhup-		*'khrab-pa*	
go up	ʈhaŋ-	khraŋ-	hraŋ-				
wash	ʈho-	khro-	hro-	ʈho-	khruʔ⁵³	*'khrud-pa*	²khru
sprout	ʈhoŋ-	khroŋ-	hroŋ-		khroŋ⁵³	*'khrung-ba*	
count	ɖaŋkha	graŋ-	ᴸraŋkha			*grangs*	
cry out	ɖak-		ᴸrak-		grek³⁵ (W)	*'grags-pa*	
shadow	ɖem	grep	ᴸrep			*grib(-ma)*	²krip
elbow	ɖumaliŋ	grumaŋti	ᴸrumaŋti		krum¹³tɕuŋ⁵³	*gru-mo*	¹kru 'cubit'
six	ɖo:ʔ	grok	ᴸrok	ɖu:	kroʔ⁵³	*drug*	⁴ʈu
warm		grut-	ᴸrut-		kro³⁵po⁵³	*drod*	⁴ɖot
mule	ɖe:ʔ	ɖẽ	griu (u)		kreʔ³⁵	*drel*	

Some PTB dental + r clusters seem to have shifted to velar + r in Common Bumthang as noted by Shafer in Dwags 'six' (PTB *d-ruk). But in 'dirt' we believe it is the WT which is innovative (PTB *kriy). The following are further examples of WT *dr-* initials (see also 'odor' §3.3.3):

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	Tam
ask	ɖi-		ᴸri-		bri³⁵	*'dri*	
sew	ɖop-					*'drub-pa*	⁴ʈup
abrade	ᴸrut		ᴸrut			*'drud-pa*	

For some WT *gr-*, we might suggest an older *rg- parallel to 'hawk, vulture' (§3.1.2) as in the following:

	Kt	Bt (Ck)	(Cm)	Mang	Dakpa	WT	PTam	PTB
wheat	go	go	go		kɔ⁵³	*gro*	*grwa⁴	?*r-gwa
walk	go-	go-	go-		kɔ⁵³	*'gros*		

Finally we may note a possible correspondence in the following: Kurtoep ʑowa 'lung' (WT glo-ba), ʑeŋ 'flute' (WT gling-bu).

3.4 Liquids and glides

3.4.1 Straightforward initial correspondences: Kt j, l, r ~ WT *y, l, r*

	Kt	Bt (Ck, Cm)	Dakpa	WT	Tam
odd one	ᴸja	ᴸja (Cm)		*ya*	
above	ᴸja	ᴸjawo		*ya*	
handle	ᴸju	ᴸju (Cm)		*yu-ba*	¹ju:
right	ᴴje:ʔ	ᴴje:ba	jɛ:⁵⁵pᴀ⁵³	*g.yas*	¹ket

Some Bumthang w ~ WT *y* are also found:

to weed	ᴸwer-	ᴸwersa		*yur*	
to be	ᴸwen-	ᴸwen	jin¹³	*yin*	³hin

as may happen also after velars (see 'dog' and (possibly) 'sprain' §3.3.4).

For initial r see 'bone', 'horn' (§3.1.3, §3.2.1).

For initial l see 'body' (§3.1.3), and:

	Kt	Bt (Ck, Cm)	Dakpa	WT
blind	^{L}loŋba	^{L}loŋma	lɔŋ¹³pʌ⁵³	long-ba
soar	^{L}liŋ-	^{L}liŋ-		lding
blade	^{L}lep	^{L}lep		ldang

(In WT *ld-*, *l* functions as the initial.)

3.4.2 Bumthang l ~ WT *zh*

    The following words show the correspondence PTB *l ~ Kt l ~ WT *zh* already observed in 'four' above.

	Kt	Bt (Ck, Cm)	Mang	Dakpa	WT	Dz	TGTM
four	ble	ble	brɛː	pli⁵³	*bzhi*	zhi	Tam ⁴pli
bow	^{L}limiʔ	^{L}li, ^{L}limae	^{L}li	li¹³	*gzhu*	^{L}zhu	Thak ³tolen
field	^{L}leŋ	^{L}leŋ	-lɛʔ	leŋ¹³	*zhing*	⁴zh'ĩː	
tasty	^{L}lembu			lim¹³po⁵³	*zhim-ba*		

(See §3.2.3 for the vowel correspondence in 'bow', PTB *d-liy.) This correspondence, which seems not to have been noticed, is a subtype of the Tibetan "palatalization of l- before y, i, or e" (Benedict 1972:33) (and in the word 'iron'!), as in the following:

	Kt	BT (Ck, Cm)	Mang	Dakpa	WT	Tam
tongue	^{H}li	^{H}li	ce	le⁵³	*lce*	²leː
flea	lija	^{H}liwa	^{H}liu	liu⁵⁵	*lji-ba*	¹taŋliŋ
iron	laːʔ	^{H}lak	cak	lek⁵³	*lcags*	
heavy	ɟit-	ɟüt- (Cm)		li⁵⁵po⁵³	*ljid-po*	³liː-pa

    If we can draw conclusions from the very small set of examples above, it would seem that the condtioning of the differential treatment *l > *lj* vs *l > *zh* in WT might have been the presence/absence of a voiceless prefix, as reflected by the high/low tone of the Kurtoep reflexes. A Bodish branch prefixed *s- could have led to high register on Kurtoep ^{H}l- as on nasal initials (§3.5.1). If this is correct, the WT evolution might reflect metathesis of the prefix rather than straight palatalization (cf. Beyer 1992:78).

3.4.3 Bumthang j ~ WT *l* < *Velar + l (?)

    One word, 'brain', has been noted with a kl initial in Bt (Ck, U) and Kt:

	Kt	BT (Ck, U)	Cm	Mang	Dakpa	WT	Dz
brain	klatpa	klatpa	^{H}latpa	^{L}lep	lʌt⁵⁵pʌ⁵³	*klad-pa*	²lep

    Except for this word, we have found no velar + l clusters in Kurtoep (and we have no others in Ck or U either). It might be suspected, however, that some of the not infrequent correspondences Bumthang ^{L}j- ~ WT *l-* reflect an old *gl-:

	Kt	BT (Ck)	Mang	Dakpa	WT	Tam	PTB	PBod (ours)
road	^{L}jam	^{L}jam	^{L}lam	lem¹³	*lam*	⁴kjam	lam	*g-lam
sheep	^{L}joːʔ	^{L}joːʔ	^{L}loːʔ	jeŋ¹³	*lug*	⁴kju		*g-luk
work	^{L}jaːʔ	^{L}jat		plɛʔ¹³jʌ¹³	*las*	⁴kjat		*g-las/t

    and perhaps:

	Kt	Bt (Ck, Cm)	Mang	Dakpa	WT	Tam	PTB
hand	^{L}jaːʔ	^{L}jak	^{L}laː	lʌʔ⁵³	*lags*	¹jaː	lak=g-lak
ankle	^{L}joŋkor	tegoloŋ (Cm)			*long-bu*		
manure	^{L}jot	^{L}jot		løn⁵⁵	*lud*		
to get	^{L}juŋ-				*len-/long-ba*	¹jaŋ	
stand	^{L}jaŋ-	^{L}jaŋ	^{L}lɔ̃ː	lʌŋ¹³	*ldang*		

    The high-register tone in Tamang suggests the presence of an old prefix. The incorporation of the prefix in the preceding set (leading to Tam. kj- initials) blocked the tone-raising effect.

A final example of Bumthang ᴸj- ~ WT *l*-:

	Kt	Bt (Ck, Cm)	Mang	Dakpa	WT	Tam	PTB
five	ᴸjaŋa	ᴸjaŋa	ᴸləŋ	le³¹ŋe⁵³	*lnga*	⁴ŋa:	

Note that the WT prefix corresponds to a Bumthang syllable in this example, as in another number, 'nine' (Kt, Bt dogo, Mang dok, Dak tu³¹ku⁵³, WT *dgu*).

3.5 Initial Series and Tones

3.5.1 Nasals

Bumthang high-tone nasal initials, like those in tonal Tibetan dialects such as Lhasa or Dzongkha, correspond to nasals with prefixes (or superscribed letters) in WT. But only WT superscribed *s-* regularly corresponds to high register in Bumthang; other prefixes (including superscript letters), which regularly give high register in Tibetan dialects (e.g. tones ᴴ, ¹, ² in Dzongkha), do so only sporadically in Bumthang:

	Kt	Bt (Ck, Cm)	Mang	Dakpa	WT	Dz	Tam
heart	ᴴneŋ	ᴴneŋ		niŋ⁵³	*snying*		¹tiŋ
nose	ᴴna	ᴴnaphaŋ	ᴴnaba	nᴀ⁵³	*sna*	ᴴha-pu	¹na
barley	ᴸna:ʔ	ᴸnat	ᴸnɛs	nᴀʔ¹³	*nas*	³na:ʔ	
ear	ᴸna	ᴸna	ᴸnül	nem³⁵nɛ⁵³	*rna*	ᴴnamco	³naphi
pus	ᴸna:ʔ	ᴸnak	ᴸnɔ:	(jᴀn¹³)	*rnag*	¹na:ʔ	³na:
dtr-in-law		ᴸnaba,ᴸnama	ᴸnam		*rnna-ma*	²nam	
sky	ᴸnam	ᴸnam	ᴸnam	nᴀm⁵³	*gnam*	²nam	²nam
pillow	ᴴŋa:ʔ	ᴴŋas (Cm)	ᴴñös	ŋᴀʔ⁵³	*sngas*	¹hã:	
blue	ᴴŋokar	ᴴŋokar	ᴴŋœm	ŋᴀu⁵⁵po⁵³	*sngon-po*	²hoem	
drum	ᴸŋa	ᴸŋa	ᴸŋa	ŋᴀ⁵³	*rnga*	ᴴŋa	³ŋa:
to cut	ᴸŋa-	ᴸŋa-	ᴸŋa-		*rnga-ba*	ᴴŋa	
fry, parch	ᴸŋu-	ᴸŋut-			*rngud-pa*		Gur ³ŋo
medicine	ᴴman	ᴴman		mᴀn⁵³	*sman*	ᴴmen	¹man
insane	ᴴmju			ɲøn⁵⁵pᴀ⁵³	*smyo-ba*		¹mjo
wound	ᴴma	ᴸmaga	ᴴma	mᴀ¹³	*rma*	ᴴma	
hoof	ᴸmukpa	ᴸmikpat		ne¹³wᴀ⁵³	*rmig-pa*	ᴴmip	
dream	ᴸmimaŋ	ᴸmimaŋ		mi³¹pren⁵⁵	*rmi-lam*		

See also 'silver' (§3.1), 'sun', 'day' 'name' (§3.2.2), 'get', 'swallow' (§3.3.2) 'buy' (§5).

3.5.2 Oral stops

As opposed to (native) Dzongkha and most Central Tibetan dialects, Bumthap dialects do not distinguish the reflexes of old prefixed vs unprefixed voiced stops. The reflexes of both are voiced with redundant low tone. (Or, as we explained earlier, if they are phonetically devoiced the compensatory low pitch is always present.)

There is a single exception to this rule: the old prefix *s- has devoiced and raised an initial *g to k with high tone in a few words:

	Kt	Bt (Ck)	Mang	Dakpa	WT	Dz	PTB
door	ko	ko	gɔs	kɔ⁵³	*sgo*	ᴸgo	
back	ke:ʔ	kai	gɛ:tshe		*sgal*	⁴gɛ:p	s-ga:l
hearthstone	kitpa	kitpa			*sgyed-po*		

Many reflexes of WT *sg-* have initial g-, however, as Bt gam- 'box' (WT *sgam*).

The *s- prefix does not seem to have had a devoicing or tone-raising effect on a *b initial:

	Kt	Bt (Ck)	Mang	Dakpa	WT	Dz	Tam
frog	beptaktakpa	baibai	bɛːp	bɛː¹³pᴀ⁵³	*sbal-pa*	⁴bɛːp	⁴palpa
give	bi-	bi-	bji	tɕi¹³	*sbyin-pa*		¹pin
a fly	braŋ	braŋ	brɔm	prᴀː⁵³	*sbrang-bu*	⁴bjam	¹naphraŋ

3.5.3 Clusters

In §3.3.4 we have seen three examples ('thread', 'village', 'body dirt') in which Common Bumthang *kr- corresponds to WT low-register initials, but the correspondence is not systematic.

4. Some (apparently) non-Tibetan roots in Bumthang

Finally, we list in a separate table some Bumthang words for which we know no Tibetan cognate (or only a partial one); many have cognates elsewhere in TB.[11]

5. Morphology

As in Tibetan, there is some morphology at the interface between finals and suffixes or postpositions. This is most striking in verb roots, which fall into ten categories depending on the final consonant (zero, p, t, k, m, n, ŋ, r, l) of the root. The root forms given can not necessarily stand alone: for example ᴸŋak- 'say, do' cannot because word-final -k does not occur in Kurtoep (although it does in Bumthang). But this somewhat artificial form allows one to derive the occurring forms, in which some finals (-t, -k, -l in particular) are dropped before some suffixes. Roots ending in -al, -ol, -ul are invariably realized -ai(l), -oi(l), -ui(l), the -l appearing only in the imperative. Examples of Kurtoep roots and imperatives (the form which best preserves the finals):

final	root	imperative	gloss
zero	ku-	kuje	dig
-p	ᴸrup-	ᴸrube	help
-t	ᴸmjot-	ᴸmjotle	swallow
-k	blek-	blege	leave sth.
-m	dom-	dome	meet
-n	zon-	zonle	send
-ŋ	phjoŋ-	phjoŋe	extract
-r	sar-	sarle, sale	cook
-l	ᴴmul-	ᴴmuile	sell

Not all apparent fronting diphthongs reflect final -l: ᴸŋwi- 'buy' (WT nyo-ba), with a velar cluster, has the imperative ᴸŋwije.

Notes

[1] BM's personal notes 1986. The Kurtoe and Chume material was rechecked by BM with informants in Kathmandu in 1993.

[2] Hodgson (1853) published a "Takpa" vocabulary of some 180 words based on a speaker from Tawang (WT rTa-wang). Sun et al. 1980 and Lu 1986 describe a very similar language under the name of Cuona Menba (WT mtsho-sna mon-pa); they mention two dialects, one in Mama commune, Lepu district, Cuona county, and the other further east in Wenlang commune, Deqing district, Motuo county. Both Chinese descriptions are based on the Mama dialect, but Lu also gives forms in the Wenlang (W) dialect, which is somewhat closer to Hodgson's data. The forms which we will cite as Dakpa are Mama dialect forms from Lu and from anon. 1991. The low register tone noted as ³⁵ in the former is transcribed as ¹³ in the latter.

[3] See also Nishida 1988. Aris (1979) has pointed out that the Dakpa language has no connection (at least at present) with the Dwags-po (pronounced [L]dakpo or [L]takpo) region of Tibet, as first suggested by Hodgson, or with its Tibetan dialect.
[4]Transcription of Kurtoep is as indicated in the next section. Transcription of Dzongkha is more orthographic and follows Mazaudon and Michailovsky 1988; in particular, y- is used instead of j- for initial *yod* (IPA [j]), and ue, oe represent IPA [y], [ø].
[5]Abbreviations for languages of the TGTM group are as follows: Tam = Tamang, Gur = Gurung, Thak = Thakali, Man = Manangba. In these languages, and in Dzongkha, the tones noted [1], [2], and [H] are high register; [3], [4], and [L] are low register.
[6]Some speakers interviewed in Kathmandu pronounced final -s but never -k. They also said geːpa for 'back' (see table). Like our first speaker, they were originally from the Dungkar area. Never having visited Kurtoe, we cannot say whether such variation is geographical or the result of contact. All of our Kurtoe informants had spent time in monasteries and urban centers.
[7] Unless otherwise noted, all PTB reconstructions are from Benedict (1972).
[8] The underlying root vowel of this verb is *a*, as evidenced in the past and future stems; the present (citation form) undergoes a rounding rule (see e.g. Beyer 1992:164).
[9]All of our Kt speakers agreed on [L]mj- in this word, but our Kathmandu speakers had [H]ñut- 'insane' (§3.2.1), [L]ñoŋ- 'get' (§3.4.3), and [L]ñot- 'swallow' where we had previously recorded mj- initials. In Cm, 'arrow' is homophonous with 'fish'.
[10](?) Cf. 'turn' (§3.2.5).
[11]Tshangla is cited from anon. 1991 and Zhang 1986; Bahing and Limbu (East Himalayish) from our field notes.

BIBLIOGRAPY

anon. 1991. *Zangmianyu yuyin he cihui*. Zhongguo shehui kexue chubanshi. Beijing. [Includes Cuona Menba (Dakpa) and Motuo Menba (Tshangla).]
Aris, Michael. 1979. *Bhutan. The early history of a Himalayan Kingdom*. Aris and Phillips, Ltd. Warminster.
—. 1980. Notes on the history of the Mon-Yul corridor. Aris, M. and Aung San Suu Kyi. *Tibetan Studies*.
Benedict, Paul K. 1972. *Sino-Tibetan, a Conspectus*. Contributing ed. J. A. Matisoff. Cambridge University Press. New York.
Beyer, Steven B. 1992. *The Classical Tibetan Language*. State University of New York Press. Albany.
Bradley, David, E.J.A. Henderson, and M. Mazaudon edd. 1988. *Prosodic Analysis and Asian Linguistics: To honour R.K. Sprigg. Pacific Linguistics* C-104. Canberra.
Jaeschke, H. A. 1968. (1881.) *Tibetan English Dictionary*. Routledge and Kegan Paul, Ltd. London.
Hodgson, Brian H. 1853. Sifan and Horsok vocabularies... *JASB* 22:117-151.
Lu Shaowun. 1986. *Cuona menba yu jian zhi*. Minzu chubanshi. Beijing.
Mazaudon, Martine and Boyd Michailovsky. 1988. Lost syllables and tone contour in Dzongkha. Bradley et al. 1988. 115-136.
Nishida, Tatsuo. 1988. On the mTsho-sna Monpa language in China. Bradley et al. 1988. 223-236.
Shafer, Robert. 1954. The Linguistic Position of Dwags. *Oriens* 7:348-356. [Reprinted in Shafer 1966:113-116.]
—. 1955, Classification of the Sino-Tibetan Languages. *Word* 11: 94-111.
—. 1966. *Introduction to Sino-Tibetan*. Part I. Harrassowitz. Wiesbaden.
Sun Hongkai et al. 1980. *Menba, Luoba, Deng ren de yuyin*. Zhongguo shehui kexue chubanshi. Beijing.
Zhang Jichuan. 1986. *Cangluo menba yu jian zhi*. Minzu chubanshi. Beijing.

	Kt	Bt (Ck)	Mang	Dakpa	Tshangla	WT	other TB
house	ᴸmeː?	ᴸmai	ᴸmɛː	(chem⁵³)	phai	(khyim)	
black	ᴸñunti	ᴸñœnde	(nəkɛ?)	(plɛː¹³kʌn⁵⁵)	(tɕhaŋlu)		?Tam ²mlaŋkai
finger	primaŋ	primaŋ	(dzumu)	-priu⁵³	-bruma	(mdzub-mo)	Tam ᴴprimci
rain	ᴸjö?	ᴸjoi	ᴸjö	(nʌm¹³)	(ŋam su)		Thak ²ju-wa
mouse	ᴴñija	ᴴñiwa	ᴴñü	(tɕi¹³pu⁵³)	(phijakpa)		
tear	ᴸmikpaliŋ	ᴸmikpele	phre	(mik⁵³tshi⁵³)	miŋri	(mig-chu)	Thulung plə
what?	ʑa	ʑa	ɕe	(tsi¹³)	(haŋ)		
who?	e	ai	ɛ	(su⁵³)	(?ibi)	(su)	
you	wit	wet	ᴸji	?i⁵³	(nan)		Tam ²ai
foot	tawa	tawa	(kãːlep)	(le¹³mɛ?⁵³)	(bi)		
ant	bruktila	bruktula	butil	ʂuk⁵⁵pu⁵³		(grog-ma)	Gur ²nabbru
old	ᴸmanba	ᴸmanba		(kɔk¹³po⁵³)	manma		Sunwar maỹt (<*man)
ash	bja	thapɟa (cm)		plʌ¹³	(thulu)		Tam ¹mephra, STC *pla
tooth	kwa	kwa	ᴴwa	wʌ⁵³	ɕa	so	
two	zon	zon	zön	(nʌi¹³)	(n̪iktsiŋ)	(gnyis)	
smoke	ᴸmikun			me³⁵kun⁵³	mu gu		Tam ²mjuku, STC *kuw
come	ᴸra-	ᴸra-	ᴸra-	rʌ³⁵			Bahing ra- 'arrive'
water leech	ᴸlekpa						Limbu laːkphɛt
walnut	khuci	khacu?, khaɹik (Cm)					Limbu kheːsik
tail	ᴸmipaŋ	ᴸmiphaŋ, ᴴñiphaŋ (Cm)					Tam ¹meː, STC *r-may
fire	gami	gami	gəm	me¹³	mi	me	Tam ¹me

Table: Some Bumthang vocabulary