Kurtöp and the Classification of the Languages of Bhutan

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0. Introduction*

The classification of the Tibeto-Burman languages of the Himalayas is a complicated endeavor and to date no consensus on the relationship amongst the languages has been reached. Tibeto-Burman languages of Nepal and Bhutan are generally assigned, a priori, to the Bodic branch of the family. Some languages of this sub-family are fairly well-described, while others, particularly those of Bhutan, remain only marginally documented. Kurtöp is a little-studied language of Bhutan that has, until the present study, escaped intense scrutiny. This paper considers Kurtöp in a historical context by examining new data in synchronic phonology, diachronic sound changes and lexical items in a comparative study.

The Kurtöp data discussed in this paper have come from two speakers living in the United States. Both consultants are males from Dungkar, but from different districts, or *geog*s, within Dungkar, and therefore speak slightly different dialects. The primary speaker is from Tabi *geog* and the second speaker is from Thuke. The data reported in this paper is representative of the speaker from Tabi, unless otherwise stated.

This paper is organized as follows. In Section one background relevant to the present study is given. Section two outlines synchronic phonology in Kurtöp and section three examines the phonology diachronically. Section four discusses a comparison of Kurtöp lexical items. A brief summary of the paper is found in section five.

1. Background

Kurtöp is a Tibeto-Burman language spoken in Dungkar, which lies within the political district of Lhuentse, approximately 50 kilometers west of the border with Arunachal Pradesh in India, and 15 kilometers south of the border with Tibet, shown in (1) below. Van Driem (1995) estimates there are 10,000 speakers of Kurtöp.

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(1) **Dungkar in Bhutan**[1]

Kurtöp has been previously studied by Michailovsky and Mazaudon (1994). They based their findings on data from one speaker, living in Delhi in 1977-78 and verified their data with other speakers in Kathmandu in 1993.

Van Driem (1995) is the only overview of the languages in Bhutan to my knowledge. His proposal situates 19 different Tibeto-Burman languages within six different Tibeto-Burman branches. Two of these, Central and East Bodish are composed of a handful of languages. The other four are represented by one language each: Tshangla, Lhokpu, Gongduk, and Lepcha. Tshangla is spoken by the largest population of speakers (138,000) and is considered the *lingua franca* of eastern Bhutan. The latter three are spoken by just a few thousand speakers each. Central Bodish is the sub-branch which contains Tibetan, Dzongkha (the national language of Bhutan) and five other languages spoken in Bhutan (Cho-ca-nga-ca-kha, Brokpa, Brokkat, Lakha and B'ökha). East Bodish, the focus of this paper, consists of Bumthang, Kheng, Kurtöp, 'Nyenkha, Chali, Dzala, Monkha and Dakpa.

1.1 Previous sub-groupings

Shafer (1954) appears to be the first to use the term 'East Bodish'. For him the term represented the proto-language from which Dwags, a language spoken southeast of Lhasa, in Tibet, had come. Based on the scanty vocabulary presented in Shafer (1954) it appears that Kurtöp is closely related to Dwags.

Bradley (1997) proposes that East Bodish is most closely related to Central Bodish (i.e. the Tibetan dialects). In addition to the East Bodish languages mentioned above, he includes Sherdukpen and the somewhat ambiguous 'Eastern Monpa' in the East Bodish. This group then joins together with its closest neighbors, the Central Bodish languages. Central and East Bodish together are then coordinate with Western Bodish and the Bodish family then joins with Tshangla and West Himalayan. These three together comprise one side of the Bodic family. Bradley's (1997) proposal is

[1]Map downloaded from http://www.lonelyplanet.com/worldguide/destinations/asia/bhutan. Reproduced with permission from the Lonely Planet website www.lonelyplanet.com (c) 2006 Lonely Planet Publications.

adapted below in (2), not including the immediate constituency discussed for East Bodish.

(2) **Bradley (1997) Tibeto-Burman genealogy proposal**

Tibeto-Burman
Bodic | Northeastern India/Sal | Kuki-Chin | Central | Northeastern | Southeastern

Bodic
Bodish | Himalayan

Bodish
West, Central, East | Tshangla | West Himalayan

West, Central, East
West | ***Central, East***

Thurgood (2003) follows Bradley (1997) in treating the East Bodish languages (i.e. Takpa) as closely related to the Tibetan dialects, but not directly descended from Classical Tibetan. His basis for this classification is primarily the fact that the East Bodish languages share an innovative second person pronoun that appears to be cognate with the TGMT and Tibetan forms. Within Takpa Thurgood places Bumthang, within which Kurtöp would presumably fall. His classification of the Tibeto-Burman family is adapted below in (3).

(3) **Thurgood (2003) Tibeto-Burman genealogy**

Tibeto-Burman
Lolo-Burmese | ***Bodic*** | Sal | Kuki-Chin-Naga | Rung | Karenic

Bodic
Tibetan Dialects | TGTM[2] | ***Takpa*** | Other

Takpa
Bumthang | Cuona Menba

2. Kurtöp Synchronic Phonology

2.1 Consonants

The current study finds a slightly different set of phonemes than Michailovsky and Mazaudon (1994). Specifically, we do not find /dz/, instead of /ʝ/, we find /ç/ with low tone, do not find the onset cluster /pl/, and instead of a series of palatalized bilabials, we find palatal-labial stop clusters. For a detailed phonemic analysis and further comparison with Michailovsky and Mazaudon (1994), the reader is referred to Lowes (to appear). The phonemes found in the current study are shown below in (4).

[2] Tamang-Gurung-Thakali-Manang

(4) **Kurtöp Consonants**

	labial	**dental**	**retroflex**	**palatal**	**velar**	**glottal**
stops	p, p^h, b	t, t^h, d	ʈ, $ʈ^h$, ɖ	c, c^h, ɟ	k, k^h, g	ʔ
affricates		ts, ts^h				
fricatives		s, z		ç		
nasals	m	n		ɲ	ŋ	
laterals		l, ɬ				
rhotics		r				
glides	w			j		
aspirates						h

Any of the above can serve as a syllable onset. With the exception of the palatal fricative, high tone exclusively follows the voiceless and aspirated obstruents and glottal stop. Low tone exclusively follows the series of voiced obstruents. The palatal fricative is the only obstruent which can be found preceding both high and low tone.[3]

The consonants above can form complex onsets, as shown below in (5).

(5) **Kurtöp Onset Clusters**

pr pc pc^h p^hr
br bɟ bl
kw k^hw gw
mr mj

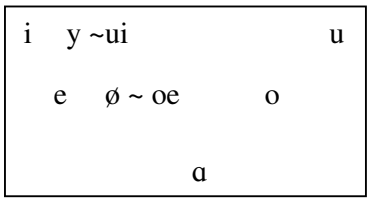
Of the phonemes in (4), Kurtöp allows only /p, t, k, r, m, n, ŋ/ and marginally /s, l, h/ as coda consonants. Of the latter three, /s/ has been found as a coda word-initially in one word, and /l/ and /h/ have been word-finally in only a small handful of words.

2.2 Vowels

In agreement with Michailovsky and Mazaudon (1994), the present study finds that Kurtöp has seven vowels, as shown below in (6).

[3] One other exception has been found to this generalization. The word [ʈoŋ] 'village' is pronounced with a voiceless stop and low tone. We suspect this is a borrowing as the Lhasa Tibetan form is characterized by a voiceless aspirated retroflex with a low tone. While we transcribe the Kurtöp form as unaspirated, acoustic measurements show voice onset time measurements could also be indicative of aspiration.

(6) **Kurtöp Vowels**



The front rounded vowels /y/ and / ø/ are often in variation with the diphthongs /ui/ and /oe/, respectively. The speaker from Thukey was more likely to have diphthongs for these vowels than the speaker from Tabi. Kurtöp also employs /iɑ/, /ɑu/, and /iu/ as possible nuclei, and have been found only in open syllables to date.

Length is minimally contrastive; it has been found to be contrastive only in open syllables in monosyllabic words such as /kó/ 'door' versus /kóo/ 'hoe' and /ɬá/ 'god' versus /ɬáɑ/ 'excess'.

2.3 Tone

Tone has little functional weight in Kurtöp, but is contrastive following sonorant consonants and the palatal fricative, such as /nɑ/ 'ear' versus /ná/ 'nose' and /çee/ 'eat.IMP' versus /çée/ 'come.IMP'. However, pitch is predictably nearly 30 Hertz higher following voiceless obstruents than when following voiced obstruents, as shown in Lowes (2006), leading us to speculate that tonogenesis is in progress. The fact that tonogenesis has already occurred for the palatal fricatives will be addressed in section 3.2.3.

2.4 Comparison

Kurtöp phonology is more similar to Tshangla than Central Bodish. Lhasa Tibetan does not have a voiced series of obstruents; this series has collapsed with the voiceless series giving rise to a two-way tonal contrast. Also unlike Kurtöp, Tibetan reports a voiceless rhotic and a series of palatalized velars (in addition to palatal and velar stops). Vowels are the same as in Kurtöp plus a low fronted /æ/ and [ɔ] allophone. In addition to tone, length, nasalization and glottalization are phonemic in Lhasa Tibetan (DeLancey 2003b), while only tone and length are minimally contrastive in Kurtöp.

Tshangla, on the other hand, has the same phonemic inventory as Kurtöp, plus a voiced affricate in borrowings and a voiced palatal fricative for some dialects. The Tshangla vowel inventory is somewhat simpler, with only the five cardinal vowels, though two possible diphthongs are reported: /ai/ and /au/. Lexical tone in Tshangla, as in Kurtöp, plays a minimal role in the phonology. In some Tshangla dialects tone is contrastive following some sonorant initials and in at least one dialect a two-way contrast in high/low tone has recently replaced a voiceless/voiced distinction in initial obstruents.

Kurtöp is similar to Tibetan in having front vowels, though does not display as rich a vowel system as Lhasa Tibetan. Nor does Kurtöp employ phonemic nasalization, glottalization or the type of tone system typical of Tibetan. Kurtöp consonants are almost identical to those in Tshangla and less like the system reported

for Tibetan. Thus, Kurtöp synchronic phonology is more similar to Tshangla, than Central Bodish.

3. Diachronic Phonology[4]

3.1 Inheritances

A two-way contrast (voiced and voiceless) amongst labial, dental and velar stops, dental and palatal affricates and fricatives were present already at Proto-Tibeto-Burman (PTB) (Matisoff 2003). By Classical Tibetan aspirated stops had developed in some environments (DeLancey 2003a). In present-day Bodish languages, including Kurtöp, aspiration is fully phonemic. PTB had six vowels: /i, e, ɑ, o, u, ə/ while only five /i, e, ɑ, o, u/ were present in Classical Tibetan. Tone was apparently not present for PTB or Classical Tibetan. Kurtöp, then, has inherited a large part of its phonemic inventory from PTB.

3.2 Innovations

Kurtöp also displays a large number of innovations, primarily with respect to vowels, including vowel length and tone. Nonetheless, some recent developments in the consonants are worth mentioning, described below in 3.2.1.

3.2.1 Consonants

The retroflex series is a recent innovation from velar or dental plus rhotic clusters. These clusters were found in Classical Tibetan and still maintained in Bumthang (van Driem 1995). Kurtöp usually retains the voicing present in Classical Tibetan, as shown below in (7).

(7)

Classical Tibetan	Kurtöp	
sgro	ɖo	‘feather’
sgra	ɖɑ	‘pronunciation’
gru	ɖu	‘boat’
grub	ɖup	‘accomplish’
drel	ɖee	‘mule’
dril bu	ɖibu	‘bell’
dkrug	ʈú(k)	‘stir’
khri	ʈʰí	‘throne’
khrom	ʈʰóm	‘market’
krung-krung	ʈʰúŋ-tʰúŋ	‘crane’

[4] Unless otherwise stated, the sources for comparative data in section three and four are as follows. Zhang (1986) provides the Tshangla data, Jäschke (2003) is the source for Classical Tibetan, the Bumthang data come from (van Driem 1995) and Proto-Tibeto-Burman forms are as reconstructed by Matisoff (2003).

The data in (8) below show this sound change has not happened to labial rhotic clusters.

(8)	Classical Tibetan	Kurtöp	
	sbraŋ-ma	brɑŋ	'fly'
	braŋ	braŋ	'chest'
	spra	prá	'monkey'
	p^{h}ral-ba	p^{h}ré	'separate'

Another recent sound change has been the development of labial-palatal stop clusters from previously palatalized labials: /by/, /py/, /p^{h}y/ > /bɟ/, /pc/, /pc^{h}/ as shown below in (9).

(9)	Classical Tibetan	Kurtöp	
	bya	bɟojɑ	'bird'
	bye-ma	bɟɑ-sɑ	'ash'
	dpyang-ba	pcúŋ	'hang'
	phyed-ka	pc^{h}ékɑ	'half'

Further evidence for this sound change is found in the literature. Michailovsky and Mazaudon (1994) report palatalized labials for Kurtöp where we find labial-palatal stop cluster and the fact that palatalized labials become palatal stops in Tibetan is well-established. Synchronic observations also support this analysis. Our consultant from Thuke still has palatalized labials for some iterations of the above items.

3.2.2 Vowels

There is some evidence that /l/ has led to fronted vowels before disappearing from coda position. This sound change is evidenced in (10) below.

(10)	Classical Tibetan	Kurtöp	
	dŋul	ŋýy	'silver'
	t^{h}al-ba	t^{h}ewɑ	'dust'
	p^{h}ral-ba	p^{h}re	'separate'

In addition to the above, vowel length in Kurtöp has developed via at least three other diachronic pathways. The first source is the loss of old velar codas, the second is attributed to the loss of old suffixes, and the third is a recent process of monophthongization. Each will be discussed in turn.

Vowel length coming from a /gs/ or /g/ coda is illustrated by the data in (11) below.

(11)	Classical Tibetan	Kurtöp	
	p^{h}ags	p^{h}áɑ	‘pig’
	rnag	nɑɑ	‘pus’

In Kurtöp, occasionally a glottal stop will occur instead of vowel length, which often results in a falling pitch. Thus, ‘pig’ is sometimes realized as [p^{h}áʔ] and ‘pus’ as [nɑʔ]. However, in fast speech this usually is not the case; instead we find vowel length without a salient drop in pitch. Loss of coda consonants in Tibetan has led to glottalization and falling pitch on the preceding vowel (DeLancey 2003b). We do not see the occasional glottal stop and falling pitch as phonologizing in Kurtöp.

Vowel length has also clearly developed from lost syllables, similar to a process reported in Central Bodish. The Dzongkha reflex of Classical Tibetan <-ba> is a diphthong with nucleus /-u/ and a falling contour (Mazaudon and Michailovsky 1989). In many varieties of Tibetan the same <-ba> has become [wa] intervocalically, and in a few instances [wa] has further developed into long, lowered vowel with a falling tonal contour (DeLancey 1989). The fact Kurtöp has also developed vowel length from Classical Tibetan <-ba> is evidenced by the data in (12). While it is true that a more extreme contour is associated with the Kurtöp tokens in (12), it is not yet clear whether this is unique to vowels which have developed via a lost syllable, or whether it is a feature common to all long vowels.

(12)	Classical Tibetan	Kurtöp	
	ka-ba	kɑ́wɑ	‘post’
	t^{h}o-ba	t^{h}ówɑ ~ t^{h}óo	‘hammer’
	rko-ba	kóo	‘hoe’

Note the data above for ‘post’ show the sound change /bɑ/ > /wɑ/. The same sound change is exemplified by the data for ‘hammer’, and is the apparent source for the vowel length found in ‘hoe’.

At a shallower level, Kurtöp has developed /ee/ via the monophthongization of /ai/. Michailovsky and Mazaudon (1994) reported that [ai] ~ [ee] for their speakers, and further, where Bumthang (van Driem 1995) reports [ai] Kurtöp always has [ee]. Some examples of the comparative data illustrating this sound change are shown in (13) below.

(13)	Bumthang	Kurtöp	
	gai	gee	‘go’
	khaido	k^{h}éedo	‘kidney’

3.2.3 Tone

An initial /s/ in onset clusters has triggered high tone following nasals, as exemplified by the data in (14) below.

(14)	Classical Tibetan	Kurtöp	
	snas	ŋá	'pillow'
	sman	mán	'medicine'
	snom	núm	'smell'

Tonogenesis has happened amongst the palatal fricatives. Michailovsky and Mazaudon (1994) note that some voiced obstruents were at times realized as voiceless with low tone, and exemplify the finding with the palatal fricative. Currently, the voiced palatal fricative is not found; instead we find a voiceless palatal fricative with low tone where they reported a voiced palatal fricative. /ç/ is the only obstruent to appear before both high and low tone. Data from section 2.4 is repeated below in (15).

(15)	çee	'eat.IMP'
	çée	'come.IMP'

Data in (16) compare cognates with Classical Tibetan and Tshangla, supporting this claim.

(16)	Classical Tibetan	Tshangla	Kurtöp	
	gzhon-pa	ʝonma	çonba	'young'
		ʝu	çor	'wine'

4. Comparative Survey

Since Shafer (1954) linguists have speculated that East Bodish languages are closely related to Central Bodish, forming with Classical Tibetan a sub-family within Bodic. A comparison of lexical items could support this hypothesis. Alternatively, given the proximity to Tshangla, a plausible hypothesis is that East Bodish, and therefore Kurtöp, is more closely related to Tshangla. A comparative survey of 372 lexical items tests these competing hypotheses.

Below I detail how Kurtöp shares the majority of its vocabulary (75%) with Tibetan and less than 2% of its vocabulary is shared exclusively with Tshangla. Of the remaining 23%, most appear to be innovations, cognate neither with Tshangla nor Tibetan, though a large number also represents retentions from Proto-Tibeto-Burman.

The fact that Kurtöp shares 75% of its vocabulary with Classical Tibetan does not come as a surprise, considering the hypotheses put forth by Shafer (1954), Bradley (1997) and others. Examples of cognates with Classical Tibetan, not already shown in section three, are illustrated below in (17).

(17)	Kurtöp		Classical Tibetan
	çɑ	‘rainbow’	ja
	ziŋ	‘pond’	rdziŋ
	çimbulɑ	‘cat’	zhimbu
	bɑdɑm	‘peanut’	ba-dam

One potential problem, however, is distinguishing borrowings from old retentions. Because of the high prestige associated with both Tibetan and Dzongkha, both Central Bodish languages, there have been borrowings from Central Bodish into East Bodish and we cannot yet distinguish the borrowings from native vocabulary.

As mentioned of the remaining 25%, only 7 out 372 items are exclusively cognate with Tshangla, and not Tibetan, as shown in (18).

(18)	Tshangla	Kurtöp		Classical Tibetan
	meme ᓗᐦ	meme	‘grandfather’	spro-bo
	kham-pei	kɑ́mpe	‘cotton’	srin-bal
	pen- ᔨ	p^hrín-	‘lick’, ‘lap’	ldag
	kowa ᓗᐦ	k^hɑ́wɑ	‘chicken’	bya-de
	hark^{h}aktaŋ ᒣᒣᒣ	ɑ́r	‘phlegm’	bad-kan, lud-pa

Some words not cognate with Classical Tibetan are old Proto-Tibeto-Burman retentions, such as ‘give’, ‘snake’, ‘chicken’ and others, shown below in (19).

(19)	Kurtöp	Classical Tibetan	PTB	
	bi	skur-ba; ster-ba	*bəy	‘give’
	mipaŋ	gzhug-gu	*may	‘tail’
	ɟu	nu-ma; braŋ;	*dz(y)op	‘breast’
	kɑ́uliŋ	pho-rog	*ka	‘crow’
	pó	sbrul	***bəw;** *rul; *wəy	‘snake’

A large section of the vocabulary in the comparative study is not clearly cognate with Tibetan or Tshangla, and appears to be innovative. Nearly 20% of the 372 lexical items considered in this study fall into this category, some of which are illustrated below in (20).

(20)	Tshangla	Kurtöp		Classical Tibetan	PTB
	ŋamsu ˥	jyy	'rain'	char-pa	rwa, wa
	namŋiŋ ˥˧	jɑŋpɑ	'tomorrow'	saŋ	
	p^hi ˩	ŋíiɑ	'mouse', 'rat'	tsi-tsi	syow, wak, yəw (rat)
	pi˨	táwɑ	'foot'	rkaŋ-pa	kaŋ keŋ, krəy
	waktsa ˥	óŋɑ	'child'	phru-gu	tsa za
	natora˥	wunbɑ	'deaf.person'	lon-pa	baŋ (deaf)
	mojaktsa ˧˥	néesɑŋ	'wife'	a-ce	
	to˩	ípɑ	'rice'	kha-lag	haŋ (cooked)

5. Summary and Conclusions

This paper has considered Kurtöp in a comparative light with the goal putting the classification of Kurtöp, and the other East Bodish languages, on more solid footing.

Kurtöp synchronic phonology is almost identical to that of Tshangla, deviating only in that it has labial-palatal stop clusters, and is innovating a series of front rounded vowels. Front-rounded vowels and labial-palatal clusters[5] are also found in Dzongkha (Mazaudon 1985), making it difficult to attribute these innovations purely to historical change, rather than areal influence.

The results of the comparative study supported the previous claim that East Bodish languages are closely related to Tibetan and other Central Bodish languages, though not direct descendents from Classical Tibetan. However, a large portion (approximately 20%) of Kurtöp's vocabulary remains unaccounted for. A more detailed comparison with other Tibeto-Burman languages, including other East Bodish languages, would confirm whether these are innovations internal to East Bodish, or representative of a larger sub-family, yet to be understood. Finally, more work is needed to disambiguate the Central Bodish borrowings from the native East Bodish reflexes.

[5] These are described as bilabials with palatal affrication in Mazaudon and Michailovksy (1989).

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