THE TIBETAN ROLE IN SINO-TIBETAN COMPARATIVE LINGUISTICS

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The establishment of a genetic affinity among Indo-European languages encouraged the assumption of a similar relation for some of the languages spoken in northern India, Burma, Thailand, Laos, northern Vietnam, and China (including Tibet). These languages are referred to by the general term 'Sino-Tibetan', which has replaced the earlier 'Indo-Chinese'. Four subgroups of Sino-Tibetan languages have been recognized: Chinese, Miao-Yao, Kam-Sui-Tai, and Tibeto-Burman. It is premature to argue whether Sino-Tibetan includes four, three, or two of these subgroups. We must first focus our attention on one of these groups at a time and make an exhaustive study of it. The Chinese language has so far received the most attention. Fang-kuei Li's comparative study of the Kam-Sui-Tai languages and my own comparative study of the Miao-Yao languages are almost near completion. Recent attempts in the field of Tibeto-Burman linguistics have, however, been seriously flawed. In some cases, what is offered as a Proto-Tibeto-Burman reconstruction is—unbelievable as it might seem—simply written Tibetan. Bad as this is, it is even worse when written Tibetan is misinterpreted, as in the assertions that 'a-chung' was a glottal stop. It is most unfortunate that these ad-hoc Tibeto-Burman reconstructions have been taken seriously in learned circles. A fresh start is needed.

Outside the Tibeto-Burman field it is well known that before we compare two languages to reconstruct their common origin, we must first reconstruct the earliest stage we can for the individual languages, using whatever evidence is at hand, whether this is in the form of written

records, the spoken language, or a combination of the two. This earliest stage, or protolanguage, will be a projection which goes beyond the written language, of whatever antiquity this may be. Spoken languages were, after all, in existence long before writing systems were devised; the earliest written record is therefore not a representation of the earliest stage of the spoken language.

Written Tibetan cannot be equated with Proto-Tibetan. An indication of this is found in, for example, the defective distribution of aspirated and unaspirated initials. In absolute-initial position, very few words have voiceless unaspirated consonants. After the preinitials d-, g-, b-, s-, r-, and l-, there are no voiceless aspirated consonants. After the nasal preinitials N- ("a-chung") and m-, there are no voiceless unaspirated consonants. In other cases, where Tibetan has the same sound in two different words, reflexes in other Tibeto-Burman languages imply different origins. I give two examples of this sort in Chart 1: the š- of written Tibetan ša 'flesh' and ši-ba 'to die' and the -r of gser 'gold' and gsar 'new'.

Chart 1

Some Tibeto-Burman Correlates of Written Tibetan š- and -r

[WT: Written Tibetan. WB: Written Burmese]

	'flesh'	'to die'	'gold'	'new'
WT	ša	ši-ba	gser	gsar
WB	sa^{2}	sei^{1}	$hrwe^{1}$	sac
Akha	sha	$shi^{\vee}$	$shui^{\vee}$	$shui_{\wedge}$
Hani	$sɔ^{21}$	$ʂʐ̩^{55}$	$ʂʐ̩^{55}$	$sə^{21}$
Nahsi	$ʂɯ^{33}$	$ʂɯ^{33}$	$ʂɯ^{11}$	$ʂɯ^{55}$
Lisu	hwa^{5}	$shɨ^{4}$	$shɨ^{3}$	$shɨ^{6}$
Ahi	xo^{21}	$ʂʐ̩^{22}$	$ʂa^{44}$	$ši^{ʔ4}$
Sani	$xâ^{11}$	$sz̊^{33}$	$ʂʐ̩^{44}$	$ši^{ʔ2}$
Nasu	xu^{33}	$ši^{44}$	$ʂɔ^{44}$	$ši^{55}$

No Tibeto-Burman language is as well-documented as Chinese; this inevitably handicaps us to some degree in doing comparative work involving these two linguistic groups. The earliest Tibetan written records are the stone inscriptions of the seventh and eighth centuries; the earliest written records of Burmese are the stone inscriptions of the eleventh century. None of this, however, can be compared with the Chinese materials in either quantity or degree of antiquity. Where written records are lacking, we may of course find archaic expressions in oral literature—stories, songs, and religious incantations. In searching for cognates we must examine both current vocabulary and archaic expressions.

The study of historical Chinese linguistics is relatively advanced. Phonological reconstructions for the different periods have been proposed and repeatedly revised. Most of the internal evidence has been considered but external evidence, through comparisons of Chinese and other languages, can open up fresh lines of investigation and lead to the reexamination of the internal evidence.

Competently made comparisons of Tibetan and other Tibeto-Burman languages are the prerequisite to any serious Sino-Tibetan reconstructions. Difficulties here are manifold. In the first place, most of these languages have not been adequately recorded or sufficiently studied. Inadequate records can only lead to confusion. A language spoken by a large number of people and with a long history of written records will naturally attract more scholarly attention than one spoken by a small group of tribal people with no written records at all. So, while many well-trained linguists have specialized in various Indo-European languages, relatively few have worked on Sino-Tibetan languages other than Chinese. Dedicated and hard-working nonlinguists have, however, written a number of detailed dictionaries, extensive grammars, and interesting research papers. Also, from the material we do have, it appears that the stock of common Tibeto-Burman vocabulary is not very extensive. There are, for instance, common Tibeto-Burman words for 'fish', 'dog', and 'pig', but not for 'tiger' and 'horse'.

And even words common to these languages, such as 'iron' and 'needle', may have been early borrowings; we are constantly baffled in our attempts to distinguish cognates from borrowings.

Degrees of affinity can be inferred, with varying success due to the complexities involved, from common features of (1) vocabulary, (2) phonology, and (3) morphology.

(1) Vocabulary. There are, for example, at least three words for 'tiger' in Tibeto-Burman: a. WT stag, Ch'iang pẓda. b. Gyarong kheη, khuη, Tərung k(h)aη, WB kja^{3}, Lushai sakei. c. Kachin shăraw, Maru law, Akha xa$_{\vee}$la$_{\vee}$, Nasu lo^{44}, Lisu la^{5}ma^{3}, Ahi lo^{55}, Sani lâ^{55}, Nahsi la^{33}, Hani lɔ^{21}.

(2) Phonology. Some, but not all, Tibeto-Burman languages have preserved consonantal endings. Written Tibetan, for instance, has as endings stops (-g, -d, -b), nasals (-η, -n, -m), and continuants (-l, -r, -s). The Nahsi dialect of Li-chiang, Yünnan, the Hani dialect of Yang-wu, Yünnan, and the Ch'iang dialect of Li-fan in Szechuan have no endings. Many other dialects, such as Sani, Nasu, Ahi, and Lisu—all found in Yünnan—have only a glottal-stop ending. In the Akha dialect of northern Thailand, glottal strictures (indicated by the symbol ∧) are reflexes of stop endings (Chart 2).

Written Tibetan and the Tərung dialect of Kung-shan, Yünnan, have initial clusters with -l- or -r- as their second element. Written Burmese, Kachin, and Gyarong have only the -r- type of cluster.

Written Tibetan has three groups of consonants in preinitial position: stops (g-, d-, b-), nasals (N-, m-), and continuants (l-, r-, s-). Here Gyarong is like Tibetan, not Burmese, which lacks such preinitials.

(3) Morphology. The verb forms of both Gyarong, spoken in Li-fan, Szechuan, and Tərung, in Kung-shan, Yünnan, have pronominal endings indicating person (first, second, third) and number (singular, dual, plural) for subject and object. Affixes are, however, often utilized in different ways in different languages. While there is a causative *s- prefix common

Chart 2

Consonantal Endings in Tibeto-Burman

	*-ŋ	*-k	*-n	*-t	*-m	*-p
	'pine, fir'	'black'	'ripe'	'to kill'	'three'	'needle'
WT	thaŋ	nag	smin	gsat	gsum	khab
WB	thaŋ^{2}	nak	hman^{3}	sat	sum^{2}	ap
Kachin	thaŋ		myin	sat	sum	
Gyarong*	tho	nak	smi	sjet	som	kjep
Tərung		na	min	sat	səm	wop
Akha		na$^{\wedge}$	myah	seh$_{\wedge}$	sm$^{\vee}$	g'aw$_{\wedge}$
Lisu	thaw^{5}	na^{3}	mi^{3}	sya^{6}	sa^{3}	waw^{2}
Sani	tho^{11}	ne^{44}	mæ	xâ^{11}	sɤ^{55}	ɣɤʔ^{2}
Hani	thu^{21}	na^{55}		še^{33}	ʂu^{21}	ko^{33}
Nasu	thɔ^{33}	naʔ^{32}	mər^{21}	si^{55}	sa^{33}	ɣɤ^{55}
Ahi	thu^{21}	nie^{44}	mɛ^{44}	xo^{11}	ʂʐ^{44}	oʔ^{4}
Nahsi	tho^{33}	na^{11}	mi^{55}	sy^{55}	sɯ^{11}	ko^{11}
Ch'iang**		ňi	mi		tšhi	xe

* Tzu-ta dialect. ** Tseng-t'ou dialect.

to many languages, there is, for example, a great deal of variety in the numeral prefixes (Chart 3).

Written Tibetan has no indications of tonal distinctions and the tones of spoken Tibetan can be clearly seen to have evolved from the segments of the written language. In, for example, the Lhasa dialect that Betty Shefts and I studied (Chang and Shefts 1964), the tonal height contrast correlates with the written Tibetan initial voicing contrast. Open syllables and syllables ending in -l, -r, or a nasal have yielded level tones; the falling tones correspond to a written Tibetan stop ending or -s. The segmental makeup of written Tibetan, which can so neatly account for

Chart 3

Some Tibeto-Burman Numeral Prefixes

	WT	Gyarong*	Tərung	Kachin	Lepcha	Lushai
'one'	gtšig	ketšek	t(h)i	lăŋai	kat	(pa)khat
'two'	gnyis	kenes	ăñi	lăkhawŋ	nyăt, nyi	(pa)hnih
'three'	gsum	kesom	ăsəm	măsum	sam	(pa)thum
'four'	bži	keudži	ăpli	măli	fă-lí	(pa)li
'five'	lŋa	kemŋo, kemŋa	pəŋa	măŋa	fă-ŋo	(pa)nga
'six'	drug	keṭo, keṭa	khĭu	kru	tă-răk	(pa)ruk
'seven'	bdun	kešñit, kešnis	snit	sănit	kăkyăk	(pa)sari
'eight'	brgyad	warjat	šat	măsat	kăkŭ	(pa)riat
'nine'	dgu	keŋgu	dŏgə	tʃăkhu	kăkyót	(pa)kua
'ten'	btšu	ṣṭṣi	titsal	ʃi	kătí	shom

* Tzu-ta dialect

the spoken Tibetan tones, cannot, however, begin to cope with the tonal complexities of many other Tibeto-Burman dialects. Written Tibetan represents only a late stage of Tibetan phonology.

Though written Tibetan, Gyarong, and the Ch'iang languages lack tones, Tibeto-Burman languages whose speakers are in closer contact with Chinese have as many as six or seven tones. Without the wholesale incorporation of Chinese vocabulary as loans—which has not taken place—it is inconceivable that these tonal systems should have been borrowed from Chinese. We know that tonal diversification can be influenced by a number of features, such as the presence or absence of voicing or aspiration. Preinitials of various sorts (e. g. nasals, fricatives, stops) can have an effect on these features and thus indirectly change tones: a

voiceless fricative may devoice the following consonant; a voiced nasal may voice it. They can also directly affect a tone. In Lhasa Tibetan, for example, a word with a nasal in absolute-initial position has the low tone ('I', WT ŋa, Lhasa ŋa̲); if the nasal is preceded by another consonant, the tone is high ('five', WT lŋa, Lhasa ŋā). In reconstructing Proto-Tibeto-Burman we face, then, the formidable task of accounting for, along with many other things, the Tibeto-Burman tonal systems. Tones are integral properties of most Tibeto-Burman languages and can never be ignored.

Consider the three-way tonal contrasts in group A of the Lolo-Burmese dialects cited in Chart 4. (In Charts 4–6, to eliminate as many variables as possible, I have used only forms with stop or affricate initials and without stop endings in Tibeto-Burman.) Forms with one tone have voiceless unaspirated initials ('to be able to', 'head'); those with the other tones—let us call them 'a' ('bitter', 'dog') and 'b' ('white', 'ten', 'human being')—both have aspirated initials in Lisu, Ahi, and Nahsi. In Burmese, Akha, and Hani, the difference between the 'a' and the 'b' tones is one of height, and the 'a' tone is the same as that of forms with voiceless unaspirated initials. I take these clues to mean that the initial of the forms with 'a' tone was voiceless and that the initial of the 'b'-tone forms was voiced. Looking farther afield we do, indeed, find voiceless aspirated initials in the Chinese cognates *khag 'bitter' (K49 u) and *khiwən 'dog' (K479 a-d) and voiced initials in the Chinese cognates *brak 'white' (K782 a-e) and *sdjəp 'ten' (K686 a-d). (The correspondence of Chinese *-k and non-Chinese -r is regular. References in parentheses are to Karlgren 1957; reconstructions are, however, modified to take into account recent work in this field.) There is perhaps not as much tonal diversity in the Nasu *voiced reflexes as the forms in Chart 4 would suggest: -tshɔ^{33} has been recorded only in the compound va^{33} tshɔ^{33} 'people; man; husband'; 'white' and 'ten' also have this tone as second members of compounds (e. g. ṭshɛ^{21} thu^{33} 'white rice', ni^{44} tsɛ^{33} 'twenty').

Chart 4

Lolo-Burmese Reflexes of Voice and Aspiration in Absolute-initial Position

A: Dialects with tonal contrasts corresponding to *voiceless unaspirated, *voiceless aspirated, and *voiced.

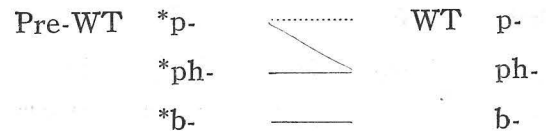
B: Dialects with tonal contrasts corresponding to *voiceless and *voiced.

		*Voiceless unaspirated		*Voiceless aspirated		*Voiced		
		'to be able to'	'head'	'bitter; salty'	'dog'	'white'	'ten'	'human being'
A.	Lisu	ku^{1}	wu^{1}	$khwa^{5}$	$khɯ^{5}$	phu^{4}	$tshi^{4}$	$tshaw^{4}$
	Ahi	$kɤ^{55}$	o^{55}	kha^{21}	$tšhi^{21}$	tho^{22}	$tshe^{22}$	$tshu^{22}$
	Sani	$kɯ^{55}$	o^{55}	$qhâ^{11}$	$tshž^{11}$	$ɬẓ^{33}$	$tshI^{33}$	$tsho^{33}$
	Nahsi	ku		kha^{33}	$khɯ^{33}$	$phur^{11}$	$tshɛ^{11}$	$tsho^{11}$
B.	WB		u^{2}	kha^{2}	$khwe^{2}$	$phru^{1}$	$tshai^{1}$	su^{1}
	Akha*		u_{V}	$k'a_{V}$	kui_{V}	pyu^{V}	tse^{V}	$tsaw^{V}$
	Nasu	$kɯ^{33}$	$ɯ^{33}$	$khɔ^{33}$	$tšhi^{33}$	thu^{24}	$tshɛ^{21}$	$-tshɔ^{33}$
	Hani		u^{21}	$χɔ^{21}$	$khə^{21}$	$phu^{33/55}$	$tšhi^{33}$	$tṣho^{33}$

* Akha k'- and g'- are postvelar, as opposed to velar k- and g-. Aspiration is not indicated in the transcription since, given the tone, its presence or absence can be predicted: in CV_{V} and CV^{V}, the initial is aspirated; in $CV_{\wedge}$ and $CV^{\wedge}$, it is not.

All of the other linguistic groups which have ever been considered part of Sino-Tibetan—that is, Chinese, Miao-Yao, and Tai—have three-way contrasts of voiceless unaspirated, voiceless aspirated, and voiced in their reconstructed proto-systems. The three-way tonal system found in Lolo dialects may be assumed to correlate, then, with a three-way Proto-Tibeto-Burman, and in turn, Proto-Sino-Tibetan, system of voice and aspiration contrasts. If this system derives from Proto-Sino-Tibetan, membership of

a particular form in any one of the three categories may have been affected by changes of voicing, devoicing, and aspiration. In Tibetan, there appears to have been an extensive shift of voiceless unaspirated to voiceless aspirated stops which created a semblance of a system with two-way contrasts. (Taking the semblance for reality, some writers in the Sino-Tibetan field have reconstructed a two-way proto-system.) I posit, then, the following development of Tibetan stops in absolute-initial position:



A perhaps universal spur to the voicing of voiceless stops in Sino-Tibetan is a preceding nasal. Throughout Miao-Yao, Chinese, and Tibeto-Burman we find examples of the assimilatory voicing of a voiceless stop by a preceding voiced nasal, sometimes with retention of the nasal, sometimes with its subsequent loss; in other instances (more often when the stop was voiced), stop and nasal have merged (Chang and Chang 1976). 'Nine' (Chart 5) appears to offer an example of such voicing in several dialects, including written Tibetan. Archaic Chinese (*kjuəg; K992 a-d) and Proto-Tai (Li 1976.233) both have voiceless velar-stop initials for 'nine'. Most Lolo-Burmese dialects imply the same initial: compare the tones of the *voiceless unaspirated reflexes in Chart 4 with the tones for 'nine' in Chart 5. The voiced (-)g- of Akha and written Tibetan may be attributed to a nasal preinitial, a reflex of which Nahsi has preserved in its ŋ-. This nasal is also found in Gyarong (Tzu-ta) keŋgu and Hsi-hsia *ŋgĩ. The d- of written Tibetan dgu is apparently a later innovation. For Proto-Tibeto-Burman 'nine' I would reconstruct, then, *k- and *N-k-, the latter for those dialects with a nasal preinitial or with evidence of voicing in either tone or initial.

Chart 5

Words with Possible *N- Preinitials

	'nine'	'insect'	'strike'	'eat'	'drink'	'wine'	'bridge'
Lisu	ku^{1}	bi^{5}	dɯ^{5}	dza^{5}	daw^{4}	ji^{4}	dzye^{4}
Ahi	kɤ^{55}	bu^{21}	da^{21}	dzo^{21}	tu^{22}	tši^{22}	tsʐ^{22}
Sani	kɯ^{55}	bv^{11}	dæ^{11}	dzâ^{11}	to^{33}	tsz̊^{33}	tsɤ^{33}
Nahsi	ŋku^{55}, ŋku^{33}	by^{33}, bi^{33}		ndzɯ^{33}		ʐɯ^{33}	ndzo^{11}
WB	ko^{2}	po^{2}		ca^{2}		sei^{1}	
Akha	g'oe$_{V}$	boe$_{V}$	deh	dza$_{V}$	daw^{V}	ji^{V}	dzm^{V}
Nasu	kɯ^{33}		dɔ^{33}	dzu^{33}	dhɔ^{213}	džhi^{21}	dzhɛ^{21}
Hani	kər^{21}	pi^{21}	tʂʐ^{21}?	tsɔ^{21}		tsi^{55}	tsu^{33}
Liang-shan Lolo			ndu^{21}	dzɯ^{33}	ndo^{33}	ndʐʐ^{33}	
WT	dgu	Nbu	rduŋ	bza	Nthuŋ		zam

'Insect', 'to strike', and 'to eat' (Chart 5) have the same tones, but not the same sorts of initials, as 'bitter' (Chart 4):

	Lisu	Ahi	Sani	Nahsi	WB	Akha	Nasu	Hani
'insect'	vd.	vd.	vd.	vd.	vl.	vd.		vl.
'to strike'	vd.	vd.	vd.			vd.	vd.	vl.
'to eat'	vd.	vd.	vd.	Nvd.	vl.	vd.	vd.	vl.
'bitter'	vl.	vl.	vl.	vl.	vl.	vl.	vl.	vl.
	asp.	asp.	asp.	asp.	asp.		asp.	asp.

I have tentatively assumed that Lolo-Burmese tonal diversification was conditioned by the syllable initials. Under this assumption, the tones of 'insect', 'to strike', and 'to eat' imply voiceless aspirated stop initials. The nasal preinitials of written Tibetan Nbu 'insect', Liang-shan Lolo ndu^{21} 'to strike', and Nahsi ndzɯ^{33} 'to eat' suggest that the almost universally voiced initials of these words in Lolo-Burmese resulted from assimilation

to a preceding nasal. Voicing would, then, have taken place after the tone was fixed by the initial.

The tones for 'to drink', 'wine', 'bridge' (Chart 5) are the same as those for 'white' (Chart 4; *voiced), with the exception of Nahsi (33) and Hani (55) 'wine' and Nasu (214) 'to drink', but again there is a difference in initials:

	Lisu	Ahi	Sani	Nahsi	WB	Akha	Nasu	Hani
'to drink'	vd.	vl.	vl.			vd.	vd. asp.	
'wine'	vd.	vl.	vl.	vd.	vl.	vd.	vd. asp.	vl.
'bridge'	vd.	vl.	vl.	Nvd.		vd.	vd. asp.	vl.
'white'	vl.	vl.	vl.	vl.	vl.	vl.	vl.	vl.
	asp.	asp.	asp.	asp.	asp.		asp.	asp.

Some languages have nasal preinitials in these words, too: Liang-shan Lolo ndo^{33} 'to drink', ndẓẓ^{33} 'wine', and Nahsi ndzo^{11} 'bridge'. Such nasal elements may have been the reason for the Lolo-Burmese developments of initials and tones in these words. Here I assume that the nasals first voiced the following consonants and that the secondarily voiced initials were the conditions for the subsequent tonal developments. (There is, admittedly, a disparity in the reconstruction of *Nph-, with voicing in written Tibetan Nbu 'insect', and the preservation of *Nth- in written Tibetan Nthuŋ-ba 'to drink'. It is, of course, the reflexes for 'insect' which pose the problem and make definitive reconstructions so difficult here.

The sequences of s- followed by voiced stop initials in written Tibetan sbal 'frog' and sgo 'door' have different correspondences in some Tibeto-Burman languages (Chart 6). The reflexes for 'frog' are voiceless stops (in written Burmese and Hani with aspiration). The voiceless stop initials of Akha, Lisu, Ahi, and Sani could conceivably derive from *s-b- (→ *s-p- → *p-); they could equally well be interpreted as reflexes of an original *p-. Nahsi has in composition the pitch (55) which in absolute-initial

position would imply a voiceless unaspirated stop: hæ^{33}sɯ^{11}pa^{55} 'golden frog'; by itself, however, 'frog' has a lower pitch (33), indicating a prenasalized stop: pa^{33}. The absence of voicing in Nahsi pa^{33}, as opposed to Nahsi by^{33}, 'insect' (Chart 5), may have been due to a preceding *s-. I do not know why written Burmese (phaa^{2}) and Hani (phɔ^{21}) have aspiration. The tonal correspondences for 'frog' are identical with those for 'to be able to' (Chart 4; *voiceless unaspirated) and for 'nine' (Chart 5), except for Nahsi, which has a variant with tone 33 for both 'frog' and 'nine'. For 'door' (Chart 6), written Burmese, Lisu, and Nahsi have the same initials and tones as for 'bitter', with its reconstructed voiceless aspirated-stop initial; this suggests a derivation from *s-N-kh- for Tibetan. The voiced-stop initials of Akha, Nasu, and Ahi may be attributed to the nasal implicit in Tibetan sg- (*s-N-g-); that the tones for 'door' in these dialects differ from those for 'nine', 'insect', 'wine', 'star', and 'body' may perhaps be attributed to the combination of *s-N- and a voiceless aspirated initial. Sani and Hani have the same initial and tonal reflexes for 'door' as for 'wine', with its reconstructed prenasalized stop initial, but differ

Chart 6

Words with r- or s- Preinitials in Written Tibetan

	'frog'	'to steal'	'door'	'star'	'body'
Lisu	pa^{1}	khu^{5}	khɯ^{5}	ku^{3}	gaw^{3}
Ahi	po^{55}	khɤ^{21}	go^{44}	tṣaʔ^{2}	kɤ^{22}
Sani	pâ^{55}	khɯ^{11}	qâ^{33}	tšæ^{33}	kɯ^{33}
Nahsi	pa$^{55/33}$	khu^{33}	kho^{33}	kɯ^{11}	gu^{33}
WB	pha^{2}	kho^{2}	kha^{2}	krai^{1}	koy^{1}
Akha	pa$_{\vee}$	k'oe$_{\vee}$	g'o$^{\wedge}$	gui$^{\vee}$	g'aw$^{\vee}$
Nasu		khɯ^{33}	ghu^{33}		gɤ^{21}
Hani	phɔ^{21}	χər^{13}	ku$^{55/33}$	kə^{33}	kər^{55}
WT	sbal	rku	sgo	skar	sku

from those for 'insect'. In Hani, 'door' has a variant with tone 33. The possible Chinese cognate for 'door', *gag (K53 a-b), offers no help in determining the initial: the *g- could represent an original voiced stop; again, it might be the reflex of a prenasalized voiceless stop. The Nasu voiced aspirated initials remain a problem.

'Star' and 'body' (Chart 6) present especially difficult problems. Devoicing of a voiced stop by a preceding s- is another major assimilatory change for which there is internal evidence in Tibetan. Was *g- devoiced by s- in Tibetan or was *k- voiced by a nasal in Lolo-Burmese? Could Lolo-Burmese differences in the forms for 'star' and 'body' be due to an *s- preceding a nasal preinitial or to incomplete spread of the preinitials *s- and *N-? It has been suggested (Chang and Chang 1976.331) that the initial of Tərung glumjet 'star' was voiced by a nasal preinitial whose reflex we see in the reconstructed Hsi-hsia *ŋgẹ. It is possible, however, that Tərung has the reflex of an original prenasalized voiced stop.

The reflexes for 'to steal' (Chart 6) differ from those for 'bitter' only in the Hani dialect. Just how the Hani tonal difference correlates with the r- preinitial of written Tibetan rku, if it does, is unclear, since the origin of the preinitial r- is itself disputed, being sometimes attributable to metathesis and sometimes to rhotacism (*s- → r-). Possible Chinese cognate: *khug 'to rob' (K111 a-b).

My main purpose in this paper has been to point out some of the complicated problems in Tibeto-Burman comparative studies and to show that these problems are far from being solved. A great deal of honest work remains to be done.

SUMMARY

	'to be able to'	'nine'	'frog'	'bitter'	'insect'	'steal'	'door'	'white'	'drink'	'star'	'body'
Lisu	ku^{1}	ku^{1}	pa^{1}	khwa^{5}	bi^{5}	khu^{5}	khɯ^{5}	phu^{4}	daw^{4}	ku^{3}	gaw^{3}
Ahi	kɤ^{55}	kɤ^{55}	po^{55}	kha^{21}	bu^{21}	khɤ^{21}	go^{44}	tho^{22}	tu^{22}	tʂaʔ^{22}	kɤ^{22}
Sani	kɯ^{55}	kɯ^{55}	pâ^{55}	qhâ^{11}	bv^{11}	khɯ^{11}	qâ^{33}	ɬẓ^{33}	to^{33}	tšæ^{33}	kɯ^{33}
Nahsi	ku^{55}	ŋku^{55}, ŋku^{33}	pa^{55}, pa^{33}	kha^{33}	by^{33}, bi^{33}	khu^{33}	kho^{33}	phur^{11}		kɯ^{11}	gu^{33}
WB		ko^{2}	pha^{2}	kha^{2}	po^{2}	kho^{2}	kha^{2}	phru^{1}		krai^{1}	koy^{1}
Akha		g'oe$_{V}$	pa$_{V}$	k'a$_{V}$	boe$_{V}$	k'oe$_{V}$	g'o$^{\wedge}$	pyu^{V}	daw^{V}	gui^{V}	g'aw^{V}
Nasu	kɯ^{33}	kɯ^{33}		khɔ^{33}		khɯ^{33}	ghu^{33}	thu^{24}	dhɔ^{213}		gɤ^{21}
Hani		kər^{21}	phɔ^{21}	χɔ^{21}	pi^{21}	χər^{13}	ku^{55}, ku^{33}	phu^{33}, phu^{55}		kə^{33}	kər^{55}
WT		dgu	sbal	kha	Nbu	rku	sgo		Nthuŋ	skar	sku

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