

**Three TB/ST Word Families:
set (of the sun); pheasant/peacock; scatter/pour**

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This paper is a quick look at three interesting word families, each with its own story. All three require the reconstruction of variant prototypes (allofams). The first, SET (of the sun), is entirely new. The second, PHEASANT/PEACOCK, takes off from an established etymology and demonstrates that it is broader in semantic scope than previously recognized, so that many more cognate forms may be identified. (For good measure we include a couple of unrelated new roots in this semantic area). The third word family, SCATTER/POUR, represented in Chinese as well as Tibeto-Burman (TB), is a combination of two previously proposed etymologies.

1.0 Set (of the sun)

This etymology began to take shape when I had the pleasure of going through Boyd Michailovsky's (still unpublished) manuscript *Proto-Kiranti* at STEDT back around 1989.¹ Further supporting data was found in the two chief compendia of TB lexical items published in China, Sun Hongkai et al. 1986 ("ZMYYC") and Dai Qingxia et al. 1992 ("TBL").

1.1 *Forms that point to PTB simple velar initials: PTB *gim*
× **gum*

Michailovsky reconstructed Proto-Kiranti ***gim** 'set (of the sun)' on the basis of two forms: Dumi **gi:m**; Thulung **gam**.

This immediately rang a bell for me, since the Lahu word is **qè**, used for the setting of several heavenly bodies: (**mû-ni qè ve** 'sun sets', **mû-ni qè phô** 'the west'), 'moon sets' (**ha-pa qè ve**), 'morning star sets' (**pā-tô? qè ve**).² The initial correspondence between the Proto-Kiranti and Lahu forms is perfect, since PTB/PLB ***g-** regularly > Lahu **q-** (cf. 'nine' PTB ***d-gəw** > PLB ***gəw**² > Lahu **qô**; 'crooked' PTB ***guk** > PLB ***gok^L** > Lahu **qô?**). As for the rhyme correspondence, Lahu **-ε** is the reflex of both ***-im** and ***-um**, which have largely merged in Lolo-Burmese.

The variation between **-i-** × **-u-** in closed syllables is in fact very common in TB word families, especially when one of the neighboring consonants is labial.³ Among many examples which could be cited:⁴

'sleep' *yip × *yip	'beat/strike' *dup × *dip
'house' *k-yim × *k-yum	'sink' *nup × *nip ⁵
'wrap' *tip × *tup	'tear/rip' *džit × *džut
'dusk/darkness' *rum × *rim	'wipe' *sut × *sit
'warm' *lum × *lim	'body hair' *g-mul × *g-mil

The other Loloish cognates to Lahu **qè** to be found in *ZMYC* #752 "*luòxià (tàyáng)*" and *TBL* #1512 "*luò (tàyáng)*"⁶ all have back vowels:

ZMYYC: Nanjian Yi **ɣu**⁵⁵, Lisu **go**³³ **ʒe**⁴⁴,
 Naxi (Lijiang and Yongning) **gv**^{31,7},
 Hani Caiyuan (Biyue) **kɔ**³³,
 Hani Shuikui (Haoni) **kɔ**³³ **ji**⁵⁵
TBL : Lisu **go**³³, Naxi Lijiang **gy**²¹

These Loloish reflexes are rather similar, but by no means identical to those of PLB ***sum**² 'three', an indubitable word with the rhyme ***-um** (cf. Written Burmese **sûm**): Lahu **ʃē**, Nanjian **sa**³³, Lisu **sq**³³, Naxi **sɿ**²¹ (see below 1.2), Hani Caiyuan **se**⁵⁵, Haoni Shuikui **su**⁵⁵. Neither do they seem particularly parallel to those of PLB ***s-dim**¹ 'cloud', a word to be reconstructed with the indubitable rhyme ***-im**⁸ (cf. Written Burmese (WB) **tim**):

ZMYYC: Yi Dafang **tie**³³, Yi Nanjian **ɑ**⁵⁵**mu**²¹**ti**⁵⁵,
 Yi Mile (Axi) **tɛ**³³, Yi Mojiang **tɛ**⁵⁵,
 Naxi Lijiang **tɕi**³³, Caiyuan Hani **ni**³¹**tshi**³¹, Hani
 Shuikui **u**³¹**tu**⁵⁵, Jinuo **mu**³³**tje**³³
TBL: Yi Xide **mu**³³**ti**³³ (**mu**³³ 'sky'),
 Yi Weishan **ɑ**⁵⁵**m**²¹**ti**⁵⁵, Yi Nanhua **ti**³³ **tʂho**³³,
 Yi Wuding **tɔ**³³, Sani **tæ**⁴⁴,
 Jinuo **m**³³**tɛ**³³, Gazhuo **ty**²⁴.

So on balance, perhaps we should reconstruct the basic Proto-Loloish allofam with a back vowel: ***gum**.

Further support for this etymology is to be found in Qiangic and Baic. The Qiangic forms point to a ***front vowel**:

ZMYYC: Qiang (Mawo) **a qe**, Shixing **miɛ**³³ **ɣĩ**⁵⁵
TBL: Shixing **gĩ**, Namuyi **mi**³³**qæ**⁵³ (cf. **ɲi**⁵⁵**mi**⁵⁵ 'sun'),
 Qiang (Mawo) **a qa**

The root for 'cloud', with front-vowel vocalism, is also well-attested in Qiangic languages:

ZMYYC: Qiang (Mawo) **zɔ̃m**, Qiang Taoping **χde³³**,
Pumi Taoba **zə⁵⁵ rē⁵⁵**,
Pumi Jinghua **sdĩ⁵⁵**, rGyalrong **zɛm**,
Ergong **zdo-mɛ**, Muya **ndw³³ zɛ³⁵**
TBL: Qiang (Mawo) **zdam**, rGyalrong **zɛm**, Daofu **zdo**,
Queyu **ctie⁵⁵**, Zhaba **stei¹³**, Pumi (Lanping) **zdĩ⁵⁵**,
Pumi (Jiulong) **dě³⁵**, Muya **ndə³³ re⁵⁵**,
Shixing **tĩ⁵⁵ rō³³**.

Note the identical rhyme reflexes in the Shixing forms for 'set' and 'cloud'.

On the other hand, Baic forms have back vowels:

ZMYYC: Bai (Jianchuan) **yo⁴²**, Bai (Dali) **o⁴²**
TBL: Bai (Jianchuan) **yü²¹**

So far then we may provisionally reconstruct PTB ***gim** \approx ***gum**. But further complications soon arise.

*1.2 Forms with affricates or clusters that might point to an earlier *cluster: PTB *glim \approx *glum*

Strong support for a medial glide in this etymon is provided by Nungish forms (cited identically in *ZMYYC* and *TBL*): Anong Nu **dzim⁵⁵**, Dulong **glom⁵³**, implying Proto-Nungish ***glim \approx *glum**.

Several other Loloish forms to be found in *ZMYYC* and *TBL* have fricative, affricate, or cluster initials which suggest a PLB form with medial glide, perhaps ***glum** or ***gyum**:

ZMYYC: Jinuo **kja**³⁵
TBL: Yi Weishan **zɛ**⁵⁵, Yi Nanhua **dzo**³³,
Yi Wuding **ɖɻ**¹¹, Sani **tlɻ**³³,
Jinuo **krɔ**³³

While these reflexes look quite different from those of 'cloud' (above 1.1), they look more similar to 'three':

Yi Nanhua **so**³³, Sani **sv**⁵⁵ (at least the Nanhua and Sani reflexes are the same!), Yi Xide **so**³³,
Yi Weishan **sa**³³, Yi Wuding **so**³³

Similarly with 'warm' (PTB ***lum** ≈ ***lim** [STC #381]; TB: #1065]: Yi Xide **tsha**³⁴**ʈo**³³, Yi Weishan **xɑ**⁵⁵**ly**⁵⁵ **mu**²¹, Yi Nanhua **lu**³³ **mə**²¹, Yi Wuding **ly**¹¹ **my**²³ Note the identical Wuding rhyme reflex in '(sun) sets' and 'warm').

Qiangic also has a number of resemblant forms for '(sun) sets' with affricated or fricative initials:

TBL: Daofu (Ergong) **nə** **ndzo**,
Queyu **pu**⁵⁵**tʃa**¹³, Lusu **ne**³³**tɕu**⁵³

Note that the Daofu rhyme reflex is identical to 'cloud' < ***-im** (Daofu **zdo**), but unlike that in Daofu **xsu** 'three' (< ***-um**).

ZMYYC: Pumi (Taoba) **nə**³⁵ **dzɛ**³⁵,
Pumi (Jinghua) **nə**¹³**dzie**⁵⁵, Ersu **tɕho**⁵⁵

The Daofu, Lusu, and Pumi first syllables mean 'sun' (< PTB *nəy).

The Ergong (= Daofu) form cited in *ZMYYC* is **dza**, very close to Amdo Tibetan **ndza**. Curiously the several ways of expressing '(sun) sets' in Lhasa Tibetan all involve other roots: **nub-pa** ('sink'), **bzud-pa** ('go away'), **skyod-pa** ('move; go; elapse'). Especially hard to evaluate in the present state of our knowledge is Alike Tibetan **njjəp** '(sun) sets', which simultaneously resembles Lhasa **nub-pa**, Amdo **ndza** and Daofu **nə ndzo**.

The relationship of these affricated forms for '(sun) sets' to those with simple velars remains highly speculative, but for now let us set up this word-family as PTB *g(l)im ≈ *g(l)um.

Even more speculative are several possible comparisons with Chinese:

淹 OC *ʔiam/MC ʔiäm [GSR 614c] > Mand. **yān** 'flood; submerge', **yānsǐ** 'drown'

暗 OC *ʔiam/MC ʔiäm: [GSR 614e] 'dark'

涵 OC *yâam 'submerge; vast, capacious; magnanimous' [AD 63].

2.0 Pheasant/peacock

The root PTB *doŋ 'peacock' is set up in STC #341⁹ on the basis of WT **mdoŋs** 'eye in peacock's feather', Jingpho **u-doŋ**

'peacock', WB ʔu'-dâuŋ 'id.' (the first element in the Jingpho (Jg.) and Burmese forms means 'bird' (< PTB *wa ≈ *wu 'bird; wing; feather'), and appears in many other Jg. bird-names. The voiced initial in the Jg. form cited in *STC* appears to be inaccurate. It is transcribed as **u-tawng** in Hanson 1906/1954:52, and as **u³¹toŋ³³** in TBL:857. The voiced **d-** in the WB form is quite genuine, however.¹⁰ WB voiced obstruents are rare, since they are secondary developments that reflect earlier prefixal elements.¹¹ (The original PTB *voiced series was devoiced in Burmese at an early date.) In Lahu (Loloish group), as in Burmese, the original *voiced series has been devoiced, but there is a robust series of secondary voiced obstruents /**b d j g**/ that clearly descend from earlier *prenasalized initials, i.e. initials preceded by the PTB nasal prefix ***m-**. It seems likely therefore that the anomalous voiced initial in Burmese reflects in this case the same nasal prefix to be found in the WT form. Hence we may set the root up as ***m-don** on the PTB level, as Benedict hesitantly did in the Indexes.

So far so good. The search for further cognates with the meaning 'peacock' is quickly stymied by the fact that most dictionaries and wordlists of TB languages lack any such gloss. What set me off on the expansion of this etymology was finding the Kanauri form **dañ**, glossed "pheasant" (STEDT database #337169). I vaguely remembered that there was a bird in Thailand called the *peacock pheasant*.¹² A quick consultation of a couple of bird-books (Lekagul and Cronin, Eve & Guigue) confirms that what we call peacocks are merely a subclass of the pheasants, which in turn are members of a larger order of birds called the *Phasianidae*, which also includes the quails and partridges. So now anything glossed "partridge" or "pheasant" was fair game, as it were.

Lekagul (p. 45) describes the Phasianidae as follows:

Plump bodies, strong unfeathered legs, and strong bills. Terrestrial, feed on seeds, berries, worms, insects, etc. In most, sexes differ, with the male more brightly colored...form three distinct groups in Thailand: small Quails, medium Partridges, and large Pheasants.

The *American Heritage Dictionary* defines 'peafowl' as:

either of two large pheasants, Pavo cristatus, of India and Ceylon, or P. muticus, of Southeast Asia.

The WB bird-name **mâṅ-dâuṅ** clinches the matter, as can be seen from the sketch in Bernot's dictionary (reproduced here as Figure 3), where the bird is identified (with no French gloss) as *Argusianus argus*. This bird is called the 'great argus pheasant' in Lekagul & Cronin, p. 51-2.¹³ The first syllable **mâṅ**- undoubtedly means 'kingly, royal' in this compound, as in another compound illustrated on the same page of Bernot, **mâṅ-thuiṅ** ("king-sit") 'area on the back of an elephant where the king sits'.

Besides Kanauri **dañ**, other Himalayish cognates include Limbu **sam-daṅ-wa** (**wa** 'bird') 'pheasant'; Sherpa **dāngan** (Hale 1973; it is not clear whether this form is to be syllabified as **d^han-an** or as **dān-gan**).

Similar forms are to be found in many languages spoken in Burma belonging to the Burmish, Chin, and Karen groups, though some of them look as if they are loanwords from Burmese **?u'-dâuṅ**:¹⁴ (Chin) Tiddim **u¹tong²** 'peacock', Lai **?oo-too** 'id.'; (Burmish) Leqi **wo³³toṅ³³**, Zaiwa **u⁵⁵toṅ⁵⁵**, Hpun **ú-tòṅ**; (Karenic) Pa-o (Taungthu) **wâ tōṅ**

Several Loloish forms look like genuine cognates to (not loans from) Burmese: Hani (Luchun) **sɔ⁵⁵dø³¹** 'peacock'; Hani (Mojiang) **ʃu⁵⁵ti³¹**; Akha **shím dè** (for the first syllables, see below 2.1). Bradley (forthcoming) cites a Northern Lisu form **na³⁵dɔ²¹** 'pheasant' (first syllable 'bird' < PLB ***s-ŋak**), with a stopped final that suggests a Pre-Lisu allofam ***dok**.

Solid cognates are also found in Nungish:

Dulong **pu³¹daŋ⁵³** 'pheasant', Bijiang Nu **dɔ⁵⁵** 'id' (TBL #340)

Possibly related is a group of Mirish forms with final vowel:

Darang Deng **oŋ⁵⁵diu⁵⁵** 'peacock', xa³¹**tui⁵³** 'pheasant'; Geman Deng **u⁵⁵ diu⁵⁵**; Idu **jaŋ⁵⁵dai⁵³** 'pheasant' (Darang **oŋ⁵⁵** is certainly cognate to Idu **jaŋ⁵⁵**, whatever these syllables might mean!)

How to reconstruct this etymon? The rhyme is reconstructed as ***-oŋ** in STC #341 on the basis of the correspondence of WT and Jingpho **-oŋ** to WB **-auŋ** (= **-oŋ**). Several cognates in other languages have rhymes with **-a-**vocalism (e.g. Kanauri **dañ**, Limbu sam-**daŋ**-wa, Dulong **pu³¹daŋ⁵³**), which might reflect a prototype like ***dwaŋ**. The PTB rhymes ***-oŋ** and ***-waŋ** have in fact merged to **-oŋ** in both WT and Jingpho, but they have been kept apart in WB, i.e. if the proto-rhyme had been ***-waŋ**, we would expect WB **-waŋ** as well. Perhaps then we should set up proto-variation in this root, something like PTB ***m-d(w)aŋ-s**, or ***d(w)aŋ** \approx ***doŋ**.¹⁵

2.1 A distinct 'pheasant' etymology: PTB *saŋ

Loloish:

PLB *saŋ² > Lahu š̌⁵ 'Siamese fireback pheasant' (*Lophura diardi*) DL 1222; Yi Xide ʂu³³ 'short-tailed pheasant', Yi Weishan a⁵⁵ ʂu²¹; Yi Nanhua ʂu⁵⁵, Yi Wuding ʂy¹¹ py³³; Sani ʂz̄⁵⁵. Perhaps also Naxi fy³³ and Gazhuo ya⁵³ zɿ³¹ (all 'pheasant').

The first syllables of these Southern Loloish compounds are also cognate: Hani (Luchun) sɔ⁵⁵ dɤ³¹ 'peacock'; Hani (Mojiang) fu⁵⁵ ti³¹ 'id.'; Akha *shím dèc*. (The second syllables have been discussed above, 2.0.)

Qiangic:

Pumi (Jiulong) fũ⁵⁵ 'pheasant', Shixing dzũ³³ ra⁵⁵

2.2 Another interesting 'peacock' etymology: PTB *s-ŋow-n

The color term *ŋow 'white; green; yellow' is reconstructed in STC #296 on the basis of WT sŋo 'blue, green' and a number of forms from Kuki-Chin languages: Lushai ŋou 'white', Thado ŋou 'clean', Sho nau 'green', Bete əŋoi 'yellow'. Two of the WT compounds for 'peacock' include this morpheme: **mgul-sŋon**, **mgrin-sŋon**, literally "blue-necked" (**mgul**, **mgrin** 'neck'), the latter form glossed also as 'mahadeva', or 'blue-necked, an epithet of gods' (Jäschke 32).¹⁶ The final **-n** in **-sŋon** looks like an derivational suffix. This is undoubtedly cognate to the hitherto mysterious Lahu form **a-ŋō-ma** 'peacock' (probably literally "the blue one"), where the very-low tone of

the syllable **-ŋō-** reflects a PLB ***ʔ-** prefix, which in turn derives from PTB ***s-** (attested directly in the WT form).

The peacock is also associated with the color blue/green in Chinese, as in the compounds **kǒngque-lyù** 'peacock green' and **kǒngque-shí** 'malachite' ("peacock-stone": a dark green mineral carbonate of copper).

2.3 ***s-rik** ≈ ***s-ryak**

Still another root for 'pheasant' is reconstructed in STC #403 with ***-ik** ≈ ***-yak** variation (like 'eye'): ***s-rik** ≈ ***s-ryak**. STC (p. 172) compares this etymon to Chinese 翟 (OC ***d'jok** : GSR 1124a-b > Mandarin **dí**): "ST and TB ***ry-** apparently shifted to ***ly-** (perhaps because of the prefix)".¹⁷

Lahu **ḡḏ?** 'silver pheasant [*Lophura nycthemera*]; bartailed pheasant/Hume's pheasant [*Syrnaticus humiae*]' descends from an allofam with medial **-w-** rather than **-y-**: ***rwak** (not directly cognate to WB **rac** < PLB ***rik**). See JAM 1988 (DL) p. 1141.

3.0 Scatter/pour

George van Driem, in his attempt to demonstrate a special relationship between Chinese and the Kiranti languages, attached special significance to the following valid and impressive-looking Chinese/Limbu comparison:

OC 散 ***sân** [GSR 156a] (Mand. **sàn**) 'disperse' ≈ 撒 ***sât** [AD 767] (Mand. **sǎ**) 'scatter, disperse; spread, distribute; let loose' / Limbu **-sɛr-** ≈ **-sɛt-** 'scatter, be spilt, go in

separate directions', **sɛnd-** ≈ **sɛn-** 'split up, disperse, break up', **-sɛs-** ≈ **-sɛ-** 'scatter, spill, sow'

The only trouble is, the very same allofamic alternation is exemplified in a pair of indubitable cognates from Lolo-Burmese, PLB ***šan** ≈ ***šat**¹⁸:

***šat** > Lahu **šêʔ** 'pour, spill'; Akha **sjeq** (Hansson) / **sheh**^ˆ (Lewis 1989:416-7); Sani **xv**⁴⁴; Bisu **šêt**

***šan** > Lahu **šē**; Akha **seh**_˘ 'sow seeds' (Lewis:398), **sheh**_˘ 'pour' (Lewis:416); Sangkong **san**³¹; Mpi **se**¹ 'sow broadcast (as mustard seeds), scatter seed' (all < PLB Tone *2); Achang **san**³⁵ 'scatter', Naxi **sa**²¹ ('id.': TBL #1235)¹⁹; Written Burmese **swân** (< Tone *2) 'pour upon, cast out by pouring' ≈ **swan** (< Tone *1) 'pour out, spill, shed'

These correspondences/reflexes are perfectly regular (initials, rhymes, tones).²⁰ There is, however, much more to say about this particular etymology. While this final stop/nasal variation both in Chinese and Lolo-Burmese is valid as far as it goes, all these forms are in fact to be subsumed under an even more widespread root ***šwar** 'flow; pour', reconstructed in STC #241 on the basis of WB **swan** and **swân** (cited above²¹), along with WT **htšhor-ba** (perf. **šor**) 'escape, flow out, run over', Lepcha **tšhor** 'pouring of water', Garo **sol-aŋ** 'flow, Jingpho **šon** 'flow as tears or sweat'.²² Fitting perfectly with this forms is the rhotic allofam just cited from Limbu: **-ser-**. Can we guess that the Chinese and Lolo-Burmese variation between final dental nasal and dental stop might be evidence for PST final ***-r** (which is only preserved directly in certain Himalayish, Nungish, and Kamarupan languages)?²³ Can we find other examples?

NOTES

¹Kiranti (=Rai) refers to a highly pronominalized group of closely related languages spoken in Eastern Nepal, which constitute a well defined nucleus within the "Himalayan" branch of TB.

²No etymology for this word is given in Matisoff 1988: 247-8.

³This was recognized as far back as Wolfenden 1929:114-5. See also Benedict 1972:80-4 and Matisoff 1988:41-2.

⁴Reconstructions are based on Benedict 1972 (*STC*) and/or Matisoff 1972 (*TSR*).

⁵Interestingly enough this verb is used for the sun's setting in several languages, notably Written Tibetan **nub-pa**.

⁶The transcriptions in these two sources frequently differ, sometimes considerably. The data in both sources seems in fact to be under-phonemicized, especially as far as vowels are concerned, which makes it tricky to use it for comparative purposes.

⁷This rhyme reflex is identical to that in 'warm' (Naxi **ly²¹**), though this root itself shows ***-i-** \approx ***-u-** variation. The Lahu reflex **lè** could descend from either proto-vowel. Lisu **le³³ mi³¹** also has a front vowel.

⁸Although the rarer rhyme ***-em** is also a possibility: ***s-dem**.

⁹The reconstruction is given somewhat differently in the Indexes to *STC* (pp. 200, 217): ***doŋ = (m-)doŋ**".

¹⁰This WB form is cited right after the Jg. cognate in *STC* #341, and it is possible that the **d-** in the Jingpho was a simple anticipatory typo that went undetected in the editing process. The voiced series of obstruents in Jingpho remains something of a diachronic mystery in any case.

¹¹See *STC* p.21, including n. 75.

¹²In Thai these are called **nókwêen**, represented in Thailand by the Burmese Grey Peacock Pheasant (*Polyplectron bicalcaratum*; Thai **nókwênsǐithaw**) and the Brown Peacock Pheasant (*Polyplectron malacense*; Thai **nókwênsǐinámtaan**) (Lekagul pp. 49-50, E. & G. 163). The Green Peafowl (*Pavo muticus*) (Lekagul p. 51-2, Eve & Guigüe p.163) is called **nókJuŋ** in Thai. See Figures 1 and 2.

¹³In Greek mythology, Argos or Argus was a monster with a hundred eyes, eventually slain by Hermes who had lulled all hundred eyes to sleep with his lyre. Hera then put the eyes of the fallen monster into the tail of the peacock, a bird sacred to her.

¹⁴Many of the forms cited in this section are from TBL #340 'pheasant' (Mand. **yějī**, lit. "wild chicken"), and *345 'peacock' (Mand. **kǒngque**)

¹⁵This ***-waŋ** \approx ***-oŋ** variation would then be quite parallel to the variation between ***-yak** and ***-ik** that is attested in several roots, including EYE (PTB ***myak** \approx ***mik**) and -- coincidentally -- another root for PHEASANT (PTB ***s-ryak** \approx ***s-rik**) [see below].

¹⁶There is a semantically parallel compound in Sanskrit, **nīlakap̄ṭha**.

¹⁷This word is glossed as "Tartar pheasant; plumage, feather trimming" in Mathews, p. 902.

¹⁸I have discussed this etymon and the parallel allofamy it displays with Chinese in at least five places: JAM 1972 ("TSR") #114; "God and the ST copula" (1985, set #40); "Regularity and variation in ST" (1994a, p. 53); "Sangkong of Yunnan" (1994b, p. 606);

"On 'Sino-Bodic'" (1999:#10a,b,c and §IV). Both Chinese allofams have been borrowed into Siamese: **sâan-sen** 'be scattered', **sàat** 'scatter'.

¹⁹Yi Weishan **de**²¹**san**⁵⁵, Jinuo **tu**⁴⁴**se**³⁵, and Bai **tã**³³**sã**²¹ (also in TBL #1235) all seem to be loans from Chinese **dǎ sǎn**.

²⁰The regular Lahu reflexes of ***-an** and ***-at** are **-e** and **-eʔ**, respectively, e.g.: 'slave' PLB ***gywan**¹ > Lh. **cè**, 'hawk' PLB ***jwan**¹ > Lh. **á-cè**; 'vomit' PLB ***C-pat**^L > Lh. **phèʔ**, 'leech' PLB ***k-r-wat**^L > Lh. **vèʔ**.

²¹Note that our previous reconstruction ***šat** ≈ ***šan** had not accounted for the medial **-w** in the Burmese forms.

²²To these we may add Lai Chin **sur** 'pour' (pers. comm., Kenneth VanBik). An open-syllable allofam ***šwa** is reflected by WT **gśo-ba** ~ **bśo-ba** 'pour out' and Jingpho **džo** ~ **tšyo** 'pour out, cast, enamel, dye'. Also perhaps related are Northern Qiang **svi**, Southern Qiang **siε**³³.

²³Although Benedict observed (STC n.460, p. 172) that "it now appears that ST ***-r** was generally replaced by **-n** in Chinese, with some **-r** ~ **-n** doublet formation", but he never noticed the Chinese and Loloish cognates to the forms he assembled in STC #241.

REFERENCES

- Benedict, Paul K. 1972. *Sino-Tibetan: a Conspectus*. Contributing Editor, James A. Matisoff. Cambridge University Press. ("STC")
- Bernot, Denise. 1978-92. *Dictionnaire Birman-Français*. 15 vols. Paris: SELAF.
- Bradley, David, ed. (in prep.) *Dictionary of Lisu (Northern dialect)*. To appear in LTBA.
- Dai Qingxia et al. 1983. *Jingpho-Chinese Dictionary*. Kunming: Yunnan People's Publishing Co.
- , 1992. *A Tibeto-Burman Lexicon*. [Zàng-Miǎn yǔzú yǔyán cíhuì]. Beijing: Central Institute of Nationalities Publishing Co. ("TBL")
- Driem, George van. 1997. "Sino-Bodic." BSOAS 60.3:455-88.
- Eve, Roland & Anne-Marie Guigue. 1996. *Birds of Thailand*. Selangor Darul Ehsan (Malaysia): Times Editions.

- Hale, Austin and David E. Watters, eds.. 1973. *Clause, Sentence, and Discourse Patterns in Selected Tibeto-Burman Languages of Nepal*. Parts I-IV. Kathmandu: Summer Institute of Linguistics and Tribhuvan University Press.
- Jäschke, H.A. 1881. *A Tibetan-English Dictionary*. London: Routledge and Kegan Paul. Reprinted (1982) by Motilal Banarsidass, Delhi.
- Karlgren, Bernhard. 1923. *Analytic Dictionary of Chinese and Sino-Japanese*. Reprinted by Dover Publications, New York. ("AD")
- . 1957. *Grammata Serica Recensa*. Stockholm: Bulletin of the Museum of Far Eastern Antiquities #29. ("GSR")
- Lekagul, Boonsong & Edward W. Cronin, Jr. 1974. *Bird Guide of Thailand*. Bangkok: Kurusapa Ladprao Press.
- Mathews, R.H. 1931/1960. *Chinese-English Dictionary*. Shanghai: China Inland Mission and Presbyterian Mission Press. Revised American edition (1960), Harvard University Press, Cambridge, MA.
- Matisoff, James A. *The Loloish Tonal Split Revisited*. Research Monograph #7, Center for South and Southeast Asia Studies. Berkeley: University of California. ("TSR")
- . 1985. "God and the Sino-Tibetan copula, with some good news concerning selected Tibeto-Burman rhymes." Tokyo: Journal of Asian and African Studies 29:1-81.
- . 1988. *The Dictionary of Lahu*. University of California Publications in Linguistics, #111. Berkeley and Los Angeles: University of California Press. ("DL")
- . 1994a. "Regularity and variation in Sino-Tibetan." In H. Kitamura, T. Nishida, and Y. Nagano, eds., *Current Issues in Sino-Tibetan Linguistics*, pp. 36-58. Osaka: Organizing Committee, 26th ICSTLL.
- . 1994b. "Sangkong of Yunnan: secondary 'verb pronominalization' in Southern Loloish. In H. Kitamura, T. Nishida, and Y. Nagano, eds., *Current Issues in Sino-Tibetan Linguistics*, pp. 588-607. Osaka: Organizing Committee, 26th ICSTLL.

- , 1999. "On 'Sino-Bodic' and other symptoms of neo-subgroupitis." Paper presented at 32nd ICSTLL, University of Illinois. To appear (2000) in BSOAS.
- Michailovsky, Boyd. ca. 1989. "Proto-Kiranti." Computer printout, archived at Sino-Tibetan Etymological Dictionary and Thesaurus project (STEDT), Berkeley.
- Sun Hongkai, et al. 1991. *Zàngmiǎnyǔ yǔyīn hé cíhuì* [Tibeto-Burman Phonology and Lexicon]. Beijing: Chinese Social Sciences Press. ("ZMYYC")
- Wolfenden, Stuart N. 1929. *Outlines of Tibeto-Burman Linguistic Morphology*. London: Royal Asiatic Society.

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