Sino-Tibetan Palatal Suffixes Revisited

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For Bill Baxter

Abbreviations

(for full references to abbreviated works, see the References)

A ⋈ B	A is an allofam of B; A and B are members of the same word-family
ATLC	*Austro-Thai Language and Culture* (Benedict 1975)
DL	*The Dictionary of Lahu* (Matisoff 1988)
GL	*The Grammar of Lahu* (Matisoff 1973/1982)
GSR	*Grammata Serica Recensa* (Karlgren 1957)
GSTC	"God and the Sino-Tibetan copula" (Matisoff 1985)
MC	Middle Chinese (= Karlgren's "Ancient Chinese")
OC	Old Chinese (= Karlgren's "Archaic Chinese")
PLB	Proto-Lolo-Burmese
PST	Proto-Sino-Tibetan
ST	Sino-Tibetan
STC	*Sino-Tibetan: a Conspectus* (Benedict 1972)
TB	Tibeto-Burman
TSR	*The Loloish Tonal Split Revisited* (Matisoff 1972)
WB	Written Burmese
WHB	William H. Baxter
WT	Written Tibetan

1. INTRODUCTION[1]

In *"God and the Sino-Tibetan copula"* (1983/1985: "GSTC"), which was largely concerned with presenting some "good news" about the Proto-Tibeto-Burman (PTB) and Proto-Sino-Tibetan (PST) rhyme *-ay, I noted in passing that there were "a surprising number of apparent instances of *-ay ⋈ *-a variation, hitherto unrecognized for TB", and identified at least 8 etyma which apparently displayed such variation. Though I prudently refrained from offering any explanation, it seemed clear that this variation did not reflect some new paradigmatic entity that had to be reconstructed for the proto-vowel system, but rather was morphological/syntagmatic in nature.

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There is no explicit mention of a palatal suffix anywhere in the *Conspectus* (Benedict 1972: "STC"). Later, however, in two provocative and freewheeling articles on ST deictics (1983) and interrogatives (1984), Benedict does sneak such suffixes in here and there.[2] In this paper, I would like to explore this problem in some detail.[3] It turns out, I believe, that three distinct etyma, once fully syllabic,

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1) A preliminary version of this paper was presented in French at EHESS, Paris, in April, 1989, and in expanded form at the 22nd ICSTLL at the University of Hawaii, October 1989. (I would like to thank W. Baxter, D. Davison, D. Herforth, John B. Lowe, J. Okell, L. Sagart, and A. Schuessler for their helpful comments on that version.) The "second draft", a 63 pp. MS, was discussed at the 3rd Spring Workshop in Theory and Method in Comparative Reconstruction, University of Pittsburgh (April, 1990). The "third draft" was offered at the 27th ICSTLL, again in Paris, in October 1994. (My thanks to Zev Handel and Jonathan P. Evans for their help in formatting that version, and to D. Hargreaves, L. Sagart, S.R.Sharma, and S. Starostin for comments thereon.)

This final version owes a great deal to William H. Baxter, whose stay at the STEDT project in Berkeley in April-May 1995 has ushered in a new era of cooperation between Sinology and TB studies. He has given unstintingly of his time in explaining the rationale behind his system of OC reconstruction, and has convinced me that it works much better than Karlgren's with respect to PTB etyma. This paper is gratefully dedicated to him.

Baxter's OC reconstructions cited in this paper, marked "OC [WHB]", reflect several changes in his system since Baxter 1992, including: (a) A notational change from *-ɿ to *-ə. (b) Following Starostin 1989, third division syllables (those with *-j- in Baxter 1992) are written with a short vowel, here marked with a breve, instead of *-j-; other syllables (those without *-j- in Baxter 1992) are written with a long vowel, marked with a macron, e.g. 子 , formerly *tsjɪ, is now *tsə̆ʔ; 多 , which was *taj in Baxter 1992, is now *tāj. (c) Also following Starostin 1989, a coda *-r is added to the system, contrasting with both *-n and *-j [see set (27)]; unlike Karlgren's *-r (whose normal reflex in Middle Chinese is *-j or zero), the usual MC reflex of Baxter's *-r is *-n, with *-j or -ø as a dialect development. Thus, 丹 OC *tān, 單 *tār, 多 *tāj (replacing *tan, *tan , *taj, respectively). (d) The capital *L- of Baxter 1992 (whose MC reflex was a voiced palatal fricative, reconstructed by Karlgren as *dź‘ < *d‘-) is reinterpreted in most cases as *ml-, e.g. 食 'eat', reconstructed as *Ljɪk in Baxter 1992, is now *mlə̆k [see below (18)]. For a full exposition of the revisions in this system, see Baxter, to appear.

2) "The roles of prefixed *a- and suffixed *-i...are as vague in Sinitic as in TB, with reconstructions at the PST level particularly hard to come by. It would appear...that the *-i (was) a genitive of sorts tending to transform a basic 'emphatic' PST *dâ ≈ *da into a deictic, primarily 'that'." (*LTBA* 7.2: 84) "...the Chinese cognates exhibit frequent *s-prefixation along with some dental suffixation: *-i, *-n and *-t... One must wonder whether or not this *-i is in any sense to be identified with the *i of the basic *i / *u / *a deictic triangle." (*LTBA* 8.1: 5) Two more recent squibs of Benedict (1994a, 1994b) have been provoked by previous versions of the present study, as well as by my Sangkong paper (Matisoff 1994b).

3) Certain ideas first adumbrated in the original (1989/1990) versions of this paper have been developed further in several other papers since then, including Matisoff 1990c ("The dinguist's dilemma..."), 1994b ("Sangkong of Yunnan..."), 1994c ("Watch out for number ONE..."), and 1995 ("Sino-Tibetan numerals...").

have all been grammaticalized and reduced phonetically to a palatal offglide in various ST languages at various times. I have identified three such morphemes on the TB side:

(1) **Transitive motion/motion away from deictic center**: PTB *ay > *-i/*-y
(2) **Diminutive**: PTB *za ✕ *ya > *-i/*-y
(3) **Nominalizer/subordinator**: PTB *way > *-i/*-y

For the moment, it does not matter whether we consider these suffixal palatals to have been fully syllabic or not. As we shall see, there is a continuum of bondedness or fusion between a vocalic nucleus and a following yod, along which at least three degrees may be recognized. It also does not seem appropriate to have to decide which of these morphemes are "derivational" and which are "inflectional", since this dichotomy is also better conceived of as a continuum. (If pressed we might decide that the *diminutive* is on the derivational side, the *nominalizer/subordinator* is more inflectional, while the *deictic/directional* is somewhere in between.)

There should be no objection to assuming that any or all of these homophonous elements could have coexisted at the same point in time, either at the PST stage or later. Any modern language will furnish examples of synchronically homophonous but etymologically distinct items of grammatical hardware (e.g. Eng.-**er** 1. 'agentive' (*writer, singer*), 2. 'comparative of adjectives' (*bigger, better*), 3. 'suffix in legal terms' (*ouster, waiver, attainder, merger*), 4. 'suffix in kin terms' (*mother, father, daughter, brother, sister*), 5. 'meaningless noun-formative' (*otter, water, clover, hammer*); or -s 1. 'plural of nouns', 2. 'third person singular of verbs'). Similarly (and closer to the palatal concerns of the present paper), English -**y/-ie** 'diminutive' (e.g. *horsie, kitty, sweetie, doggie*) [cognate to Dutch -**je**] and -**y** 'adjectivizer of nouns' (e.g. *salty, windy, messy, doggy*) [cognate to Dutch -**ig**, German -**ig**]. Analogously, Y. R. Chao (1968: 46) discusses three diachronically distinct proveniences of the Mandarin retroflex suffix -**r**: -**lï** 'therein', **rì** 'day', and **ér** 'child' (see below 6.4).

The following discussion will cover the whole ST family, including Chinese, but by an uncanny coincidence the full range of semantic functions of these secondary palatal suffixes are deducible from data to be found within a single humble unwritten TB language, chosen at random—Lahu. On the phonological side, Lahu also furnishes evidence for several different morphophonemic/phonetic stages of palatal fusion. Some of this evidence I have misinterpreted in the past. A reanalysis of this material now sheds light on the development of ST palatal suffixes in general. The recognition of these suffixes will hopefully enrich our understanding of ST morphophonemic patterns, by adding to the repertoire of attested variational phenomena to be found in word families.[4]

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4) Previously recognized variational patterns include -u- ✕ -i-; -ya- ✕ -i-; homorganic final stop ✕ final nasal; prefixal variation, etc. Cf. Matisoff 1978, *passim.*

1.1 "Intrinsic" vs. "Fusional" Diphthongs

In my discussion of "complex vocalic nuclei" in *The Grammar of Lahu* (1973/1982: 15-20 ["GL"]), I drew a useful, though admittedly fuzzy distinction between *intrinsic* vs. *fusional* diphthongs. In principle, intrinsic diphthongs occur within a single morpheme, while fusional diphthongs are the result of "phonetic telescoping across morpheme boundary." Native Lahu syllables are either monophthongal or fusional-diphthongal; intrinsic diphthongs are confined to loanwords.

The most frequent intrinsic diphthong is **-ay**, found in many loans from Tai, e.g. **hày** 'evil; fierce', **láy** 'several', **ɔ̀-thāy** 'shelf; tier', **vây** 'fast', **láy-láy** 'in vain; empty', **kɔ̂ʔ-fây** 'lantern', etc. Most cases of fusional diphthongs are readily apparent, easily analyzable into their constituent morphemes. Thus the verb-particle **ò**, indicating change of state or completed action, tends to fuse into a single mora with a preceding verb under the same tone / ˋ /, especially when the meaning of the verb is itself completive or resultative, i.e. highly congruent with the meaning of the particle, e.g. **pɔ̀** 'finish', **gà** 'arrive', **mɔ̀** 'see': **pɔ̀-ò** '(It's) all done', **gà-ò** '(It's) here; (It) reaches', **mɔ̀-ò** 'Now (I) see'. Similarly, the verb-particle **e** 'transitive motion; movement away from the deictic center', around which the discussion will revolve below [§ 3(1)], forms a tightly fused unit with a few verbs having locomotive or processual meanings, e.g. **pā** 'fall', **na** 'recover (from illness)': **pā-e** 'fall over; fall down', **na-e** 'get better'.[5]

Phonetically there is no way to distinguish many fusional diphthongs from intrinsic ones. In the case of the two most important Lahu diphthongs /**-ay -aw**/, the final labial or palatal element is realized as a high-mid semivowel, regardless of the diphthong's morphophonemic status:

láy	'several'	(intrinsic)	[lae̝]
na-e	'get better'	(fusional)	[nae̝]
qāw	'tell; narrate'	(intrinsic)	[qao̝]
gà-ò	'has arrived'	(fusional)	[gao̝]

There are other cases, however, where the intrinsic vs. fusional distinction becomes shaky—necessarily so, since it can be no more precise or stable than the concept of morpheme boundary on which it is based. Sometimes there is a "semantic elusiveness" problem—a certain increment of meaning seems to be contributed by a palatal segment, but one can't be very precise about what it is. (This is the case with those striking "labialized doublets" whose inner nature I have been so slow to grasp completely; see below 6.11.) It also happens that the phonological shape of a morpheme can become so reduced that the native speaker is no longer aware that there ever was a morpheme boundary in the word at all. In these latter cases, we

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5) Similar vocalic fusions across syllables are also highly characteristic of Chinese dialects. Cf. such Mandarin examples as 别 **bié** 'negative imperative' < **bú yào**; 甭 **béng** 'need not' < **bú yòng**, etc.

require historical/comparative evidence to redraw the boundaries for us. (Cf. English words like **in-k** ultimately < Gk. *en-kauston* 'burnt on (substance)', **dai-s-y** < *day's eye*, **good-b-ye** < *God be with ye*.)

1.11   Degrees of fusion[6]

After certain nuclear vowels, two degrees of palatal fusion in Lahu may be distinguished on the basis of the phonetic quality of the realization of the palatal segment. This happens after the non-low central vowels /ɨ ə/, especially with /ɨ/. Here the loosely fused palatalized nucleus comes out with ɛ [iɛ], while the tightly fused version has a semivowel intermediate in height between [i] and [e], i.e. [ɨi] or [iɛ]. (See below 6.13.) Failing this—i.e. even when the degree of fusion does not much affect the quality of the vowel—two degrees of palatal fusion may still be distinguished on quantity grounds (i.e. by mora-count). Thus with the Lahu directional particle **e** [below, §3(1)]:

(1) *separate and equal morae*
  há 'spend the night' + **e** > **há e** (two syllables)
(2) *fused sesquimoral unit*
  na 'recover' + **e** > **na-e** (one and a half syllables)

If we take historical/comparative morphosemantic criteria into consideration as well, a more advanced stage of fusion may be recognized, such that the modern native speaker has ceased to be aware of an original morpheme boundary:

(3) *'superfused' sesquimoral unit, with sense of morpheme boundary obliterated*
  ***ka** 'go' + ***ay** > **qay** 'go' [below, set (4)]

As we shall see, for all three of the proto-morphemes that reduced to a palatal suffix, there is evidence for both a less-fused and a more-fused form, to be correlated roughly, one may suppose, with degrees of stress:

	Stressed (less fused)		Unstressed (more fused)	
	PTB	Lahu	PTB	Lahu
Transitive motion:	*ay	e	*-ăy	/-y/ [ɛ]
Diminutive:	(*za ɤ) *ya[7]	ɛ	*-yă	/-y/ [ɛ]
Nominalizer/ subordinator:	*way	ve	*(w)ăy	/-y/ [ɛ]

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6) The question of degrees of vocalic fusion in Lahu has been discussed in greatest detail in Matisoff 1982/1989. Perhaps it is not too pretentious to compare these degrees of fusion to the *strong force* vs. the *weak force* that bind nuclei of another type together—atomic nuclei.

7) A more complicated reconstruction of this morpheme may be necessary. See below 6.2.

In what follows, this chart is justified by Sino-Tibetan comparative data. The palatal-fusional developments that can be documented in detail for Lahu, I would claim, are typical of what has been going on at all time depths in the history of TB and Chinese.

2. OLD CHINESE CORRESPONDENCES TO PTB *-a AND *-ay

2.1 PTB *-a / OC *-a and PTB *-a / OC *-ə

In Baxter's system (see Baxter 1994: 27-31), PTB *-a has two different correspondences in OC, reflecting two separate PST finals:

	PST	PTB	OC [WHB]	OC [GSR]	Rhyme Group
(Div. I)	*-a	*-a	*-a	*-o	魚 YU
(Div. I)	*-ə[8]	*-a	*-ə̄	*-əg	之 ZHI
(Div. III)			*-ə̆	*-jəg	

Examples of PST *-a[9]

	PTB	Chinese	OC [WHB]	OC [GSR]	
BITTER	*ka	苦	*khā́ʔ	*k'o	[49u]
FOX	*gwa	狐	*gʷā	*g'wo	[41i]
I	*ŋa	吾	*ŋā	*ngo	[58f-i]
FIVE	*l/b-ŋa	五	*ŋā́ʔ	*ngo	[58a-d]
FISH	*ŋya	魚	*ŋă̆	*ngi̯o	[79a-c]

Examples of PST *-ə[10]

	PTB	Chinese	OC [WHB]	OC [GSR]	
CHILD[11]	*tsa	子	*tsə̆ʔ	*tsi̯əg	[964a-j]

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8) In the latest formulation of his system (1995) Baxter has changed barred-eye to schwa. See note 1.

9) The original version of STC (p.186) gives the following five examples, and observes that this correspondence occurs after velars; note 487 adds examples after labials and non-palatalized dentals.

10) STC (n. 487, p.188) gives the following three examples, observing that PST *-a > OC *-jəg "after dental affricates and sibilants and palatalized *n and *l." After other types of initials, the original version of STC admits that the OC fate of PST *-a "cannot be determined with any assurance." In footnotes (e.g. n. 487) Benedict introduces a new final *-â-, which only occurred in closed syllables, and which is supposed to have played a role in WT verbal ablaut. This is not developed seriously, however, and the impression is left that the multiple Chinese correspondences to PTB *-a are somehow to be regarded as phonologically conditioned.

11) See the discussion of this word, below 6.4.

LOVE	*dza	字	*dzǎs	*dzi̯əg	[964n]
EAR	*r-na	耳	*nǎʔ	*ńi̯əg	[981a-b]
ARROW	*b-la	弋	*lšʔ	*di̯ək	(with -k, not -g) [918a-b]

2.2 PTB *-a(:)y and OC *-aj

As presented in STC, the OC correspondences to the PTB rhyme *-a(:)y are a mixed bag, as Benedict is the first to admit: "The material on final *-y forms is...in general quite unsatisfactory."[12] The suggested cognates include the following:

	PTB	Chinese	OC/WHB	OC/GSR
BIG	*tay	大	*hlāts	*t'âd [316a; 317d]
			*lāts	*d'âd [317a-c]
CRAB	*d-ka:y	蟹	*grēʔ	*g'ĕg [861d]
TAIL	*r-may	尾	*mǎjʔ	*mi̯wər [583a-b]
LOVE	*ŋ-(w)ay	愛	*ʔəts	*·əd [508a]
RICE	*may/*mey	米	*mījʔ	*miər [598a-c]

These sets are all worth discussing individually, and will be scattered through the following sections.[13]

Baxter reconstructs OC *-āj in Division I words where GSR has â (歌 GE rhyme-group). The full table of equivalents between the Karlgren and Baxter reconstructions for the three Divisions of this rhyme-category are as follows:

Division	GSR	WHB
I	*-â	*-āj
II	*-a	*-rāj
III	*-ia	*-(r)ǎj

In a recent article on Chinese/TB sound correspondences (Baxter 1994: 27-28), he offers seven examples of PTB *-ay / OC *-aj. Two of these (I/SELF and BIG) actually involve PST *-a ⋊ *-ay alternations, and will be discussed below [sets (6) and (24)]. Three other etyma in this group (WINNOW/CHAFF, CHANGE/ EXCHANGE, and SLOPING/OBLIQUE) have already been reconstructed for PTB, though Baxter seems to be the first to offer OC comparisons with them:

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12) STC n. 491, pp. 192-193.
13) They have all been discussed in a preliminary way in GSTC. We return to BIG and LOVE below 2.4(c), and in more detail to BIG as set (6). CRAB is grouped with SPLEEN, below 2.4(b); for TAIL see 2.3; RICE reappears below as set (14).

WINNOW/CHAFF   PTB *pwa:y [STC #170; GSTC #77] 'chaff'
籭 'winnow'   OC [WHB]   *pājʔ   : [GSR 25n] *pwâ
CHANGE/EXCHANGE   PTB *lay [STC #283; GSTC #69]
移 'move; transport'   OC [WHB]   *lǎj   : [GSR 3q] *dia
SLOPING/OBLIQUE   PTB *pay ≍ *bay [GSTC #124; not in STC]
                          'lame; limp; askew'[14]
坡 'slope; bank'   OC [WHB]   *phāj   : [not in GSR]
頗 'inclined; slanting'   *phāj   : [GSR 25p] *p'wâ
跛 'to walk lame'   *pājʔ   : [GSR 25m] *pwâ
   'lean to one side'   ≍ *pǎjs

The remaining two etyma are set up by Baxter by comparing OC etyma directly
with Lushai forms, and look very promising:
RUB   Lushai   chhǎi   'caress; fondle'
差 'to rub'   OC [WHB]   *tshāj   : [GSR 5f] *ts'â
DISCUSS/CONSIDER   Lushai   ngāi   'think; consider; opine'
議 'discuss; consider;   OC [WHB]   *ŋǎjs   : [GSR 2v] *ngia
   plan'

2.3   PTB *-a(:)y and OC *-ɨj (= *-əj)

In a previous article (1985: 257-262), Baxter makes a large number of
comparisons between PTB etyma in *-a(:)y and OC words he reconstructs with
*-ɨj, including:

TAIL   PTB *r-may [STC #282]
尾   OC [WHB] *mǎjʔ   : [GSR 583a] *mi̯wər
REVOLVE   PTB *wa:j [STC #90]
回   OC [WHB] *wǎj   : [GSR 542a] *g'wər
HUNGRY/FAMINE   WT bkres
飢   OC [WHB] *krǎj   : [GSR 602f] *ki̯ɛr
饑   OC [WHB] *kǎj   : [GSR 547k] *ki̯ər

2.4   Other Old Chinese Correspondences to PTB *-a(:)y

(a)   PTB *-a(:)y and OC *-ə (= GSR *-əg)

PROPERTY/LIVESTOCK/TALENT
Elsewhere I have presented detailed arguments for a cognate relationship between a
new PTB root I reconstruct as *(t)sa:y ≍ *(d)za:y 'property; livestock; talent' and
the Chinese etymon written variously as 才, 財, and 材 (GSTC #106; Matisoff

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14)   An allofamic connection is also suggested between this etymon and PTB *b(w)ǎy 'left
        (side)' (GSTC 80 and p. 42).

1988b), reconstructed as OC [WHB] *dzə̄ (GSR *dzʻəg). Although Baxter finds this comparison semantically "appealing" (1994: 28-29), he would like to see more examples of this rhyme correspondence. In that spirit I repeat here GSTC #107:

REPEAT/PRACTICE
A PTB root *bay 'repeat; practice' is set up (GSTC #107) to underlie Jingpho **bái** 'repeat, do over', Mikir **bé** 'practice; accustom', Lakher **bai** 'add to', Boro **báy** 'do again and again'. To these I would like to compare Chinese 倍, 'accompany, support; augment, double', reconstructed as OC *bʻwəg [GSR 999b', c'], or *bə̄ʔ in Baxter's system.

(b)   PTB *-a(:)y and OC *-e (= GSR *-ieg, -iěg)

Two excellent correspondences exists between PTB *-ay and a slightly different OC final, reconstructed as -iěg or *-ieg in GSR and as *-e in Baxter's system:

SPLEEN
PTB *r-pay [VSTB, n. 271; GSTC #94] / Chinese 脾 OC *bi̯ěg [GSR 874h] / [WHB] *bə̌. There seems to be internal TB variation in this root between *-ay (e.g. Jingpho **pāi**, Lahu ɔ̀-pe) and -i (e.g. Angami **ú-prì**, Mikir **pli-ha**), with both variants perhaps reflected in the Abor-Miri doublet **tur-pe** ✕ **tur-pui**.[15] I had thought of Indo-Aryan influence on the allofam with -i (cf. Sanskrit **plihan**, Bengali **bilij**), but maybe this root displays a genuine ST variational pattern.

CRAB
A phonologically parallel example is the word for CRAB mentioned above (2.2): PTB *d-ka:y / OC *grē? 蟹.

See also PLB *s-ŋay 'short; little' [below 6.2] and 兒 'child' OC *ŋě [below 6.4]. Another possible correspondence of this sort is PTB *day 'one; demonstrative' and 是 'this is' OC *dě? [see below (27c)].

(c)   PTB *-a(:)y and OC *-ats and *-əts

Finally, I'd also like to claim validity of correspondence between PTB *-a(:)y and *qusheng* etyma reconstructed as Baxter's OC *-ats or *-əts.
The   best   example   I   have   found   of   this   correspondence   is BELT/ZONE/WAIST, presented in GSTC #95:

BELT/ZONE/WAIST
PTB *ta:y (PLB *n-day³ > Lahu **de** 'expanse of terrain', etc.; WT **sde** 'part, portion (of a country); province, district, territory', Lushai **tai** 'waist', etc.) / Chinese 帶 OC *tâd [GSR 315a] / WHB *tāts

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15)   Such variation occurs in several other TB etyma, e.g. TEN *ts(y)i(y) ✕ *tsyay (GSTC 73).

BIG

As we shall see below in set (6), Baxter prefers to relate PTB *ta-y 'big' not to the Chinese words for BIG in GSR 316-317, which he reconstructs as OC *(h)lāts, but rather to 多 'much; many', reconstructed as OC *tāy in his system. While this certainly seems persuasive, the existence of other likely correspondences between PTB *-a(:)y and Chinese etyma in *-ts at least points to an allofamic relationship among all these BIG/MANY words.

LOVE

The comparison between PTB *ŋ-(w)ay and Chinese 愛 (OC [WHB] *ʔəts; see above 2.2) was made in GSTC #126.

RETALIATE/BEAR A GRUDGE

In GSTC #118 I set up a PTB etymon *m-ta:y, based on Jingpho tài 'avenge, retaliate', mətài 'vengeance' and Lushai tăi 'be at enmity with one another; have a grudge against', and suggested a relationship with Chinese 對 OC *twəd [GSR 511a-g] 'respond, in response; reply' and 懟 *d'ĭwəd [GSR 511i] 'cause resentment'. In Baxter's reconstruction, however, these OC words are to be reconstructed with original *-ps (not *-ts) and a back vowel, *k-lŭps and *g-lŭps, since they are supposed to be allofamic with 答 'answer', which definitely had final *-p (see Baxter 1992: 557).

Although Baxter's *-ts seems usually to correspond to PTB *-(w)at (e.g. TAKE OFF (clothes)/SET FREE: PTB *g-lwat [STC 209]/脫 OC *hlōt), perhaps we can assume developments like the following:

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\begin{array}{llll}
\text{PST *-at-s} & >\text{PTB *-at} & / \text{OC *-ats} \\
\text{PST *-wat-s} & >\text{PTB *-wat} & / \text{OC *-ots} \\
\text{PST *-aj-s} & >\text{PTB *-ay} & / \text{OC *-ats} \\
\text{PST *-əj-s} & >\text{PTB *-ay} & / \text{OC *-əts}
\end{array}
$$

This is easier to swallow if we assume that this OC final consonant sequence was articulated as a *palatal* affricate, which is typologically more plausible anyway (cf. WB -ac < PTB *-ik). Starostin (1989: 332) reconstructs *-ać for the OC period, from earlier *-ats, *-aps.

2.5 Variation Between *-a and *-ay, Within and Between TB and Chinese

Stimulated (or provoked) by a previous version of this paper, Baxter has independently unearthed eight good-looking examples of *-a ✕ *-ay variation within Chinese: i.e. between OC *-a ✕ *-aj in his system, equivalent to GSR's *-o ✕ *-â (p. c., April 1995). All eight of these fit quite comfortably into the three classes of cases we shall discuss below. Five of them (I/SELF[16], YOU, INTERROGATIVE, LACK/NOT HAVE, and WHO) are grammatical functors, belonging to our third group [see below §7, sets (21), (24), (25), (26)]; two others

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16) This item (I/SELF) already figured in the first version of this paper, and has been discussed again in the context of PST pronominal morphology in Matisoff 1994b.

(LAKE/RIVER, MONKEY) seem plausibly to involve diminutive formations, i.e. to our second group [see below §6, sets (19) and (20)]; the remaining one perhaps belongs to our first category of motion-verbs (below §3.1).

3. WHERE A PALATAL SUFFIX INDICATES MOTION AWAY FROM THE DEICTIC CENTER

(1) PTB *s-wa and *ʔay 'go; motion away' and their OC cognates

The PTB etymon *s-wa 'go' is well established, supported by forms like WB swâ, Magari and Chepang hwa 'walk; move', Lotha Naga wa 'go', Newari wa 'come'.[17] In many TB languages (e.g. in Kukish) this morpheme has been gram-maticalized into an auxiliary verb or verb-particle indicating transitive motion. Jingpho has developed a doublet from this etymon: one allofam is the full verb sā 'go', showing preemption of the root-initial by the *s- prefix, while the other is a verb-particle wà 'motion; movement; change of position', reflecting the unprefixed root. These two co-allofams often occur syntagmatically in the expression sā wà ʔāi 'go; come' (Hanson 1906: 580; glossed "qù; lái" in Dai et al. 1983: 702). The Jingpho verb-particle wà may also be used in cases of figurative motion, e.g. sī wà ʔāi 'die; pass away' (equivalent to Lahu ší e ve).[18]

As indicated in STC (p.167), PTB *s-wa is undoubtedly related to Chinese 于 'to go; go to; to, in, at, on', reconstructed as OC *gi̯wo in GSR 97a-g, and as *w(r)ja in Baxter 1992:335 (#794), equivalent to *wă in his new system. It seems very likely that this Chinese morpheme is allofamically related to a semantically similar form written 於 'be in, in, at, on, with, from', reconstructed as OC *ʔi̯o in GSR 61e-f, as *ʔa by Schuessler (1987: 775), and as *ʔja in Baxter 1992:334 (#790), equivalent to *ʔă in his new system. Both characters are now pronounced yú in Mandarin; Baxter feels that 于 has influenced 於, since the latter should be Mandarin first tone. This seems appropriate, since 于 seems to have represented the original fully verbal notion GO (locative *motion*), while 於 was grammaticalized at an early date into a preposition-like functor often indicating locative stasis: (BE) AT.

On the TB side, I have reconstructed another etymon of the shape *ʔay, which seems originally to have been a full verb with a meaning like 'go', but which also became grammaticalized at an early date into an auxiliary verb or verb-particle with the meaning 'V away from the deictic center'. Supporting forms have been assem-bled from several branches of TB:[19]

(Loloish)   Lahu e 'verb particle indicating motion away from the center of

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17) See STC: 105, 167, 187.
18) Jingpho ʔāi and Lahu ve are both nominalizers, used, *inter alia*, in the citation forms of verbs; both descend from the copula *way (see GSTC *passim*, and below, Section §7).
19) See GSTC 128 and n. 76.

interest',[20]/[21] Akha i^{55} 'go down', Hani, Khatu, Pijɔ jí, Lisu ye^4 'go', Phunoi ʔέ, Bisu ʔέ, Mpi je^5 'go (south or west)'[22]

(Himalayish)   Bunan e 'go', Chitkuli and Manchati i- (prefix) 'go and V; V away'
(Kamarupan)   [Barish] Garo -e 'go and V'; [Naga] Lotha yi 'go'; [Abor-Miri-Dafla] Milang yi-ma

I feel that all these forms are to be included in the same PST word-family, which I reconstruct as *s-wa-y ✕ *s-ya-y.[23]

3.1   Palatal Suffix with TB/ST Verbs of Motion

There are at least four cognate sets for verbs of motion, where the nuclear vowel is PST/PTB *a, but which display *-a ✕ *-ay variation, such as to suggest the occasional fusion of the directional morpheme *ay [above (1)] with the verb-root.   It must be emphasized that we are dealing in these sets with proto-variation, and not with regular correspondences.   Sometimes it is the Lahu reflex which points to *-a, while others point to *-ay (THROW; COME); sometimes Lahu reflects *-ay, while other languages point to the simple vowel *-a (FALL, GO).

(2)   FALL   PST *gla-y ✕ *kla-y

A group of forms meaning 'fall' is reconstructed as PTB *gla ✕ *kla in STC #123: Written Burmese [WB] kya' 'fall' (simplex<*gla) ✕ khya' 'let fall; drop' (causative<*kla), Lepcha klo, Mikir klo.   In GSTC #125 I opined that the above set "certainly seems related" to a group of forms I reconstructed as PTB *glay ✕ *klay:

> Lahu ce 'fall from a height', Luquan Lolo ts'e^{33} 'fall down', Boro gəglɔ́y 'fall; lie down' (simplex) ✕ kəklɔ́y 'to fell' (causative) ✕ klay 'V downward' (e.g. za-klay 'eat from top to bottom', kam-klay 'burn down', bar-klay 'jump down' (Lahu ce may also be used as an auxiliary in this way, e.g. bɔ̂ʔ ce ve 'fell by shooting', bà ce ve 'throw down'; also perhaps Mikir (Grüssner 1978) ingjùy 'fall off, drop off (hair, leaves)', V+jùy 'V away' (e.g. kát-jùy 'wegrennen', arphlúng-jùy 'wegjagen')

From our present vantage point, it is clear that these latter forms are fusional in origin, from a prototypical disyllabic sequence like *gla+*ay.

Forms showing other suffixes are "snuck into" STC #123 without comment.

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20)   As demonstrated in GSTC, -e is the regular Lahu reflex of PST/PTB/PLB *-ay.
21)   Other probable intra-Lahu allofams include two full verbs of limited use, i (V) 'go; wend one's way (poetic)' and yì (V) 'go', as in á-qàʔ yì ve 'go outside (to defecate) [euph.]' and yì-yì là-là te ve 'go back and forth aimlessly'.
22)   See Hansson 1989: 35.
23)   For the morphophonemic alternation between the semivowels w and y, cf. similar variation in the PST copula, *way ✕ *ray.   See GSTC and §7, below.

Jingpho **khràt** has suffixed **-t**, while Lushai **tlaak** 'fall' (*simplex*) ⋊ **thlaak** 'let fall' (*causative*) shows suffixed **-k**.[24] Perhaps because Benedict conceived of this root too monolithically in terms of a simple open proto-rhyme, he failed to notice the obvious Chinese cognate 落 (Mand. **luò**) < OC ***glâk** (GSR 766q') / [WHB] ***g-rāk** 'shed the leaves' (*Shijing*); 'drop, fall, perish' (*Guoyu*), which also reflects suffixed **-k**. Certainly related allofamically is Chinese 下 (Mand. **xià**), GSR #35a-c ***g'å/ɣa**: 'down; below', reconstructed by Baxter as ***graʔ**.

A more detailed reconstruction of this etymon requires a "pan-allofamic formula" (PAF) like:

PST	***g**		**-k**
		la	**-y**
	k		**-t**

where the initial voicing alternation reflects the simplex/causative distinction and ***-y** is a fused directional suffix. The semantic value of **-k** and **-t** in this family is still unknown.

Notice that according to Baxter's system, this set shows a correspondence between PTB ***-l-** and OC ***-r-**. See below 4.3.

To return to Lahu for a moment: alongside **ce** 'fall from a height' there is another verb **qa** 'fall', used both for meteorological phenomena (e.g. **a-ŋə qa ve** 'frost descends', **vâ-šī qa ve** 'hail falls'), and for accidental unpleasant falls (e.g. **mì-qō qa ve** 'fall into a hole', **à-mī qa-šɨ ve** 'fall into a fire and die'). This verb is from the unsuffixed prototype ***gla³** (cf. Bisu **kla**), and is not to be related to the Lahu verb **qay** 'go', which we claim is a fusion of an obsolete verb ***qa** (< ***s-ka**) plus the particle **e** (< ***ay**) [see (4) below]. There is one problem in assigning Lahu **ce** and **qa** to the same word-family—the initial consonants. Yet this alternation can be explained in terms of different earlier glide-consonants: Lahu **c-** can come from ***gy-**, while ***gl-** gives **q-**. We therefore hypothesize variation at the pre-Lahu stage between ***gla** (>Lahu **qa**) and ***gya-y** (>Lahu **ce**), with the latter form presumably being a later development. (Note that velar-plus-lateral clusters also evolved into velar-plus-palatal clusters in the history of Burmese.)[25]

(3) THROW *g/k-ba-y ⋊ *m/s-ba-y

In GSTC #147 I set up a new PTB root meaning 'throw; discard' which displays ***-ay** ⋊ ***-a** variation. All the supporting forms reflect the diphthongal prototype, except for Lahu, which points to a simple ***monophthong**. We repeat the set here (with the addition of the WB and Kokborok forms, noticed later):
(a) With palatal element:

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24) The Garo cognate **gaʔak** (cited in Benedict 1987: 61) shows the same velar final.

25) As a curiosity for the megalocomparatively inclined, I must report an astounding lookalike to this word-family: Tocharian **klā** ⋊ **klāy** (p.c., Jay Jasanoff, April 1990).

WB **pay** 'put aside, put away; reject; tare or tret'; Jingpho **kəbài ⋊ gəbài** 'throw'; Lushai **paih** 'throw/fling away; strike out, cancel, annul, discard, subtract'; Tiddim Chin **pa:i** 'throw away' (in main clauses) **⋊ pai?** (in subordinate clauses); Kokborok **səbi** 'throw'.
(b) With monophthong:
　　Lahu **bà** 'throw; throw away; divorce (a spouse)'; (as auxiliary verb) 'discard by V'ing', e.g. **šî? bà ve** 'wipe away'

　　The voicing of the Lahu form reflects a *prenasalized allofam, *mba¹ (PLB Tone *1). Jingpho shows a velar prefix. The variation in voicing of the labial initial is undoubtedly due to prefixal influence. The Kokborok form shows an s-prefix. For now we may set up a pan-allofamic formula (PAF) like:

$$
\begin{array}{lll}
\textbf{PTB} & \textbf{*g} & \\
& \textbf{k} & \textbf{p} \\
& & \quad \textbf{a} - \textbf{y} \\
& \textbf{s} & \textbf{b} \\
& \textbf{m} &
\end{array}
$$

　　There is a similar-looking Siamese word **paa** 'throw, toss at'—but this seems to refer strictly to flinging or tossing, while the basic meaning of the TB form seems to be discarding or rejecting (more like the Siamese word **thíŋ**). If the monophthongal Lahu form is not a borrowing from Tai (which I think is unlikely), its existence implies that the palatal element elsewhere in TB is suffixal, i.e. a manifestation of the directional particle *ay.

(4) GO *s-ka-y ⋊ *m-ga-y

　　There is no reason to think that the most important Lahu verb of motion, **qay** 'go', is a loanword, yet it has a peculiar vocalism which made me suspect all along that it was "a fusion of a now obsolete verb *qa plus the directional particle e. This is supported by the fact that e is never found after **qay** in the modern language" (GL: 16-17). This guess seems certainly to have been correct, and in fact the basic verb in question seems to be the etymon in STC #469, PTB *ka 'be wide open; open the legs; stride'.[26]

　　Still another member of this word-family (previously unrecognized) is undoubtedly represented by Lahu **gà** 'reach; arrive', whose voiced initial reflexes a PLB nasal prefix, *m-ga¹. Before verb-roots this nasal prefix indicated *stativity* (see Wolfenden 1929): to have 'reached' someplace is 'to be in the state of having gone.' This Lahu verb is frequently followed by the transitive motion particle e

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26) The mid-tone (unmarked in the transcription) and voiceless unaspirated initial of pre-Lahu qa 'go' point either to PLB *ga³ (Tone *3/ *voiced initial) < PTB *s-ga, or to PLB *?ga¹ (Tone *1/*pre-glottalized initial) < PTB *s-ka. The Burmese cognate **kâ** 'divaricate; be stretched apart' derives rather from a PLB allofam *ga² (Tone *2). Note that both Burmese and Lahu have devoiced the PLB *voiced series of obstruents. (See Matisoff 1969, 1979.)

[see (1) above], with which it forms a fused sesquimoral unit, **gà-e** 'reach by going (*motion*); come to a certain pass (*abstract*)' (with sense of morpheme boundary intact). This is quite distinct from the 'superfused' **qay** 'go', where the sense of morpheme boundary has been lost (above 1.11).

The probable Chinese cognate to this etymon is 開 *k'ər/k'âi [GSR 541a] 'open; set free' (graph shows two hands lifting bar from a door) / OC *khəj in Baxter's system, whose range of modern meanings includes 'set in motion' etc. (**kāi chē** 'drive a car', **kāi shuǐ** 'boil water'). Cf. also the different graph 闓 [GSR 548f] with the same reconstruction except for tone, OC[WHB] *khəjʔ, glossed 'open'. Neither item is mentioned in STC. In this case, we would claim that Chinese has incorporated the palatal suffix into the root.[27]

(5) COME *la-y

There is a well-established monophthongal PLB root *la[1] 'come', represented by WB **la**, Lahu **là**, Akha **lá**, Phunoi **lá**, Bisu **lá**, Mpi **lo[5]**.[28] This is an eminently grammaticizable etymon. Lahu has, in addition to the full verb, **là**, two tonally distinct but allofamically related verb-particles: **la** (mid-tone) 'motion toward the deictic center' and **lâ** 'non-3rd person beneficiary'[29] (see Matisoff 1978: 57).

In GSTC #185, I related PLB *la to a form that reflects a proto-diphthong, Mikir (Grüssner) **lè** 'arrive; reach'. (The Mikir form has a terminative meaning, much like that of the Lahu verb-particle **e**, e.g. in **gà e ve**.) Since then I have found a cognate within Burmish itself that also points to the allofam *lay: Zaiwa (Atsi) **le[55]** 'come'. (Other examples of *-ay > Zaiwa -e include 'ten': PLB *tsyay[1] > Zaiwa. **tshe[51]**.)

These forms all seem to stand in an allofamic relationship with a Kamarupan etymon represented by Lushai **lo-kal** 'come' (-**kal** means 'go'), Meithei **lau**, and Proto-Northern Naga *lo (Chang **lo**, Tangsa Moshang **ka-lo**, Yacham-Tengsa **loa**) (French 1983: 471), perhaps reflecting PTB *la-w.

My first impulse was to relate PTB *la-y to Chinese 來, Mand. **lái**, reconstructed by Karlgren as OC *ləg/MC **lâi** [GSR #944a]. This becomes quite problematic, however, in terms of Baxter's (328: #777) reconstruction OC *C-rə̄(k) / MC **loj**: (a) first there is the problem of the final stop -k, inferred both from

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27) The comparison between the TB etymon and Chinese 去 OC *kjab 'go away; leave' [GSR 642a]/[WHB] *khǎʔ-s is less attractive semantically, since the notion of opening or forking is lacking. The basic meaning of this Chinese word seems to be more like 'separating', similar to the slang English use of the verb *split* in the sense of 'leave a place'.

28) See Bradley 1979: 649A.

29) We might mention in passing that this same lexeme seems to have found its way into White Hmong (presumably a loan from Chinese), where the form is "los" (the -s here is a tonemark).

Shijing rhymes with *rusheng* words,[30] as well as the loan-graphic connection with 麥 'wheat', Mand. **mài** < OC **mrək* (the graph itself is a drawing of the wheat plant);[31] (b) secondly, we would be faced with the correspondence of PTB *l/OC **C-r**.

Neither of these is a fatal objection, however. A few TB forms point to an allofam with final velar stop, *la-k: Meithei **lak**, Dulong **lɔʔ**, Phun **Ruʔ**. As for the correspondence between PTB *l- and Baxter's OC *r-, it is far from unique in my opinion (see below 4.3), and we have just seen another example of it [FALL, above (2)]. Besides, many TB languages of the Kamarupan group have forms for COME that have *r-, not *l-, e.g. Angami **vorü**, Ao **aru**; **ra**, Khoirao **ra**, Lotha **ro**, Mao **vu**, Meluri **ru**, Ntenyi **gho**, Rengma **re**, Sangtam **ro**, Tangkhul **ra**, and Yimchungru **arü** (Marrison 1967: 58).

If we're still not happy with this Chinese comparison to the TB root, another possibility is 途 OC **d'o** [GSR 82v] 'road', reconstructed as *lā in Baxter's system.

4. EXCURSUS ON PTB / OC LIQUID CORRESPONDENCES

In Benedict's view, both PST *r- and *l- have merged to OC *l- (STC: 171). For Sinologists like Pulleyblank, Schuessler, Starostin, and Baxter, on the other hand, both liquids must be reconstructed for OC. Where GSR and STC reconstruct *l-, Baxter has *C-r; they reconstruct *l- where GSR has **dį** (or sometimes **d'-**). I feel that the last word has yet to be said on this subject, and that several other valid liquid correspondences may be recognized between PTB and OC.

4.1   PTB *C-r- / OC [WHB] *C-r-   (GSR/STC "*l")

LINE UP   連 or 聯 'join; bring together' **lįan/lįän* [GSR #213a, 214a] : [WHB] **C-răn* / PTB **m-ren* 'line up; be equal' [STC #346]

STAND   立 **glįəp/lįəp* [GSR 694a-d] : [WHB] **g-rɤp* / PTB **g-ryap* [STC #246]

WEEP   泣 **k'lįəp/k'įəp* [GSR 694h] : [WHB] **khrɤp* / PTB **krap*

4.2   PTB *C-l- / OC [WHB] **(C-)lj-*   (GSR/STC "*d'")

"Under conditions of palatalization (not fully worked out) ST *l tends to be

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30) "This is the most common *pingsheng* word with *rusheng* connections" (Baxter 1992: 337). "This common verb may have lost its final *-k by some irregular process between the…older parts of the *Shijing* and the…newer ones" (*ibid.*, p.330). Baxter (1992: 337) hypothesizes that the variant without the -k occurred in unstressed position (cf. the English neuter 3rd person pronoun *it*, an unstressed variant of earlier *hit*).

31) Li Fang Kuei reconstructs it as *mləg ?, with a question-mark '1. wheat (*Triticum aestivum*) 2. come', followed by Schuessler (1987: 361-2), who sets it up as *mrəkh ?.

replaced in Chinese by i̯ or di̯/i̯...” (STC: 171):[32]

HAND/WING	翼 *di̯ək/i̯ək [GSR 954d] ‘wing’ : [WHB] *lɜ̆k / PTB *g-lak ‘hand’ [STC #86]
LEAF	葉 *di̯ap/i̯âp [GSR 633d] : [WHB] *lă̆p / PTB *s-la-p [STC #321]
ARROW	弋 *di̯ək/i̯ək [GSR 918a-b] : [WHB] *lɜ̆k / PTB *b-la ⋊ *m-da [STC #449; pp. 96, 111-2, 118]
HAWK/EAGLE	鷹 OC/MC *ʔi̯əŋ [GSR 890c] : [WHB] *ʔ(r)ɜ̆ŋ / PTB *g-laŋ [STC #333][33]

To these we should probably add:

EAT/LICK[34]   食 OC *d’i̯ək [GSR 921a] : [WHB] *m-lɜ̆k) [Schuessler] *mli̯ək/ PTB *m-lyak

4.3   PTB *C-l- / OC [WHB] *(C-)r-   (GSR/STC “*(C-)l”)

I have found eight possible examples (of varying quality) illustrating the possibility of TB *(C-)l- corresponding to OC [WHB]   *(C-)r-[35].

FALL   PTB *g/kla-k ⋊ *g/kla-y / OC *g-rāk   [See set (2), above.]

COME   PTB *la-y ⋊ *law ⋊ *lak / OC *C-rɔ̆k   [See set (5), above.]

NECK   PTB *m-liŋ [STC #96; pp. 155, 180] (cf. WT ḥdziŋ) / 領 OC *li̯eng [GSR #823f] ‘neck; collar’ : [WHB] *C-rĕŋʔ ⋊ 頸 OC *ki̯ĕŋ or *g’i̯ĕŋ [GSR #831n] : [WHB] *kĕŋʔ, geŋ ‘neck’

GOOD   PTB *l(y)ak ⋊ *l(y)aŋ [JAM] (cf. WT legs-pa ⋊ lags-pa (Ladakhi) ‘good; serving the purpose; neat, elegant, graceful, beautiful’ ⋊ yag-po ⋊ ḥdźag-po ‘good’[36]; Lushai lian ⋊ len ‘good’)[37] / OC 麗 *lieg ‘elegant; beautiful; refined; good’ [GSR #878a-b] : [WHB] *C-rēs ⋊ 良 *li̯aŋ ‘good’ [GSR #735a-d] : [WHB] *C-ră̆ŋ ⋊ 靈 *lieng ‘super-natural; felicitous; intelligent; excellent’ [GSR #836i] : [WHB] *C-rēŋ (cf. also 令 *li̯eng ‘command; used as a loan for *good* [GSR #823a-e] : [WHB] *C-riŋ)

YOUNG MAN/HUSBAND   PLB *laŋ² [JAM] Written Burmese lâŋ ‘husband’ /

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32)   I have devoted a separate (but still unpublished) study to this l/d problem (Matisoff 1990c).

33)   This is an old Wanderwort, found also in Austroasiatic and Hmong-Mien (see STC n. 225), and is not criterial in establishing correspondences.

34)   This set is certainly allofamic with TONGUE, below (18).

35)   In any event, it is hard to be precise where liquid correspondences are concerned. Even such a key language as Sanskrit is useless in differentiating between PIE *r and *l !

36)   These WT forms are cited in STC p. 54, but no cognates are offered beyond the Bodish (Tibetanoid) subgroup itself, to which Benedict believed the etymon to be confined (pp. 203, 214).

37)   Cf. also Lahu dàʔ ‘good; beautiful’ (< PLB *Ndak) ⋊ qha-dὲʔ ‘well’ (< *Ndyak). It looks as if pre-Lahu, like Chinese, sometimes developed dì- from *lì-!

OC 郎 *lâŋ (not found in this sense in GSR #735r or Schuessler 1987)
[38)/39)] : [WHB] *C-râŋ

SALT(Y)   PTB *s-la 'salt' (Miri əlo, PKaren *hla, Pwo Karen lá) [STC: 187] /
鹵 OC *lo [GSR 71a-b] 'salty; (AD) rock-salt' ; [WHB] *C-râʔ[40)]

STRENGTH/ARM   We have already compared PTB *g-lak 'arm; hand' [STC
#86] to Chinese 翼 OC*djək [GSR] or *lǒk [WHB] (above 4.2).
Perhaps we should also bring into this word-family 力 'strength'
*liək [GSR#928a-b] : [WHB] *C-rǒk (Karlgren observes that "the
graph seems to depict an arm with a hand"). This family would then
show *l- ≍ *r- variation within Chinese. Several different allofams
must also be recognized on the TB side.[41)]

FOREST   It is tempting to compare PTB *b-liŋ [STC#378] to 林 *gljəm/ljəm
[GSR #655a-d] : [WHB] *C-rǒm, but there are problems with both the
vowel and the final consonant. For now this comparison remains
highly doubtful.[42)]

4.4   Miscellaneous OC Correspondences to PTB *(C)-l

In several words from GSR Series #413, PTB *prefix+l corresponds to OC
dental/palatal stops plus high front vowel:[43)]

GRANDCHILD   PTB *b-ləy 'grandchild' / 姪 'nephew' OC *d'iet ≍ d'jǒt [GSR
413o-p] : [WHB] *dīt

LEECH   PTB *m-l:it / 蛭 OC*tjət or *tiet [not in GSR 413] :
[WHB] *tǐt or*tīt

HEAVY   PTB *s-ləy / 輊 OC *tjěd [GSR 413e] : [WHB] *trǐts

The following two sets are highly irregular:

FOUR   PTB *b-ləy / 四 OC *sjəd [GSR 518a-d] : [WHB] *splǐts

TIGER   PLB *k-la [prob. a loan<Mon-Khmer] / 虎 OC *χo [GSR

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38)   Glossed in GSR only as 'place name (Tso); double roof, one roof above the other
(Yichou shu)'. Although the meaning 'young man; bridegroom; classifier for sons' does
not occur in early texts, it would be rash to infer that it did not exist at all in spoken OC.

39)   I would now like to suggest an allofamic connection between this WB form and a set I
reconstructed in TSR 177, Proto-Loloish *ʔlak 'youth/young person' (> Luquan hla⁵⁵,
Lahu chɔ-há, Lisu za²¹-gu²¹-lǽ. This Lolo-Burmese word-family should then be
reconstructed something like *ʔlak ≍ ʔlaŋ.

40)   Baxter (p.c., April 1995) suggests a semantic connection with the homophonous word
魯 [GSR 70a-d] 'place-name; state of Lu', since that region was a salt-marsh in ancient
times.

41)   For a detailed discussion, see Matisoff 1985b.

42)   Baxter (p.c.) suggests alternative comparisons for both of these PTB and Chinese
words: PTB *b-liŋ could go with Chinese 田 'field' OC *d'ien [GSR 362a] : [WHB] *līŋ;
while Chinese 林 could be cognate to Proto-Northern Naga *C-ram 'forest; jungle'
(French 1983: 507-508).

43)   Cf. STC, n. 458 (pp. 171-172), and Matisoff 1994a.

57b-e] : [WHB] *hlāʔ [Baxter's *hl- normally gives MC th-, as in BIG, below (6)]

5. WHERE A PALATAL SUFFIX INDICATES EMERGENT QUALITY IN STATIVE VERBS

The Lahu directional particle e (<*ay) is also usable after adjectival/stative verbs to indicate the progressively greater realization of a state (GL: 319):[44] chu e ve 'get fat; continue to get fat; go on getting fat; get fat from now on'. One can also say chu qay ve 'get fatter and fatter', with our verb qay 'go' (4) functioning as an auxiliary with much the same semantic effect as the verb-particle e (GL: 237). It is also possible to say chú ɛ̀ qay ve 'get fat', with a tone-change in the adjective and the adverbializing particle ɛ̀, which occurs in hundreds of "stative adverbials" (GL 4.422), sometimes inducing a change of tone, but usually not. This latter particle ɛ̀ is probably derived from *ya and ultimately from the copula *way, the source of our "third" palatal suffix (below §7).[45] It is possible that the palatal element in these stative adverbials is from this source, and not from the directional particle. This would account for the cases where the meaning is merely stative, and not necessarily 'emergent stative.'

Three cognate sets involving stative verbs that show *-a ≈ *-ay variation are presented in GSTC. It seems possible that the forms that reflect a palatal element have incorporated such a particle of 'emergent quality':

(6) BIG   *ta-y

Almost all of the reflexes of this high-frequency TB adjectival etymon reflect a palatal final element. STC #298 sets up PTB *tay on the basis of WT mthe-bo 'thumb'; Nung the 'big, large, great'; Mikir thè, kethè 'id.'; WB tay 'very'. To these, GSTC #68 adds: Tangkhul Naga kətay 'be extra', khəmətay 'increase, multiply', akətay 'remnant'; Proto-Northern Naga (W. French) *-tay (>e.g. Wancho a-tai 'far', tai-hu 'many').

Yet the Abor-Miri form ta 'large' (Lorrain 1907: 208) reflects a monophthongal prototype which should be taken seriously. (Abor-Miri does retain a distinctive reflex of PTB *-ay, viz. -ai, as in tai-é 'excrement; dross; rust' < PTB *(t)saːy [GSTC #108]).

In GSTC #68, I proposed a comparison between this TB etymon and the Chinese word-family represented by these three different characters:

泰 OC *t'âd/MC t'âi-   [GSR #316a]   'great; excessive'   : [WHB] *hlāts

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44) This usage of e is inadvertently not mentioned specifically in *The Dictionary of Lahu* (p. 118). The verb-particle la [see set (5) above] may also be used after adjectives to indicate temporal becoming, but in the sense of a change from the past to the present, e.g. chu la ve 'begin to get fat; be on the verge of overweight.'

45) That is, ɛ̀ and the nominalizer/subordinator ve could well be co-allofams.

太 OC *t'âd/MC t'âi- [GSR #317d-e] 'great; greatly'   : [WHB] *hlāts
大 OC *d'âd/MC d'âi- [GSR #317a-c] 'great; greatly'   : [WHB] *lāts

This last character could also be pronounced with voiceless aspirated initial, like the two others. Its Mandarin pronunciation, however, is usually dà, with monophthongal vowel.[46] This has always been something of a mystery.

Baxter (1992: 312 and n. 234) ascribes the variant MC and Mandarin readings to dialect mixture: "...the reading daH could reflect a dialect where at least the *-ts > *-js part of *final cluster simplification* preceded, and therefore fed, *-AJ *monophthongization*. Note, however, that MC daH would be expected to give Mandarin duò, not dà.... For what it is worth, it is southern dialects (e.g. Cantonese) which preserve the reflex of MC dajH as the normal pronunciation of this character." In any case, Baxter (297; 844, n. 212) feels that a better match with the TB forms is 多 *tâ/tâ (Mand. duō) 'much; many' [GSR #3a-c], which Baxter reconstructs as OC *tāj > MC *ta[47].

This idea of Baxter's is all the more attractive since he suggests an allofamic relationship between this latter morpheme and the word 諸 'many, all; plural for eminent persons', thus:

諸   OC [WHB] *tǎ   [GSR 45p] *țio
多   OC [WHB] *tāj   [GSR 3a-c] *tâ

Pleased as I am to be presented with this additional example of *-a ⋊ *-ay variation within Chinese, I would still not rush to abandon the idea that the words in GSR #316/#317 might also be accommodated within this word-family (see above 2.4c).

(7) RED   *t(s)ya-y ⋊ *t(s)ya-n

This etymon evidently included both palatal- and nasal-suffixed allofams.[48] STC reconstructs only two variants, one with monophthongal -a and one with a nasal suffix:

*t(y)a: WB ta, tya 'flaming red, very red'
*t(y)an: Lushai śen, Tiddim san, tśhan

To these I added in GSTC #150 a third allofam *t(s)a-y, on the basis of a pair of (Kuki-)Chin forms: Lushai tâi 'rosy; ruddy; red' and Lakher sai 'rosy; ruddy; red; crimson', sai-law 'scarlet'.[49]

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46) The monophthongal pronunciation apparently goes back to the Proto-Mandarin period (ca. 10th c. A.D.), though the character is still pronounced dài in a few compounds, like dàifu 'doctor' and dàihuáng 'Chinese rhubarb'.

47) Another member of GSR series #3 obviously belongs in this word-family as well, viz. 侈 #3i 'great; extravagant, overbearing' reconstructed by Karlgren as *t̑ia/tś'iɛ: and by Baxter (p. 413) as *thjajʔ/tsyheX (where -ʔ and -X stand for the OC and MC ancestors of Mand. *shangsheng* or rising tone).

48) Two similar suffixal elements occur in the word-family for ONE, (27) below.

49) Lorenz Löffler maintains that Lakher -ai is the regular reflex of Kukish *-an (p. c., Paris ICSTLL, Oct. 1994), but this is hard to believe in view of the Lushai cognate.

On the Chinese side, STC (pp. 169, 188) suggests comparing TB *t(y)a to 朱 OC *ṭịu [GSR #128a-c] : [WHB] *tǒ, though Baxter characterizes this as an "odd correspondence", and proposes as a more likely cognate 紫 OC *tsịăr 'purple' [GSR #358j] : [WHB] *tsějʔ, which could perhaps derive from an earlier *tsăjʔ.

There is good evidence for the nasal-finalled allofam in Chinese:

丹 OC *tân 'red; vermilion; cinnabar' [GSR #150a-b] : [WHB] *tān

STC suggests further affiliations with two other forms with front vowels:

綪 OC *tsịĕn 'pale red' [GSR 378g] : [WHB] *tsǐns

綪 OC *ts'iən 'dark red' [GSR 812t'] : [WHB] *tsīns

Baxter considers it possible that these last two items are related to each other, but feels they are quite separate from OC *tān.

(8) TAPERING   *s-(r)wa-y

WB **swai** 'slender and tapering', perhaps ✕ WB **rwâi** 'be pensile, as a tear' and/or ✕ WB **hrû** 'become less in size toward the end; taper'; Jg. **šói** 'small, weak, paltry'; Lahu **šú ɛ̀ ve** (with secondary high-rising tone, probably < šu³³) 'tapering'.[50] The Lahu form could be a borrowing < Burmese (WB **hrû** is now pronounced /hyu/) since WB **hr-** normally gives Lahu **h-** (cf. 'eight' WB **hrac**, Lh. **hí**). Alternatively it could be cognate to WB **swai**, at least to the **swa-** part, since WB **-wa** corresponds regularly to Lahu **-u**, e.g. 'cattle' WB **nwâ**, Lh. **nû**; 'handspan' WB **thwa**, Lh. **thu**; 'tooth' WB **swâ**, Lh. **-šū** 'toothlike part of tools'.

For a similar case, where Lahu **-u** corresponds to a WB form with **-wa** + suffix, cf. *swa-n GARLIC (GSTC: 10). If the latter analysis is correct, maybe we should suspect other WB adjectival/adverbial forms in **-ai** as having incorporated this suffix. See 5.1, below.

Since the regular correspondence to PTB *-way in Baxter's OC system is *-oj, he suggests a possible relationship between *s-(r)wa-y and 垂 *ḍwia 'hang down' [GSR 31a] : [WHB] *ḍǒj, though the initial correspondence is peculiar and in need of independent confirmation. Another possibility he proposes is 楕 OC *t'wạ 'narrow and long; oval' [GSR 11c] : [WHB] *hlōjʔ. Though more plausible both semantically and phonetically, this would still be the first example noted of PTB *s-r- corresponding to OC *hl- (see 4.1-4.3 above).

(9) EASY   *s-l(w)a-y

LaPolla points out (1987: 27) that in Nungish there is a monophthongal form for EASY, Dulong **la⁵⁵**, that is clearly related to the diphthongal root set up on the basis of other languages: WB **lwai**, Jingpho **loi~lwe** [STC #302].

5.1 The Rhyme -ai in Written Burmese

With much greater than chance frequency, words with the Written Burmese rhyme **-ai** (sometimes transcribed "-ay") have stative (or even "emergent stative")

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50) See GSTC #177; Matisoff 1974, #275; and DL: 1193-1194.

meanings.[51]   These often have an affective and/or onomatopoetic element as well,
e.g. **prai** 'become weak; waste away; get less vivid or pungent'. (For a complete list
of examples see *Appendix I*.)   Such words are often under the creaky tone as well
(transcribed with an apostrophe);[52] but this derivational device has a different
etymology, in some cases having arisen from an *s-prefix (Thurgood 1981).
Sometimes the *s- prefix and *-y suffix seemed to have worked in tandem, as in **nai'**
'loose'; **kai'** 'bit by bit; by degrees'; **yai'** 'loose; flimsy'.[53]

This initial impression[54] of the stative content of the final palatal element is
confirmed by a rough count of the morphemes with this rhyme in Judson's
dictionary, as compiled in the *Rhyming Dictionary of Written Burmese*
(1941/1976).[55]   The total number of morphemes in **-ai** and **-wai** were counted, as
well as the subset of these with stative/affective meanings.   As a control, the same
counting technique was applied to stative morphemes with the monophthongal
rhymes **-a** and **-wa**:[56]

WB Rhyme	Total Morphemes	Morphemes with Stative Meaning	Percent of Statives
-a	206	25	12%
-wa	62	18	29%
-ai	118	29	24.6%
-wai	62	16	25.8%

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51) For some of these words cognates have been discovered: WB **prâi** 'gape, extend, flare'
     (Lh. **pé è**) < PLB ***bray²** [GSTC #127].

52) Of the 25 statives in **-a**, 9 are under creaky tone (36%); of the 18 statives in **-wa**, fully 9
     are under creaky tone (50%); of the 29 statives in **-ai**, 9 are under creaky tone (31%), while
     among the 16 statives in **-wai**, 4 (25%) are under creaky tone (or have creaky tone
     variants).   These are all much higher percentages than the proportion of creaky-toned
     items in the Burmese lexicon in general.

53) In connection with the co-occurrence of these two morphemes, let us repeat the quote
     from Benedict given above: "...the Chinese cognates...exhibit frequent *s-prefixation
     along with some dental suffixation: *-i, *-n and *-t...One must wonder whether or not this
     *-i is in any sense to be identified with the *i of the basic *i / *u / *a deictic triangle"
     (1984: 5).

54) When I first expressed this notion in public (June 1989 in Paris), it was reassuring to
     have it enthusiastically confirmed by the eminent lexicographer of Burmese, Denise
     Bernot.

55) This count can be nothing but rough.   An attempt was made not to include obvious
     loanwords, and to give only one point collectively to all members of the same derivational
     family.   (Thus simplex/causative verb-pairs, or verbs and their derived nouns with the ʔă-
     prefix count as one item, not two.)

56) Words with these monophthongal rhymes are listed in *Appendix II*.   It is interesting to
     note that WB words in **-ai** include an especially small proportion of nouns, while words in **-a**
     have a large proportion of nouns.

Particularly striking examples, where WB has pairs of monophthongal and diphthongal co-allofams (sometimes semantically differentiated), include:

kwa 'become separate; go apart' ≍ kwai 'be divided; split'
tâ-tâ 'by a very little' ≍ tâi-tâi 'id.' ≍ tai 'very'

The presence of medial -w- also seems to correlate positively with the semantic component of stativity:

| -wa, -wai | Total 124 | Stative 34 | Percent stative 27.4% |
| -a, -ai | Total 324 | Stative 54 | Percent stative 16.7% |

Thus the most highly marked statives have medial -w-, final -y, and creaky tone, e.g. twai' 'pendent, hanging', nwai' 'bending flexibly', ywai' 'distorted; awry'.

5.2   Statives with the PTB *-oy Rhyme

Of the twelve etyma reconstructed with the relatively rare rhyme *-oy in STC, five have meanings that could be termed stative: *moy [#304] 'perfectly, beautifully'; *r-moy [#305] 'beginning to form in the bud'; *soy [#306] 'passing close by, grazing'; *koy [#307] 'curved, coiling'; *ŋoy 'gentle, peaceful, listless'.

6.   DIMINUTIVES < PST *-ya (≍ *za ≍ *tsa ≍ *dza)

The second palatal suffix I am hypothesizing for PST/PTB/PLB was appended to nouns, and carried a *diminutive* or *affective* increment of meaning. I believe it to have arisen through destressing of a fully syllabic morpheme meaning 'child; little one'. This etymon is found throughout Sino-Tibetan, and constitutes a complex word-family, with several allofams already coexisting as far back as we can go.

Synchronically Lahu has preserved vivid evidence of this suffix, which even remains somewhat productive. However, as we shall see, my previous analyses of Lahu vowel morphophonemics[57] have obscured this evidence.

Of our three palatal suffixes, the diminutivizer is the only one where a sense of morpheme boundary still sometimes persists. Yet even here semantic bleaching has often occurred. A morpheme which originally had diminutive force can slide into a mere affect marker, and thence to a simple device for adding phonological bulk.[58] (An analogous phenomenon may be observed with respect to the "honorific" o-prefix in Japanese, which now often means nothing more than "this familiar obect which we see/use every day", as in *o-hashi* 'chopsticks', *o-cha* 'tea', *o-benjo* 'toilet'.)

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57) See Matisoff 1973/1982: 19-20; Matisoff 1982/1989, passim.
58) Cf. the discussion of Mandarin -zi and -r, below 3.4.

6.1   A Refined Interpretation of Lahu Synchronic Diminutive Morphology

Black Lahu has a 9-vowel system:[59]

i	ɨ	u
e	ə	o
ɛ	a	ɔ

Of these vowels, only the 6 non-front ones can take the diminutive palatal suffix:

ɨ	u
ə	o
a	ɔ

The non-occurrence of the suffixal palatal after the front vowels stands to reason; a palatal element would not be very salient after such phonetically similar nuclear vowels.   This diminutive morpheme is not available for syllables whose nuclear vowel is /i e ɛ/ (i.e., already palatal), since vowel length is not distinctive. Height-wise, /i/ and /e/ are quite close (the mid-vowel is actually mid-high), so a palatal suffix would be equally useless for them.   Even *ɛy does not occur; since the palatal element has the tendency to assimilate to the height of the nuclear vowel, this would have given [ii, ee, ɛɛ], which are canonically impossible.[60]

Phonetically and perceptually, the amalgamation of the palatal suffix with the central vowels leads to quite different results from what happens with the back vowels.   I used to consider as separate two diminutive alternations, one involving the central vowels /ɨ ə a/ and the other involving the back vowels /u o ɔ/.   From my present vantage point, it is now clear that one and the same process is involved—the suffixation of a palatal diminutive morpheme.

6.11   When the nuclear vowel is back: rising diphthongs[61]

Lahu has interesting "doublet-formations where forms having simple back vowels /u o ɔ/ may also be pronounced with a nucleus consisting of /w/ plus the *front* vowel of the same height /i e ɛ/" (GL: 19), i.e., u ⋈ wi, o ⋈ we, ɔ ⋈ wɛ: 'dried fish' ŋâ-ku ~ ŋâ-kwi; 'era' co ~ cwe (< Shan; cf. Siamese chûa); 'curved object' ɔ̂-qɔ̂ʔ~ɔ̂-qwɛ̂ʔ.   In "*The mora the merrier*" (1982/89: 170) I viewed this as a "meaningless extrusion or extension from the original nuclear monophthong" or "a

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59) The Yellow Lahu dialect has only a 7-vowel system, having merged the non-low central vowels ɨ and ə with the corresponding front vowels i and e.

60) A minor exception is constituted by the 'echo-vowel adverbials' like nɔ-vî-i 'bright green', chɔ̂-nɔ̂-ɔ 'all bruised'. See Matisoff 1989.

61) Please note the silly enantiodromic error in the Introduction to DL: 17, where in discuss-ing this phenomenon I systematically (four times in one paragraph!) said "falling" instead of "rising" diphthongs.

benign bulging of the syllable's substance"—which is cute, but doesn't explain much.

Although this alternation was correctly described synchronically, I did not realize its diachronic significance. I referred to the greater familiarity or folksiness of the so-called "prelabialized" variant, comparing its stylistic value to that of English present participles with "dropped g", like *singin'*. But this is really backwards—it is not the labiality which historically carried the diminutive/affective sense, but rather the final palatal element.[62] The three nuclear back vowels are actually neutralized to -w- in this position (even though they are all still phonetically distinct), with the contrast being shifted onto the palatal suffix, now distinguishing three degrees of vowel height:

wi [ʮi]   we[ǫe]   wɛ [ʔɛ]

Historically the peak of sonority passed gradually from the nuclear vowel to the suffix, which then had to take on the burden of distinguishing the three degrees of vowel height.

6.12   When the nuclear vowel is central

When it occurred after the central vowels /i ə a/, this tightly fused element was already recognized as diminutive in GL, p. 19.[63] Examples include:

MIRROR	mɛ̂ʔ-g̈ə̂ʔ ⋊ mɛ̂ʔ-g̈əy ("little glass")
POWDER	ɔ̀-məy [cf. mə 'to pulverize']
FORKED/SPLIT OBJECT	ɔ̀-qáy [cf. ɔ̀-qá 'branch']
SCAR	ɔ̀-kíy [also ɔ̀-kî]
STHG SPECIAL/EXTRA	ɔ̀-lə́y [cf. lɔ́ 'be left over' < Tai]

Furthermore, with the central vowels, two degrees of fusion must be recognized.

6.121   Tight vs. loose palatal fusion with central nuclear vowels

There are two degrees of palatal-suffix fusion possible with the Lahu central vowels /i ə ɑ/. The less-fused type results in "co-valent" diphthongs like -iɛ (neither rising nor falling, two morae in length), while the more-fused variety yields a monosyllabic falling diphthong:

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62) In other words, we do not have "prelabialization" here, but rather *post-palatalization*.

63) The analogy was also drawn there between the Lahu final palatal element and Mandarin
    子 **zǐ** and 兒 **ér**.

	Suffixable vowel	Less fused	More fused
	i	iɛ	iy [i̥i]
CENTRAL	ə	əɛ	əy [ə̥ɛ̥]
	a	aɛ	ay [ḁɛ̥]
	u		wi [u̥i]
BACK	o		we [o̥e]
	ɔ		wɛ [ɔ̥ɛ̥]

These two degrees of fusion are particularly clear in a small class of words I call "diminutive extentives" (GL: 17-18), nominal morphemes that are derived from the plain extentives, which in turn derive from a restricted set of common stative verbs:

Base Adjective		Extentive		Diminutive Extentive			
					Loosely Fused~		Tightly Fused
'be big'	ī	'this big'	chi hi	'only this big'	chi híɛ́	~	chi híy
'be many'	mâ	'this much'	chi ma	'only this much'	chi máɛ́	~	chi máy
'be long'	yı	'this long'	chi ši	'only this long'	chi šíɛ́	~	chi šíy
'be far'	vî	'this far'	chi fı	'only this far'	chi fíɛ́	~	chi fíy

6.13 Semantic bleaching and replacement of simplex by diminutive

In some cases an etymological diminutive with non-syllabic labial glide and front (post-palatalized) vowel has completely replaced the simplex form on which it was based:

> 'grandchild': ɔ̀-hwē (but *ɔ̀-hɔ̄ does not exist)
> 'barking deer [Cervulus muntjac]' : chi-pí-qwɛ̀ʔ (but not *chi-pí-qɔ̀ʔ)
> 'firefly': mềʔ- g̈ɔ́-lwề (*mềʔ-g̈ɔ́-lɔ̄ does not exist)

Analogies to this state of affairs are readily found in Indo-European:

(a) Vulgar Latin diminutives which became the ordinary name for the object in Gallo-Romance/French:

> 'bird'   Fr. oiseau   < Spoken Latin avicellu
> 'uncle' Fr. oncle   < Spoken Latin avunculu 'mother's brother'
> 'bee'   Fr. abeille < Spoken Latin apicula
> 'ear'   Fr. oreille < Spoken Latin auricula

(b) Slavic diminutives which became the ordinary name:

> 'heart'   PIE *k'erd- > Common Slavic *sṛdĭcĭ (with diminutive suffix) > OSl sṛŭdĭcĕ, Russ. serdce (Kurath 1921: 12)

'finger/palm/thumb'   Lat. **palma**, Gk. **palámē**, OE **folm** 'palm'; OSl **palǐcǐ**
'thumb', Russ. **palec** 'finger' (with diminutive suffix)

(c) Nouns in Yiddish where the root ends in -**l** are perceived as intrinsically contain-
ing the homophonous diminutive suffix -**l**:[64]

eynikl   'grandchild' (cf. German *Enkel*)
feygl   'bird' (cf. German *Vogel*)
tsibele   'onion' (no form *tsibl exists; cf. German *Zwiebel*)
beygl   'bagel'

This phenomenon is actually a kind of linguistic teknonymy, analogous to
naming a grownup in terms of his child's name.

6.2   PST/PTB/PLB Proveniences of Lahu Diminutive Morphemes—a Ramified Proto-word Family

For the concept of 'child', STC reconstructs both *tsa and *za[65]. To these we
must add the allofams *dza and *sa to account for certain Lahu forms (see below),
and now I would claim we need a variant *ya as well, to account for ɛ, the Lahu
"less fused" variant of the diminutive morpheme.[66] The phones [y] and [z] are
closely related in Lahu; Lahu has no /z/ phoneme, but /y/ is [z] before /i/. The
Lahu reflex of both PLB *y and *z is y. Sets which demonstrate the fate of PLB *z-
include the usual Lahu word for 'child; son':

	WB s-	Lh. y-	PLB *z-
'child'	sâ	yâ	*za²
'strong'	san	yè	*zan¹
'descend'	sak	yàʔ	*zak
'3rd pers. pronoun'	sâŋ	yɔ̂	*zaŋ²

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64)   Usually Yiddish nouns may undergo two degrees of diminutivization, with the super-
diminutive taking the suffix -**ele** (e.g. **hunt** 'dog', **hintl** 'little dog', **hintele** 'sweet little
dog').

65)   For *tsa 'child; grandchild; nephew/niece' see STC: 27, 30, 100, 154, 158, 169, 188,
189; for *za 'child (offspring)' see STC 59 (p.27) and STC: 30, 54, 90, 100, 102, 122, 135,
169, 188. Tsangla has both roots, which co-occur in the single form **za-sa** 'child (baby)'
(STC, n. 86). Cf. the discussion of "incestuous compounds" under LUNG in Matisoff
1978: 119. We should not be too surprised to find two co-allofams participating in the
same synchronic collocation—cf. the new compound **house-hus**band, or the colloquial
sequence of particles *off of,* as in "He fell **off** of the table", where *off* and *of* descend from
the stressed vs. unstressed variants of the same etymon, *apo. Cf. the Lahu combi-
nation yɛ̀-ɛ̂ [above 3.2] and the compounds **qhɔ̀-qhe/qhà-qhe** < *ka-kan, below (23).

66)   The regular Lahu reflex of *-ya is ɛ, as in 'bee' PLB *bya² > Lh. **pɛ̂**; 'swidden' PLB
*hya¹ > Lh. **hɛ**; 'eye' PLB *s-myak > Lh. **mɛ̂ʔ**.

'use'	sûm	yɛ̂	*zum²
'leopard'	sac	mɔ̀ʔ-yì̀ʔ	*zik

I now believe we must also add a variant with nasal prefix to account for the diminutive morpheme represented by the Lahu suffix -nɛ̂ʔ ⪥ -nɛ́ (see TSR #158). We thus have a pan-allofamic formula something like this:

$$
\begin{array}{ccc}
 & y & \\
*s\text{-} & & \\
 & a & \text{-k} \\
*N\text{-} & & \\
 & (d)z & \\
\end{array}
$$

But this is not all.   There seems to be still another variant reconstructible for Lolo-Burmese, PLoloish *N-yay¹, on the basis of forms with nasal initial but unstopped finals: Akha, Hani, Khatu, Pijɔ njí, Mpi ɲɯ⁵ (Hansson 1989: 35).[67] Compare also Lahu ŋɛ 'short', which could also be from *ʔŋay (known to be preglottalized because of the mid-tone; the regular Lahu reflex of *-ay is -e, but the syllable ŋe does not occur in Lahu).   So perhaps we should set up *ñay ⪥ *ŋay.

This adds a slight complication to our pan-allofamic formula:

$$
\begin{array}{ccc}
 & y & \\
*s\text{-} & & \text{-k} \\
 & a & \\
*N\text{-} & & \text{-y} \\
 & (d)z & \\
\end{array}
$$

This reconstruction now accommodates a set of forms supporting PTB *m-dza 'love' [STC #67]; the stative/passive meaning often borne by the nasal prefix fits well semantically here—children are *beloved*.   This word-family is now capacious enough to include two key diminutive Chinese etyma, the ancestors of Mandarin ér and zǐ,[68] though it may be preferable to consider them as etymologically independent from each other for the time being (see below 3.4).

I believe that no fewer than seven or eight of these putative allofams have

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67)   Contra Hansson, WB nâi 'few' (Judson 581) does not seem to belong here.   It is from Tone *2, and seems to derive from nâñ (J. 558).   A more promising Burmese cognate would be ŋai (< Tone *1) 'small, little, inferior' (J.323).   Interchange of nasal points of articulation is common in TB in the environment of palatals.

68)   To complicate the picture, there is also a PTai root *(h)nɔ(ɔ)i (PTai tone B-1 ⪥ C-2) 'small; little', represented by Siamese nɔ́ɔj (C-2) ⪥ nɔ̀ɔj (B-1).   (See Li Fang Kuei 1977: 111, 113, 288).

distinct Lahu reflexes:
- PLB *za² > Lahu yâ 'child; son'[69]
- PLB *dza¹ > Lahu cà-'prefix to traditional boys' names'
- PLB *ya² > Lahu yê 'offspring; young of animal'
    /also ɔ̀-yê, ɔ̀-yê-ɛ́; cf. pɛ̂-yê, pɛ̂-yɛ̂-ɛ́ 'wasp larvae'; note the simultaneous occurrence of two co-allofams in the synchronic combination yê-ɛ́ 'young of animal', < *ya²-ʔyak./
- PLB *s-ya² > *sa² > Lahu šā 'nephew'
    /in the compounds ɔ̀-šā-pā 'nephew', ɔ̀-nū-ɔ̀-šā 'nieces and nephews'/
- PLB *s-yak > *ʔyak > Lahu ɛ́ 'baby; diminutive suffix'
    /This morpheme appears in prefixed form as an autonomous noun, ɔ̀-ɛ́, but it is now most common as a productive diminutive suffix:
      phî-ɛ́ 'little dog; puppy' < *kʷəy-ʔyak
      ɔ̀-g̈ù-tɛ̂ʔ-ɛ́ 'small intestine'
      cha-mɔ̂-ɛ́ 'labia minora'
      šú-lèʔ-ɛ́ 'cigarette' ("little cigar")
      lɔ̄lī-ɛ́ 'tricycle' ("little lorry")/[70]
- PLB *s-nyak > *ʔnyak > Lahu nɛ́~nɛ̂ʔ 'diminutive morpheme'
    /e.g. cà-pĭ-nɛ̂ʔ 'starling', yâ-cú-nɛ̂ʔ 'runt; undersized person or animal', nɛ̂ʔ 'get pulverized; be reduced to fragments; shatter', tɔ̂ʔ-nɛ̂ʔ 'cut up fine'; see TSR #158; DL 786-7/
- PLB *s-ŋyak > *ʔŋyak > Lahu ŋɛ́ 'be faint (of sounds)' (DL: 428)
- PLB *s-nyay ≍ *s-ŋay > Lahu ŋɛ 'short' (DL: 428)

Basically this is a Loloish Tone *2 etymon: *za² > yâ and *ya² > yê. It is not known what the function of the *-k suffix was in this word-family. We reconstruct it to account for the high-rising tones of ɛ́ and nɛ́ by glottal dissimilation (Matisoff 1970, 1972).

As often in TB phonology, y was in an ambivalent position here: when it was treated more like an initial consonant (as in the allofam *ya²) it survived redundantly after coloring the following vowel; when it was treated more like part of the vocalic nucleus it was dropped, after it had done its job of coloring the following vowel. In its grammaticized function as a diminutive marker (ɛ́), it lost its initial consonant (a typical development in Lahu functors) - i.e., the y indulged its tendency to dissolve into the following vowel.

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69) Direct cognates of this LB etymon apparently occur as diminutive suffixes in the Naga languages Ntenyi and Sangtam, where the words for 'finger' are: Ntenyi **gwün-zung-za** (**gwün** 'hand', **zung** 'finger') and Sangtam **müyong-za** (**müyong** 'finger'). See Marrison 1967: Appendix Ia, p. 95.

70) In this usage, ɛ́ contrasts with an antonymic augmentative suffix **-ló** (< Tai; cf. Siamese **lŭaŋ**), e.g. ɔ̀-g̈ù-tɛ̂ʔ-ló 'large intestine', **cha-mɔ̂-ló** 'labia majora'.

6.3 Evidence for a Palatal Diminutive Suffix at the PST or PTB Level

(10) BEE PST *k(l)wa-y ≍ *g(l)wa-y

This root is set up simply as *kwaːy in STC #157, on the basis of forms like WB **kwâi** 'dammer bee', and Lushai **khuai~khoi**, Tangkhul Naga **khui**, Thakali **koy** 'bee'.

To these GSTC #76 adds some additional reflexes (Angami Naga **mèpfĩ** (Kohima dial.), **makwi** (Khonoma dial.); Meithei **khoy**; PTamang *gway [Mazaudon 1984]; PNorthern Naga *C-guay [French 1983: 460]), and observes that the latter two reconstructed forms as well as the unaspirated initial of WB **kwâi** point to a proto-allofam with voiced initial *gw-. As I remarked in GSTC, two of the forms cited in STC (Lakher **əkha**, Nung **kha**)[71] point to a monophthongal variant of this etymon as well, though Benedict does not call attention to this. More modern Nungish data (from Sun 1982) is cited in LaPolla 1987: Dulong **khwa 31 me53**.

A solid Chinese cognate now allows us to trace this etymon back to the PST level: 蜾 *klwâr/kuâː [GSR 351c] 'sp. of small wasp' : [WHB] *k(r)ōjʔ.[72] Actually several other near-homophonous characters in this same phonetic series are also of interest in the present context:

果	*klwâr/kuâː	[GSR 351a-b]	'fruit'	: [WHB]	*k(r)ōjʔ
堁	*k'lwâr/k'uâ-	[GSR 351e]	'dust'	: [WHB]	*kh(r)ōjs
裸	*glwâr/luâː	[GSR 351g]	'bare; naked'	: [WHB]	*g-rōjʔ

The initial *velar-plus-lateral cluster is reconstructed in GSR for the OC forms in the series because of the interchange between velar and lateral initials in Middle Chinese.[73] The semantic content of these words is such that they are good candidates for diminutivization: [351c] refers to a *little* species of wasp; *fruits* [351a-b] are nice little round things; *dust* [351e] is composed of tiny particles (see the discussion of RICE and SAND, (14) and (16) below); and *nudity* [351g] is a concept that lends itself to jocular or affective intensification (cf. Eng. *stark naked* < older *start naked* [*start* = 'tail'], *starkers, buck naked*, etc.).

Similar forms for BEE ending in a palatal semivowel are to be found in non-ST languages as well. The Hlai language of Hainan (of the 'outlier' branch of Kadai) has forms like **koːi, kuai, kaːi** (Ouyang and Zheng 1983: 406, 449), and STC

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71) Actually I have not been able to verify STC's Lakher form (it is not in Lorrain 1931:76), but have come up with another one, **khei** (Lorrain: 176). If both Lakher forms are valid, it nails down the monophthongal ≍ diphthongal alternation.

72) This form is not cited in STC, but Benedict does mention it in ATLC: 100, in connection with possible Austro-Tai affiliations [see below].

73) The modern Mandarin name for this insect is an apparently reduplicative dissyllabic compound **guǒ-luǒ** 蜾蠃 [WHB] OC *k(r)ōjʔ-(C-)rōjʔ.

suggests that the TB etymon is "a possible early loan from Austro-Tai" (n. 144). The Semai language of Malaya (Aslian branch of Mon-Khmer) has a form **lwey** (p.c., G. Diffloth).[74]

For now it seems best to reconstruct this etymon for PST with both a monophthongal and diphthongal allofam, assuming that the **-y** originally had diminutive/affective value. It is impossible to tell at the moment where this apparent Wanderwort originated, though it is certainly possible that it diffused from Sino-Tibetan into other language families, with the diminutive suffix already incorporated into the root.

(11) CHEEK   PTB *ba-y

There is a well-established Lolo-Burmese root *ba² 'cheek; jaw; chin' (not in STC), underlying e.g. Written Burmese **pâ** and Lahu **pâ**, that occurs in many compounds having to do with the lower parts of the face, e.g. Lahu **pâ-qɔ̄-bî** 'whiskers', **pâ-qə̂ʔ-lə̂ʔ** 'chin', **pâ-kâ** 'jaw; cheek', **pâ-cîʔ** 'beard; moustache', **pâ-jâ-lâ** 'dewlap (of bovine)', **pâ-pi-li** 'chin', **pâ-g̈ɔ̂** 'jawbone', **pâ-g̈ì-qhwèʔ** 'dimple', etc. (DL: 807).

The recently attested Pa-O Karen (= Taungthu) form **bái** 'cheek',[75] as well as Dulong **kəbai** 'jaw; cheek', now enable us to set up an allofam with final palatal for PTB. Semantically, certain body-parts are good candidates for diminutivization. Dimples are cute.

(12) JAW/CHIN   PTB *m-ka-y ⋈ *s-ka-y

In the same general somatic area, there is a word for JAW/CHIN that has been shown to relate to the same verbal root *ka 'open; fork; divaricate' that we have cited under GO, above (4). All the forms presented in STC #470 reflect a monophthongal prototype *m-ka or *s-ka: Jingpho **nìŋkhá~n̄khá** 'chin; jaw', Nung **məkha** 'id.', Dimasa **khu-sga** 'chin', etc.

The more modern Nungish data presented in La Polla 1987 reveal the existence of a palatally suffixed variant: Dulong **mɯ³¹kai⁵⁵**. This is supported by the second element of a Jingpho elaborate expression **nkha-nkhai** 'chin; jaw' (Hanson 1906: 492). We may thus safely push the diphthongal variant back at least as far as the Proto-Jingpho-Nung stage.[76]

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74) Several years ago I noted the form "Malay **keluai**" 'bee' in the margin of ATLC: 230, but have since been unable to confirm this with Malay specialists, and cannot now remember where I found it!

75) Data from Solnit 1991.

76) This etymology is in fact a nice piece of additional evidence for the long-suspected special relationship between Jingpho and Nungish. As more data become available it may well turn out that Nungish is a stronghold of palatal suffixation. Of the six etyma pointed out by LaPolla (1987: 27) where Nungish data provides evidence for a ⋈ ay variation, Dulong points to the *-ay allofam in three cases [CHEEK, above (10), FATHER, below (17), and JAW/CHIN], but to the *-a allofam in three others [RICE, ↗

(13) FONTANELLE   PTB *r-(w)a-y

Recent data on this obscure bodypart collected for the *Sino-Tibetan Etymological Dictionary and Thesaurus* project (STEDT) at Berkeley show that it too provides evidence for a diminutive palatal suffix. The fontanelle—the soft spots on a baby's skull—is certainly an eminently diminutivizable bodypart.

Lahu ú-ğâ points to a monophthongal PLB prototype *ra². (The first syllable means 'head'.) This is supported by the Risiangku dialect of Tamang (Nepal), which has ²wa.

The Meithei (Manipuri) form ləway is doubly important: it reconciles the liquid of Lahu with the w of Tamang, and it reflects our palatal suffix. The suffix is confirmed by Tangkhul Naga ālaprai, āraprai (to be syllabified ā-lap-rai, since pr- clusters do not occur in native Tangkhul words).

(14) RICE   PST *ma-y

STC sets up a root "*may or *mey" for RICE, which Benedict believed to be confined to Bodo-Garo (e.g. Garo mi [⚹ me- in comp.], Dimasa mai 'rice, paddy'), Karenic (e.g. Pwo, Sgaw me 'boiled rice')[77] and Chinese 米 OC *miər [GSR #598a-c] 'rice, paddy' : [WHB] OC *mījʔ. Baxter's reconstruction goes well with the *mey allofam.

The peculiar vocalism of this etymon—STC reconstructs the Proto-Bodo-Garo form as *m[a,e]y)—led Benedict to suppose that it was a loan from "Austro-Tai" (his putative umbrella-family that includes Austronesian, Kadai, and Hmong-Mien).[78] Yet there is an alternative explanation closer to home.

Several TB forms have been uncovered that point to a variant with the simple vowel *-a: GSTC cites Tangkhul Naga ma 'paddy' (#57, p. 27). This form is not in Pettigrew 1918, but is to be found in Bhat 1969: 33, along with compounds like ma-ŋum 'unhusked paddy, ma-thɯ 'young paddy plant', ma-won 'paddy flower', ma-hɯ 'paddy stubble', etc. (Note that the usual Tangkhul reflex of *-ay is -ai—e.g. Jingpho mənài 'twist', Tangkhul khənai 'knead' [GSTC #61].) LaPolla (loc. cit.) adds monophthongal forms from two other branches of TB: Dulong (Nungish) tś(h)ɯ³¹ ma⁵⁵ and Luoba (Mirish) amə.

> below (14); BEE, above (10); EASY, above (9)]. Note the intra-Nungish disagreement in final between Nung məkha and Dulong mɯ³¹kai⁵⁵.

77) STC: 65, 128, 149, 192-3.

78) ATLC (pp 49, 364), by a daring semantic leap, attempts to relate PIndonesian *imay 'rice' to PTai *may 'tree / wood / bamboo / sugarcane'. The only semantic link adduced is lifted from a *different etymology*, PIndonesian *pag'ay, wherein the Austronesian language Hova has a morpheme fari 'sugarcane', which also appears as an element in the compound tsimpari 'wild rice' (ATLC: 363-364). This seems like a slim reed indeed on which to support a semantic association between TREE and RICE! Once the Tai root is divorced from the Austronesian one, there is no need to assume that the Austronesian etymon was so widespread as to have been borrowed into PST, rather than vice versa.

It seems clear that this etymon is also a fine candidate for reanalysis in terms of a diminutive palatal suffix.

One may come up with at least three reasons for a diminutive/affective increment to a word for RICE: (a) *Granularity*. Rice comes in small grains (cf. SAND, (16) below). (b) *Positive affect*. Rice, as the staple food of all East Asia, is regarded with familiarity and affection by everybody.[79] (c) *To distinguish different species of cereal grains*. Conceivably a suffix could have been added to distinguish rice from another cereal with larger grains. Cf. Mandarin **mài** 麥 'general term for wheat, barley, etc.', alongside **dà-mài** ("big **mài**") 'barley', **xiǎo-mài** ("little **mài**") 'wheat', as well as Japanese **mugi** (written with the same character) 'wheat, barley, oats, rye', alongside **oomugi** (oo- 'big') 'barley', **komugi** (ko- 'small') 'wheat'.

It is interesting to note that a similar allofamic alternation between monophthongal and diphthongal rhymes appears in Proto-Yao *(h)mɛ (y) as well (ATLC: 364). This could be interpreted as the result of both the plain and suffixed variants of the root having been borrowed into Yao from ST at an early date.

(15) ARROW   PTB *b-la-y ⪥ *g-la-y

STC #449 sets up a PTB root *b-la or *m-la 'arrow' on the basis of forms like Bahing **bla**, Jili **məla**, Dimasa **bala**, and Tangkhul **məla**, along with a supposedly separate root *m-da to account for WT **mda** and Khauri **niŋda** (n. 313).[80] A Chinese cognate with final *-k is also adduced: 弋 *djək/jək [GSR 918a-b] : [WHB] *lǒk 'arrow with string attached' (STC: 176, 188).

I would now like to propose a diminutivized version of this etymon, *g-la-y (> pre-Lahu *g-ya-y), as the precursor of the Lahu bound morpheme **ce**, which occurs with a prefix as an autonomous noun (ɔ̀-ce 'arrow'), and in the compound **khá-ce** (<khâʔ-ce) 'arrow of crossbow'. Similarly structured Loloish compounds with the same etymon as second syllable include Akha (Hansson) **kaq-mjà** and Kha Li (So. Lolo) **ka-mla** (for 'crossbow' PLB *krak, cf. TSR #9). The velar prefix *g- is meant to account for the affrication of the Lahu initial, as well as the aspiration of the WB form **hmrâ** (unexplained in STC). Perhaps this velar prefix arose through assimilation or metanalysis with the final velar in the morpheme for 'crossbow': *krak-m-la-y > *krak-g-lay > *krak-glay.

The Lahu tone is a problem. WB **hmrâ** and Akha **mjà** both reflect Tone *2,

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79) Cf. the use of an incorporated 'familiar-honorific' prefix **go-** in Japanese **gohan** 'cooked rice'; **han** (< Chinese) does not exist as a free morpheme in Japanese. Alongside the usual Lahu form for cooked rice, ɔ̄ (< PLB *hâŋ²), there is a diminutivized form, **wɛ**, that occurs in the compound **á-qhâ-wɛ** (lit. "ragweed rice") 'ritual rice sent to the grave of a dead person'. (For the ɔ ⪥ wɛ alternation, see above 6.11.)

80) Alternation between **l** and **d** is in fact quite widespread in ST. See Matisoff 1990c, "The dinguist's dilemma." Jackson Sun observes (p.c., 1993) that the WT prefixes **m-** and **h̩-** both have a delateralizing effect on the following root-initial, as also in FATHOM (PTB *lam > WT h̩doms-pa, WING (PTB *s-lap > WT h̩dab-ma), and LEAF (PTB *lap > WT h̩dab-ma, lo- h̩dab) (probably the same etymon as WING).

but the mid-tone of the Lahu form can derive only from Tones *1 or *3. One might, however, suspect that the incorporation of the palatal suffix would have affected the tone. Supporting the inclusion of the Lahu form in this set is the perfect homophony with the verb FALL: *glay > *gyay > Lahu ce, above (2).

Semantically this root is a suitable candidate for diminutive morphology— the arrow is the child of the bow.[81]

(16)   SAND   PST *z(l)a-y < **s(l)a-y

STC suggests (p. 188) that WT sa 'earth' is cognate to Chinese 沙 'sand' *sa/ṣa [GSR #16a-c], though Benedict does not venture to reconstruct any general TB root for 'sand', nor does he set up an etymon for 'earth' of this shape.[82] The Chinese word is a Division II member of the GE 歌 rhyme category, so Baxter reconstructs the OC form as *srāj.[83]

I would now like to claim that there is indeed a general TB root for SAND of the shape *s(l)a-y, where the palatal final is our diminutive morpheme ("little earth").

There is also a closely similar Tai etymon, and borrowing should be assumed in one direction or the other.

The usual word for 'sand' in Burmese is θê (WB sâi), though there is a doublet θəlê (WB səlâi;[84] also səlâi-krâm 'coarse sand', səlâi-ni 'red sand') (Judson 1893: 1010), that is of considerable interest when Tai forms are considered (below). There are many similar forms in Loloish languages (e.g. Lahu šê-šī, Akha qá-šìʔ, Phunoi khi-săi, Bisu sàj, Mpi n⁴si⁵; cf. Bradley #334 and GSTC #159), though some of these are evidently borrowings. Lahu šê- has to be a loan (either from Burmese or from Shan s'ai), since native Lahu words beginning in š- do not appear under the high-falling tone /ˆ/. The checked syllable in the Akha form reflects a variant antecedent with final stop.

Jingpho has well-integrated compounds like zài-brù 'sand', zài-brōn 'coarse sand; gravel', zài-nì 'very fine sand; common white sand or dust', zài-brù-jàŋ 'beach; desert', zài-brù-zài-brōn-gà 'sandy places in general' (Dai et al. 1983: 905-

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81) The Lahu word hɔ̂-ma 'bow' does in fact have an *augmentative* suffix, -ma, ultimately to be derived from an etymon for 'mother'. See (17) below, and Matisoff 1991b ("The mother of all morphemes...").

82) Benedict first made this WT/Chinese comparison way back in 1939 ("Semantic differentiation in Indo-Chinese", p. 222).

83) L. Sagart points out (p.c., Oct. 1989) that the Min dialects of Wenzhou and Fuzhou have many words with final -ai where other dialects have simple -a, and that SAND is one of these. These diphthongal Min forms might therefore be regarded as the more conservative variants, having escaped the monophthongization which affected other Chinese dialects between the OC and MC periods. See Baxter 1992: 293-297.

84) Dr. Khin Maung Win of London believes that sâi is "a fusion or shortening of səlâi" (p.c., John Okell 1993). The fuller version is a native word, and is still to be heard in the speech of older people.

906). Orthographic "z-" is pronounced **dz-** in Standard Jingpho, and there is also a variant with voiceless affricate initial **hkūm-tsāi** 'sand (Northern usage)'.[85] It looks to me as if these Jingpho forms are native, and not recent borrowings from Shan **s'ai** (the Tai language with which Jingpho is in contact), which has an aspirated **s'**.

The nativeness of this etymon to Tibeto-Burman from an early period is confirmed by Abor-Miri **shi-yé** 'sand', **yé-pu** 'soft sand', **yé-rol** 'coarse sand'.[86] The only Tai language with which Abor-Miri could have come in contact was the Ahom language of Assam (now extinct), where the word for SAND, **s'āi**, has an identical initial consonant to the Shan form, an aspirated voiceless sibilant—an unlikely source for Abor-Miri **y-**. On the other hand, **y-** is a highly probable reflex of PTB *z- (it will be remembered that *z- also > Lahu **y-**; above 6.2); and the AM rhyme reflex **-e** < *-ay is shared by many other TB languages (including Written Tibetan and Lahu).

The proper PTB reconstruction of the initial consonant is still uncertain, though *z- is perhaps the best candidate. Written Burmese **s-** could be from earlier *z- (above, *ibid.*). The WB doublet **səlâi** might well induce us to suppose that this voiced spirant derived from a still earlier **sl-** (cf. e.g. WT **zla-ba** 'moon' < PTB *s-la).

These TB forms bear a close relationship to a well-established Tai etymon. The Siamese word for SAND, **saaj**, is written as if it descended from Proto-Tai *dr-, though Li Fang-Kuei flatly declares this spelling to be spurious on the basis of the comparative tonal and consonantal data, which point unambiguously to PTai *zaay (Tone *A-2) (Li 1977: 161-162). The etymon occurs in all three branches of the Tai family: *Northern Tai* (Bo-ai and Longzhou ɬiŋ-ɬaai 'kind of candy' [Wu-ming θa A1 is a loan from Chinese]); *Central Tai* (Nung[87] **xlai**, Tay **xai**, Tho **raai**); and *Southwest Tai* (Siamese **saaj**, Shan **shai** [s'ai], Ahom **shāi** [s'āi], Lü and White Tai **sai**). Note how similar some of these forms are to WB **səlâi**.

In ATLC (369-370), Benedict takes the orthographic dental cluster in Siamese seriously, and reconstructs Proto-Austro-Tai *bəw(n)draj on the shaky basis of Proto-Formosan (Austronesian) *bu(n)daj on the one hand and a supposed PTai *draay on the other, along with Proto-Kam-Sui *de (from a truly weird and uninterpretable meso-form that consists entirely of bracketed material "*[dr][aay]"). Also dragged in by the hair are "split cognate" forms from Hlai, deriving from "PHlai *phəw": S. Li **phəw**, N. Li **pho** ("irreg. aspir.") from *[b]əw(draj), and finally Lati **ñǎ**, from *[bəw]ndra[j].[88]

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85)   Hanson 303; see also Dai et al.: 265; Hanson identifies **khūm-** with 'foam; froth', as in **khum-bái** 'spittle', **khum-púp** 'mud, mire, mortar'.

86)   The second syllable **-rol** of the latter word may be compared to that of Jg. **zài-brōn**, as reflecting a hitherto unrecognized TB root *b-rol, perhaps with the meaning 'coarse'. Final *-l regularly > Jg. **-n**.

87)   The Central Tai language Nung has nothing to do with the TB language of the same name.

Be all this as it may, it seems clear that the diminutive suffix hypothesis is compatible with the recognition that these words for SAND reflect some kind of contact relationship between ST and Tai. At least four scenarios are possible. Either: (a) this was an originally monophthongal ST root meaning EARTH, which became diminutivized palatally with the meaning SAND in some branches of TB and in Chinese, and was later borrowed in this diphthongal form into Proto-Tai; or (b) this was originally a Tai root meaning SAND, whose final palatal element was borrowed intact by Burmese, Jingpho, and Abor-Miri, but reinterpreted as a diminutive suffixal element and dropped, e.g. by Tibetan; or (c) it was originally a diphthongal ST root that underwent monophthongization in Tibetan (and probably some other TB languages) by a similar process; or (d) maybe WT **sa** 'earth' and Chinese 沙 'sand' *sraj are not cognate after all.

Note that Benedict must assume that there is no relationship between his Austro-Tai forms and the monophthongal Chinese and WT forms that are the only ones he cites from Sino-Tibetan.

Semantically, a diminutive morpheme seems highly appropriate in words for SAND, which is composed of tiny particles [cf. RICE, (14) above]. The second syllable -**šī** of the Lahu form cited above, **šê-šī**, means '(small) round object', as in many other compounds (DL: 1213-4), which shows that sand is typically conceptualized as an aggregate of little round things. Note also the semantically similar fused Lahu forms **ɔ-mɤy** 'powder; powdery substance', **nâʔ-mɤy** 'gunpowder' < **mɤ** (V) 'pulverize, reduce to powder' (above 6.12).

(17) Diminutive -y in kin terms

One might well expect kinship terms to be a stronghold of diminutivization—even English makes use of a hypocoristic palatal suffix with kin terms (*mommy, daddy, auntie, granny*). TB seems to have its share of these formations, at various time-depths.

Alongside the two basic monophthongal roots for the parents, which turn out unsurprisingly to be PTB *ma mother' [STC #487] and PTB *p-wa 'father' [STC #24], there are diphthongal forms (not cited in STC)[89] like WB **mai, əmai** 'mother'[90] and Dulong (LaPolla 1987: 27) a³¹pai⁵³ (alongside a³¹ba⁵³) 'father'.

A number of other kinship terms that reconstruct with palatal diphthongs may ultimately prove to be similarly complex morphologically. Good candidates

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88) Implausible as this etymology is, it is worth mentioning that the word for SAND in the aberrant Jiamao dialect of Hlai is **kɯ²udeī¹**, which bears at least a superficial resemblance to PKam-Sui *de! See Ouyang and Zheng: 469.

89) Benedict 1939 does mention the disparity between WT **a-ma** and WB **a-mai**.

90) Sagart (p.c., Oct. 1989) points out that the Chinese word for 'mother' 母 *məg/mḁu: [GSR 947a-e] : [WHB] *mōʔ (Mandarin mǔ) belongs to a phonetic series that shows puzzling vocalic alternations: cf. e.g. 'sea' 海 *χməg/χḁi: [947x-y] : [WHB] *hmōʔ (Mandarin hǎi).

include PTB *(y)ay 'elder female relative; mother; grandmother; maternal aunt' (reconstructed in GSTC #100; cf. also Matisoff 1990b "¡Ay, madre!"); and PTB *doy ⋊ *toy [STC #309 and n. 211] 'younger sibling; youngest sibling'.[91]

(18) TONGUE/LICK   *s-l(y)a-y ⋊ *m-lyak, etc.

This richly variable etymon has reflexes that unambiguously point to allofams both with and without a final palatal element, e.g. WB **hlya** (<*s-lya) and WT **lče** (<*s-l(y)ay).[92]   In all its splendor, this word family should in fact be set up with a "pan-allofamic formula" like the following:

					y
s-					w
m-	l	(y)	a	-	t
g-					k
					m

There are several Chinese reflexes of this word-family, though none of the allofams reflect a final palatal element.   These Chinese forms include: (a) 食 'eat' [WHB] *mlə̆k, which goes much better with PTB *m-lyak 'lick' than it does with PTB *dz(y)a 'eat'; (b) 舌 'tongue' [WHB] *mlăt; (c) 舐 'lick, lap' [WHB] *mlăj; (d) 舔 'lick' [WHB] hlīmʔ; (e) 甜 'sweet' [WHB] *līm.

Two more possible cases of OC *-a ⋊ *-aj variation that could well reflect a diminutive suffix have just been pointed out to me by Baxter:

(19) LAKE/RIVER   OC *gā-y

湖 OC *g'o   'lake' [GSR 49j'] : [WHB] *gā
河 OC *g'â   '(Yellow) river' [GSR 1g] : [WHB] *gāj

This etymology is strengthened by its exact phonetic parallelism with a homophonous pair of morphemes showing the same *-a ⋊ *-aj variation: two interrogative words that are written with exactly the same phonetics as this watery pair.   See below (21a).

(20) MONKEY

猶 OC *zi̯ôg   'kind of monkey' [GSR #1096r-s] : [WHB] *lŭ or *jŭ
蜼 OC *di̯wər   'kind of monkey-like animal' [GSR #575q] : [WHB] *lŭjs

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91) This accounts for still another of the 12 etyma reconstructed with the *-oy rhyme in STC (above 5.2). Stimulated by a previous version of this paper, Benedict has very recently produced a two-page squib on the "ST kin *-i suffix" (Benedict 1994b), to appear in *LTBA*.

92) STC (n. 203) much too conservatively claims that these forms represent separate roots. For a fuller discussion of this word-family, see Matisoff 1990c: 3.233 and 1994a: 54.

6.4 Chinese 兒 ér and 子 zǐ

J. Norman observes that "The use of the morpheme meaning *child* as a marker of the diminutive is still commonly found in some Southern dialects" (1988: 113-114). Indeed it seems as if this has been a general feature of Chinese from earliest times to the present. The speech of Beijing is well-known for its liberal use of a retroflex suffix, often carrying a diminutive/affective meaning,[93] and written with a character for 'child' that has solid roots all the way back to PST:

兒   OC *ńjěg [GSR #873a-d] (Mand. ér∼-r) : [WHB] *ŋě

Another Chinese allofam is 倪 'young and weak', OC *ngieg [GSR #873f] : [WHB] *ŋē (with a double Mandarin reading ní∼yí). It seems like an excellent candidate for comparison with our general PTB diminutive root (above 6.2), *s/N-ya-y/k ✕ *N-(d)za-y/k, perhaps from a PST allofam like *N-zə or *N-yə < *s/N-yə-y/k.

Mandarin has another morpheme 子 meaning 'child' (pronounced zǐ when fully stressed) that has become a neutral-toned formative (zi) in hundreds of nouns (e.g. shāzi 'sand', biànzi 'queue', shīzi 'louse', kùzi 'trousers')[94], where it is now devoid of recognizable semantic content, serving merely to provide "phonological bulk.[95] It seems reasonable to suppose, however, that its origin was also diminutive or affective. This word is reconstructed as *tsjəg/tsi: [GSR 964a-j] : [WHB] *tsə̌ʔ.[96] Closely related allofams are 慈 'affectionate, loving, kind' OC *dz'jəg [GSR 966j] : [WHB] *dzə̌; and 字 'to breed; nurture; to love, fondle; to foster' OC *dz'jəg [GSR 964n] : [WHB] *dzə̌s.

I would like to claim that this latter form represents yet another avatar of the general diminutive morpheme already reconstructed (above 6.2), this time from an *affricated allofam without the nasal prefix, PST *tsə ✕ *dzə < *N-(d)zə-y/k.

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93) Chao (1968: 46; quoted in Davison 1989: 216-217) discusses three diachronically distinct proveniences of the Mandarin retroflex suffix -r: 裡 lǐ 'therein' (as in zài zhèr 'here' < zài zhèlǐ, zài nàr 'there'); 日 rì 'day' (as in jīnr [jiər] 'today' < jīn-rì), and 兒 ér 'child'. Besides its diminutive/affective function, the retroflex suffix in modern Pekinese also plays the syntactic role of an *adverbializer* (e.g. màn 'slow', màn-mānr de 'slowly'; hǎo 'good', hǎo-haōr de 'well'), and can also function as a *nominalizer* (e.g. huà huàr 'draw a drawing'). It is interesting to note that there is also a Lahu adverbializing particle è which is very similar phonologically to the Lahu diminutive morpheme ɛ́ (above 6.1).

94) I have compiled a list of about 550 Mandarin words with this suffix, including all those I could find in Wu Jingrong 1979. I am told that the Wu dialects have a *rusheng* word with this function, something like [tsəʔ].

95) The Black Lahu dialect I studied in Thailand retained several Chinese loanwords of this type, rendering the Chinese formative by the otherwise meaningless syllable -cɨ [tsɿ], e.g. cê-cɨ 'scissors' < 剪子 (cf. Mand. jiǎnzi), cɔ̄-cɨ 'throne' < 桌子 (cf. Mand. zhuōzi 'table; stand'), šɔ̄-cɨ 'heddles of loom' < 梭子 (cf. Mand. suōzi 'shuttle') (DL: 500).

Although I do suspect that PST *s/N-yə-y/k and *N-(d)zə-y/k are themselves co-allofams—so that Mandarin zǐ and ér are actually descendants of the same PTB etymon—this is not essential to the argument that they both have solid etymologies on the TB side.

7. ABSTRACT FUNCTORIAL OCCURRENCES OF PALATAL ELEMENTS

The remaining cognate sets we shall discuss in this section (21-26) all involve a final palatal element of elusive functorial meaning, which in some cases at least may be provisionally assigned to a highly abstract copula/subordinator PTB *-way � *-ray.[97] The fully stressed Lahu reflex of this etymon is the particle ve, which I have discussed in much detail elsewhere.[98] Any or all of the bewildering variety of Lahu particles and functors pronounced è (or ɛ or ê) could represent unstressed allofams of ve, given the widespread TB propensity to drop initial consonants in grammatical morphemes of high frequency.

(21) QUESTION PARTICLES   *la ⋈ *lay (*la-y)

Both Burmese and Lahu have two different interrogative particles, one for yes-no questions, and the other for substance ("wh-") questions. The former is WB lâ / Lh. lâ (<PLB *la²), and the latter is WB lâi / Lh. le (<PLB *lay² ⋈ *lay³; the WB and Lahu tones do not correspond regularly).[99] In both these Lolo-Burmese

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96)   Sagart points out (p.c., Oct. 1989) that a character in the same phonetic series as zǐ 'child', 仔 *tsjəg/tsi(:), glossed 'burden' in GSR 964k (cf. Mand. zǐjiān 'official burdens; responsibilities'), also has two other Mandarin readings with meanings connected to 'child', neither of which is mentioned in GSR: zǐ 'young (of domestic animals)' (e.g. zǐzhū 'piglet', zǐjī 'chick'); and zǎi (SW dial.) 'young animal; whelp', as in the insult gǒuzǎi 'sonofabitch' and niúzǎi 'cowboy'. This latter, diphthongal form may also be written with the character 崽 (also not in GSR), attested in this sense, according to Sagart, since the *Fangyan* dictionary (200 A.D.), and to be reconstructed as OC *tsə̂ʔ in Baxter's system. Notice that the OC pronunciations of 子 *tsə̌ʔ and 崽/仔 *tsə̂ʔ differ only by vowel length. Baxter suspects that this increment of vowel length might once have had derivational or affective significance.

97)   Suggested Chinese cognates of this etymon include 隹 or 惟 Mand. wéi, reconstructed as OC *djwər in GSR #575n-o (revised to OC *sgjwər by Benedict on *xiesheng* evidence, and reconstructed as *wɨj in Baxter's system); and 惠 Mand. huì < OC *g'iwəd [GSR 533a-d] : [WHB] *wēts or *wējs. (See Benedict 1983: 87, and GSTC *passim*, especially the Appendix by Richard Kunst: 66-69.) Baxter suggests that a closer Chinese match to the PTB etymon would be 為 'make; do; act as; be (a certain way)', reconstructed as OC *gwia in GSR 27a, and as *w(r)äj in Baxter's system. In this case the medial -r- permitted by WHB's reconstruction fits nicely with the *w ⋈ *r alternation so amply documented on the TB side (GSTC, *passim*).

98)   See Matisoff 1972, "Lahu nominalization, relativization, and genitivization", and *The Grammar of Lahu* (1973/1982), *passim*.

99)   Cf. Okell 1969, GSTC #131, and GL: 374-375.

cases the yes-no particle (semantically simpler perhaps, and apparently more widely distributed in TB) is expressed by the monophthongal variant, while the substance (= "wh-question") particle (semantically more complex?) incorporates the palatal grammatical element, whatever increment of meaning it may have provided.

This interrogative morpheme must in fact be set up for PTB as a whole. Newari has an identical yes-no particle **lā** (Malla 1981/1985: 73), as in **wa thana wala lā** 'Did he come here?', and another interrogative particle **le** (p.c., D. Hargreaves 1994). Similarly for Meithei, where yes-no questions are marked by the particle **-la** ⋊ **-lə** (these variants are apparently in free variation), while "wh- questions" are marked by a prefix **kə-** (Thoudam 1980: 163, 197-201). In Kokborok (= Tripuri, Barish group) the substance question particle appears only with a palatal final, and optionally with a velar prefix: **lay~khlay** (p.c., Prashanta Tripura 1989).[100]

An excellent cognate of the non-palatal-finalled allofam is now available on the Chinese side, 與 or 歟 'final (yes/no or rhetorical) interrogative particle', reconstructed as OC *zjo in GSR 89e, but as *lă in Baxter's system.

Interestingly, Baxter has come up with two more examples of Chinese sets of interrogative words that reflect *-a ⋊ *-ay alternation:

(21a) 胡   OC [WHB] *gā   'interrogative particle'
       何   OC [WHB] *gāj   'what'

Note the perfect homophony with the pair LAKE/RIVER, above (19).

(21b) 孰   OC [WHB] *dŭk   'who'
       疇   OC [WHB] *drŭ   'id.'
       誰   OC [WHB] *dŭj   'id.'

(22) INCHOATIVE PARTICLE   *sa ⋊ *say   (*sa-y)

Lahu has two particles, **šā** (<*sa) and **šē** (<*say), which indicate that an action has not yet occurred or been carried through to its conclusion, or that an action must be performed as a prerequisite for some further action.[101] The second of these particles seems clearly to have evolved as follows:

šē < šā + e < *šā + (w)ay.

Both semantically and phonologically, the Mandarin adverb **cái** looks like an excellent match.[102] Though written now with the same graph as 'talent' 才 OC

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100) The Newari, Meithei, and Kokborok cognates were not cited in GSTC #131. The Kokborok yes-no question particle is **dəy**.
101) See GL: 336-338, 351-352; and GSTC #154.
102) It also indicates prerequisite action. Y.R. Chao (1968) compares **cái** to German *erst:* **Nii dawle woo tsair neng tzoou** 'Only when you've arrived will I be able to go'.

*dz'əg [GSR #943] : [WHB] *dzə̄ (see above, 2.4a), this is a loan substitute for a complicated character 繰. This word is not in Schuessler 1987, but it appears already in the *Hou Han Shu* (2nd c. A.D.) with a meaning like Mandarin. **gāngcái**[103].

This is a tricky etymology within Lolo-Burmese. Although there are apparent cognates to the Lahu form (WB sê, Akha á-shì), the vowel correspondences here are irregular: WB -e < *-əy, Lahu -e < *-ay, Akha -i < *-ey. There is a similar morpheme in Tai (Siamese sǐa), which has conflated with the Lahu particle to some extent.[104]

Chinese **cái** seems quite distinct from the interjectory particle 哉 (Mandarin **zāi**) (Schuessler 1987: 803), that sometimes gets translated as 'indeed' in old texts (e.g. **Qí jūn yě zāi** 'The lord indeed!' [*Shijing* 130-131]). This particle can also mean 'begin', but Schuessler feels this sense is probably a loan from another character.

(23) WHICH/LIKE/DEICTIC *ka-y and *kaŋ

Lahu has a number of interrogative morphemes that begin with the aspirated post-velar stop qh-.[105] The most important of these is **qhà** 'which?; what?; what kind of?', which also occurs in many compound question-words, e.g. **qhà-qhe** 'how?', **qhà-thâʔ** 'when?', **qhà-nî** 'how many?', **qhà-ma** 'how much?', **qhà-mɔ** 'for how long a time?', **qhà-hɨ** 'how big?', etc. (DL: 278-282). The low-falling tone of this morpheme reflects PLB Tone *1, but is irregular for aspirated initials.[106]

There is another interrogative of the shape **qhɔ̀** (also under the aberrant low-falling tone), whose basic meaning is 'where?' (**qhɔ̀ le** 'Where is it?'). However, it is interchangeable with **qhà** in many contexts (**qhɔ̀ ve N** ~ **qhà ve N** 'what kind of N?'; **qhɔ̀-thâʔ** ~ **qhà-thâʔ** 'when?', **qhɔ̀-qhe** ~ **qhà-qhe** 'how?'), and in these cases it is especially characteristic of the Red Lahu dialect (DL: 307-309). Since -ɔ is the regular reflex of earlier *-aŋ, it is quite possible that this morpheme is directly cognate to WT **gang** 'who?; which?; what?', and descends from a general PTB etymon *kaŋ ⪥ *gaŋ, along lines suggested by Benedict (1984). On the other hand,

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103) See Yang and Tian 1983: 18-19.

104) Lahu šê often conveys a nuance of regret, and in this sense it seems definitely to be influenced by this Tai particle. See GL: 330-331. There is apparently a cognate particle in at least one Karen dialect, something like θa, though I have been unable to find this form in Jones 1961.

105) In a way one could speak of Lahu qh- questions the way one speaks of English wh-questions!

106) There is another functor which I believe to be allofamically related, under the etymologically correct mid-tone: qha (Adv) 'completely; all' < PLB *ka¹. This morpheme occurs in a host of adverbial expressions with following verbs or extentive nouns, e.g. qha bî ɛ̀ 'copiously; overflowing', qha bûʔ ɛ̀ 'to satiety', qha ma ɛ̀ 'equally; to the same extent', qha hɨ ɛ̀ 'to the same size', etc. (DL : 265-271).

a recent fusional origin for qhɔ̀ seems even more likely, at least in those contexts where it varies with qhà. Thus, 'Where is it?' may be expressed either as qhɔ̀ le or as qhà ɔ̄ le, where ɔ̄ is a general locative or topicalizing particle (DL: 222).[107]

Closer to the concerns of the present paper, however, is still another interrogative word, qhe 'like; thus; so', which plays many key roles in Lahu grammar (DL: 288-293). After nominals it is best translated 'like': chi qhe 'like this', ô qhe 'like that', Lâhū-yâ qhe 'like a Lahu'. In combination with qhà~qhɔ̀, it forms the important word qhà-qhe~qhɔ̀-qhe 'how?' Here too a fusional etymology imposes itself, this time with our abstract palatal suffix:

$$*ka + ăy > qha-e > qhe.$$

The compound qhà-qhe would then descend from *ka-ka-ay.

A possible Chinese cognate to this TB etymon is 豈 'how' OC *k'jər [GSR #548a] : [WHB] *khǎjʔ, < PST *kə-y.

(24) I/FIRST PERSON PRONOUN   *ŋa ≍ *ŋay (*ŋa-y)

The basic first person pronominal etymon in TB is *ŋa (some languages reflect a stop-initialled allofam *ka) [STC #406]. Obviously related is a group of forms with palatal final, set up as a separate etymon *ŋay in STC #285: WT ŋed ("with suffixed -d") 'I, we [elegant]', Jingpho ŋai 'I',[108] Lushai ngei 'self'. (To these forms GSTC #70 adds Meithei ei 'I'. See also Benedict 1983: 87-88.)

I have recently concluded that the PST pronominal system reflects a fairly pervasive pattern of alternation among open-syllable, palatal-final, and nasal-final allofams in all three persons (see Matisoff 1994b, 1994c). However, it is far from clear what increment of meaning the palatal suffix contributed to the pronouns. Could it have been a fused case-marker (e.g. genitive), or even a diminutive/humilific morpheme ('insignificant little me')?[109]

On the Chinese side, at least two different first person pronominal forms have also existed since early times:[110]

吾 *ngo/nguo [GSR 58f-i] : [WHB] *ŋā
我 *ngâ/ngâ [GSR #2a-g] : [WHB] *ŋājʔ

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107) This particle ɔ̄ itself may ultimately derive from an earlier functor *aŋ: *ka + aŋ > qhà ɔ̄ > qhɔ̀.

108) I have recently claimed that this Jingpho pronoun is the source of the aberrant Jg. numeral ləŋâi 'one' (Matisoff 1994c).

109) In a very recent paper (1994a), Benedict concludes that this palatal pronominal element must have been some kind of "emphatic topic marker." S.R. Sharma (p.c., 1994) observes that there is an ergative pronominal suffix -i in West Himalayish languages like Pattani (=Manchati).

110) See STC: 160, 186, 188.

It is not clear to what extent these pronouns were syntactically differentiated in early written Chinese, though Benedict (1983: 88), following Dobson 1959, attempts a partial repartition as follows: [2a-g] "Subject~Object~Genitive (high status)'; [58f-i] "Subject (emphatic)~Genitive". In any event, the *-a ⋈ *-ay alternation within Chinese is irrefutable in this etymon.[111]

Baxter cites a pair of second person pronouns which show similar *-a ⋈ *-ay variation in Chinese, according to his system:

(24a) YOU/SECOND PERSON PRONOUN

> 汝 OC *ńjo [GSR #94j-k]   : [WHB] *nǎʔ
> 爾 OC *ńjǎr [GSR] #359a-b : [WHB] *nǎjʔ or *nějʔ or *nǎjʔ

(25)   WHAT   *ʔma-y < *ba-y ⋈ *ma-y

Benedict (1984: 7) correctly recognizes a group of TB forms with labial initials meaning 'what?', some of which descend from monophthongal *-a, while others reflect a palatal suffix.

WB has both **bha** (Mod.Bs. **ba**)[112] 'what', and a general interrogative morpheme **bhai** (Mod.Bs. **be**) that occurs in collocations like **bhai-hma** 'where?', **bhai-lok** 'how much?', **bhai-su** 'who?', **bhai-kui** 'whither?', etc. Lahu reflects the nasal-initialled monophthongal allofam, *ma: à-ma, à-thòʔ-ma 'what?' Bodo-Garo reflects both the plain and suffixed variants: Dimasa **ba-ra** 'where', **ba-khali** 'when', Bodo **ma** 'interrogative', Garo **mai** 'id.'

(26) LACK/NOT HAVE   OC *ma-y

Perhaps the best-attested functor in all of TB is the negative adverb reconstructible as *ma (see STC: 97). Baxter points out a likely pair of Chinese cognates displaying *-a ⋈ *-ay variation:

無 'not have' OC *mjwo [GSR #103a]   : [WHB] *mǎ
靡 'there is no; without' OC *mia [GSR #17h] : [WHB] *mǎjʔ

An excellent TB cognate to the variant with palatal final is WB **mai'** 'be wanting, not full.'

8.   *-ay, *-an, *-ar: THE CASE OF (27) ONE/ALL/ THIS/ THAT/ HE

The rhymes *-ay and *-an have merged in Lahu to yield -e. The same tendency seems to have had a long history in Chinese as well. Baxter observes that already in

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111) Sagart notes (p.c., Oct. 1989) that certain modern dialects (e.g. in the Hakka and Fukienese groups) have first person pronouns of the ŋai type.
112) Orthographic voiced (or even voiced aspirated) consonants in WB sometimes reflect earlier prenasalized initials.

the *Shijing* there is a tendency in Eastern dialects for *-n to rhyme with *-j (1992: 294). In modern times, a similar trend has affected certain Wu dialects as well, e.g. Suzhou:

COME 來   Mand. lái, Suzhou [le] < LMC laj < EMC loj
BLUE 藍   Mand. lán, Suzhou [le] < lan < LMC lam < EMC lam

Karlgren (1954: 300-301) sets up *-r in the cases where words with final *-j show contacts of various kinds with words in *-n (Baxter, *ibid.*).[113]

8.1   Modern Burmese Reflexes of WB -ai and -añ

WB **-ai** developed into monophthongal -e [ɛ] in Modern Standard Burmese, while WB -e is now pronounced as a diphthong /ei/. WB **-añ** represents the merger of at least four earlier rhymes with non-low short front vowels *-i- and *-e- before *velar or *dental nasals. A similar development to WB **-ac** befell the rhymes with velar/dental final stops after those vowels:

PTB *ay *or* *a-y   WB ai   Mod.Bs. e
PTB *iy *or* *əy   WB e   Mod.Bs. ei
PTB *iŋ / *eŋ / *in / *en   WB añ   Mod.Bs. i / ĩ / e / ei
PTB *ik / *ek / *it / *et   WB ac   Mod.Bs. I?

WB does have the rhymes **-in** and **-it**, which is usually explained by postulating an earlier length distinction in these rhymes, with the original final consonant surviving if the vowel was long:

PTB/PLB *in > WB añ, but PTB/PLB *iːn > WB in
PTB/PLB *it > WB ac, but PTB/PLB *iːt > WB it

No one has yet explained the fourfold Modern Burmese reflexes of WB **-añ**. Clearly we cannot invoke the multiple PTB proveniences as conditioning factors, since their merger was apparently complete by WB times (from the early 12th c. A.D.). Dialect mixture seems to have been involved, much as in the fate of Middle English long **o** (orthographic -oo-) with its multiple modern reflexes /ʊ/ *good*, /ʌ/ *blood*, /uw/ *soon*.

At any rate, there is a certain interchange between WB **-ai** and **-añ**, with many words showing variant spellings:

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113) It is interesting to note that both WT and Lotha Naga have a locative suffix of the
      shape -r, though this morpheme seems quite distinct from the directional palatal suffix
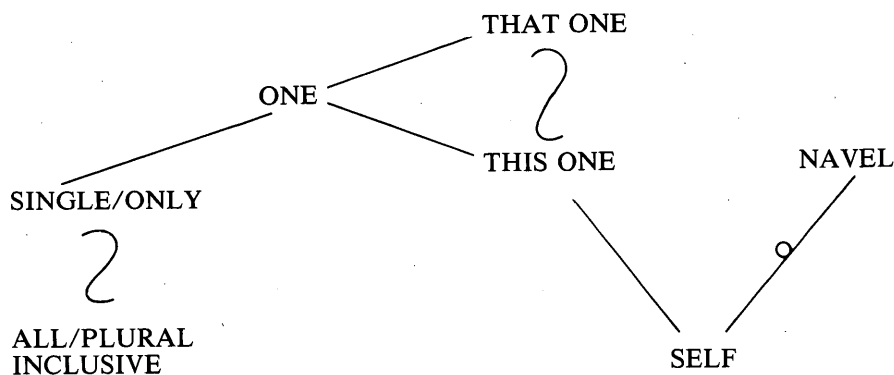   we have been discussing.

'ass, donkey'	**mrâñ**	⋉	**mrâi**
'fall from erect posture'	**lâñ**	⋉	**lâi**
'few'	**nâñ**	⋉	**nâi**
'dark; black'	**mâñ**	⋉	**mâi**
'weak; infirm'	**khyâñ**	⋉	**khyâi**

Some words written with **-ai** in Judson's dictionary are marked with the notation that they are "frequently pronounced" as if written with **-añ**, e.g. "**rai** (freq. pron. **rañ**)" (p. 838)—though this is ambiguous given the multiple modern pronunciations of WB **-añ**![114]

(27)   ONE / ALL / THIS / THAT / HE   *ta-n/r ⋉ *ta-y, etc.

A root ***day** is set up in STC #21 with the meaning 'that; this'. Later, in his two rather frenetic LTBA articles, Benedict has the insight that this deictic etymon should really have been set up with a monophthongal root (***da**) to which a palatal suffix was added in certain languages (***da-i**) (1983: 82; 1984: 6). We accept this latter position, but go further: I now wish to claim that this deictic morpheme is identical to a ST/TB root for ONE/ALL, with the network of semantic associations also extending to the notion of SELF and even NAVEL.[115]

These semantic interconnections may be crudely diagrammed as follows:

Morphophonemically, this is a complex word family that utilizes several morphological elements at one or another diachronic level:

1. nasal prefix   *N-
2. palatal suffix   *-y   or *-i
3. nasal or rhotic suffix   *-n   or *-r
4. glottal prefix   *ʔ-   or *ʔə-
5. sibilant prefix   *s-

We also set up both stressed and unstressed allofams, with the unstressed rhyme *-ăy yielding reflexes in -i.

This may all be summarized in a "pan-allofamic formula":

Prefixes	Initials	Vowel	Suffixes
*N-			
	t		-y
s-		a	
	d	ă	-n/-r
ʔ-			
k/g-			

Let us lay out the supporting forms one allofam at a time:[116]

(a) *da

We accept Benedict's (1983: 82-84) basic notion of a deictic root *da (underlying, e.g. WT **do** 'this', Lepcha **do** 'self; own; the same', Central Monpa **ta** 'that', **a-tha** 'here', etc.), to which all kinds of formal/semantic increments were added.

(b) *d/tan or *d/t(w)ar

The allofam in -an is attested by Chinese 單 'single; simple' OC *tân [GSR #147a-d]. (This form is not adduced in Benedict, *opera citata*.) Starostin (1989: 339) reconstructs it as *tār, with final *-r, as he does all the words in GSR #147. (Baxter now concurs, accepting the coda *-r in addition to *-n and *-j.) This actually works nicely for PTB, in view of the WT form **thor-bu** 'single; separate' (Jäschke 1881/1958: 239), perhaps<PTB *t(w)ar, and a recently reconstructed Abor-Miri-Dafla etymon *tur ✕ *tir 'one', based on Mising (=Miri) **a-ter**, Padam (=Abor) **a-tel**, Minyong **atîr**, Milang **a-tel**, Monpa (Motuo) **t'or**, Sharchop (=Tsangla) **thur**) [the last two forms may be loans from Tibetan] (Matisoff 1995: §3.151).

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116) Lest we think all this allofamy is a bit farfetched, think of complex functorial English allofamic sets like *one* [wʌn] ✕ *an* [æn ～ n̩] ✕ *only* [own-] ✕ *onion* [ʌn-]!

(c) *day ⋉ *tay

Jingpho **tāi** 'single, **ətāi** 'one, as of a pair', **gùntāi** 'single', **šìŋtāi** 'only' ⋉ Jingpho **dāi~dài** 'this, that', **dāi** 'reflexive pronoun', **dài** 'navel';[117] Boro **otay** 'whole'; Lakher **dei** 'only; alone'; WT **de** 'that one'.

To this group of forms I would now suggest adding Chinese 第 'ordinal marker; 'order; sequel' [GSR 591e] *d'iər/d'iei : [WHB] *dəjʔ, which in Han texts was used to write 'only' (p.c., Derek Herforth, April 1989). Another possible Chinese comparison is 是 'this (is)' OC *d̑i̯eg [GSR #866a] : [WHB] *děʔ (see above 2.4b).

Lahu **tê** 'one' could come either from PLB *dan² or *day², but given the lack of any independent attestation for a final nasal or final *-r in LB, I believe the palatal allofam (PLB *day²) to be correct in this case (see GSTC: 47). Lahu **tí** 'only', with its high-rising tone bespeaking a *stopped syllable with preglottalized initial, descends rather from the distinct PLB root *ʔdik[118] < PTB *s-gyi-k ⋉ *s-dyi-k,[119] which also has TB reflexes and Chinese cognates demonstrating a semantic relationship between the numeral ONE and demonstratives.

(d) *N-day

Another allofam within Lahu, whose obvious relationship to **tê** 'one' I did not recognize until recently, is **dê-dê** 'all', with the voiced initial reflecting a nasal prefix < *N-day. The reduplication adds an *inclusive* increment of meaning, as in many other languages.[120] This now goes nicely with the Jingpho proximal deictic **ǹdāi** 'this'.[121]

(e) *k/g-day

Jg. **gədāi** ⋉ **kədāi** 'who'; Meithei **kəday** 'where'

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117) The STC sets up two roots, SELF [#284] *tay (why not *day?) and NAVEL *s-tay, and implies by a cross-reference (p.65) that they are ultimately related. But Benedict does not take the necessary further step of relating both of these to the demonstrative morpheme he sets up as #21. See GSTC #71, where many additional cognates for SELF and NAVEL are presented. The Lakher form **tlai** 'oneself; self' goes perfectly with WT **lte-ba** 'navel', and bespeaks a prefixed allofam *l-tay.

118) See TSR #31(a,c) and #48, and especially the extended discussion in Matisoff 1995: 3.14.

119) Greenberg 1987 uses this PST etymon for one of his "Proto-Sapiens" etymologies. See Matisoff 1990a.

120) Semantically and morphologically (though not of course etymologically) this is exactly parallel, e.g. to Hindi **eka** 'one', **eka-eka** 'all' (p.c., John B. Lowe). Cf. also WT **re** 'single; one', **re-re** 'all'.

121) Assuming that the Jingpho and Lahu variational patterns reflect the same semantic opposition, it is tempting to set up a proportion: **dāi** : **tê** :: **ǹdāi** : **dê-dê** *that : one :: this : all*, where the unprefixed form is EXCLUSIVE-INDIVIDUATIVE, while the prefixed form is INCLUSIVE-INDEFINITE.

(f)   Unstressed or vowel gradated allofam: *tăy or *tey

WB thî 'single; alone', əthî 'alone'; Akha tì 'one', Lisu hti⁵ 'id.', Hani (Gao 1955) t'ɔ²¹ 'id.'

9.   PTB *-aw AND THE LAHU SPATIAL DEMONSTRATIVES

The good ideas on ST demonstratives to be ferreted out of Benedict (1983) are buried among a welter of speculative and sometimes spectacularly wrong etymologies, especially as concerns Lahu forms.[122]   In the context of the fusion of grammatical morphemes, I would like to take this opportunity to set the record straight at least with respect to the Lahu deictic morphemes I have called the "spatial demonstratives" (see GL: 51-52): chò 'here', ô 'there' (ô ve 'that'), cô 'way over there', mô 'down there', nô 'up there'.

Some analogical leveling has taken place here; these forms all have the same vowel, and except for 'here' all have the same (high-falling) tone.[123]. I would also invoke fusional etymologies for these demonstratives—but with quite different etyma than Benedict suggests.

Benedict's problem was his incomplete familiarity with Lahu historical phonology, particularly with respect to the Lahu fate of the diphthongal rhymes *-ay and *-aw.   All he had to go on was the brief and sketchy summary of rhyme developments in *The Grammar of Lahu* (1973: 13-15).[124]   There he found out that PLB *-am > Lh.-o, while PLB *-an > Lh.-e.   While this is quite correct, it is by no means the whole story—there are other sources of the Lahu mid-vowels /e o/, namely the diphthongal rhymes *-ay and *-aw, respectively.   That is, both *-an and *-ay > Lh.-e, while both *-am and *-aw > Lahu -o.

Since the vowel in all the Lahu spatial demonstratives is -o, Benedict leapt to the conclusion that they all descend from an etymon in *-am.[125]   He then cooks up such an entity by positing a dissyllabic form *a-ma 'there', for which there is no

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122)   This is particularly distressing in light of the fact that he says (p. 94) that this paper "...owes much to discussions...with J. Matisoff re allofamy, and Lahu forms and phonology"!.

123)   Benedict does a bit of analogical levelling of his own, mis-citing the word for 'here' as *chô, also with high-falling tone (p. 93, line 5).

124)   He was also apparently misled by the unsubstantiated reconstructions of the spatial demonstratives in Bradley 1979, sets #456-458.   A major portion of GSTC is in fact devoted to demonstrating that the regular Lahu reflex of PST/PLB *-ay is -e.   While this article was not published until 1985, Benedict had access to a draft copy as early as mid-1983.

125)   By an analogous error, Benedict tries to derive the Lahu nominalizing/subordinating particle ve from *wan, despite the massive evidence presented in GSTC that it derives rather from *way.   In this he is partly followed by Thurgood (1983: 99), who tries to have his cake and eat it too by invoking "two phonologically similar but distinct etymons [sic], *s-wan and *wəy."   In point of fact the *wan "etymon" is totally chimerical.

independent evidence.[126] He then assumes a metanalysis leading to apocope of the final vowel *a-ma > *am-a > *am > Lahu ô 'there'.[127] Having gotten this far, he proceeds to generate the remaining spatial demonstratives by mechanically fusing bits of etymological flotsam and jetsam to syllable initial position: **nô** 'up there' < *nam, **cô** 'way over there" < *jam, **chô** [sic] 'here' < **chi** 'this' + **am**, and—the *pièce de résistance*—**mô** 'down there' < *mam, called (tongue-in-cheek, one hopes) "a rare example of a non-reduplicative auto-allofam" < *ma-ma. Of these putative etyma, *nam, *jam, and *mam have no support whatever. The word for 'here', **chò**, is indeed plausibly to be derived from **chi** 'this'—but fused to quite a different second element (next paragraph).

    In fact there is a much simpler and more straightforward explanation for these forms, though it requires that one realize that another source for Lahu -o is the diphthong *-aw.[128],[129] It is ironic that Benedict overlooked this, since this same article begins with his setting up a pair of deictic morphemes that have wide instantiation throughout TB: *(h)i 'this' and *(h)əw 'that' (pp. 75-76). It seems quite obvious that Lahu ô 'there; that one' derives from a stressed variant of the latter, distal deictic, i.e. *aw.[130]

    The remaining spatial demonstratives may then plausibly be viewed as fusions with this morpheme *aw as second element. My best guess about **nô** 'up there' is that it involves a fusion of the locative noun **na**, **ɔ̀-na** 'in front of and above; up there' < PLB *ʔ-na:

$$*ʔna\text{-}aw > na\text{-}o > n\hat{o}^{[131]}$$

chò 'here' is very likely derived from **chi** 'this' plus our deictic element:

$$*chi\text{-}aw > ch\grave{o}$$

    About **mô** 'down there' I am less confident. Perhaps there is a connection between it and the noun **mì** 'earth; ground' (DL: 985-989); < PTB *mləy [STC

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126) Presumably the closest thing to such a form in Lolo-Burmese would be the WB locative particle **hma**. Compounds of the shape **a-ma** have interrogative meanings like 'who?' (Lisu **a⁵-ma⁴**) or 'what?' (Lahu **à-thòʔ-ma** or **à-ma**). See (21) above.

127) This sort of apocope is not characteristic of Loloish functorial fusions, where if anything it is the last vowel which dominates. If anything is to be elided it will be a syllable-initial consonant, as in Lahu **mâ ∼ â** 'negative', **lɛ̀ ∼ ɛ̀** 'topic-marking particle', **tâ ∼ â** 'perfective particle'.

128) Examples include PTB *kaw ✕ *gaw 'call' > WB **khau**, Lahu **qho** [not in STC #14].

129) So obvious is this that a Lahu etymologist might say **nā-qā-pɨ àʔ tē ā ve** 'it is (as if) pounded into one's forehead'!

130) I would like to revise Benedict's reconstruction of these two basic deictics in order to accommodate both stressed and unstressed variants:
    a) in stressed position   *(h)ay (proximal) / *(h)aw (distal)
    b) in unstressed position   *(h)əy (proximal) / *(h)əw (distal).

131) See *The Dictionary of Lahu*, p. 728. It is possible that there is a Tai connection for this morpheme—cf. Siamese **nâa** (< PTai *hnaa) 'face; front; ahead of'.

#152], which functions as the "lower correlative" of **mû** 'sky; heaven' in countless Lahu elaborate expressions:

$$*mləy-aw > m\hat{o}$$

At any rate, there is no need to accept Benedict's over-complicated and unmotivated reconstructions for these words.

10. CONCLUSION: IMPLICATIONS FOR ST ALLOFAM THEORY

This paper is an attempt to enrich our understanding of Sino-Tibetan and Tibeto-Burman morphophonemics—attested patterns of phonological alternations in ST/TB word-families. Many of these, including variations in syllable-initial voicing/aspiration, alternations between homorganic final stops and nasals, vocalic variations like *-u- ⋈ *-i- and *-ya- ⋈ *-i-, prefixal interchange, etc., have already been discussed at some length in the literature. We are here proposing another alternational pattern barely noticed before: *-a ⋈ *-ay. We have tried to show that there is no single origin for this final palatal element, but that all cases so far examined seem to fall into one of three types, involving at least three separate but phonologically similar proto-morphemes: (a) an auxiliary verb of motion (literal or figurative); (b) a diminutive formative; and (c) an abstract functor that had a range of copular / nominalizing / subordinating meanings similar to that of the synchronically observable Lahu particle **ve**.

Much of our discussion has hinged on the notion of *intersyllabic vocalic fusion*, especially as it operates between a fully stressed root morpheme and a following unstressed affix.[132]

When used with due caution and conservatism, the recognition of this "new" *-a ⋈ *-ay alternational pattern can be of great use in discovering new cognates and word-family relationships, both in Tibeto-Burman and in Chinese.

Appendix I: Written Burmese stative morphemes in -ai/-wai
        (creaky tone words are in italics)

ai	'full, distended, puffed up'
ai	'incessantly (crying)'
kai	'distended, puffed, swollen'
kai	'oblique, sidewise'[133]
kai'	'bit by bit, by degrees'

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132) The "bulging monosyllables" of ST languages (see Matisoff 1982/1989) owe their phonetic complexity in no small measure to these fusional processes. I intend soon to develop the cyclical notion of "syllabic compression and rarefaction" in Sino-Tibetan.

133) Possible Chinese cognates include a number of forms from GSR series #1: 奇 [GSR #1s] 'strange, extraordinary' OC *g'ia : [WHB] *găj ⋈ 'odd (number)' OC *k'ia : [WHB] *kăj; also 촰 'slanting' [GSR #1d'] OC *k'ia ⋈ *kia : [WHB] *khăj ⋈ *kăj; 畸 'odd (number)' [GSR #1z] OC *kia : [WHB] *kăj; and 倚 'leaning to one side' OC * · ia [GSR #1f'] : [WHB] *ʔăjʔ.

kyai	'wide, broad' ✖
kyâi	'wide apart' ✖
khyâi	'make wide apart' ✖
khyai'	'wide, spread out'
kyâi-kyâi	'intensely (sun's heat)'
khâi	'coagulated, indurated'
khyai	'flowery, variegated'
khyai'-khyai'	'tremblingly'
ŋai	'small, little, inferior'
ŋai'	'leaning, inclined on one side'[134]
tai	'very'
tâi-tâi	'by a very little' (✖ tâ-tâ 'id.')
nai'	'loose, not firm' ✖
hnai'	'loosen'
pai'	'broken off, chipped, harelipped' ✖
phai'	'break off a small piece'[135]
prai	'become weak, waste away, get less vivid or pungent'
prâi	'gape, expand, flare'
mai'	'disfigured in face, as when crying'
mai'	'be wanting, not full'
yai'	'loose, flimsy'
râi	'bold, courageous'
râi	'bright red color'
râi	'satisfied, contented'
lai'-lai'	'slightly (of green/blue color; of vigor, liveliness)'
sâi	'noisy'
kwâi	'divided, split, parted' (✖ kwa 'become separate, go apart')
krwai	'having in abundance, wealthy'
khywâi	'slimy, sticky'
twâi	'hanging, pendent' ✖
twai'	'id.'
nwai	'stretched out, as a creeper' ✖
nwai'	'bent flexibly' ✖
hnwai	'stretched along in connection' ✖
hnwâi	'procrastinate; leaning sideways, inclining' ✖
hnwai'	'bend flexibly'[136]
phwai	'suitable, fit, proper' (also written bhwai)
phwai	'inadhesive, devoid of natural richness'
phwâi	'small, fine'
mwâi	'gray, dull, faded; exhausted, poor'
ywai'	'distorted, awry'
rwai	'of ordinary size; in the prime of life'

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134) Cf. Chinese 俄 'slanting' OC *ngâ [GSR #2h] : [WHB] *ŋāj. See also Lahu ŋɛ ✖ ɛ 'lean against; recline' (there is no Lahu syllable *ŋe).

135) A likely Chinese cognate is 破 'break' OC *p'wâ [GSR 25o] : [WHB] *phājs.

136) A promising Chinese comparison is 緌 'tassel; free-hanging end of band; pennon' OC *ńjwər [GSR 354e] : [WHB] *nŭj or *nŏj.

rwâi	'pensile, as a tear'
hrwâi	'soaking wet'
ʔərwai'	'irrelevant, annoying'
lwai	'easy, yielding'
lwâi	'out of the way, variant, contrary' ✄
hlwâi	'go out of the way, turn aside'
swai	'slender and tapering'

Appendix II: Written Burmese stative morphemes in -a/-wa
(creaky tone words are in italics)

a'	'dumb'
â	'vacant, free'
ka'	'swift'
kâ	'divaricate, be stretched'
kya-kya	'loudly'
kyâ	'variegated'
kra	'be long (time)'
khâ	'bitter'
ta	'very red' ✄
tya	'flaming'
tâ-tâ	'by a very little'
pâ	'thin, sparse'
pra	'blue' ✄
pra	'dim, as old eyes; gray'
prâ/bra	'flat, level'
phâ	'hang loosely'
phâ	'fatigued'
phra'	'fine, gentle (sound)'
ma	'hard; well, healthy'
mâ	'high, towering'
mra'	'cool'
mra'	'very sharp'
lya'	'thin, flimsy' ✄
lyâ	'thin' ✄
lya	'oblong'
hla'	'handsome, pretty'
hla'	'very, excessively'
ha' ha'	'laughingly'
ha	'lie open, not be quite full'

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