Sino-Tibetan Palatal Suffixes Revisited
James A. Matisoff
journal or publication title
Senri Ethnological Studies
volume
41
page range
35-91
year
1995-07-17
URL
http://doi.org/10.15021/00002991
Sino-Tibetan Palatal Suffixes Revisited

James A. Matisoff*

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. INTRODUCTION1)

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.

*University of California, Berkeley; e-mail matisoff@garnet.berkeley.edu.
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. In this paper, I would like to explore this problem in some detail. It turns out, I believe, that three distinct etyma, once fully syllabic,

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 *-a to *-a. (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. 多, formerly *tsji, is now *ts3t; 多, which was *taj in Baxter 1992, is now *taj. (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 -o as a dialect development. Thus, 丹 OC *tan, 單 *tar, 多 *taj (replacing *tan, *tan, *taj, respectively). (d) The capital *L- of Baxter 1992 (whose MC reflex was a voiced palatal fricative, reconstructed by Karlgren as *dz’ < *a`) is reinterpreted in most cases as *ml-, e.g. 食 ‘eat’, reconstructed as *ml5k in Baxter 1992, is now *ml5k [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 *då < *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 linguist’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, attainer, 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: -li ‘therein’, ri ‘day’, and er ‘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)

---

4) Previously recognized variational patterns include -u-; -ya-; homorganic final stop x 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’, lày ‘several’, t-thày ‘shelf; tier’, vày ‘fast’, lày-lày ‘in vain; empty’, k32-fày ‘lantern’, etc. Most cases of fusional diphthongs are readily apparent, easily analyzable into their constituent morphemes. Thus the verb-particle o, indicating change of state or completed action, tends to fuse into a single mora with a preceding verb under the same tone /'/, especially when the meaning of the verb is itself completive or resultative, i.e. highly congruent with the meaning of the particle, e.g. pà ‘finish’, gà ‘arrive’, mò ‘see’: pà-o ‘(It’s) all done’, gà-o ‘(It’s) here; (It) reaches’, mò-o ‘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. pà ‘fall’, na ‘recover (from illness)’. pà-e ‘fall over; fall down’, na-e ‘get better’.

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) [laɛ]
- na-e ‘get better’ (fusional) [naæ]
- qáw ‘tell; narrate’ (intrinsic) [qaɔ]
- gà-o ‘has arrived’ (fusional) [gaɔ]

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

5) Similar vocalic fusions across syllables are also highly characteristic of Chinese dialects. Cf. such Mandarin examples as 别 bié ‘negative imperative’ < bù yào; 非 běng ‘need not’ < bù yòng, etc.
Sino-Tibetan Palatal Suffixes Revisited

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

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 /i o/, especially with /i/. Here the loosely fused palatalized nucleus comes out with e [ie], while the tightly fused version has a semivowel intermediate in height between [i] and [e], i.e. [iː] or [ie]. (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:

<table>
<thead>
<tr>
<th></th>
<th>Stressed (less fused)</th>
<th>Unstressed (more fused)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PTB</td>
<td>Lahu</td>
</tr>
<tr>
<td>Transitive motion:</td>
<td>*ay</td>
<td>e</td>
</tr>
<tr>
<td>Diminutive:</td>
<td>(*za x) *yaʔ</td>
<td>e</td>
</tr>
<tr>
<td>Nominalizer/</td>
<td>*way</td>
<td>ve</td>
</tr>
<tr>
<td>subordinator:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>PST</th>
<th>PTB</th>
<th>OC [WHB]</th>
<th>OC [GSR]</th>
<th>Rhyme Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Div. I)</td>
<td>*-a</td>
<td>*-a</td>
<td>*-a</td>
<td>*-o</td>
</tr>
<tr>
<td>(Div. I)</td>
<td>*-ə</td>
<td>*-a</td>
<td>*-ə</td>
<td>*-ə</td>
</tr>
<tr>
<td>(Div. III)</td>
<td>*-ə</td>
<td>*-ə</td>
<td>*-ə</td>
<td>*-ə</td>
</tr>
</tbody>
</table>

Examples of PST *-a

<table>
<thead>
<tr>
<th>PTB</th>
<th>Chinese</th>
<th>OC [WHB]</th>
<th>OC [GSR]</th>
</tr>
</thead>
<tbody>
<tr>
<td>BITTER</td>
<td>*ka</td>
<td>苦</td>
<td>*kʰəʔ</td>
</tr>
<tr>
<td>FOX</td>
<td>*gwa</td>
<td>狐</td>
<td>*gʰə</td>
</tr>
<tr>
<td>I</td>
<td>*ŋə</td>
<td>吾</td>
<td>*ŋə</td>
</tr>
<tr>
<td>FIVE</td>
<td>*l/b-ŋə</td>
<td>五</td>
<td>*ŋəʔ</td>
</tr>
<tr>
<td>FISH</td>
<td>*ŋya</td>
<td>魚</td>
<td>*ŋə</td>
</tr>
</tbody>
</table>

Examples of PST *-ə

<table>
<thead>
<tr>
<th>PTB</th>
<th>Chinese</th>
<th>OC [WHB]</th>
<th>OC [GSR]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD(1)</td>
<td>*tsa</td>
<td>子</td>
<td>*tsəʔ</td>
</tr>
</tbody>
</table>

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 *-ə after dental affricates and sibilants and palatalized *u 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 *-ə-, 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.
2.2 PTB *-a(\text{\textasciiacute})y and OC *-aj

As presented in STC, the OC correspondences to the PTB rhyme *-a(\text{\textasciiacute})y are a mixed bag, as Benedict is the first to admit: “The material on final *-y forms is...in general quite unsatisfactory.”\textsuperscript{12) The suggested cognates include the following:

<table>
<thead>
<tr>
<th>PTB</th>
<th>Chinese</th>
<th>OC/WHB</th>
<th>OC/GSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIG</td>
<td>*tay</td>
<td>*hlats</td>
<td>*t’âd</td>
</tr>
<tr>
<td>CRAB</td>
<td>*d-ka:y</td>
<td>*gré?</td>
<td>*g’ěg</td>
</tr>
<tr>
<td>TAIL</td>
<td>*r-may</td>
<td>*māj?</td>
<td>*miwar</td>
</tr>
<tr>
<td>LOVE</td>
<td>*ŋ-(w)ay</td>
<td>*ʔats</td>
<td>*ʔad</td>
</tr>
<tr>
<td>RICE</td>
<td>*may/*mey</td>
<td>*mij?</td>
<td>*miår</td>
</tr>
</tbody>
</table>

These sets are all worth discussing individually, and will be scattered through the following sections.\textsuperscript{13)}

Baxter reconstructs OC *-āj in Division I words where GSR has ā (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:

<table>
<thead>
<tr>
<th>Division</th>
<th>GSR</th>
<th>WHB</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>*-â</td>
<td>*-āj</td>
</tr>
<tr>
<td>II</td>
<td>*-a</td>
<td>*-râj</td>
</tr>
<tr>
<td>III</td>
<td>*-ia</td>
<td>*-(r)âj</td>
</tr>
</tbody>
</table>

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:

\textsuperscript{12} STC n. 491, pp. 192-193.
\textsuperscript{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’

CHANGE/EXCHANGE  PTB *lay [STC #283; GSTC #69]

SLOPING/OBLIQUE  PTB *pay ≠ *bay [GSTC #124; not in STC]

The remaining two etyma are set up by Baxter by comparing OC etyma directly with Lushai forms, and look very promising:

RUB  Lushai  chhāi  ‘caress; fondle’

DISCUSS/CONSIDER  Lushai  ngai  ‘think; consider; opine’

2.3 PTB *-a(:)y and OC *-ij (= *-aj)

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 *-ij, including:

TAIL  PTB *r-may [STC #282]

REVOLVE  PTB *wā:j [STC #90]

HUNGRY/FAMINE  WT bkres

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 財, 財, and 材 (GSTC #106; Matisoff

14) An allofamic connection is also suggested between this etymon and PTB *b(w)ā:y ‘left (side)’ (GSTC 80 and p. 42).
1988b), reconstructed as OC [WHB] *dzā (GSR *dz`ay). 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 bāi ‘repeat, do over’, Mikir bé ‘practice; accustom’, Lakher bāi ‘add to’, Boro bāy ‘do again and again’. To these I would like to compare Chinese 倍, ‘accompany, support; augment, double’, reconstructed as OC *b`weg [GSR 999b’, c’], or *bā in Baxter’s system.

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

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

**SPLEEN**

PTB *r-pay [VSTB, n. 271; GSTC #94] / Chinese 脾 OC *bi`eg [GSR 874h] / [WHB] bā. There seems to be internal TB variation in this root between *-ay (e.g. Jingpho pāi, Lahu ㄆ) and -i (e.g. Angami ú-pri, 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 bili), 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 *gre? 蟹.

See also PLB *s-nay ‘short; little’ [below 6.2] and 兇 ‘child’ OC *nē [below 6.4]. Another possible correspondence of this sort is PTB *day ‘one; demonstrative’ and is ‘this is’ OC *dé? [see below (27c)].

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

Finally, I’d also like to claim validity of correspondence between PTB *-a(:)y and qusheng etyma reconstructed as Baxter’s OC *-ats or *-ots.

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 *tād [GSR 315a] / WHB *tāts

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 *tä-y ‘big’ not to the Chinese words for BIG in GSR 316-317, which he reconstructs as OC *(h)låts, but rather to 多 ‘much; many’, reconstructed as OC *tåy in his system. While this certainly seems persuasive, the existence of other likely correspondences between PTB *-a(s)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] *påts; see above 2.2) was made in GSTC #126.

RETAILIATE/BEAR A GRUDGE
In GSTC #118 I set up a PTB etymon *m-tä:y, based on Jingpho tāi ‘avenge, retaliate’, matāi ‘vengeance’ and Lushai tāi ‘be at enmity with one another; have a grudge against’, and suggested a relationship with Chinese 對 OC *twed [GSR 511a-g] ‘respond, in response; reply’ and 對 *d’[w]ad [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-lûp and *g-lûp, 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 *hlot), perhaps we can assume developments like the following:

\[
\begin{align*}
\text{PST } *\text{-at-s} & \quad \rightarrow \text{PTB } *\text{-at} & / \text{OC } *\text{-ats} \\
\text{PST } *\text{-wat-s} & \quad \rightarrow \text{PTB } *\text{-wat} & / \text{OC } *\text{-ots} \\
\text{PST } *\text{-aj-s} & \quad \rightarrow \text{PTB } *\text{-ay} & / \text{OC } *\text{-ats} \\
\text{PST } *\text{-aj-s} & \quad \rightarrow \text{PTB } *\text{-ay} & / \text{OC } *\text{-ats}
\end{align*}
\]

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 *-lk). Starostin (1989: 332) reconstructs *-aç 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/SELF16, 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

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 *?ay ‘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’. In many TB languages (e.g. in Kukish) this morpheme has been grammaticalized into an auxiliary verb or verb-particle indicating transitive motion. Jingpho has developed a doublet from this etymon: one allofam is the full verb så ‘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 så wà ?ai ‘go; come’ (Hanson 1906: 580; glossed “qû; lâi” in Dai et al. 1983: 702). The Jingpho verb-particle wà may also be used in cases of figurative motion, e.g. si wà ?ai ‘die; pass away’ (equivalent to Lahu ši 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 *giwo in GSR 97a-g, and as *w(r)ja in Baxter 1992:335 (#794), equivalent to *wâ 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 *ŋjo in GSR 61e-f, as *ŋja by Schuessler (1987: 775), and as *ŋja in Baxter 1992:334 (#790), equivalent to *ŋâ in his new system. Both characters are now pronounced yî 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 *?ay, 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 assembled from several branches of TB:19)

18) Jingpho ?ai 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 i55 'go down', Hani, Khatu, Pijo jì, Lisu ye4 'go', Phunoi ýé, Bisu ýé, Mpi je5 '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'e33 'fall down', Boro gaglóy 'fall; lie down' (simplex ≠ kóklóy '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. bò? ce ve 'fell by shooting', bò ce ve 'throw down'; also perhaps Mikir (Grüssner 1978) ingjúy 'fall off, drop off (hair, leaves)', V + júy 'V away' (e.g. kát-júy 'wegrennen', arphlúng-júy '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.

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 yi (V) 'go', as in á-qà? yi ve 'go outside (to defecate) [euph.]' and yi-yi là-là te ve 'go back and forth aimlessly'.
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 khrät 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. lù) < OC *glâk (GSR 766q') / [WHB] *g-râk ‘shed the leaves’ (Shijing); ‘drop, fall, perish’ (Guoyu), which also reflects suffixed -k. Certainly related allofamically is Chinese 落 (Mand. xià), GSR #35a-c *gâ/ya: ‘down; below’, reconstructed by Baxter as *grã?.

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

\[
PST \begin{array}{llll}
  *g & -k \\
  la & -y \\
  k & -t 
\end{array}
\]

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-qa qa ve ‘frost descends’, vā-ši qa ve ‘hail falls’), and for accidental unpleasant falls (e.g. mi-qō qa ve ‘fall into a hole’, ā-mi qa-ši 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:

25) As a curiosity for the megalocomparatively inclined, I must report an astounding lookalike to this word-family: Tocharian kla ≠ klây (p.c., Jay Jasanoff, April 1990).
WB pay ‘put aside, put away; reject; tare or tret’; Jingpho kobài ≠ gobài ‘throw’; Lushai paih ‘throw/bling away; strike out, cancel, annul, discard, subtract’; Tiddim Chin pai: ‘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. šì 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:

\[ \begin{array}{cccc}
\text{PTB} & g & k & p \\
\text{s} & b & a - y \\
\text{m} & & & \\
\end{array} \]

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 thip). 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 sumxal, 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 ga ‘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

26) The mid-tone (unmarked in the transcription) and voiceless unaspirated initial of pre-Lahu qa ‘go’ point either to PLB *ga1 (Tone *3/ *voiced initial) < PTB *s-ga, or to PLB *qa1 (Tone *1/*pre-glottalized initial) < PTB *s-ka. The Burmese cognate ka ‘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.)
Esee (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'ar/k'ài [GSR 541a] ‘open; set free’ (graph shows two hands lifting bar from a door) / OC *khôj 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 開 [GSR 548f] with the same reconstruction except for tone, OC[WHB] *khôj?, 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! ‘come’, represented by WB la, Lahu là, Akha lá, Phunoi lá, Bisu lá, Mpi lo6.28) This is an eminently grammaticizable etymon. Lahu has, in addition to the full verb, là, two tonally distinct but allofamically related verb-particles: là (mid-tone) ‘motion toward the deictic center’ and là ‘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) lé ‘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) le55 ‘come’. (Other examples of *-ay>Zaiwa -e include ‘ten’: PLB *tsyayi>Zaiwa. tshe51.)

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 *ła/OC lái [GSR #944a]. This becomes quite problematic, however, in terms of Baxter’s (328: #777) reconstruction OC *C-ra(k) / MC loj: (a) first there is the problem of the final stop -k, inferred both from

27) The comparison between the TB etymon and Chinese 來 OC *kaj ‘go away; leave’ [GSR 642a]/[WHB] *kāj-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 麦 ‘wheat’, Mand. mài < OC *mrāk (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 l5?3, Phun Ru?3. 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 aru (Marrison 1967: 58).

If we’re still not happy with this Chinese comparison to the TB root, another possibility is 逨 OC d’o [GSR 82v] ‘road’, reconstructed as *tā 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 dj (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 "*I")

LINE UP 聯 or 聯 ‘join; bring together’ *lijan/lijan [GSR #213a, 214a] : [WHB] *C-rān / PTB *m-ren ‘line up; be equal’ [STC #346]

STAND 立 *gliop/ljop [GSR 694a-d] : [WHB] *g-röp / PTB *g-ryap [STC #246]

WEEP 嚎 *k`liop/k`jop [GSR 694h] : [WHB] *khröp / 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

---

\(^{30}\) “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 *mlag ?, with a question-mark ‘1. wheat (Triticum aestivum) 2. come’, followed by Schuessler (1987: 361-2), who sets it up as *mrakh ?.
replaced in Chinese by \( \text{i} \) or \( \text{di}_i / \text{i} \)...” (STC: 171):32)

HAND/WING
翼 \( *\text{di}_i^\text{j}/\text{jak} [\text{GSR} 954\text{d}] \) ‘wing’ : [WHB] \( *\text{l}_\text{a}^\text{k} / \text{PTB} *\text{g}-\text{lak} \) ‘hand’ [STC \#86]
LEAF
葉 \( *\text{di}_i^\text{j}/\text{lap} [\text{GSR} 633\text{d}] : [\text{WHB}] *\text{l}_\text{a}^\text{p} / \text{PTB} *\text{s}-\text{la}-\text{p} [\text{STC \#321}] \)
ARROW
弋 \( *\text{di}_i^\text{j}/\text{jak} [\text{GSR} 918\text{a-b}] : [\text{WHB}] *\text{l}_\text{a}^\text{k} / \text{PTB} *\text{b}-\text{la} \equiv \text{m-da} [\text{STC \#449}; \text{pp.} 96, 111-2, 118]
HAWK/EAGLE
鷹 OC/MC \( *\text{la}-\text{ŋ} [\text{GSR} 890\text{c}] : [\text{WHB}] *\text{r}(\text{r})\text{a}-\text{ŋ} / \text{PTB} *\text{g}-\text{la}-\text{ŋ} [\text{STC \#333}]\)
To these we should probably add:
EAT/LICK34
食 OC \( *\text{d}_i^\text{j}/\text{jak} [\text{GSR} 921\text{a}] : [\text{WHB}] *\text{m}-\text{l}_\text{a}^\text{k} [\text{Schuessler}] *\text{ml}_\text{j}/\text{PTB} *\text{m}-\text{ly}_\text{ak}

4.3 PTB \( *\text{C}-\text{l}^- \) / OC [WHB] \( *(\text{C})-\text{r}^- \) (GSR/STC “*(\text{C})-\text{l}^-”)

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

FALL
PTB \( *\text{g}/\text{kl}_\text{a}-\text{k} \equiv *\text{g}/\text{kl}_\text{a}-\text{y} / \text{OC} *\text{g}-\text{r}_\text{a}^\text{k} [\text{See set (2), above.}]
COME
PTB \( *\text{la}-\text{y} \equiv *\text{l}_\text{a}-\text{w} \equiv *\text{l}_\text{a} / \text{OC} *\text{C}-\text{r}_\text{a}^\text{k} [\text{See set (5), above.}]
NECK
PTB \( *\text{m}-\text{l}_\text{i}_\text{g} [\text{STC \#96}; \text{pp.} 155, 180] (\text{cf.} \ \text{WT} \text{hdzi}_\text{n}) / \text{OC} *\text{l}_\text{e}_\text{ng} [\text{GSR \#823f}] \) ‘neck; collar’: [WHB] \( *\text{C}-\text{r}_\text{a}^\text{g}^- \equiv \text{OC} *\text{kJ}_\text{e}_\text{ŋ} \text{or} *\text{g}_\text{i}_\text{e}_\text{ŋ} [\text{GSR \#831n}] : [\text{WHB}] *\text{kJ}_\text{e}_\text{ŋ} \text{,} \text{g}_\text{e}_\text{ŋ} \) ‘neck’
GOOD
PTB \( *\text{l}(\text{y})\text{a}_\text{k} \equiv *\text{l}(\text{y})\text{a}-\text{ŋ} [\text{JAM}] (\text{cf.} \ \text{WT} \text{legs}-\text{pa} \equiv \text{lags}-\text{pa} (\text{Ladakhi}) ‘\text{good}; \text{serve} \text{ing}; \text{neat} \text{elegant} \text{,} \text{graceful} \text{,} \text{beautiful}’ \equiv \text{yag}-\text{po} \equiv \text{hd}_\text{zag}-\text{po} \) ‘good’36) / \text{OC} \( *\text{lie}_\text{g} \) ‘elegant; \text{beautiful; refined; good’} [\text{GSR \#878a-b}] : [WHB] \( *\text{C}-\text{r}_\text{e}_\text{ŋ} \equiv \text{OC} \ (\text{cf.} \ \text{also} \ *\text{l}_\text{e}_\text{ng} \) ‘command; \text{used} \text{as} \text{a} \text{loan} \text{for} \text{good’} [\text{GSR \#823a-e}] : [\text{WHB}] *\text{C}-\text{r}_\text{e}_\text{ŋ})

YOUNG MAN/HUSBAND
PLB \( *\text{la}_\text{n}^\text{2} [\text{JAM}] \) Written Burmese \( \text{l}_\text{n}_\text{a}^\text{2} \) ‘husband’ /

32) I have devoted a separate (but still unpublished) study to this I/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 \( \text{d}_\text{a}^\text{2} \) ‘good; beautiful’ (\text{cf.} \ PLB \( *\text{Nd}_\text{a}_\text{k} \equiv \text{qa}_\text{ha}-\text{de}_\text{2} \) ‘well’ (\text{cf.} \ *\text{Nd}_\text{y}_\text{a}_\text{k})}. It looks as if pre-Lahu, like Chinese, sometimes developed \text{d}i- from *\text{li}-!
OC 郎 *tāŋ (not found in this sense in GSR #735r or Schuessler 1987)

SALT(Y)  PTB *s-la ‘salt’ (Miri əlo, PKaren *hla, Pwo Karen lâ) [STC: 187] / 钠 OC *lo [GSR 71a-b] ‘salty; (AD) rock-salt’; [WHB] *C-rāŋ

STRENGTH/ARM  We have already compared PTB *g-lâk ‘arm; hand’ [STC #86] to Chinese 祜 OC *djak [GSR] or *lîk [WHB] (above 4.2). Perhaps we should also bring into this word-family 力 ‘strength’ *lîk [GSR #928a-b] : [WHB] *C-rūk (Karlsgren 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-lîq [STC #378] to 林 *gliam/ljâm [GSR #655a-d] : [WHB] *C-rūm, 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-lai ‘grandchild’ / 姑 ‘nephew’ OC *d’iet ≠ d’jät [GSR 413o-p] : [WHB] *dit

LEECH  PTB *m-lit / 綿 OC *tiet or *tiset [not in GSR 413] : [WHB] *tit or *tít

HEAVY  PTB *s-lai / 輕 OC *tjēd [GSR 413e] : [WHB] *trits

The following two sets are highly irregular:

FOUR  PTB *b-lay / 四 OC *sjad [GSR 518a-d] : [WHB] * splits

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

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 *ṭlāk ‘youth/young person’ (> Luquan hla58, Lahu cha-hā, Lisu za21-gu21-lā. This Lolo-Burmese word-family should then be reconstructed something like *ṭlāk ≠ tāŋ.

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-lîq could go with Chinese 田 ‘field’ OC *d’ien [GSR 362a] : [WHB] *tîu; while Chinese 林 could be cognate to Proto-Northern Naga *C-rūm ‘forest; jungle’ (French 1983: 507-508).

43) Cf. STC, n. 458 (pp. 171-172), and Matisoff 1994a.
57b-e: [WHB] *hlaʔ [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): 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 chu ëqay ve ‘get fat’, with a tone-change in the adjective and the adverbializing particle e, which occurs in hundreds of “stative adverbials” (GL: 4.422), sometimes inducing a change of tone, but usually not. This latter particle e is probably derived from *ya and ultimately from the copula *way, the source of our “third” palatal suffix (below §7). 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 vs *-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 kotay ‘be extra’, khomotay ‘increase, multiply’, akotay ‘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)say [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'âî- [GSR #316a] ‘great; excessive’ : [WHB] *hlâts

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, e and the nominalizer/subordinator ve could well be co-allofams.
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 dàH 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 dàH 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. duò) ‘much; many’ [GSR #3a-c], which Baxter reconstructs as OC *taj>MC *ta47).

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] *tâ | [GSR 45p] *tio |
|———|———|
| 多 OC [WHB] *tâj | [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 šen, Tiddim san, tshan

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 tâ ‘rosy; ruddy; red’ and Lakher sai ‘rosy; ruddy; red; crimson’, sai-law ‘scarlet’.49)

---

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

47) Another member of GSR series #3 obviously belongs in this word-family as well, viz. 多 #3i ‘great; extravagant, overbearing’ reconstructed by Karlgren as *tia/ts’iê: and by Baxter (p. 413) as *thjaj?/tsyheX (where -? 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 Lößfler 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 OC *tiu [GSR #128a-c] : [WHB] *tō, though Baxter characterizes this as an “odd correspondence”, and proposes as a more likely cognate OC *tsjär ‘purple’ [GSR #358j] : [WHB] *tsēʔ, which could perhaps derive from an earlier *tsājʔ.

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

- OC *tān ‘red; vermilion; cinnabar’ [GSR #150a-b] : [WHB] *tān
- JFI OC *tfin `red; vermilion; cinnabar’ [GSR #150a-b] : [WHB] *tan
- STC suggests further affiliations with two other forms with front vowels:
  - OC *tsien `pale red’ [GSR 378g] : [WHB] "tsins
  - kfi OC 'ts'ion `dark red’ [GSR 812t'] : [WHB] Stsins

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 rwāi ‘be pensile, as a tear’ and/or ≠ WB hrū ‘become less in size toward the end; taper’; Jg. śōi ‘small, weak, paltry’; Lahu šū è ve (with secondary high-rising tone, probably <šu³³) ‘tapering’.50) The Lahu form could be a borrowing<Burmeses (WB hrū is now pronounced /hyu/) since WB hr- normally gives Lahu h- (cf. ‘eight’ WB hrac, Lh. hi). 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 nwa, Lh. nū; ‘handspan’ WB thwa, Lh. thu; ‘tooth’ WB swā, Lh. thu; ‘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 *dwa ‘hang down’ [GSR 31a] : [WHB] *dōj, though the initial correspondence is peculiar and in need of independent confirmation. Another possibility he proposes is OC *t'wa ‘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)wa-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”) 50) See GSTC #177; Matisoff 1974, #275; and DL: 1193-1194.
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); 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'.

This initial impression 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). 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:

<table>
<thead>
<tr>
<th>WB Rhyme</th>
<th>Total Morphemes</th>
<th>Morphemes with Stative Meaning</th>
<th>Percent of Statives</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a</td>
<td>206</td>
<td>25</td>
<td>12%</td>
</tr>
<tr>
<td>-wa</td>
<td>62</td>
<td>18</td>
<td>29%</td>
</tr>
<tr>
<td>-ai</td>
<td>118</td>
<td>29</td>
<td>24.6%</td>
</tr>
<tr>
<td>-wai</td>
<td>62</td>
<td>16</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

51) For some of these words cognates have been discovered: WB prai ‘gape, extend, flare’ (Lh. pe ê) < 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 suffixion: *-i, *-a 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 ?ti-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'
- **fà-fà** 'by a very little' ≠ **tài-tài** 'id.' ≠ **tai** 'very'

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

<table>
<thead>
<tr>
<th>Morphology</th>
<th>Total</th>
<th>Stative</th>
<th>Percent Stative</th>
</tr>
</thead>
<tbody>
<tr>
<td>-wa, -wai</td>
<td>124</td>
<td>34</td>
<td>27.4%</td>
</tr>
<tr>
<td>-a, -ai</td>
<td>324</td>
<td>54</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

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'; *goy '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 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. (An analogous phenomenon may be observed with respect to the "honorific" o-prefix in Japanese, which now often means nothing more than "this familiar object which we see/use every day", as in o-hashî 'chopsticks', o-cha 'tea', o-benjo 'toilet'.)

---

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:\(^{59}\)

\[
\begin{array}{ccc}
\text{i} & \text{u} \\
\text{e} & \text{o} \\
\text{e} & \text{a} \\
\end{array}
\]

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

\[
\begin{array}{ll}
i & u \\
\text{e} & o \\
\text{a} & \text{o}
\end{array}
\]

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 e/ (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 *ey 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, ee], 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 /i e a/ and the other involving the back vowels /u o o/. From my present vantage point, it is now clear that one and the same process is involved—the suffixation of a palatal diminutive morpheme.

6.1.1 When the nuclear vowel is back: rising diphthongs\(^{61}\)

Lahu has interesting “doublet-formations where forms having simple back vowels /u o o/ may also be pronounced with a nucleus consisting of /w/ plus the \textit{front} vowel of the same height /i e e/” (GL: 19), i.e., u × wi, o × we, e × we: ‘dried fish’ ɲà-ku ~ ɲà-kwi; ‘era’ co ~ cwe (< Shan; cf. Siamese chúa); ‘curved object’ ³-qòʔ~ ³-qweʔ. In “The mora the merrier” (1982/89: 170) I viewed this as a “meaningless extrusion or extension from the original nuclear monophthong” or “a

---

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


61) Please note the silly enantiodromic error in the Introduction to DL: 17, where in discussing 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:

\[
\begin{align*}
\text{wi [u]} & \quad \text{we[ge]} & \quad \text{we [e]}
\end{align*}
\]

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 o a/, this tightly fused element was already recognized as diminutive in GL, p. 19.63) Examples include:

- MIRROR: \(\text{më?-gå?} \neq \text{më?-gåy} \) (“little glass”)
- POWDER: \(\text{ǔ-møy} \) [cf. \(\text{må} \) ‘to pulverize’]
- FORKED/SPLIT OBJECT: \(\text{ǔ-qåy} \) [cf. \(\text{qå} \) ‘branch’]
- SCAR: \(\text{ǔ-kìy} \) [also \(\text{kì} \)]
- STHG SPECIAL/EXTRA: \(\text{ǔ-låy} \) [cf. \(\text{lå} \) ‘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 o a/. The less-fused type results in “co-valent” diphthongs like -ie (neither rising nor falling, two morae in length), while the more-fused variety yields a monosyllabic falling diphthong:

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 \(\text{zi} \) and 兒 \(\text{ér} \).
Suffixable vowel | Less fused | More fused
---|---|---
CENTRAL | i | ie | iy [iː]
 | a | ae | ay [aː]
 | a | ae | ay [aː]
 | u | | wi [wɪ]
BACK | o | | we [wɛ]
 | o | | we [wɛ]

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:

<table>
<thead>
<tr>
<th>Base Adjective</th>
<th>Extensive</th>
<th>Diminutive Extensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{'be big'})</td>
<td>i</td>
<td>(\text{chi hi 'only this big'})</td>
</tr>
<tr>
<td>(\text{ma 'this much'})</td>
<td></td>
<td>(\text{chi má 'only this much'})</td>
</tr>
<tr>
<td>(\text{yi 'this long'})</td>
<td></td>
<td>(\text{chi ši 'only this long'})</td>
</tr>
<tr>
<td>(\text{vi 'this far'})</td>
<td></td>
<td>(\text{chi fi 'only this far'})</td>
</tr>
</tbody>
</table>

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:

- \(\text{grandchild': } ə-hwɛ (\text{but } *ə-hɔ does not exist}\)
- \(\text{barking deer [Cervulus muntjac]: } \text{chi-pi-qwɛ? (but not } *\text{chi-pi-qɔ? )}\)
- \(\text{firefly': } mɛʔ-gɔ-lwɛ (*mɛʔ-gɔ-lɔ does not exist}\)

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:

- \(\text{bird' Fr. oiseau <Spoken Latin avicellu}\)
- \(\text{uncle’ Fr. oncle <Spoken Latin avunculu 'mother's brother'}\)
- \(\text{bee’ Fr. abeille <Spoken Latin apicula}\)
- \(\text{ear’ Fr. oreille <Spoken Latin auricula}\)

(b) Slavic diminutives which became the ordinary name:

- \(\text{heart’ PIE *k’erd- > Common Slavic *srďic} (\text{with diminutive suffix}) > \text{OSl srďicě, Russ. serdce (Kurath 1921: 12}\)

(c) Nouns in Yiddish where the root ends in -l are perceived as intrinsically containing the homophonous diminutive suffix -l:

- *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 e, 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 ofboth PLB *y* and *z* is y. Sets which demonstrate the fate of PLB *z*-include the usual Lahu word for ‘child; son’:

| WB | Lh. | PLB *
|----|-----|-----|
| s- | yá | za
| sá | yè | za2
| san | và? | zan1
| sak | yó | zak
| ság | yó | zan2

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’, *hintel* ‘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-husband*, 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 combination *yè*-e [above 3.2] and the compounds *qhà-qhe/qhà-qhe* < *ka-kan*, below (23).

66) The regular Lahu reflex of *-ya* is e, as in ‘bee’ PLB *hya2* > Lh. pè; ‘swidden’ PLB *hya1* > Lh. he; ‘eye’ PLB *s-myak* > Lh. mè?.

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

\[
\begin{align*}
\text{y} & \quad \text{a} & \quad -k \\
\text{*N-} & \quad (d)z
\end{align*}
\]

But this is not all. There seems to be still another variant reconstructible for Lolo-Burmese, PLoloish *N-yay', on the basis of forms with nasal initial but unstopped finals: Akha, Hani, Khatu, Pijo njį, Mpi nɯw (Hansson 1989: 35).\(^6^7\) Compare also Lahu ñe 'short', which could also be from *ŋay (known to be preglottalized because of the mid-tone; the regular Lahu reflex of *-ay is -e, but the syllable ñe does not occur in Lahu). So perhaps we should set up *ŋay × *ŋay.

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

\[
\begin{align*}
\text{y} & \quad -k \\
\text{*N-} & \quad a & \quad -y \\
\end{align*}
\]

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 er and zi,\(^6^8\) 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

\(^6^7\) Contra Hansson, WB nāi `few' (Judson 581) does not seem to belong here. It is from Tone *2, and seems to derive from nān (J. 558). A more promising Burmese cognate would be ñai (< Tone *1) 'small, little, inferior' (J.323). Interchange of nasal points of articulation is common in TB in the environment of palatals.

\(^6^8\) To complicate the picture, there is also a PTai root *(h)nɔj (PTai tone B-1 × C-2) 'small; little', represented by Siamese nɔj (C-2) × nɔj (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 yè `offspring; young of animal'
  /also ɔ̄-yè̄, ɔ̄-yè̄-è; cf. pè̄-yè, pè̄-yè̄-è `wasps larvae'; note the simultaneous occurrence of two co-allofams in the synchronic combination yè̄-è `young of animal', < *ya²-}"yak/.\(^{69}\)
- PLB *s-ya²* > *sa²* > Lahu ša `nephew'
  /in the compounds ɔ̄-ša-pà `nephew', ɔ̄-nù-ɔ̄-ša `nieces and nephews' /
- PLB *s-yak* > *"yak* > Lahu é `baby; diminutive suffix'
  /This morpheme appears in prefixed form as an autonomous noun, ɔ̄-é, but it is now most common as a productive diminutive suffix:
  phi-è `little dog; puppy' < *kɔ̄y-}"yak
  ɔ̄-gù-tè̄-è `small intestine'
  cha-mà̄-è `labia minora'
  šù-lè̄-è `cigarette' ("little cigar")
  lɔ̄lì-è `tricycle' ("little lorry")\(^{70}\)
- PLB *s-nyak* > *"nyak* > Lahu nè̄ `diminutive morpheme'
  /e.g. cà-pì-nè̄ `starling', yà-cù-nè̄ `runt; undersized person or animal', nè̄ `get pulverized; be reduced to fragments; shatter', tɔ̄-nè̄ `cut up fine'; see TSR #158; DL 786-7/
- PLB *s-nyak* > *"nyak* > Lahu nè̄ `be faint (of sounds)' (DL: 428)
- PLB *s-nyay K *s-pay* > Lahu pè `short' (DL: 428)

Basically this is a Loloish Tone "2 etymon: *za²* and *ya²* > yè. 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 é and nè 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 (é), it lost its initial consonant (a typical development in Lahu functors) - i.e., the y indulged its tendency to dissolve into the following vowel.

---

\(^{69}\) 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 gwùn-zung-za (gwùn 'hand', zung 'finger') and Sangtam müyong-za (müyong 'finger'). See Marrison 1967: Appendix Ia, p. 95.

\(^{70}\) In this usage, é contrasts with an antonymic augmentative suffix -lù (< Tai; cf. Siamese lùaŋ), e.g. ɔ̄-gù-tè̄-lù `large intestine', cha-mà-lù `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 *kwav in STC #157, on the basis of forms like WB kwāi ‘dammer bee’, and Lushai khuai–khoi, Tangkhul Naga khu, Thakali koy ‘bee’.

To these GSTC #76 adds some additional reflexes (Angami Naga mēpfi (Kohima dial.), makwi (Khonoma dial.); Meithi 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 kwāi point to a proto-allofam with voiced initial *gw-. As I remarked in GSTC, two of the forms cited in STC (Lakher akha, Nung kha) 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.

A solid Chinese cognate now allows us to trace this etymon back to the PST level: 蝶 *klwār/kua: [GSR 351c] ‘sp. of small wasp’ : [WHB] *k(r)ój?. Actually several other near-homophonous characters in this same phonetic series are also of interest in the present context:

| 喬 | [GSR 351a-b] | ‘fruit’ | [WHB] *k(r)ój? |
| 堡 | [GSR 351e] | ‘dust’ | [WHB] *kh(r)ōjs |
| 裸 | [GSR 351g] | ‘bare; naked’ | [WHB] *g-rōj? |

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. 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’], stalkers, 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 koi, kuai, kai (Ouyang and Zheng 1983: 406, 449), and STC.

---

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 guō-lúō 蝶 [WHB] OC *k(r)ój?-(C-)rōj?. 
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 *baʔ ‘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-qês-bî ‘whiskers’, pâ-qês-lâʔ ‘chin’, pâ-kâ ‘jaw; cheek’, pâ-ciʔ ‘beard; moustache’, pâ-jà-lâ ‘dewlap (of bovine)’, pâ-pî-li ‘chin’, pâ-gê ‘jawbone’, pâ-gi-qhâʔ ‘dimple’, etc. (DL: 807).

The recently attested Pa-O Karen (= Taungthu) form bai ‘cheek’,75) as well as Dulong kâbai ‘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 nî̂khâ ~ ñkhâ ‘chin; jaw’, Nung makh’a ‘id.’, Dimasa khu-sga ‘chin’, etc.

The more modern Nungish data presented in La Polla 1987 reveal the existence of a palataIly suffixed variant: Dulong mû3i³kai. 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)

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 ü-gā 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 laway 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 alaprai, araprai (to be syllabified a-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 * OC *mior [GSR #598a-c] ‘rice, paddy’: [WHB] OC *mij2. 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,el]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-ñum ‘unhusked paddy, ma-thu ‘young paddy plant’, ma-won ‘paddy flower’, ma-hu ‘paddy stubble’, etc. (Note that the usual Tangkhul reflex of *-ay is -ai—e.g. Jingpho manai ‘twist’, Tangkhul khanai ‘knead’ [GSTC #61].) LaPolla (loc. cit.) adds monophthongal forms from two other branches of TB: Dulong (Nungish) ts(h)um1 ma35 and Luoba (Mirish) ama.

\[ below (14); BEE, above (10); EASY, above (9)]. Note the intra-Nungish disagreement in final between Nung maka and Dulong mu35ka155.

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 *moy ‘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. (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’, xiāo-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)mæ (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 mala, Dimasa bala, and Tangkhul mala, along with a supposedly separate root *m-da to account for WT mda and Khauri niqda (n. 313). A Chinese cognate with final *-k is also adduced: ꦁ *djak/jak [GSR 918a-b] : [WHB] *lãk ‘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 (6-ce ‘arrow’), and in the compound khâ-ce (< khā?-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 hmrã (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 hmrã and Akha mjà both reflect Tone *2.
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: *gay > *gay > 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 扪 ‘sand’ *sa/ša [GSR #16a-с], 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 *sräj.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 သင (WB sāi), though there is a doublet သင (WB salāi;84) also သင-ကဴ (‘coarse sand’, သင-ဗေ ‘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 ᵇ-ဗ, Akha ᵇ-ဗ, Phunoi ᵇ-ဗ, Bisu ᵇ, Mpi n^s^i5; cf. Bradley #334 and GSTC #159), though some of these are evidently borrowings. Lahu ᵇ- has to be a loan (either from Burmese or from Shan s’ai), since native Lahu words beginning in ᵇ- do not appear under the high-falling tone /7/. The checked syllable in the Akha form reflects a variant antecedent with final stop.

Jingpho has well-integrated compounds like ဗဲဗေ ‘sand’, ဗဲဗဲ (‘coarse sand; gravel’, ဗဲဗဴ ‘very fine sand; common white sand or dust’, ဗဲဗဤ ‘beach; desert’, ဗဲဗဲ၏ ‘sandy places in general’ (Dai et al. 1983: 905-81)

81) The Lahu word ṛး-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…”).


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 sāi is “a fusion or shortening of salāi” (p.c., John Okell 1993). The fuller version is a native word, and is still to be heard in the speech of older people.
Orthographic "z-" is pronounced dz- in Standard Jingpho, and there is also a variant with voiceless affricate initial h funcionários "sand" (Northern usage). 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-ye 'sand', yé-pu 'soft sand', yé-rol 'coarse sand'.

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'ai, 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 saláí might well induce us to suppose that this voiced spirant derived from a still earlier **s- (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 tiŋ-tai 'kind of candy' [Wu-ming 61 is a loan from Chinese]); Central Tai (Nung87) xlaí, Tay xai, Tho raai); and Southwest Tai (Siamese saaj, Shan shai [s'ai], Ahom sháí [s'ai], Lü and White Tai sai). Note how similar some of these forms are to WB saláí.

In ATLC (369-370), Benedict takes the orthographic dental cluster in Siamese seriously, and reconstructs Proto-Austro-Tai *baw(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][aayl]"). Also dragged in by the hair are "split cognate" forms from Hlai, deriving from "PHlai "phaw": S. Li phaw, N. Li pho ("irreg. aspir.") from *blaw(draj), and finally Lati ña, from *bawndraj.88)

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

86) The second syllable -rol of the latter word may be compared to that of Jg. zāi-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  FirebaseFirestore `sand’ *sraʃ 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 -sɨ of the Lahu form cited above, sɨ-sɨ, 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 ɜ-moay ‘powder; powdery substance’, naʔ-moay ‘gunpowder’ < mo (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) like WB mai, omai ‘mother’ and Dulong (LaPolla 1987: 27) a3ipai53 (alongside a3iba53) ‘father’.

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

88) Implausible as this etymology is, it is worth mentioning that the word for SAND in the aberrant Jiamao dialect of Hlai is kuʃudei, 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 *mэag/mэu: [GSR 947a-e] : [WHB] *mэO (Mandarin mú) belongs to a phonetic series that shows puzzling vocalic alternations: cf. e.g. ‘sea’ 處 *xэag/xэi: [947x-y] : [WHB] *hmэ (Mandarin hэi).
include PTB *(y)ay ‘elder female relative; mother; grandmother; maternal aunt’
(reconstructed in GSTC #100; cf. also Matisoff 1990b “iAy, 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 l6e
(< *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:

s- y
w
m- l (y) a - t
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) tR: ‘eat’ [WHB] *ml5k, which goes much better with PTB *m-lyak ‘lick’ than it does with
PTB *dz(y)a ‘eat’; (b) I!i ‘tongue’ [WHB] *mlit; (c) i5E ‘lick, lap’ [WHB] *mlaj; 
(d) 舌 ‘lick’ [WHB] hlim?; (e) 舌 ‘sweet’ [WHB] *lim.

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’ā ‘(Yellow) river’ [GSR 1g] : [WHB] *gā

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

猕 OC *zi6g ‘kind of monkey’ [GSR #1096r-s] : [WHB] *lū or *jū
緑 OC *djuwar ‘kind of monkey-like animal’ [GSR #575q] : [WHB] *lūjs

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 recent-
lly produced a two-page squib on the “ST kin *-i suffix” (Benedict 1994b), to appear in
L7:BA.

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, and written with a character for 'child' that has solid roots all the way back to PST:

선 OC *ɲiɛj [GSR #873a-d] (Mand. ér~r) : [WHB] *ɲe

Another Chinese allofam is 儿 ‘young and weak’, OC *ɲiɛj [GSR #873f] : [WHB] *ɲe (with a double Mandarin reading ni~yi). 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-za or *N-ya < *s/N-ya-y/k.

Mandarin has another morpheme 子 meaning 'child' (pronounced zǐ when fully stressed) that has become a neutral-toned formative (zǐ) in hundreds of nouns (e.g. shāzi ‘sand’, biānzi ‘queue’, shìzi ‘louse’, kūzi ‘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 *tsiŋ/tsi: [GSR 964a-j] : [WHB] *tszd.96) Closely related allofams are 慈 ‘affectionate, loving, kind’ OC *dzʃjag [GSR 966j] : [WHB] *dz; and 子 ‘to breed; nurture; to love, fondle; to foster’ OC *dzʃjag [GSR 964n] : [WHB] *dzsd.

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 *tsa ≈ *dzə < *N-(d)za-y/k.

---

93) Chao (1968: 46; quoted in Davison 1989: 216-217) discusses three diachronically distinct proveniences of the Mandarin retroflex suffix -r: 裡 ‘therein’ (as in zài zhèr ‘here’ < zài zhělì, zài nàr ‘there’); 日 ri ‘day’ (as in jīnr [jiər] ‘today’ < jīn-ri), 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’; hào ‘good’, hào-haôr de ‘well’), and can also function as a nominalizer (e.g. huà huâr ‘draw a drawing’). It is interesting to note that there is also a Lahu adverbializing particle ล which is very similar phonologically to the Lahu diminutive morpheme ล (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 [tsaʔ].

Although I do suspect that PST *s/N-ya-y/k and *N-(d)za-y/k are themselves co-allofams—so that Mandarin zi 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 ê (or e 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 lá / Lh. là (<PLB *la²), and the latter is WB lài / Lh. le (<PLB *lay² ≠ *lay³; the WB and Lahu tones do not correspond regularly).\(^{99}\) In both these Lolo-Burmese

96) Sagart points out (p.c., Oct. 1989) that a character in the same phonetic series as zǐ ‘child’, 仔 *tsjøg/tsli(:), glossed ‘burden’ in GSR 964k (cf. Mand. ziltān ‘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. zīhū ‘piglet’, zǐjī ‘chick’); and zāi (SW dial.) ‘young animal; whelp’, as in the insult gōuzǎi ‘sonofabitch’ and niúzǎi ‘cowboy’. This latter, diphthongal form may also be written with the character 恵 (also not in GSR), attested in this sense, according to Sagart, since the Fangyan dictionary (200 A.D.), and to be reconstructed as OC *tsO? in Baxter’s system. Notice that the OC pronunciations of 子 *tsā? and 恵/仔 *tsā? 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 候 or 唯 Mand. wēi, reconstructed as OC *djwar in GSR #575n-o (revised to OC *ṣgiwar by Benedict on xiesheng evidence, and reconstructed as *wij in Baxter’s system); and 唯 Mand. huì < OC *g’iwad [GSR 533a-d] : [WHB] *wêts or *wêjs. (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)āj 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).


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 la (Malla 1981/1985: 73), as in wa thana wala la ‘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 ≠ -la (these variants are apparently in free variation), while “wh-questions” are marked by a prefix ka- (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 亥 ‘final (yes/no or rhetorical) interrogative particle’, reconstructed as OC *zio in GSR 89e, but as *la 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) 汝 OC [WHB] *dūk ‘who’
爾 OC [WHB] *drū ‘id.’
誰 OC [WHB] *dūj ‘id.’

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

Lahu has two particles, ติดต่อ (<*sa) and ｾ (<*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:

\[ ｾ < ｶ + ｾ < ｶ (w)ay. \]

Both semantically and phonologically, the Mandarin adverb cái looks like an excellent match.102) Though written now with the same graph as ‘talent’ 卓 OC

---

100) The Newari, Meithei, and Kokborok cognates were not cited in GSTC #131. The Kokborok yes-no question particle is day.


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'ag [GSR #943] : [WHB] *dzā (see above, 2.4a), this is a loan substitute for a complicated character 翁. 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. gangcāi103).

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

Chinese cāi seems quite distinct from the interjectory particle 哉 (Mandarin zài) (Schuessler 1987: 803), that sometimes gets translated as ‘indeed’ in old texts (e.g. Qí jūn yě zài ‘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 *kāŋ

Lahu has a number of interrogative morphemes that begin with the aspirated post-velar stop qh-.105) The most important of these is qhā ‘which?; what?; what kind of?’, which also occurs in many compound question-words, e.g. qhā-qhe ‘how?’, qhā-thā? ‘when?’, qhā-nì ‘how many?’, qhā-mà ‘how much?’, qhā-mò ‘for how long a time?’, qhā-hì ‘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 qhà (also under the aberrant low-falling tone), whose basic meaning is ‘where?’ (qhā le ‘Where is it?’). However, it is interchangeable with qhā in many contexts (qhā ve N ~ qhā ve N ‘what kind of N?’; qhā-thā? ~ qhā-thā? ‘when?’; qhā-qhe ~ qhā-qhe ‘how?’), and in these cases it is especially characteristic of the Red Lahu dialect (DL: 307-309). Since -o 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 *kāŋ ≠ *gāŋ, along lines suggested by Benedict (1984). On the other hand,

104) Lahu sê 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 ʔa, 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 extensive nouns, e.g. qha bì ‘copiously; overflowing’, qha bû? ‘to satiety’, qha ma ‘equally; to the same extent’, qha bì ‘to the same size’, etc. (DL : 265-271).
a recent fusional origin for $qh\ddot{o}$ seems even more likely, at least in those contexts where it varies with $qh\dot{a}$. Thus, ‘Where is it?’ may be expressed either as $qh\ddot{o} le$ or as $qh\dot{a} 5 le$, where 5 is a general locative or topicalizing particle (DL: 222).

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’, $qhe$ ‘like that’, Lahu-yâ $qhe$ ‘like a Lahu’. In combination with $qh\dot{a}\sim qh\ddot{o}$, it forms the important word $qh\ddot{a}-qhe\sim qh\ddot{o}-qhe$ ‘how?’. Here too a fusional etymology imposes itself, this time with our abstract palatal suffix:

$*ka + \ddagger \ddagger > qha-e > qhe$.

The compound $qh\ddot{a}-qhe$ would then descend from $*ka-ka-ay$.

A possible Chinese cognate to this TB etymon is $k\ddagger k\ddagger ?$ OC $*k'jar$ [GSR #548a] : [WHB] $k\ddagger k\ddagger ?$, < PST $*ka-y$.

(24) I/FIRST PERSON PRONOUN

$*\ddagger y = *\ddagger ay (*\ddagger a-y)$

The basic first person pronominal etymon in TB is $*\ddagger y$ (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 $*\ddagger ay$ in STC #285: WT $\ddagger ed$ (“with suffixed -d”) ‘I, we [elegant]’, Jingpho $\ddagger ai$ ‘I’, Lushai $\ddagger gei$ ‘self’. (To these forms GSTC #70 adds Meithei $\ddagger e$ ‘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’)?

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

吾 $*ngo/nguo$ [GSR 58f-i] : [WHB] $*\ddagger a$

我 $*ngâ/ngå$ [GSR #2a-g] : [WHB] $*\ddagger aj$

107) This particle 5 itself may ultimately derive from an earlier functor $*a\ddagger : *ka + a\ddagger > qh\dot{a} 5 > qh\ddot{o}$.

108) I have recently claimed that this Jingpho pronoun is the source of the aberrant Jg. numeral $laj\ddagger i$ ‘one’ (Matsoff 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 -1 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.iii)

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] *nā?
爾 OC *ńjär [GSR #359a-b] : [WHB] *nāj? or *nēj? or *nāj?

(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)ii) ‘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: a-ma, a-thōr 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 *miwo [GSR #103a] : [WHB] *mā
靡 ‘there is no; without’ OC *mia [GSR #17h] : [WHB] *māj?

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

iii) Sagart notes (p.c., Oct. 1989) that certain modern dialects (e.g. in the Hakka and Fukienese groups) have first person pronouns of the gai type.

ii) 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] < lán < LMC lam < EMC lam

Karlsgren (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*).

### 8.1 Modern Burmese Reflexes of WB -ai and -añ

WB -ai developed into monophthongal -e [e] 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:

<table>
<thead>
<tr>
<th>PTB</th>
<th>WB</th>
<th>Mod.Bs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ay or *a-y</td>
<td>ai</td>
<td>e</td>
</tr>
<tr>
<td>*iy or *a-y</td>
<td>e</td>
<td>ei</td>
</tr>
<tr>
<td>*in / *eg / *in / *en</td>
<td>añ</td>
<td>i / i / e / ei</td>
</tr>
<tr>
<td>*ik / *ek / *et</td>
<td>ac</td>
<td>I?</td>
</tr>
</tbody>
</table>

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 *it > WB in
- PTB/PLB *it > WB ac, but PTB/PLB *it > 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 /u/ good, /ʌ/ blood, /uw/ soon.

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

---

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

\textbf{(27) ONE / ALL / THIS / THAT / HE} \quad \textbf{\text{*}ta-n/r \text{=} \text{*}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 NAVAL.\textsuperscript{115}

These semantic interconnections may be crudely diagrammed as follows:

\begin{center}
\begin{tikzpicture}
\node (one) at (0,0) {ONE};
\node (thisone) at (1,0) {THIS ONE};
\node (thatone) at (1,1) {THAT ONE};
\node (singleonly) at (-1,-1) {SINGLE/ONLY};
\node (allplural) at (-1,-2) {ALL/PLURAL};
\node (inclusive) at (1,-2) {INCLUSIVE};
\node (self) at (2,-2) {SELF};
\node (navel) at (2,-1) {NAVEL};
\draw[-] (one) -- (thisone);
\draw[-] (thisone) -- (thatone);
\draw[-] (singleonly) -- (thisone);
\draw[-] (allplural) -- (thisone);
\draw[-] (inclusive) -- (thisone);
\end{tikzpicture}
\end{center}

\textsuperscript{114} The Burmese-Russian Dictionary of Minina and U Kyo Zo gives the alternate pronunciations /yi/ and /ye/ for this word (p. 466), so presumably Judson meant "frequently pronounced /yi/" (since /ye/ would be the normal reading of WB rai, and -i is a possible reading of WB -aṅ).

\textsuperscript{115} The same semantic relationship between ONE and DEMONSTRATIVE may be traced in another, phonologically independent root, mentioned briefly below: *s-gyi-k \text{=} *s-dyi-k. For an extended discussion, both of (27) and this latter set, in the context of ST numerals in general, see Matisoff 1995, §3.14: 37-39. Most of the forms presented in (27) are also cited in STC #21; in Matisoff 1974, #154; and in GSTC #148 and #178.
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 *?- or *?o-
5. sibilant prefix *s-

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

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

\[
\begin{array}{cccc}
\text{Prefixes} & \text{Initials} & \text{Vowel} & \text{Suffixes} \\
\text{*N-} & t & y & \\
\text{s-} & a &  & -n/-r \\
\text{?} & d & â &  \\
\text{k/g-} &  &  &  \\
\end{array}
\]

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 单 ‘single; simple’ OC *tân [GSR #147a-d]. (This form is not adduced in Benedict, opera citata.) Starostin (1989: 339) reconstructs it as *târ, 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 \(\neq\) *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).

\[116\] Lest we think all this allofamy is a bit farfetched, think of complex functorial English allofamic sets like one [wAn] \(\neq\) an [æn \(\sim\) n] \(\neq\) only [own-] \(\neq\) onion [æn-]!
(c) \( ^{*}d ay \approx ^{*}t ay \)

Jingpho \( t\ddot{a}i \) ‘single, \( a\ddot{t}\ddot{a}i \) ‘one, as of a pair’, \( g\ddot{u}n\dot{t}\ddot{a}i \) ‘single’, \( \ddot{S}i\dot{g}\ddot{t}\ddot{a}i \) ‘only’ \( \not\approx \)
Jingpho \( d\ddot{a}i \sim d\ddot{a}i \) ‘this, that’, \( d\ddot{a}i \) ‘reflexive pronoun’, \( d\dot{a}i \) ‘navel’;\(^{117}\) Boro \( o t\ddot{a}y \) ‘whole’; Lakher \( d e\ddot{t}i \) ‘only; alone’; WT \( d e \) ‘that one’.

To this group of forms I would now suggest adding Chinese \( r\ddot{g} \) ‘ordinal marker; ‘order; sequel’ [GSR 591e] \( ^{*}d^i a^r /d^i e^i \) : [WHB] \( ^{*}d a^j^? \), which in Han texts was used to write ‘only’ (p.c., Derek Herforth, April 1989). Another possible Chinese comparison is is ‘this (is)’ OC \( ^{*}d^j\dot{e}^g \) [GSR #866a] : [WHB] \( ^{*}d^e^? \) (see above 2.4b).

Lahu \( t\ddot{e} \) ‘one’ could come either from PLB \( ^{*}d a^2 \) or \( ^{*}d ay^2 \), but given the lack of any independent attestation for a final nasal or final \(-r\) in LB, I believe the palatal allofam (PLB \( ^{*}d ay \)) to be correct in this case (see GSTC: 47). Lahu \( t\ddot{i} \) ‘only’, with its high-rising tone bespeaking a \( *\)stopped syllable with preglottalized initial, descends rather from the distinct PLB root \( ^{*}\ddot{d}i\ddot{k}i^k\) \( <\) PTB \( ^{*}s-gyi-k \) \( \not\approx \) \( ^{*}s-dyi-k \),\(^{119}\) 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 \( t\ddot{e} \) ‘one’ I did not recognize until recently, is \( d\ddot{e} \ddot{d}e \) ‘all’, with the voiced initial reflecting a nasal prefix \( <\) \( ^{*}N-day \). The reduplication adds an \( i n c l u s i v e \) increment of meaning, as in many other languages.\(^{120}\) This now goes nicely with the Jingpho proximal deictic \( \ddot{d}a\ddot{t}i \) ‘this’.\(^{121}\)

(e) \( ^{*}k/g-day \)

Jg. \( g\dot{a}d\ddot{a}i \not\equiv k\ddot{a}d\dot{a}i \) ‘who’; Meithei \( k\dot{a}d\ddot{a}y \) ‘where’

117) The STC sets up two roots, SELF [\#284] \( ^{*}t ay \) (why not \( ^{*}d ay \)?) and NAVEL \( ^{*}s-t ay \), 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 \( t\ddot{a}l\dot{i} \) ‘oneself; self’ goes perfectly with WT \( l\ddot{t}e-ba \) ‘navel’, and bespeaks a prefixed allofam \( \ddot{t}-t ay \).

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: \( d\dot{a}i : t\ddot{e} :: \ddot{d}d\ddot{a}i : d\ddot{e} \ddot{d}e : t h a t : o n e :: t h i s : a l l \), where the unprefixed form is EXCLUSIVE-INDIVIDUATIVE, while the prefixed form is INCLUSIVE-INDEFINITE.
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. 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): cho ‘here’, ó ‘there’ (ó ve ‘that’), có ‘way over there’, mò ‘down there’, nó ‘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. 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). 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. He then cooks up such an entity by positising a dissyllabic form *a-ma ‘there’, for which there is no

---

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 *chò, 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 *way.” In point of fact the *wan “etymon” is totally chimerical.
independent evidence.\textsuperscript{126} He then assumes a metanalysis leading to apocope of the final vowel *a-ma > *am-a > *am > Lahu ḍ ‘there’.\textsuperscript{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: nō ‘up there’ < *nam, cō ‘way over there’ < *jam, chō [sic] ‘here’ < chi ‘this’ + am, and—the pièce de résistance—mō ‘down there’ < *mam, called (tongue-in-cheek, one hopes) “a rare example of a non-redundicative auto-allofam” < *ma-ma. Of these putative etyma, *nam, *jam, and *mam have no support whatever. The word for ‘here’, chō, 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.\textsuperscript{128},\textsuperscript{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)aw ‘that’ (pp. 75-76). It seems quite obvious that Lahu ḍ ‘there; that one’ derives from a stressed variant of the latter, distal deictic, i.e. *aw.\textsuperscript{130}

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

*ima-aw > na-o > nō\textsuperscript{131}

chō ‘here’ is very likely derived from chi ‘this’ plus our deictic element:

*chi-aw > chō

About mō ‘down there’ I am less confident. Perhaps there is a connection between it and the noun mi ‘earth; ground’ (DL: 985-989); < PTB *mlay [STC

\textsuperscript{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-ma‘) or ‘what?’ (Lahu a-thò?-ma or a-ma). See (21) above.

\textsuperscript{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 mā ~ ā ‘negative’, lē ~ ē ‘topic-marking particle’, tā ~ ā ‘perfective particle’.

\textsuperscript{128} Examples include PTB *kaw x *gaw ‘call’ > WB khau, Lahu qho [not in STC #14].

\textsuperscript{129} So obvious is this that an Lahu etymologist might say nā-qā-pi ā? tē ā ve ‘it is (as if) pounded into one’s forehead’!

\textsuperscript{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)ay (proximal) / *(h)aw (distal).

\textsuperscript{131} See The Dictionary of Lahu, p. 728. It is possible that there is a Tai connection for this morpheme—cf. Siamese nāa (< PTai *hnaa ‘face; front; ahead of’.
#152], which functions as the “lower correlative” of mū ‘sky; heaven’ in countless Lahu elaborate expressions:
\[*m\text{lay-aw} > mō*

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.\(^\text{132}\)

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’
aiai `incessantly (crying)’
kaiai ‘distended, puffed, swollen’
kaiai ‘oblique, sidewise’\(^\text{133}\)
kaiai ‘bit by bit, by degrees’

\(^\text{132}\) 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.

\(^\text{133}\) Possible Chinese cognates include a number of forms from GSR series #1: 奇 [GSR #1s] ‘strange, extraordinary’ OC *g'ia : [WHB] *gāj ≠ ‘odd (number)’ OC *k'ia : [WHB] *kāj; also 職 ‘slanting’ [GSR #1d'] OC *k'ia ≠ *kīa : [WHB] *kāj ≠ *kāj; 偏 ‘odd (number)’ [GSR #1z] OC *kīa : [WHB] *kāj; and 偷 ‘leaning to one side’ OC *- ia [GSR #1f' ] : [WHB] *ʔaj?
kyai  ‘wide, broad’ ≠
kyāi  ‘wide apart’ ≠
khāi  ‘make wide apart’ ≠
khyai  ‘wide, spread out’
kyāi-kyāi  ‘intensely (sun’s heat)’
khāi  ‘coagulated, indurated’
khyai  ‘flowery, variegated’

khyaï̯-khyaï̯  ‘tremblingly’

ṇai  ‘small, little, inferior’
ñai  ‘leaning, inclined on one side’

tai  ‘very’
tāi-tāi  ‘by a very little’ (≠ tā-tā ‘id.’)
nai̯  ‘loose, not firm’ ≠
hnai  ‘loosen’
pai  ‘broken off, chipped, harelipped’ ≠
phai  ‘break off a small piece’
prai  ‘become weak, waste away, get less vivid or pungent’

crāi  ‘gape, expand, flare’
mai̯  ‘disfigured in face, as when crying’
mai  ‘be wanting, not full’
yai  ‘loose, flimsy’
rāi  ‘bold, courageous’
rāi  ‘bright red color’

rāi  ‘satisfied, contented’
lai̯-lai̯  ‘slightly (of green/blue color; of vigor, liveliness)’
sāi  ‘noisy’
kwāi  ‘divided, split, parted’ (≠ kwa ‘become separate, go apart’)
krwai  ‘having in abundance, wealthy’
khywāi  ‘slimy, sticky’

twāi  ‘hanging, pendent’ ≠
twāi  ‘id.’
nwai  ‘stretched out, as a creeper’ ≠
nwai̯  ‘bent flexibly’ ≠

hnwai  ‘stretched along in connection’ ≠

hnwāi  ‘procrastinate; leaning sideways, inclining’ ≠

hnwai̯  ‘bend flexibly’

phwai  ‘suitable, fit, proper’ (also written bhwai)
phwai  ‘inadhesive, devoid of natural richness’

phwāi  ‘small, fine’

mwāi  ‘gray, dull, faded; exhausted, poor’

ywai̯  ‘distorted, awry’

rwai  ‘of ordinary size; in the prime of life’

134) Cf. Chinese 俄 ‘slanting’ OC *nung [GSR #2h] : [WHB] *nāj. See also Lahu ng ≠ e ‘lean against; recline’ (there is no Lahu syllable *ng).


136) A promising Chinese comparison is 纜 ‘tassel; free-hanging end of band; pennon’ OC *nijwar [GSR 354e] : [WHB] *nūj or *nōj.
rwāi  ‘pensile, as a tear’
hrwāi  ‘soaking wet’
ʔərwai’  ‘irrelevant, annoying’
lwai  ‘easy, yielding’
lwāi  ‘out of the way, variant, contrary’ ×
hlwāi  ‘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)

\begin{align*}
a' & \quad \text{‘dumb’} \\
ä & \quad \text{‘vacant, free’} \\
kə & \quad \text{‘swift’} \\
k̀ & \quad \text{‘divaricate, be stretched’} \\
kyə,kyə & \quad \text{‘loudly’} \\
kyã & \quad \text{‘variegated’} \\
kra & \quad \text{‘be long (time)’} \\
khā & \quad \text{‘bitter’} \\
ta & \quad \text{‘very red’ ×} \\
tya & \quad \text{‘flaming’} \\
tā-tā & \quad \text{‘by a very little’} \\
pā & \quad \text{‘thin, sparse’} \\
pˈe & \quad \text{‘blue’ ×} \\
pˈe & \quad \text{‘dim, as old eyes; gray’} \\
pˈe/bra & \quad \text{‘flat, level’} \\
phə & \quad \text{‘hang loosely’} \\
phə & \quad \text{‘fatigued’} \\
phə & \quad \text{‘fine, gentle (sound)’} \\
ma & \quad \text{‘hard; well, healthy’} \\
mā & \quad \text{‘high, towering’} \\
mˈe & \quad \text{‘cool’} \\
mˈe & \quad \text{‘very sharp’} \\
lˈe & \quad \text{‘thin, flimsy’ ×} \\
lˈe & \quad \text{‘thin’ ×} \\
lˈe & \quad \text{‘oblong’} \\
hˈa & \quad \text{‘handsome, pretty’} \\
hˈa & \quad \text{‘very, excessively’} \\
hˈa ha’ & \quad \text{‘laughingly’} \\
hə & \quad \text{‘lie open, not be quite full’}
\end{align*}

REFERENCES
Baxter, William H.


Benedict, Paul K.


1948 Archaic Chinese *g and *d. HJAS 11: 197-206.


1975 Austro-Thai Language and Culture, with a glossary of roots. New Haven: Human Relations Area Files Press. [ATLC]

1983 This and that in TB/ST. LTBA 7.2: 75-98.

1984 PST interrogative *gu(n)g~*ka. LTBA 8.1: 1-10.


1994a PTB/PST pronominal *-i suffix. MS.

1994b Sino-Tibetan kin term *-i. MS.

Bhat, D.N. Shankara


Bodman, Nicholas C.


Bradley, David


Chao, Yuen Ren


Dai Qingxia, et al.


Davidson, Jeremy (ed.)


Davison, Deborah S.


Dobson, W.C.A.H.
1959  *Late Archaic Chinese: a Grammatical Study*.  Toronto: University of Toronto Press.

1962  *Early Archaic Chinese, a Descriptive Grammar*.  Toronto: University of Toronto Press.


French, Walter T.


Greenberg, Joseph


Grüssner, Karl-Heinz


Hanson, Ola


Hansson, Inga-Lill.


Jäschke, H.A.


Jones, Robert B., Jr.


Judson, Adoniram


Karlgren, Bernhard


1957  *Grammata Serica Recens*.  Stockholm: BMFEA #29.  [GSR]

Kurath, Hans.


La Polla, Randy J.


Li, Fang Kuei


Lorrain, J. Herbert


Malla, Kamal P.


Marrison, Geoffrey E.

Matisoff, James A.


1979 Problems and progress in Lolo-Burmese; Quo Vadimus? *LTBA* 4.2: 11-43.


1990b Siamese jaai revisited, or ¡Ay, madre!: a case-study in multiple etymological possibilities. To appear in Carol J. Compton and John F. Hartmann (eds.), *Festschrift for William J. Gedney*.

1990c The linguist’s dilemma: i/d interchange in Sino-Tibetan. Paper presented at 23rd ICSTLL, University of Texas, Arlington.


1991b The mother of all morphemes: augmentatives and diminutives in areal and universal perspective. In Martha Ratliff and Eric Schiller (eds.), *Papers from the First Annual Meeting of the Southeast Asian Linguistics Society (SEALS)*, Tempe: Arizona State University, Program for Southeast Asian Studies, pp. 293-


1994c Watch out for number ONE: Jingpho ȵai ‘I’ and ɿʑʅ ‘one’ (with some speculations about Jingpho number TWO). *LTBA* 17.1 (To appear.)


Minina, G.F. and U Kyo Zo


Norman, Jerry


Okell, John


Ouyang Jueya and Zheng Aiqing


Pettigrew, Rev. W.


Pulleyblank, Edwin G.


Schuessler, Axel


Sharma, D.D.


Solnit, David


Starostin, Sergej Anatol’evič


Sun Hongkai


Sun, Jackson Tianshin


Thoudam, Purna Chandra

Thurgood, Graham

Wolfenden, Stuart N.

Wu Jingrong (ed.)

Yang Bojun and Tian Shusheng