Journal of Asian and African Studies, No. 29, 1985

God and the Sino-Tibetan Copula
with some good news concerning Selected Tibeto-Burman Rhymes

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FOREWORD

This monograph was summarized orally and circulated in preliminary form at the Sixteenth International Conference on Sino-Tibetan Languages and Linguistics, University of Washington, Seattle, September 15–18, 1983. I would like to thank Professors N. Bodman, Chou Fa-kao, P. Serruys, and K. Takashima for the interesting comments they made at the Conference, and I am grateful to P. K. Benedict, S. DeLancey, and D. Solnit for taking the trouble to send me written comments later.

At the same Sino-Tibetan Conference, Professor Richard Kunst of Duke University presented a concise and cogent paper entitled "A note on several possible cases of the copula *wéi* 隹/*huì* 叀 in the line texts of the *Yijing*." Since this subject is so directly relevant to the concerns of the present monograph, I asked Professor Kunst if I might include it as an Appendix to this published version, to which he graciously agreed (see below, pp. 66–70).

To help the reader pick his way through the labyrinth of forms, an Index of Reconstructed Roots has been added (below pp. 70–78).

I would like to express my deep appreciation to Professor Hajime Kitamura of the Tokyo University of Foreign Studies for arranging for the publication of this monograph. A special word of thanks is also due to my former student, Dr. Yasuhiko Nagano, of the National Museum of Ethnology, Osaka.

March, 1984

JAM
Berkeley

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ABBREVIATIONS

A≵B	A is an allofam of B; A and B are members of the same word family
Ak.	Akha
GL	*The Grammar of Lahu* [Matisoff 1973a]
GSR	*Grammata Serica Recensa* [Karlgren 1957]
ILH	I-L. Hansson [in prep.]
Jg.	Jingpho (= Jinghpaw = Kachin)
KHG	K-H. Grüssner [1978, ca. 1979]
Kmrp.	Kamarupa; Kamarupan languages [see n. 8]
LB	Lolo-Burmese (= Burmese-Lolo)
Lh.	Lahu
LQ	Luquan Lolo [Ma 1949]
Mk.	Mikir
PL	Proto-Loloish
PL	Paul Lewis [1968]
PLB	Proto-Lolo-Burmese
PST	Proto-Sino-Tibetan
PTB	Proto-Tibeto-Burman

ST	Sino-Tibetan
STAL	"Sino-Tibetan: another look" [Benedict 1976]
STC	*Sino-Tibetan: a Conspectus* [Benedict 1972]
TB	Tibeto-Burman
TSR	*The Loloish Tonal Split Revisited* [Matisoff 1972a]
VSTB	*Variational Semantics in Tibeto-Burman* [Matisoff 1978a]
WB	Written Burmese
WT	Written Tibetan

NOTE ON THE TRANSCRIPTION OF TONES

Tones are indicated according to the following sources and conventions: (Akha) Lewis 1968 or Hansson and Matisoff 1979; (Bawm) Schwerli ca. 1979; (Boro) Bhat 1968; (Burmese) □ 'low, clear', □̂ 'heavy, breathy', □̰ 'creaky'; (Hani) Hu and Dai 1964, Gao Huanian 1955; (Jingpho) Maran [in prep.]; (Jino) Gai Xingzhi 1981; (Karen) Jones 1961; (Lahu) Matisoff 1973a; (Laizo) Osburne 1975; (Lisu) Fraser 1922; (Luquan) Ma Xueliang 1949; (Lushai) either as entered by Siamkhima Hkawlhring into a copy of Lorrain 1940, or Weidert 1975); (Meithei) Thoudam 1980; (Mikir) Grüssner 1978, 1979; (Mpi) Srinuan 1976; (Nasu) Gao Huanian 1958; (Tangkhul) Bhat 1969; (Tiddim) Henderson 1965; (Woni) Yuan Jiahua 1947.

1.0 Introduction

There can be no more solemn duty for the comparative linguist than to reconstruct his language family's word for the Supreme Being. Although I did not realize it at the time, the first steps along this pious path were taken at the Sixth Sino-Tibetan [ST] Conference (San Diego 1973), when I informally proposed a relationship between the 'ubiquitous' Lahu [Lh.] particle *ve* (which has both subordinating and nominalizing functions and is used in the citation-form or 'infinitive' of verbs), and the Jingpho [Jg.] forms *ʔāi* 'relativizer; nominalizer; marker of citation-forms of verbs' and *rái* 'copula', setting up a Proto-Tibeto-Burman [PTB] etymon of the shape **way* ≍ **ray*.

There matters stood for awhile, until for some reason I was ruminating about the strange vowel correspondence in the word LAUGH between Written Burmese [WB] *rai* and Lh. *g̈ɛ̀*. Now before I had ever started thinking about the etymology of *ve*, I had twice claimed in print that "final *-i* is the regular Lahu reflex for **-ay*"[1] on the basis of the sets for CRAB, TEN, and TOOTH/TUSK. See Table I.

1) See my portion of n. 81 in [*S*]*ino*-[*T*]*ibetan*: *a* [*C*]*onspectus* (Benedict 1972), p. 25. Also Matisoff 1973a, p. 15: "/i/ . . . is the reflex of **-ay* . . ."

Table I

Gloss	WB	Lh.	PLB
[1] LAUGH	rai	ğ̀ɨ̀	**ray*^{1} (?)
[2] TEN	(tə)chai	(tê)chi	**tsay*^{1} (?)
[3] TOOTH$_1$/TUSK	cwai	cì	**jway*^{1} (?)
[4] CRAB	....	"á-ci-ku"[2]	

/cf. Lushai *ai* 'crab', Tangkhul Naga *khai* 'fish', *khai-reu* 'crab' <PTB **d-k(y)a·y* [STC #51]; see [59] below/

Taking the WB final as faithfully reflecting PLB **-ay*, how to explain the apparently aberrant *-ɨ̀* vocalism of Lh. *ğɨ̀* 'laugh'? It then occurred to me that Black Lahu does not tolerate the sequence */ği/ (nor for that matter the sequence */ğe/),[3] so that there would be no theoretical objection to considering /ɨ̀/ to be the 'regular' conditioned reflex of **-ay* after initial **r-* (> Lh. *ğ*).[4]

In order to confirm this hypothesis, I began to consider other Lahu syllables pronounced /ğɨ̀/. The most interesting of these was the first element in *ğɨ̀-ša* 'God; Creator; Great Spirit', a word I had once regretfully included in the category of 'obscure compounds of religious or mythic import' [GL, p. 60]. Did cognates to this *ğɨ̀-* exist elsewhere in TB that could be derived from a prototype **ray*? The form which immediately leapt to mind was Jingpho *kərài kəsāŋ* 'the Supreme Being, the Creator; the self-existing first cause... invoked only in time of extreme danger or dire calamity' [Hanson 1906/1954, p. 266], which Hanson derived from the verb *rài* 'create'.[5]

2) This Lahu form was elicited on my 1965–6 fieldtrip to Black Lahu [Lâhū Nâ?] villages in N. Thailand, but was amended to *á-cè-gu* by my chief informant in one of these same villages in 1970. This latter form was accepted by my best informant in 1977, who also offered the variant *á-cì-gu*. (I have wondered whether there has occurred some contamination from the etymologically distinct word *á-cè* 'hawk, kite' < PLB **dzwan*^{1}, below [6].) At any rate, words for 'creepy-crawly' creatures like crabs, spiders, dragonflies, etc. show great dialectal variation in languages like Lahu, which makes them tricky to use for comparative purposes.

For CRAB, Bradley [*Lahu Dialects* (1979) #68] has recorded Black Lahu *á-ji-ku* (North Country subdialect); *ci-ku* (Mɔ̂n-pù-lón subdialect); Red Lahu (Lâhū Ní) *á-ci-gu*; Lahu Shehleh *á-ce-ku*; and Yellow Lahu (Lâhū ši) *a-ka-qū* [Bakeo subdialect], *ci-kɔ́?* [Banlan subdialect]. The Mɔ̂n-pù-lón subdialect of Black Lahu is the one on which my Lahu grammar and dictionary are based.

3) See Matisoff 1973a, *The Grammar of Lahu* [GL], p. 9.

4) The symbol /ğ/ stands for the voiced velar spirant [γ] in my transcription. It is the regular reflex of PTB and PLB **r-* [GL, pp. 8–9].

5) Tone-marks are absent from Hanson's classic dictionary. The Jingpho tones in this paper have been supplied by La Raw Maran, either via personal communication or from the MS of his unpublished dictionary [see Bibliography].

The probable relationship between Lh. *ğɨ̀* and Jg. *kərài* had been independently noticed by Bradley, who called the phonological correspondence 'nearly regular' [*op. cit.*, p. 47].

"Self-existing first cause?" Of course! A semantic association between a copula (e.g. Jg. *rái*)—a verb of existence—and the Creator—He who is the Ground of Being for the universe (e.g. Jg. *rài* 'create')—is an extremely natural one, with parallels all over the world.[6]

If this comparison is valid, we now have two examples of **ray* > Lh. *g̈i̊*:

[1] LAUGH: WB *rai*, Lh. *g̈i̊* < PLB **ray*[1]
[5] COPULA$_1$/CREATOR: Jg. *rài* 'copula', *kərài(-kəsāŋ)* 'Creator', Lh. *g̈i̊(-ša)* 'id.' <PTB **g-ray*.

A key problem remains, however. As indicated above, we had long ago followed a hunch and posited an allofamic relationship between the Jg. copula *rài* and the particles Jg. *ʔāi*/Lh. *ve* (<PTB **way*) 'nominalizer; subordinator; verb citation-form marker'. If this hunch were correct, Lahu *ve* and *g̈i̊(-ša)* would now both have to be derived from a prototype in **-ay*. But what independent evidence is there that **-ay* could become *-e* in Lahu (as it presumably did in *ve*)? So far the only Lahu reflexes of **-ay* we had observed were *-i* and *-i̊*. Yet the 3 examples of **ay* > Lh. *i* were all after *palatal initials* (TEN, TOOTH, CRAB [2–4] above). This at least left open the possibility that **-ay* could have developed into Lh. *-e* after *non-**palatal *non-**r initials, thus:

PTB **-ay* > PLB **-ay* > Lh. *i̊/g̈* _____
> Lh. *i/c, ch* ____
> Lh. *e*/_____ .

Desiring to test this hypothesis, I started looking for new TB roots in **-ay* that might have a Lahu reflex in *-e*. This search has turned out to be more successful than I had dared to hope. Below I present evidence for well over a dozen new etyma of this type.

Two excellent and provocative articles have just appeared which are directly relevant to the issues raised in this paper. In "The Sino-Tibetan copula **wəy*" (1982), Thurgood explicitly rejects my suggestion of putting **way*[7] and **ray* into the same word-family (p. 72). And in "*This* and *that* in Sino-Tibetan" (1983), Benedict tries to derive Lh. *ve* from **wan* rather than from **way*

6) As is well-known, the euphemism substituted by the ancient Hebrews for the ineffable name of God was the "Tetragrammaton" YHWH (the original 'four-letter word'!) conventionally vocalized as Yahweh or Jehovah, which is derived from the Hebrew copula, whose root-consonants are H-W-H or H-Y-H. When asked His name, God replies 'I am that I am' [*Exodus* 3:14].

7) We shall discuss below [5.11] whether the proto-rhyme should be **-ay* or **-əy*.

(pp. 85–6). In what follows, I hope to demonstrate, in all humility, that on these points God knows they are wrong and I am right.

* * *

Our argument will proceed on two fronts: comparative-phonological and semantic. We will explore the PTB rhyme **-a(·)y* and its close relatives (**-ey, -oy,* etc.), using the STC as our point of departure, but also presenting a large number of new etymologies for the first time. Since the rhymes **-an, *-at,* and **-i·t* are also relevant, they will first come in for their share of attention as well. The discussion will depend to a large extent on data from the 'Kamarupan'[8] languages, since it is in the Western branches of TB that the PTB diphthongs seem to be best preserved.

Finally, we shall zero in on the morphophonemics and semantic interconnections of the TB copula, in both its secular and divine aspects.

2.0 Previously recognized sources of Lahu -e: PTB/PLB *-an and *-at

In his valiant but quixotic attempt to derive Lahu *ve* from **s-wan,* Benedict (1983, *loc. cit.*) quotes *The Grammar of Lahu* (p. 15):

> "/e/ [comes] from PLB */an wan at wat/".

As far as it goes, this is a perfectly true statement—and in fact it is 'truer' today than ever before. Where once I only had a handful of examples of **-(w)an* > Lh. *-e,*[9] the present study has unearthed a dozen more. (It is just that this is not the whole story—Lahu *-e* is also the chief reflex of **-ay*![10])

2.1 The fate of *-an in Lahu

Of the 10 sets reconstructed with the rhyme **-an* in STC, only one has a Lahu cognate:

[6] HAWK/KITE: PLB **dzwan*^{1} > WB *cwan,* Lh. *á-cè./*STC also cites Atsi *tsûn,* Lisu *dzyē*^{4}, and Chinese 鳶 [GSR 230a] **d̥iwan/i̯wän* [pp. 49, 169, 190]; to these we may add 3 Southern Loloish forms: Akha [ILH] *xhà-dzé,* Mpi *te*^{6}*-mo*^{4}, and Jino *tsø*^{5}*-mɔ*^{3}*/*

8) The term "Kamarupan" (from the Sanskrit Kāmarūpa, an old name for Assam), is adopted in Matisoff [in prep.$_2$] as a neutral overall designation for the TB languages of NE India and adjacent areas that belong to the Kuki-Chin-Naga, Barish (=Bodo-Garo), and Abor-Miri-Dafla groups (or that remain imprecisely classified, like Mikir).

9) Especially HAWK and SLAVE (below [6] and [8]).

10) Benedict is of course hardly to be blamed for jumping to the conclusion that */an wan at wat/* were the *only* sources of Lahu *-e,* since on the same page I had claimed flatly that Lahu *i* is 'the reflex of **-ay*'. [See note 1, above.]

In another important set, PLB *-*an* derives from an older PTB *-*ar*:

[7] LOUSE: PTB **sar* [STC pp. 15, 53, 84, 147, 172, 189] > PLB **san*$^{1/2}$. Lh. *še,* Akha *shé-mɔ́,* and Mpi *se*^{6} reflect PLB Tone *1, while WB *sân* [mis-cited in STC pp. 15, 84 as *san*] is from a Tone *2 variant. Note the difference in the Akha reflex from that in HAWK.

The following ten etyma (sets [8–17]) do not appear in STC. In all of them it is clear that the proto-rhyme is *-*an* or *-*wan,* and Lahu has the reflex *-e*. In some cases the etymon has not yet been traced outside of Lolo-Burmese [LB], but 4 or 5 can already be reconstructed at the PST level.

[8] SLAVE: PLB **gywan*^{1} > WB *kywan,* Lh. *cè, ɔ̀-cè*. Luce (1981) compares the WB form to WT *khol-po* 'servant' (fem. *khol-mo*) and Chinese 宦 **g'wan* [GSR #188 a] 'servant, officer, official' < PST **k(y)wal* ≳ **g(y)wal*. [See Matisoff (1983) "Review of Luce", set #73.]

[9] SHARPEN/MAKE A POINT: PLB **kywan*$^{1/2/3}$ > WB *khywan* 'make pointed, sharpen; sharp, keen', *ʔəkhywan* 'end of sthg. sharp' [< Tone *1], *khywân* 'naturally pointed', *khywân* ~ *khrwân* 'goad for elephants' [<*2]; Akha [ILH] *tjhɛ* (mid-tone) and Mpi *tɕhe*^{3} both reflect Tone *3; Lahu *che* (mid-tone) may reflect either *1 or *3.

[10] FILTER/CAUSE TO REMAIN: PLB *(ʔ-)*gyan*^{1} ≳ **kyan*^{1}.
(a) **gyan*^{1} > WB *kyan* 'remain, be left'
(b) **ʔgyan*^{1} > WB *khyan* 'leave, let remain'
(c) **kyan*^{1} > Lh. *che* 'strain, filter'.
/The WB forms are a simplex/causative pair./

[11] STRETCH OUT$_1$: PLB *(ʔ-)*dzan*^{3} ≳ **tsan*^{3}.
(a) **dzan*^{3} > WB *can'* 'stretched out, lengthened'
(b) **ʔdzan*^{3} > WB *chan'* 'stretch out straight, lengthen sthg'
(c) **tsan*^{3} > Lh. *che* 'stretch out, extend, stick sthg out (e.g. leg, arm, tongue)'.
/The WB forms are a simplex/causative pair. Lahu also has a synonym *qhe* 'stretch out (as stiff arms or legs or an animal skin) [implies more tension than does *che*]; see [12], below./

[12] OBJECT TO/OPPOSE: PLB **k(y)an*^{1or3} ≳ **tšan*$^{1/3}$ (ʔ)./WB has *chan* (< Tone *1) 'contravene authority; go upriver, go against the wind' and *chan'* (< Tone *3) 'contrary, opposite, adverse'; Lahu has *que* 'object to sthg, oppose smn., apparently reflecting **kan* (< Tone *1 or *3). The initial correspondence is irregular (we would expect Lh. *che*)

and inexplicable (but cf. the Lh. *che* ~ *qhe* alternation in [11]). The reconstruction here remains uncertain.

[13] HAZE/FOG: PTB **d$^{\check{}}$an* > Lh. *cè* 'colored haze' (PLB Tone *1) in *mû-ni cè ko ve* 'for the sun to be encircled by a colored haze', P Karen **jan* 'brouillard' [Haudricourt 1946, p. 107].

[14] ARROW: PTB **ʔ-dzan* > Lh. *khá-ce* [1st. syll. < *khâʔ* 'crossbow'; the mid-tone of *-ce* points to a PLB *preglottalized initial], Proto-Northern Naga **(la-)dza·n* (Moshang *la-san,* Nocte *lat-chan,* Wancho *san,* Konyak *la-han*; the 1st. element means 'bow' [French 1983, p. 448]). /French etymologizes this compound as "bow-children", with the 3nd. element < PTB **(d)za* 'son, child' [STC #59] + collective **-n* suffix [STC n. 284, p. 99]. If this is correct it would add still another allofam *ce* (< PLB **dza-n*^{1}) to a Lahu word-family already comprising *yâ* 'child, son' (< PLB **za*^{2}), *šā* 'sibling's child' (< PLB **sa*^{2}), and *cà-* 'prefix to male names' (< PLB **dza*^{1})./

[15] SPREAD WIDE/STRETCH OUT$_2$: PTB **p-ran* ≷ **p-yan* > PLB **(ʔ)bran*^{3} ≷ **pran*$^{3/1}$ ≷ *ʔwan*^{lor3}.

(a) WB has a simplex/causative pair: *pran'* [< PLB **bran*^{3}] 'be expanded, spread out, level', *phran'* [< PLB **ʔbran*^{3} or **pran*^{3}] 'spread out, expand; spread wings'.

(b) Lahu *phe* [< PLB **pran*^{3} or **pran*^{1}] 'spread sthg out (blanket, cloth, one's palm)', *mû-phe* 'sky' ("sky-spread"?); also *fe* [< PLB **ʔwan*^{lor3}] 'wide'. Mpi has *phe*^{5} [< PLB *1] 'wide'.

(c) Jingpho *phyàn* [Hanson] 'spread wings, as a bird', [Maran] 'spread wide; open, unroll, and flatten out' (Maran adds "SYNONYM: *phran*" [tone not indicated]), *pyān* 'grow, unfold and flatten (as a leaf)', *phrān* [Maran] untie a knot; (fig.) untangle a knotty problem', *yàn* [Hanson] 'unrolled, unwound, spread out (as a bundle)'.

[16] STRONG/FIRM/STEADFAST: PTB **b-tsan* > PLB **zan*^{1}. WB *san* 'strong, vigorous', Lh. *yè* 'durable, strong, firm; steadfast' [< PLB **zan*^{1}; WB *s-*/Lh. *y-* are the regular reflexes of PLB **z-*].

An older affricated initial is implied by WT *btsan-po* 'strong, mighty, powerful; firm, staunch, immovable; safe, sure; definite, decided' and P Northern Naga **jan* (cf. Yogli *a-tsan* 'hard', Nocte *can* 'difficult', *a-can* 'hard', *lo-can* 'strong' [French, *op. cit.* p. 497]).

[17] DHOLE/WOLF/WILD DOG: PTB **kywal* > PLB **wan*^{1}. Lh. *vè*

'dhole' (*Cuon javanicus*), Jino Ø[4] (glossed 豺狗 in Gai Xingzhi 1981, p. 67), and Akha [ILH] *xhà-jé*, [PL] *k'a‿yeh*˘ 'wolf' point to PLB **wan*[1]. /This set is particularly interesting, since the Lahu cognate looks superficially so similar to our particle *ve* (< **way*, below 5.11)./

French [*op. cit.*, p. 576] reconstructs a P Northern Naga root **C-khyual* on the basis of Wancho *šan* 'wolf', Konyak and Phom *šo* 'id.', Chang *šo* 'wolf', *šuo* 'wild dog'. To these Benedict [p.c. to French] compares Jg. *čəkhyōn* 'fox, wolf, wild dog', setting up PTB **kywal*.

The Loloish forms indicate that the velar element in the initial was prefixal.[11),12)]

2.11 An apparent exception explained: Lh. šū 'onion, garlic'

The STC sets up a PST etymon **swan* 'garlic' on the basis of WB *krak-swan* and Chinese 蒜 **swân/suân-* [GSR #175 b]. Lahu *šū* 'onion, garlic' (appearing in such compounds as *šū-qō* 'leek' ["hollow onion"], *šū-phu* 'onion' [cf. *phu* 'tuber'] and *šū-phu-nù* 'garlic' [cf. *nù* 'to stink']), has always been a puzzling form, since there are no other examples of **-wan* > Lh. *-u*.

This anomaly may now be satisfactorily explained by assuming that the **-n* is suffixal. This is justified by the fact that Lh. *-u* is the regular reflex of PTB/PLB **-wa*, a Lautgesetz for which I have so far found three solid examples:

'cattle$_1$' PTB **ŋwa* [STC #215] > PLB **nwa*^{2} > WB *nwâ*, Lh. *nû*
'span' PTB **m-twa* [STC #165] > PLB **twa*^{1} > WB *thwa*, Lh. *thu*
'tooth$_2$' PTB **s-wa* [STC #437] > PLB **swa*^{2} > WB *swâ*, Lh. *-šū*
'tooth-like part of tools' (e.g. *pī-kâ?-šū* 'tooth of a comb', *lí-lə-šū* 'saw-tooth', etc.).[13)]

The Lahu morpheme *šū-* 'onion, garlic' is thus a perfect homophone of *-šū* 'toothlike part', both < **swa*^{2}.

Perhaps it is not too far-fetched to suppose that the *-n* in the WB and Chinese words for GARLIC is still another instance of the 'collective *-n* suffix' [STC n. 284, pp. 99–100]—after all, garlic (as opposed to onions) is composed of multiple discrete cloves.

11) For discussions of the 'velar animal prefix', see Matisoff 1969 (pp. 190–99) and STC n. 301 (p. 107).

12) It is tempting to try to bring in Chinese 犬 **k'i̯wən/k'iwen* 'dog' [GSR #479a–d] here. STC treats this as cognate to PTB **kwiy* [#159], with a 'collective' dental suffix (pp. 157, 158). (It should be pointed out that such a suffix is more appropriate for wild dogs or wolves, which run in packs.) My own feeling (which there is no time or space to justify here), is that PTB **kwiy* and **kywal* are themselves ultimately related.

13) It will be remembered that the ordinary Lahu word for 'tooth' is *cì* < PLB **jway*^{1} ([3] above).

We should thus set up PTB **swa-n,* with the Lahu form deriving from the unsuffixed root.

2.2 The fate of *-at in Lahu

As demonstrated in TSR (Matisoff 1972a), the regular Lahu reflex of the stopped rhyme **-at* is also the mid front vowel *e,* with the former final stop **-t* transphonologized as one or the other of the two checked tones, high-checked ˆʔ or low-checked ˋʔ, thus *-éʔ* or *-èʔ*.[14]

2.21 Etyma in *-at which appear in STC

[18] BREAK IN TWO/CUT THROUGH/CONCLUDE.
A PTB root **tsyat* is set up in STC #185 on the basis of forms from only two languages, WT *gtśod-pa* (perfective *btśad*) and Lushai *tśat* 'break, cut'.

To these may be added WB *chat* 'brittle' and the forms assembled in TSR #40, reflecting PLB **C-tsat,* especially Lh. *chêʔ*.

As suggested already in Matisoff [1980a pp. 27–8], I would also like to bring at least two Chinese forms into this word family: 絶 **dz'i̯wat/dz'i̯wät* [GSR 296 a] 'cut off, break off' and 脆 **ts'i̯wad/ts'i̯wäi-*[GSR 296 c] 'brittle'.

[19] LEECH: PTB **r-pat* [STC #45] > PLB **k-r-wat* [TSR #167] > P Loloish **wat.* A better PTB reconstruction might be **p-wat* ≷ **k-r-wat.* To the forms assembled in STC (#45 and n. 78) (WT *srin-bu pad-ma,* Lushai *vaŋ-vat,* Rangkhol *ervot,* Jg. *wòt,* etc.) add Mikir *ingphat,* and a Northern Naga group (Moshang *tawat,*[15] Nocte *wa-vot* ~ *sa-vot,* Wancho *vat,* Chang *wat* [French, *op. cit.,* p. 507]).

WB has a doubly prefixed form *krwat,* but Loloish (and most N Naga languages) reflect the unprefixed prototype **wat* (e.g. Lahu *vèʔ*).

[20] FLOWER: PTB **bwat* [STC p. 24] > PLB **sə-wat* [TSR #185]. The **sə-* prefix (which I posit to account for the Loloish forms in the HIGH tonal class, e.g. Lh. *vêʔ*) is a reduction of the morpheme 'tree' (PTB **sik* ≷ **siŋ* [TSR #118, STC #233]), as in Trung *śiŋ-uat,* Lisu *si₂-vé₃,* Lh. *śí-vêʔ*.

14) Which is the two checked tones a syllable acquires is determined by the voicing or voicelessness of its initial consonant(s), as explained in TSR [passim].

15) The dental prefix in Moshang is paralleled in other TB languages, including Nung *dəphat~phəphat* [STC p. 24] and Karenic (Taungthu *təwaʔ*, Pwo *θəwaʔ*, Sgaw *θuʔ*) [STC n. 357, p. 132].

[21] KILL: PTB *g-sat* [STC #58] > PLB **C-sat* [TSR #124]. Lahu has no reflex of this etymon, otherwise very widespread in TB (e.g. WT *gsod* [pf. *bsad*], WB *sat,* PN Naga **ʔsot* [French p. 504]), with a solid Chinese cognate 殺 **săt/ṣăt* [GSR #319 d].

[22] FREE/RELEASE/LOOSE/SLIPPERY: PTB **g-lwat* (≷ **s-lwat* ≷ **ʔ-lwat*) [STC #209] (cf. WT *hlod-pa* 'loose, relaxed', *glod-pa* 'loosen, relax, slacken'; Jg. *lòt* 'escape, be free, unrestrained,' *šəlòt* 'set free') > PLB **k-lwat* ≷ **g-lwat* ≷ **ʔ-lwat* (cf. WB *lwat* 'be free', *hlwat* (<**ʔlwat*) 'free, release' and *kywat* (< **glwat*) 'loosed, freed', *khywat* (<**ʔglwat*) 'release, free').

This set does not appear in TSR, though I have subsequently uncovered several Loloish cognates, including Lh. *lêʔ* 'to slip; be slippery, smooth (of objects); free-flowing (of a liquid); glib, smooth-tongued (of a person)' [< **k-lwat*], *lèʔ* 'remove sthg from its place; withdraw oneself; release from (an influence or power)' [< **lwat*]; and Akha [PL] *leh^* 'take off an article of clothing' [< **k-lwat*].

[23] DEER (SAMBAR): PLB **tsat* > WB *chat,* AK. *tseh^*, Lisu *htsye*[2] [TSR #10] (no Lahu cognate).

STC #344 relates the WB form to WT *btsod* ~ *gtsod* 'Tibetan antelope' < PST **tsot,* though as Benedict implies (p. 73), **-ot* had already merged with **-at* by PLB times.

2.22 Etyma in **-at* which appear in TSR (but not in STC)

[24] ALIVE: PLB **dat* > Lh. *tèʔ* Akha [PL] *deh^* [TSR #1]. /As illustrated by this example, the regular Akha reflex of **-at* is *-eh^* [PL]/ *-èq* [ILH] for LOW-toned syllables, and *-eh^* [PL]/*-éq* [ILH] for HIGH-toned ones./

[25] BITE DOWN ON: PLB **Ȼ-tsat* > Lh. *chèʔ*, Ak. *tseh^* [TSR #24].

This root may now be reconstructed for PTB, thanks to some newly discovered N Naga forms: Wancho *tsat,* Konyak *jei* < PNN **tsat* [French, p. 455].

[26] VOMIT: PLB **C-pat* > WB *phat,* Lh. *phèʔ*, Ak. *peh^* [TSR #38].

This root must now definitely be reconstructed for TB as a whole, as PTB **m-pat*: Abor-Miri *bat,* Jg. *ǹ-phàt,* Gyarong [Nagano 1983] *mphat.*[16] It also turns up in N Naga: Yogli and Konyak *phai,* Nocte *phat* [French, p. 570].

16) The nasal prefix attested by Jg. and Gyarong was evidently not applied to this root in Loloish, since **mp-* yields the voiced stop *b-* in Lahu [TSR pp. 15–16].

2.23 New etyma in *-at (appearing neither in STC nor TSR)

[27] CUT OPEN: PLB *(ʔ-)*brat* ≋ **C-prat*.
(a) **brat* > WB *prat* 'be cut in two'
(b) **ʔbrat* > WB *phrat* 'cut sthg in two'
(c) **C-prat* > Lh. *phèʔ* 'cut open; perform a surgical operation'.
/The WB forms are a simplex/causative pair./

[28] FLAIL/FLAP: PLB **pat-* > WB *phat-lat* 'loosely and flappingly' (usually reduplicated as *phat-lat-lat* or *phat-lat-phat-lat*), Lh. *phêʔ-dɔ̀* 'thrash around, flail about, struggle (as when resisting capture)', *phêʔ-phêʔ-tɛ̂ʔ-tɛ̂ʔ* 'moving the hands and feet restlessly; fidgety, squirming'.

[29] STICK INTO OPENING: PLB **swat* > WB *swat* 'put into a small opening (as a letter into an envelope)', Lh. *šêʔ* 'put on/wear socks or leggings', *khɨ-šêʔ* 'leggings, gaiters, puttees'.

[30] SMELL/ODOR: PTB and PLB **bat* > Jg. *bàt* 'odor; any kind of smell, fragrant or offensive', Lh. *ɔ̀-pèʔ* 'a smell', Ak. [PL] *beh^-la^* 'to smell'.
/cf. also perhaps WB *pwat-sui-na* 'disease affecting the nose' (given as a synonym of *phwat-cəʔui-na* in Judson, p. 705)/

[31] WIND AROUND/CONNECT BY ARCHING: PTB **bat* > Jg. *bàt* 'wind around', WB *pat* 'wind around, encircle' (the Jg/WB comparison was already made in Hanson p. 61).
Hanson explicitly (pp. 61, 114) derives from this root Jg. *dīŋ-bàt* 'crossbar, stringer, beam; arch, space, as between two posts and a top-bar; the bow (as of a crossbow)', which surely goes with Ak. [PL] *beh^* 'rafter that goes lengthwise on the posts at side of house'.
As suggested in Matisoff 1974 (#346) the probable Lahu cognate is *pêʔ* 'classifier for strips/pieces of land; slice, piece'.

2. 24 Etyma in *-at where Lahu has developed a central vowel

In four important cases, all of them involving initial **w-* or medial **-w-*, the Lahu reflex of **-at* is not *-eʔ*, but rather a central vowel: *ɨʔ* or *əʔ*.

[32] WEAR (CLOTHES)/DRESS (SMN): PLB **wat* [STC p. 24, n. 78] > WB *wat*, Atsi *vut*.
In TSR #181, Lh. *vəʔ* 'wear' (simplex) and *fɨ* 'dress smn, put smn's clothes on him' (causative), along with Lisu *rgh*$_6$ [ɣ$_6$], Sani *vi* 22s, Luquan *i* 55, Nasu *vi* 55, and Ahi *vi* 44s (simplex), *fi* 55 (causative), are derived from "PLB **wik*/**ʔwik* or **wit*/**ʔwit*", and declared

to correspond irregularly to WB *wat*.

To these puzzling forms we may now add Akha [ILH] *zýq* 'wear (archaic)', also with a central vowel.[17] (It will be remembered that the normal Akha reflex of *-at* is *-éq/èq* [ILH], *-eh^/-eh_^* [PL].)

Cf. also Gyarong *wat* (Nagano 1983 #321).

[33] PLUCK: PLB **ʔcwat* [TSR #57] > WB *chwat* 'pluck, gather, as flowers or fruit'; Lh. *cɨ̂ʔ* 'pinch (between the fingers), pluck', *g̈âʔ-mu cɨ̂ʔ ve* 'pluck a chicken's feathers', *ɔ̀-vêʔ cɨ̂ʔ-g̈ɔ̀ ve* 'pluck a flower'; Ak. [PL] *ci^* 'dress a fowl or animal before roasting, by pulling out feathers or scraping off fur'.

Again note the peculiar Akha reflex, this time *i^*. Mpi has two forms for 'pluck', *tɕhuʔ*[3] and *tɕe*[3] [Matisoff 1978b, p. 12]; the latter has the 'correct' Mpi vowel reflex for **-at* (i.e. *e*) but is irregular in that it has no glottal stop.

[34] HUNGRY: PLB **mwat* [TSR #132] > WB *mwat*, Ak. [PL] *meh_^* (this time the 'regular' reflex!), but Lh. *mə̀ʔ*.

Several forms seem to point to an alternant with *-y-* semivowel: **myat* (Ahi *ni* 44s, Sani *n̥* 22s, Hani (Gao Huanian) *mie* 33, Nasu *ñi* 55) though we still know too little about the historical phonology of these languages to be sure.

Another related WB form (lacking in TSR)[18] is *ŋat*, as in *re ŋat* 'thirst for water', *cha-ŋat* 'be hungry or thirsty, be in want of food' (same as *cha-mwat*), *ŋat-mwat* 'id.'

We now wish to reconstruct this word-family as PLB **mwat* ≋ **ŋ(w)at*.

[35] STAR$_1$/MOON. PST and PTB **s-ŋwat* > PLB **mwat* > Lh. *mə̀ʔ(-kə)* 'star'.

This etymon is the chief focus of discussion in 'Stars, moon, and spirits: bright beings of the night in Sino-Tibetan' (Matisoff 1980a), where the first syllable of the Lahu form is brought into direct comparison with Chinese 月 **ngi̯wat/ngi̯wɒt* [GSR 306 a-f] 'moon' and such TB forms as Angami Naga *thèmvə̌* 'star'.

Although all four of these sets are reconstructed with prevocalic **(-)w-* (in the case of WEAR, **w-* is the root-initial consonant; in the other three **-w-* is

17) I-L. Hansson's *-ẏq/-ỳq* corresponds to P. Lewis' *ui^/ui_^*, i.e. [ɨʔ]. Note that this Akha form is in the LOW-stopped tone, while all those assembled in TSR #181 reflect **HIGH-stopped tone.

18) It is discussed in Matisoff 1980a (pp. 22–3) for the light it sheds on the etymon STAR (see below [35]).

a medial glide), this cannot be the conditioning factor for the peculiar vocalic reflexes, since in other such etyma Lahu has the normal *-e?* reflex: in [19] LEECH (*vè?*) and [20] FLOWER (*vê?*), **w-* functions as the Loloish root-initial; while in [22] FREE/SLIPPERY (*lê?*) and [29] STICK INTO OPENING (*šê?*), **-w-* is a medial glide.

Rather than offer some *ad hoc* explanation (e.g. positing a length distinction between **-(w)at* (> Lh. *e?*) and **-(w)a·t* (> Lh. *ɨ?/ə?*), for which there is no independent evidence, it seems best merely to identify this problem without trying to solve it now.[19]

2. 25 An obvious recent loanword: nâ? 'gun, rifle'

The Lahu word *nâ?* 'gun, rifle' is clearly a recent loan from some other language, both on extralinguistic and comparative phonological grounds. This word appears in Mon-Khmer (Mon *sənat* [Shorto 1962, p. 196], Khmu *snàat* [Smalley 1961] and in many other TB languages (WB *senat* 'musket, fowling-piece', Jg. *sənát*, Pa-O Karen *tənàt* [Solnit], Bisu *suŋ-hnat*, Phunoi *šiŋ-dat* [Bradley 1979 a, #267]), with all forms pointing to an **-at* final. The Lahu high-stopped tone reflects the *s-* prefix (cf. **s-nak* 'black' > Lh. *nâ?* [TSR #142]), but the word was obviously borrowed into Lahu after the **-at* > *e?* shift had occurred.[20]

2. 3 Word families showing **-an* ≷ **-at* variation

A number of interesting sets display variation between the homorganic rhymes **-an* and **-at*. Among the five we shall discuss in this section, the Lahu cognate reflects **-an* in two cases (SPIRIT, BRAID/INTERWEAVE); in two others a Lahu form is lacking (RUN/DANCE/KICK) or seems to reflect neither **-an* nor **-at* (LOAD/BURDEN); and in one case (POUR/SPILL/SOW BROADCAST) Lahu preserves a distinct reflex for each of the two proto-allofams.

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19) Note that there is nothing about the initial consonants to account for the non-occurrence of *-e?* in our four sets, since syllables like *me?*, *che?*, and *ve?* do occur in the language [see LEECH, FLOWER, and the discussion of **-i·t*, below 3. 0]. (This is different from the case of LAUGH (above [1]), where the Lahu form *ğì* was justified on the grounds that no Lahu syllable **ğe* or **ği* occurs.)

The double reflex *-ə?/-ɨ?* in these sets is not a problem. There is a very low functional load to the *ə/ɨ* contrast in Lahu checked syllables. (Note that both vowels occur in the allofams of [32] WEAR/DRESS, *və̀?* and *fɨ́*.) Certain initial consonants (e.g. *v-*, *ğ-*, *m-*) only occur with *-ə?* but not *ɨ?* in native words, while certain others (e.g. *f-* and the palatals *c- ch- j- š- y-*) only occur with *ɨ?* but not *ə?*.

20) The ultimate source of this loan has been a problem. Bradley (1979a, p. 318), claims it is from Malay, but later (1982) relates it to the mysterious Wanderwort meaning "crossbow" that is found in so many language families (e.g. Chinese 弩, PTai **hna*, Vietnamese *nỏ*, Nung (TB) *thəna*, Moso *təna*). [see Benedict 1975, pp. 309–10]. Actually, however, as Gérard Diffloth suggests [p.c. 1985], our word is probably from Portuguese *espinharda* ("the spiny one"), presumably a 16th century soldiers' slang term for "musket."

[36] SPIRIT/DEMON$_1$/ANIMIST DEITY: PLB **nan* ≷ **nat* [TSR #136]. Lh. *nê* reflects PLB **nan*^{2}, as do Sani *ni*^{55} and Lisu *ni*^{5}; while Jg. *nát*, WB *nat*, Ak. [PL] *neh*$_{\wedge}$, Woni *ni*^{33}, and Nasu *nɛ*^{55} point to the allofam **nat*.

Both the *-t* and the *-n* in this etymon may be suffixal, ultimately deriving from **na* 'ill; pain' [STC #80] (> PLB **na*^{1} > WB *na*, Lh. *nà*).

Chinese 難 **nân/nân* [GSR 152 d-f] 'difficulty, suffering' descends from the same nasal-finalled allofam as the Lahu form.[21]

[37] BRAID/PLAIT/INTERWEAVE: PLB **pan*$^{1/2}$ ≷ **Ø-pat*. Lh. *phê* 'braid, plait' reflects PLB **pan*^{2}, while Mpi *phe?*^{1} could derive from PLB **Ø-pat*.[22]

Possibly related to these forms are WB *phan* 'shuffle cards' (i.e. "interweave cards") [< PLB **pan*^{1}] and *bhân* 'shallow basket' (<PLB Tone *2, with orthographic initial unexplained).

[38] LOAD/BURDEN/TRANSPORT: PTB **wan* ≷ **wat*.

French [*op. cit.*, p. 459] sets up a PNNaga root **wən* 'bring, take', which shades into the meaning 'load, cargo, stuff, what one brings or takes along' (e.g. Chung *o-on* ~ *u-wan* 'load, burden'). Benedict has suggested [p.c. to French] relating these forms to WB *wan* 'load' and WT *ḥon* 'bring', setting up PTB **wan*.

I would now like to develop this word-family further by positing an allofam **wat* underlying Tangkhul Naga *wot* [Bhat] 'thing' = *ot* [Pettigrew] 'work, subject, substance, service' [Pettigrew gives *ot* as the Tangkhul gloss for 'load' in the English-Tangkhul part of his dictionary, p. 163], *ot kaphei* 'unload' (*kaphei* 'dismantle').

The Lahu word for load, *vɨ̀*, has the 'correct' initial correspondence to WB *w-*, but the rhyme *-ɨ̀* cannot be derived from **-an*. (See [17] DHOLE: PLB **wan*^{1} > Lh. *vè*.) Lahu *vɨ̀* could derive from PLB

21) See STC p. 159 and Matisoff 1978a ("VSTB") p. 28, pp. 110–111 (incl. Figure 7), and notes 140, 141 (pp. 254–5).

22) We need to posit the voiced consonantal prefix "*Ø-*" to account for Mpi tone 1, which reflects the *LOW stopped tone. The Mpi form (contra Matisoff 1978b, p. 26) could not come from **bat*, since that would give Mpi non-aspirated *p-*.

Benedict (p.c.) cites cognates from Kamarupan languages (Lushai *phăn* 'knit, crochet, net', Tiddim *phan* 'weave, plait', Garo *pan?* [note final occlusion!] 'wind into a ring or spiral', Boro [Bhattacharya] *phan* 'twist', [Bhat] *pán* 'clear entangled thread on loom'), and suggests a relationship with WB *pân* 'go around the end of a thing'. In STC (n. 460, p. 173), the Chinese cognates of this widespread root are given: 辨 **b'i̯an/b'i̯än* [not in GSR #219] 'braid, plait' and 編 **pian/pien* 'plait, weave' and **b'i̯an/b'i̯en* 'arrange in series' [GSR #246e].

**wiy*^{1} (*cf.* [5.11] FAR: PLB **wiy*^{2} > Lh. *vî*), but at the moment it seems doubtful that this is relatable to WB *wan*. On the other hand, Sgaw Karen *wi* 'classifier for loads carried on the back' [Jones 1961, p. 20] looks directly cognate to the Lahu form.

[39] RUN$_1$/DANCE/KICK. PTB **k(y)at* ≳ **gan*.

In TSR #18, I set up a PLB etymon **kyat* 'run' on the basis of Ak. [PL] *ceh^*, [ILH] *tjéq*, Lisu *hchye*$_2$, and Sani *cɛ*$_{44}$, remarking that "extra-Loloish" forms like Bodo *khat*, Garo *kat*, Mikir *kát*, Jingpho [Hanson] *gàt* 'run', *kəgàt* 'flee', [Hertz *pəgat*], reflect an alternate prototype without *-y-*, **kat*.

I now see that I had conceived of the semantic scope of this etymon too narrowly as 'run, flee', and that its range extends over several types of vigorous foot-action, including dancing and kicking. We may now set up the allofam **kat* at the Loloish level as well, as reflected by the 2nd. syllable of Lahu *qāqhê*$^{?}$ 'dance' (1st. syll. prob. ≳ Lh. *qa* 'sing; play'). We can also bring in some new Jingpho allofams with *kh-* (along with the perhaps 'secondarily' voiced *gàt*, etc.): Jg. *khàt*, *ləkhàt* 'kick, as a horse', *khàt-khàt* 'to "show the heels"; to hurry (also used adverbially)'.

Finally WB *kan* 'to kick; kick back, rebound (as a gun when fired); push off (as a boat from land); prop laterally' suggests that we should also set up a nasal-finalled allofam **gan*. The semantic development here seems to be into '(sudden) lateral action', and we may perhaps also include in this family WB *kan'* (< Tone **3*) 'mark across, intersect, thwart of a boat', *əkan'* 'transverse line', *khat* 'strike by side or back blow' (< **kat*).

[40] POUR/SPILL/DISPERSE/SOW BROADCAST: PST **š(w)an* ≳ *š(w)at*.

In TSR #114, I reconstructed PLB **šat* POUR/SPILL, on the basis of Lh. *šé*$^{?}$, Ak. [PL] *sheh^*, Sani *xɤ*$_{44}$, and Bisu *šèt*.

I now see that a nasal-finalled allofam must also be posited, underlying Lh. *šē*, Ak. [ILH] *sjhè*, and Mpi *se*^{1} [< PLoloish **šan*^{2}], all meaning 'to sow broadcast', i.e. to sow seeds too small to plant individually (e.g. mustard-seeds) by scattering them over the prepared earth. The direct WB cognate is *swân* 'pour upon; cast out by pouring', with medial *-w-*, so the PLB reconstruction should be **šwan*^{2}. (WB also has a variant that reflects PLB Tone **1*, *swan* 'pour out, spill, shed'.)

This is a gratifying TB word-family, since both allofams have direct Chinese parallels: 散 **sân/sân:* ~ *sân-* [GSR #156 a] 'disperse' and 撒 **sât* [Karlgren, *Analytic Dictionary* #767] 'scatter, disperse;

spread, distribute; let loose'.[23] We must therefore posit both allofams already for the PST level.

3.0 Lahu -e?<PLB *-i·t: a first taste of copular allofamy

PLB *-*it* is one of the few rhymes for which there is enough evidence to reconstruct a length contrast in the vowel (*-*it* vs. *-*i·t*). As explained in TSR (n. 55, p. 65), it appears that the short rhyme *-*it* merged with *-*ik* to become WB -*ac* (e.g. EIGHT [41]), while long *-*i·t* remained WB -*it* (GOAT [42], FLICKER/BLINK/EXTINGUISH [43], REAP [44]). The regular Lahu reflex of *-*i·t* is definitely -*e?*, with -*ɔ?* a conditioned variant after *r- [REAP]. Although the evidence is slim here, it looks like the short rhyme *-*it* becomes Lh. *i(?)* [EIGHT].

[41] EIGHT: PTB **b-r-gyat* ≷ **(b)-g-ryat* [STC #163] > PLB **ʔrit* [TSR #171] > WB *hrac*, Lh. *hi*.

/The glottal final has disappeared in Lahu by dissimilation from the preglottalized initial (see Matisoff 1970)./

[42] GOAT$_1$: PTB **tsi·t* > PLB **V-ci·t* [TSR #27] > WB *chit*, Lh. *á-chè?*.

/This root is also found in Trung a_{12}-*tšit*$_{44s}$, so it is not confined to Lolo-Burmese, contra the indices in STC pp. 208, 214. Both STC (p. 88) and TSR err in not reconstructing a long vowel./

[43] FLICKER/BLINK/EXTINGUISH:[24] PTB/PLB **s-mi·t* > WB *hmit* 'wink, shut the eyes', Lh. *mè?* 'shut abruptly (eyes, mouth); go on and off rapidly; twinkle, flash, flicker (as fireflies, stars, sparks)', Akha [PL] *mi^* 'be extinguished, *mya^-nui^ mi^ eu* 'close one's eyes tightly', Mpi *mi?*$_3$ 'go out (of fire), be extinguished'. (The WB form reflects an **s*-prefix, which is also attested by the Akha and Mpi tones (< PLB *HIGH-checked). The tone of the Lahu form (< PLB *LOW-checked) reflects the unprefixed allofam **mi·t*.

The phonological shape and semantic range of this etymon is only partially presented in STC #374, which sets up a root **mit* (better: **s-mi·t*) on the basis of forms (none of them from LB) which all mean 'extinguish; destroy' (e.g. Nung *ɜ́əmit*, Lushai *timit*, Mikir *met*). The Chinese cognate is 滅 **miạt/miät* [GSR #294 b] 'drown; extinguish,

23) The Chinese forms provide no support for the medial *-*w*- reflected in WB.
24) See the discussion of this word in Matisoff 1983, #59.

destroy' [STC p. 183].[25]

[44] REAP: PTB **ri·t* [STC #371] > PLB **ri·t* [TSR #169] > WB *rit* 'reap, mow, shave', Lh. *g̈ə?*, Lisu *rgh*$_6$.

In this case there is extra-LB confirmation for the long vowel, in Lushai *rîit* 'scrape with a hoe'.

Since Lahu lacks the syllable *g̈e*, we may take *-ə?* to be the regular conditioned reflex of **-i·t* after *g̈-* (<**r-*).[26]

[5-A] COPULA$_2$/BE THE CASE: PTB **s-ri·t* ≷ **s-rut*.

In STC #264, an etymon **s-ri* 'to be' is reconstructed, on the basis of only two forms, WT *srid-pa* 'existence' ("with suffixed *-d*") and WB *hri'* 'be, be there'. This is certainly valid as far as it goes, but it is only the tip of the copular iceberg, as we shall see [5.2, 5.3].

In the present context, I would like to bring in two more forms whose apparently strange correspondence has long been a source of puzzlement: Lh. *'hê?* 'be the case, be so' (usually occurring negated, as in *yɔ̂ Lâhū-yâ mâ hê?* 'He is not a Lahu'),[27] *ɔ̀-hê?* 'true omen, portent; symbol, sign', and WB *hut* 'be so, be true', *?əhut* 'truth, right'.[28] See below 5.34.

We now see that this Lh. *-e?*/WB *-ut* correspondence reflects an older alternation between **-i·t* (> Lh. *-e?*) and **-ut* (> WB *-ut*), which is simply one more example of the **-i-* ≷ **-u-* alternation that is so well-attested in TB word-families![29]

The long vowel in the allofam **s-ri·t* is independently justified by the fact that the copula root has an underlying diphthongal vowel (< ***s-ray-t* [below 5.34].

The initial consonants of Lh. *hê?*/WB *hut* call for some comment. *h-* is the regular Lahu reflex of **sr-* or **?r* (cf. EIGHT [41], SPEND THE NIGHT [PLB *?rak* > Lh. *há* (TSR #174)], STAND [PLB **?rap* > Lh. *hú* (TSR #175)], etc.).

25) In STC (*loc. cit.*, n. 481) an attempt is made to relate this Chinese form to the WT 'negative copula' *med-pa* 'be not, exist not', a suggestion which must, I believe, be rejected. See below 5.34.

26) This is closely analogous to what we posited above (1.0) in connection with [1] LAUGH **ray* > Lh. *g̈ɛ̀* and [5] COPULA/CREATOR **g-ray* > Lh. *g̈ɛ̀*(*-šɑ*), where the Lahu central vowel *ɛ* is the regular conditioned reflex of **-ay* after **r-*.

27) Using *mâ hê?* is the regular way of negating nouns or nominalized clauses in Lahu [see GL 3.632, 4.411(2), 4.422(1), 4.711], e.g. *yɔ̂ là tù ve mâ hê?* 'He won't be coming'.

28) The negated verb *mə-hut* (Mod. Bs. *mə-hou?*) is the regular way of negating nouns or nominalized clauses in Burmese, e.g. *θu la me mə-hou? phû* 'He won't be coming' (Okell 1969, p. 149).

29) See Wolfenden 1929 (pp. 114–5), STC pp. 80–84, VSTB pp. 41–2. Cf. such key etyma as SLEEP **yip* ≷ **yup*, HOUSE **kyim* ≷ **kyum*, SWEEP/WIPE **sit* ≷ **sut*, etc.

WB vacillates in its reflexes of **sr-/*ʔr-*, sometimes responding with *hr-*(EIGHT: WB *hrac*; BE/EXIST: WB *hri'*), sometimes with a plain *r-* (STAND: WB *rap*; SPEND THE NIGHT: WB *rak* 'complete day of 24 hours'), and in the present instance with a plain *h-* (*hut*).[30]

4. 0 *-ay, *-ey and related rhymes in PTB

The vocalic system of PTB, as brilliantly reconstructed in STC, comprises the set of open and diphthongal rhymes indicated in Table II.[31]

The part of this system with which we are especially concerned in this paper is the palatal falling diphthongs with non-high nuclear vowels:

-ey -oy

-ay/-way

-a·y/-wa·y

4. 1 Reflexes of *-ay, *-a·y, *-ey in key TB languages

These three proto-rhymes are reflected in six major TB languages as in Table III [from chart in STC, p. 62].

Already we may gather that the 2 'pre-*y*' distinctions implied by these three proto-rhymes — i.e. between long and short *-a-* and between *-a-* and *-e-* — are rather tenuously maintained in TB as a whole. Three of these languages, including WT, have merged all 3 *rhymes, and 5 of them have merged long and short *-*a*(·)*y*. Only Jg. and WB distinguish *-*ey* from *-*a*(·)*y*, and only Lushai

30) WB *hut* may thus be viewed as a form where the proto-prefix has 'pre-empted' the root-initial. For the introduction of this term see Matisoff 1972c and 1973/1979 "Quo Vadimus".

31) Adapted from STC, p. 58. For the purposes of this exposition, we are treating medial *-w-* as a feature of the rhyme.

32) E.g. only 10 sets in all of STC are reconstructed with *-*i*, and most of these have allofams with diphthongal rhymes, or are restricted in distribution, or are area words.

33) For this relatively quite minor change he was severely attacked by Roy Andrew Miller (1974), who claimed that it vitiated Benedict's entire previous system of reconstruction. In my reply to Miller (1975), I perhaps went to the other extreme in minimizing the significance of the change, calling it 'merely notational'. Actually I now agree that the reconstructions with shwa are preferable, since the previous system amounted to setting up a length contrast in open syllables, (i.e. *-*i*/-*i*: (=*iy*), *-*u*/-*u*: (=*uw*), which seems typologically unnatural. As the phonologies of Kamarupan languages are coming to be better described, we are finding a number of modern languages with diphthongs like [-əy] [-əw], e.g. Tangkhul Naga (Bhat 1969), Meithei (Thoudam 1980), etc. And of course shwa vocalism in diphthongs is also highly characteristic of Chinese.

34) We should note, however, that the prelabialized counterpart of this rhyme, *-*wiy* (=*-*wəy*), sometimes has reflexes with lower nuclear vowel (*-ay, -oy*), which may merge with the reflexes of the PTB diphthongs in which we *are* particularly interested (i.e.

Table II PTB Open and Diphthongal Rhymes

OPEN	PALATAL FALLING DIPHTHONGS	LABIAL FALLING DIPHTHONGS
(-i/-wi) (-u) (-e/-we) (-o) -a/-wa	-iy/-wiy (-uy) = -əy/-wəy -ey (-oy) -ay/-way -a·y/-wa·y	-uw = -əw (-ew) -ow -aw -a·w

Notes to Table II

1 Poorly attested rhymes are in parentheses. Except for **-a* (by far the most common vowel in the system), pure vowels in syllable final position are quite rare.[32]

2 There is no contrast in the system between **-wi* and **-uy*. The only set reconstructed with **-wi* in STC is based on forms with falling diphthongs in two Chin languages:

[45] FOLLOW: PTB **ywi* [STC p. 51]>Lushai *zui*, Siyin *yui*.
/Incidentally, I would now like to offer a Chinese cognate for this etymon: 隨 **dzwia/zwiɛ* [GSR #11g] 'follow'./

3 In the MS version of STC (ca. 1942-3), Benedict reconstructed the homorganic diphthongs **-iy* and **-uw* for two of the best attested TB vowel correspondences, where WB has *-e* and *-ui* respectively:

PTB	WT	WB	Example		
			PTB	WT	WB
**-iy*	-i	-e	DOG: **kwiy* [STC #159]	khyi	khwê
(**-i*	-i	-i)			
**-uw*	-u	-ui	STEAL **r-kuw* [STC #33]	rku-ba	khûi
(**-u*	-u	-u)			

Benedict changed his reconstructions of these rhymes to **-əy* and **-əw* in the new footnotes to the printed version of STC [1972]. (See, e.g. n. 188, p. 57).[33]

A detailed discussion of this rhyme is beyond the scope of this paper.[34]

4 A vowel length contrast is posited only for the rhymes **-a(·)y* and **-a(·)w*. Even here, there is not much evidence for a length contrast if medial *-w-* is present (i.e. the **-way/*-wa·y* contrast is very tenuous).

**-ay, *-way, *-ey*). Thus, **s-hwiy* 'blood' [STC #222] > Jg. *sài*; **s(y)wiy* 'shave' [STC #180] > Tiddim Chin *ta:i* 'plane', Mikir *sòy* 'chisel, plane, shave'; **krwiy* 'sweat' > Lakher *mathlai* [contra STC p. 90, this latter root is not confined to Lolo-Burmese].

Table III

PTB	WT	Jg.	WB	Garo	Dimasa	Lushai
*-ay	-e	-ai	-ai	-e	-ai	-ei
*-a·y	-e	-ai	-ai	-e	-ai	-ai
*-ey	-e	-i	-i	-e	-ai	-ei

has distinct reflexes for *-*ay* vs. *-*a·y*.[35]

In an attempt to buttress the evidence for this tripartite distinction, it is natural to seek the testimony of other "Kamarupan" languages besides Lushai.[36] Though we cannot yet demonstrate this in detail, there are indeed some suggestive correlations between the Lushai reflexes and those in such languages as Tiddim Chin, Lakher, Tangkhul Naga, Abor-Miri, Mikir, and Meithei. However, even when we increase our data base to include many etyma not to be found in STC [below 4.3], no simple or clearcut pattern emerges. It appears certain, in fact, that vowel length is a highly unstable feature even in Kamarupan languages, with much inter- and intra-lingual variation. Many of these languages—including Lushai itself[37]—now have thoroughgoing length contrasts for virtually all vowels before *-y* and *-w*, which are clearly *secondary* from the standpoint of PTB. Often one and the same morpheme will have allomorphs with both long and short vowels. This is especially frequent in verb roots, which in many Kuki-Chin-Naga languages have two forms, one typically used in main clauses ("Form I") and the other in subordinate clauses ("Form II").[38] It is usually easy to determine the synchronically 'basic allomorph' for a given verb—e.g. we would certainly consider the Form I to be basic in the following Tiddim pairs:

	Form I	Form II
'plaster with mud'	-mai?	-mai?

35) When a Lushai cognate is lacking, STC adopts the convention of reconstructing a short vowel *-*ay*. Ideally one might prefer a special non-committal symbol for these cases, e.g. *-*åy*.

36) In Matisoff [to appear], I have adopted the name Kamarupan (from Sanskrit *Kāmarūpa*, an old designation for Assam or extreme NE India) as an overall non-committal geographic designation for the TB languages of the Kuki-Chin-Naga, Bodo-Garo, and Abor-Miri-Dafla groups, along with those languages which the STC hesitates to assign to a particular branch of TB (e.g. Mikir, Meithei, Mru). See n. 8.

37) See Weidert 1975, pp. 10–13.

38) See, e.g. Henderson 1965 (Tiddim), Osburne 1975 (Zahao=Laizo), Schwerli 1979 (Bawm), and Weidert, *op. cit.* Weidert 1981 attempts a single 'explanation' of all the complex morphophonemic alternations between Form I/Form II pairs by positing some highly dubious proto-suffixes which he then scrambles around by complex rules. See the discussion in Matisoff 1982.

'plane wood' `ta:i -tai?.[39]

Nevertheless, when language-internal length-variation is rampant, the door is wide open for 'paradigm leveling', 'analogical readjustments', etc., which cannot help but cloud the historical picture.

It seems to me likely, in fact, that vowel-length contrasts have come and gone cyclically in the history of TB, with the effects of later changes largely obscuring the results of earlier developments.[40]

With the **-ay/*-ey* contrast, we are on somewhat firmer ground—they can be distinguished quite well even in Lolo-Burmese—though there are a number of cases of intra- and inter-lingual variation between the two rhymes and many languages have merged **-ay* and **-ey* entirely.[41]

TB **-ey* regularly becomes *-e* in Pwo and Sgaw Karen (e.g. [47] *me* 'fire', [50] *ne* 'get', *khe* [52] 'tiger', but **-ay* often does too ([56] *phle/p(ə)le* 'tongue', [71] *de* 'navel', [77] *phe* 'chaff, husks'). The Karen evidence for the **-ay/*-a·y* distinction is also spotty [STC pp. 149–50].

Little comfort is to be found from Chinese:

> "Our comparative [ST] material on these [diphthongal] finals is still scanty, more so than might be anticipated, and we have good evidence for only a few of the possible combinations . . .
>
> "The material on final *-y* forms is still skimpier, if anything, and in general is quite unsatisfactory . . ."[42]

As far as Lahu is concerned, only 5 of the sets with **-a(·)y* presented in STC have known Lahu cognates:[43] TEN **tsyay* > Lh. *chi* [STC #408 and n. 81, p. 25], CRAB **d-ka·y* [STC #51] >Lh. *"á-ci-ku"* [see n. 2, above], LEFT **b(w)ay*

39) The 'direction of predictability' here is from Form I to Form II, and not vice versa—i.e. if Form I is basic, a simple 'rule' could state that 'a long vowel is shortened in Form II, with the addition of *-ʔ*'; but if Form II is taken as basic, there is no way to predict whether Form I will have a long vowel.

40) I have long adopted a similar view with respect to *tone* in TB—what one might call a 'polygenetic' tonogenetic theory rather than a 'monogenetic' one. See Matisoff (1973b) "Tonogenesis in SE Asia".

41) See below 4.211, and STC pp. 65–6.

42) STC p. 192 (n. 491). STC makes 9 specific comparisons of Chinese forms with PTB roots in **-ay*, **-ey*, or **-oy*: BEAUTIFUL [below, 81], BIG [68], CRAB [4; 59], LOVE [126], NEAR [55], RICE [57], TAIL [72], YOUNGER BROTHER [146], and RHINOCEROS [PST **b-sey* > WB *bse*, Ch. 犀 **siər/siei* (GSR #596a–b)]. We will venture to make a few more [below 4.3], e.g. BELT/ZONE [95], SPLEEN [94], REPEAT/PRACTICE [107], VEGETABLE [161], TALENT/APTITUDE [106], and perhaps $COME_2$ [185].

43) In three of these sets the Lahu form is actually given in STC: TEN, CRAB, LEFT. For a more speculative comparison of a Lh. form with a set in STC see CENTER/NAVEL (below [61]).

> Lh. (*là²-*) *mē* [STC #47 and n. 80], TAIL **r-may* [STC #282] > Lh. *mē(-tu)*, and CHAFF **pwa·y* [STC #170] > Lh. (*và²-*)*phî*. *By a strange quirk of fate, none of the Lahu reflexes displayed by these etyma /i, ɛ, ɨ/ is the 'regular'* (i.e. most frequent and least conditioned) *reflex of* **-a(·)y!* To demonstrate this requires finding many more examples, which is the motivation for Section 4. 3 below. (See especially 4. 38.)

4. 2 Sets reconstructed in STC with the rhymes *-ey, *-(w)a(·)y, *-oy

4. 21 STC sets in *-ey

Four of the sets reconstructed with **-ey* in STC have Lahu cognates, and all of these have *-i* ([46–49] below), so that we may declare the regular Lahu reflex of **-ey* to be the same as in Jg. and WB:

PTB	WT	Jg.	WB	Lahu	Garo	Dimasa	Lushai
*-ey	-e	-i	-i	-i	-e	-ai	-ei

(For 2 new examples of **-ey* > Lh. *i*, see [144] and [145], below.)

[46] FRUIT: PTB **sey* [STC #57]
WT *se-* 'morpheme in plant names', Vayu *se* 'to fruit', *se* ~ *si* 'fruit' ... Jg. *sì* ~ *əsì* 'fruit', *əsì sì* 'bear fruit', WB *sî* 'bear fruit', *əsî* 'fruit', Garo *the* ~ *bithe* 'id.', Dimasa *thai* 'bear fruit', *bathai* 'fruit', Lushai *thei*, Mikir *(a)the* 'fruit'.

/add Lahu *šī*, Akha *áshì* (< PLB **sey²*); Lakher *thei*, Tangkhul *thei*, Abor-Miri *a-ye*, Meithei *məhəy* 'fruit; result', Boro *táy;* also PNNaga **sey* [e.g. Yogli *(pul-)di*] [French p. 488]/

[47] FIRE: PTB **mey* [STC #290]
WT *me* ... WB *mî*, Lushai *mey*, Mikir *me*, Jg. *myì²-phràp* 'lightning' ("fire-flash") ...

/add Lahu *à-mī* [see STC, n. 203], Ak. *mì-dzà* (< PLB **²-mey²*); Tangkhul [Bhat] *məy*, Lakher *mei*/

[48] KNOW: PTB **syey* [STC #182]
WT *śes-pa* ... WB *si'* 'know, understand', Jg. *šì* 'news', Garo *masi* ...

/add Lahu *šī* (< PLB **sey²/³*); the creaky tone in WB is unexplained, though the WT form suggests that suffixal **-s* was somehow responsible/

[49] PENIS: PTB **m-ley* ≷ **li* [STC #262]
WT *mdźe* ... WB *lî*

/This set was originally reconstructed as **li*, on the basis of Garo *ri-gaŋ*, Dimasa *li*, Kanauri *kut-li* (vs. e.g. Kan. *me* 'fire'), but the WT

form establishes the allofam in **-ey* [n. 197]. To the forms given in STC, add Lh. *nī* (with preemption and assimilation of the prefix), Jg. *mənè~mənéʔ*, Atsi *nʔyì*, Maru *ˈnʔyī*, Lisu [Fraser] *h'aw*[5].

The other sets reconstructed in STC with **-ey* include:

[50] GET/OBTAIN: PTB **(r-)ney-t* [STC #294]
Bahing (and general Kiranti) *ne* 'take', WT *rnyed-pa* (with suffixed *-d*) 'get, obtain', Lushai *nei* 'get, have, obtain'.
/add Tiddim *`nei* 'have (of weather, etc.)', Lakher *hnei* 'shift, obtain, acquire; have, possess'; also perhaps Meithei *manai* 'servant'/
For speculations on the copular affinities of this etymon, see Section 6.0 and note 115, below.

[51] HAIR (of head): PTB **ney* [STC #292]
Gyarung *rni,* Nung *əni~təni,* Garo *khəni*[44], Dimasa *khanai.*
/add Boro *kanáy* and also a very interesting Xide Loloish form recorded by Professor Fu Maoji in his unpublished doctoral dissertation for Cambridge University, *ʔo ʔɲi* [1st. syll. is 'head'].[45]

[52] TIGER: PTB **d-key* [STC #462]
Kiranti **key-ba* (e.g. Limbu *keh-va*), Miri *si-ke* 'species of civet cat', Lushai *sa-kei* 'tiger' [STC p. 107], Pwo/Sgaw Karen *khe* [STC p. 134].
/add Tangkhul [Bhat] *śəŋkhɯ* 'tiger', Meithei *kəbokəy* 'leopard'/[46]

[53] CANE/RATTAN/ROPE: PTB **rey* [STC #478]
Jg. *rì* 'rattan, cane, cord, string, thread' . . . Garo *re,* Dimasa *rai* 'rattan, cane'.
/add Abor-Miri *ri-bí, ri-bui* 'creeper of any sort; cane, wire, rope, string' and PN Naga **rey* (e.g. Moshang and Nocte *ri,* Wancho *re,* Konyak *wei,* Chang *li*) [French, p. 462]/

[54] BUY$_1$/BARTER: PTB **b-rey* ≷ **(r-)ley*
**b-rey* [STC #293] > Jg. *mərī,* Miri *re,* Garo *bre,* Dimasa *barai* 'buy'.[47]
/Benedict considers this etymon to be a loan from Austro-Thai **(m)baḷi* [see Benedict 1975, p. 282]. In a monumentally confusing note [n. 205, p. 64], he suggests that a separate but related loan yielded

44) With Garo *-i* instead of the expected *-e*. See STC n. 206, and below 4.211.
45) David Bradley, p.c. (ca. 1972).
46) Benedict posits an unorthodox **-ey* ≷ *-əy* variation in this root by attempting to relate WB *khye-sac* 'leopard cat' [n. 324]. A similar hypothesis might be invoked for EARTH [151] below.
47) Add Boro *bay* 'buy', Tangkhul [Bhat] *arəy* 'worthy of price', *rəycuk* 'market-study'.

PTB *(r-)ley 'barter, buy', which, though distinct from a native root *lay 'change, exchange' [STC #283; below 69], overlaps with it both semantically and phonologically in certain languages [cf. WT rdźe-ba, which means both 'barter' and 'change (name, clothes)'].[48]

Perhaps this is another root where we should recognize *-ey ≳ *-ay variation [see following subsection].

4.211 Sets displaying *-ey ≳ *-ay variation

For at least 3 sets discussed in STC, Benedict admits *-ey ≳ *-ay variation or uncertainty, and to these we may add several others:

[55] NEAR: PTB *s-ney ≳ *s-na·y [STC #291][49]
*ney > Jg. nì, WB nî
*s-na·y > Lushai hnai, Lahu nê
/WT nye-ba could reflect either allofam; Lh. nê [not in STC] cannot be from *ney, since *-ey > Lh. -i (cf. PENIS [49]). Other Kamarupan forms include Tangkhul khaŋanai, and 3 Tiddim verb-pairs showing allofamic tone-and-length variation: ´na:i/`na:i 'be near', `na:i/ _nai? 'draw near' (v.i.), _nai?/_nai? 'draw smn near (v.t.)'.
For the same irregular WB/Lahu vowel correspondence, cf. WB hnî 'strip of bamboo' [< PLB *-ney[2]]/Lh. (vâ-)ne 'id.' [< PLB *?nay[1]] (below [128]). [Note the tonal discrepancy also.]

[56] TONGUE: PTB *-lay ≳ *-ley ≳ *-lya.
This slippery root is reconstructed in STC #281 as *m-lay ≳ *s-lay, on the basis of forms like WT ltśe (< *s-lay), Nung phəlɛ (<*m-lay), Jg. làai (couplet form), Garo sre, Dimasa salai, Lushai lei, Mikir de.
WB hlya, Lh. ha (-tɛ̄) are assigned to a separate root (let us say *s-lya), apparently influenced (n. 202) by *m-lyak ≳ *s-lyak 'lick'.[50]
French (p. 565) sets up a PNNaga root *C-ley (> e.g. Yogli li, Wancho le, Konyak yi, Phom yei), and indicates that Benedict [p.c. to French] has changed his PTB reconstruction to *-ley [on the basis of these Naga forms?]. (Add TC lei, Jg. śiŋli [another couplet form].)

[57] RICE/PADDY: PTB *may or *mey [STC pp. 65, 128, 149, 192–3]

48) For PNNaga, French reconstructs both *lyey 'barter' (e.g. > Nocte a-lit-min) and *rey 'buy' (> e.g. Nocte ri) [pp. 450, 461].
49) The reconstruction is given simply as *ney in STC, though the Lushai form is marked as showing "vowel gradation".
50) Still other allofams (or "related roots", as Benedict calls them in his classically simple terminology) are posited for this word family, including *s-lya·w and *s-lyam [see STC #211].

For this root STC cites forms only from Bodo-Garo (Garo *mi* and *me-* [the latter is a combining form], Dimasa *mai* 'rice, paddy' [p. 65]), from Karen (Pwo and Sgaw *me* 'boiled rice' [p. 149]), and Chinese 米 **miər/miei*: [GSR #598 a-c]. The Bodo-Garo forms could reflect either **may* or **mey* (the reconstruction is given as "BG **m[a/e]y*" on p. 192), though Benedict somehow feels that the Karen forms unambiguously reflect PKaren ("and by inference also PTB") **may* [p. 149, n. 408].[51]

Also related, I believe, is a form from outside of Bodo-Garo, Tangkhul *ma* 'paddy', reflecting an allofam **ma*. (We have found a surprising number of apparent instances of **-ay* ≷ **-a* variation, hitherto unrecognized for TB.)[52]

Benedict considers this root to be a loan from Austro-Thai, which perhaps accounts for its phonological instability.

[58] PASS/EXCEED: PTB **s-lay* ≷ **s-ley*

STC sets up a root **lay* [#301] on the basis of Jg. *lài* ~ *šəlài* 'pass; exceed', Nung *lɛ*~*səlɛ* 'pass', Garo *re,* Dimasa *lai* 'pass', Mikir *le* 'over, excess, profit', and Lushai *lei* 'fine, debt, tax'.

/add Tiddim *la:i* (with long vowel) 'still, yet', Boro *lay* (auxiliary verb) 'V again' [e.g. *za lay* 'eat again', *ray lay* 'speak again'], Nocte *a liet choan* (with suffixed *-t*) 'surpass' [French, p. 558], and Lushai *hlěi* [< **s-lay*] 'more than ten; over ten', *hlēi-hlēi* 'more still, even more, in particular'/

Intra-lingual allofams in Lakher (=Mara)[53] point to **-ay* ≷ **-ey* interchange in this root: *lai-pa* 'the remains, that which is left over', *hlei* 'more than others; beyond; more than; special'.[54]

Other examples of **-ay* ≷ **-ey* variation include BRIDGE (below [131], BAMBOO STRIP [128], BUY/BARTER [54].

4.22 STC sets in *-a·y

PTB	WT	Jg.	WB	Garo	Dimasa	Lushai
*-a·y	-e	-ai	-ai	-e	-ai	-ai

51) To further complicate matters, there is a typo in the English-TB Index (p. 218), where the root is cited as "**moy* [BG]". This error was unfortunately repeated in the Index of Chou Fa-kao 1972 (p. 235).

52) See below, BIG [67], I/SELF [70], THROW [147], FALL [125], SEE [76], COME$_2$ [185], QUESTION PARTICLE [131].

53) Lakher is a Central Chin language closely related to Lushai, for which quite a good dictionary exists [Lorrain 1951].

54) Lahu *lɔ́* 'be extra, be left over', *ɔ̀-lɔ́* 'sthg special' is unrelated, being a loan from Tai (cf. Siamese *lɤ̌a*).

STC reconstructs 5 sets with **-a·y* on the basis of Lushai cognates, and sneaks in another one (KNEAD/TWIST [60]) on the testimony of Tangkhul. To these we may add one more (GOOD [65]), misreconstructed in STC with a short vowel since the Lushai cognate had not been discovered.

[59] CRAB: **d-k(y)a·y* [STC #51]

/see [1] and note 2, above; French (p. 469) reconstructs PNNaga **gra·n* (> Wancho *san,* Chang *hin*) with the 'collective' **-n* suffix as in Jg. *tšəkhân* [STC p. 99, n. 285], and indicates that Benedict [p.c. to French] has changed his PTB reconstruction to **d-gra·y*/

[60] WHIRL/BRANDISH/WAVE: **wa·y* [STC #90]

Jg. *wāi* 'whirl, as a whirlpool; stir, as with a ladle; strike out with a sweeping movement' ... WB *wai* 'whirlpool; soar around, as a bird; brandish (a sword, weapon, stick)', Lushai *vài* 'row, paddle; wave (the hand, arm)', Mikir *ingvei* [Grüssner has *ingwèy*] 'fly around (as an insect)'.

/add Tiddim *`va:i* 'be giddy'; I would also like to include in this family WB *swai'* (Tone *3) 'swing around (as a sword); wave (as a flag)' < **s-way* [with fused causative prefix?], and perhaps the 1st. syll. of Lushai *hui, èk zial,* 'whorl, coil; twist in whorls or coils'/

[61] KNEAD/TWIST: PTB **na·y* [STC #286]

Jg. *mənài* 'twist', WB *nai,* Tangkhul *khənai* 'knead'/French (p. 550) compares this root to his PNNaga **ña·y* 'soft'/

[62] CENTER/NAVEL$_1$: PTB **la·y* [STC #287]

WB *ʔəlai* 'middle, center', Lushai *lai 'id.*; navel'.

/I have long wondered whether Lahu *le* 'trigger' (*nâʔ-le* 't. of gun', *khâʔ-le* 't. of crossbow') might be cognate here; a trigger does not, it is true, look much like a navel, but it *is* a central, important part of a weapon/

[63] DIG: PTB **la·y* [STC #288]

Jg. *lāi* 'dig up', Lushai *lai,* 'dig, hoe'.

[64] PLAY: PTB **r-tsya·y* [STC #289]

WT *rtse-ba* 'play, frolic, joke', Jg. *tśyāi* 'play; do for pleasure', Lu. *tśai.*

/add Lakher *sai-so* 'joke, jest, be funny', Tangkhul [Bhat] *khəŋəcay* 'play (football)', Mikir *jùy* 'play', PNNaga **C-tsa·y* (e.g. Chang *cai*) [French p. 528]; another Jg. form that must be related somehow is

zói 'joke' [< **dzwa·y?*]/[55]

[65] GOOD$_1$: PTB **ma·y* [contra STC #300]

In STC #300, a root **may* is reconstructed on the basis of 3 forms: Jg. *māi* 'good, pleasing', Nung *mɛ*, Mikir *me* 'good, well'.

To these, however, we must add Lushai *maih*, 'be in good condition; plump, well-favored', which leads us to revise the reconstruction to **ma·y*. (This is supported by French's PNNaga reconstruction **ma·y* [p. 492] > Wancho *mai*, Konyak *mei-pu*, Phom *mei-pə*, Chang *mai-bu*.)

Also add the Jg. causative form *šəmāi* 'cure, heal' and the Boro auxiliary verb *-may* 'V properly' (e.g. *ray-may* 'speak properly', *za-may* 'eat properly', *so-may* 'be beautiful').

Most interesting to Lolo-Burmanists are Akha [ILH] *mỳ* 'good, beautiful' and Mpi *mɯ*^{1} 'good' which now establish this root for LB (PLB Tone *2) as well.[56]

I suspect that this root is allofamically related to **moy* [STC #304] 'beautiful' [below 4. 25].

4. 23 STC sets in *-ay

We may divide the sets reconstructed with **-ay* in STC into three groups:

(a) those where a Lushai cognate in *-ei* is lacking, so that the short vowel in the reconstruction is 'short by default' (i.e. there is no *positive* evidence for its shortness) [4. 231];

(b) those where a Lushai cognate in *-ei* is available (i.e. the shortness of the reconstructed vowel has contrastive status) [4. 232];

(c) those where Lahu, Burmese, and/or Lushai have 'irregular' reflexes, and some kind of 'vowel gradation' or allofamic variation is posited [4. 233].

4. 231 Where no Lushai cognate is available

PTB	WT	Jg.	Bs.	Garo	Dimasa
*-ay	-e	-ai	-ai	-e	-ai

[66] FEAR: PTB **b-ray-t* [STC #450 and n. 317]

WT *bred-pa* (< **b-ray-t*) and *żed-pa* (< **ryed-*, with 'secondary palatalization') [the final dental in both forms is suffixal], Digaro *re* . . . Nung *phərɛ* 'fear, be afraid', Mikir *phere* 'fear, doubt, dread'.

55) In Matisoff 1974 [#188], I tentatively compared Jg. *tśyāi* to Lahu *gɨ* 'play; do for pleasure', being influenced by the fact that in both languages the words may be used as auxiliary verbs ("V for pleasure"). I would now be pleased to withdraw this suggestion on phonological grounds.

56) *-ɯ* seems to be the most frequent Mpi reflex of **-a(·)y*, e.g. Mpi *ʔɯ*^{5} 'laugh' <**ray* [1], *tɕɯ*^{8} 'tusk' <**jway* [160], *ko*^{ʔ2} *-phɯ*^{2} 'chaff' <**pwa·y* [77].

[67] THIS/THAT: PTB **day* [STC #21]
WT *de* 'that; that one', Jg. *dài* 'this; that', Nung *dɛ* 'this'.

/add Jg. *ǹdài* 'this', Abor-Miri *de*; for a free-wheeling discussion of this and other TB deictic etyma, see Benedict 1983 [esp. pp. 82–5].

[68] BIG: PTB **tay* [STC #298 and n. 208]
WT *mthe-bo* 'thumb', Nung *thɛ*, Mikir *thè, kethè* 'big large, great', WB *tai* 'very'; the Chinese cognate has been repartitioned into three different characters: 泰 **t'âd/t'âi-* [GSR #316a] 'great; excessive', 大 *d'âd/d'âi-* and **t'âd/t'âi-* [GSR #317 a-e] 'great, greatly', and 太 **t'âd/t'âi-* [GSR #317 d-e] 'id.'

/add Tangkhul *kətay* 'be extra', *khəmətay* 'increase, multiply', *akətay* 'remnant'; and PNNaga **-tay* (e.g. > Wancho *a-tai* 'far', *tai-hu* 'many') [French, p. 481]; also Abor-Miri *ta* 'large', perhaps reflecting an allofam in **-a* (see above [57] RICE/PADDY and note 52).

4. 232 Where there is a Lushai cognate in -ei: *-ăy

When there is a Lushai cognate in *-ei* corresponding to a Jg. or WB word in *-ai*, there is positive evidence for the shortness of the proto-vowel, and we adopt the convention of adding a breve /◡/ to the reconstruction.

PTB	WT	Jg.	Bs.	Garo	Dimasa	Lushai
*-ay	-e	-ai	-ai	-e	-ai	-ei

[69] CHANGE/EXCHANGE: PTB **s-lăy* [STC #283 and n. 205]
Jg. *lāi* 'be changed'; *gəlái* 'change, exchange, barter'; *məlāi* 'change, repeat, substitute', Nung *thəlɛ* 'alter, (ex)change', WB *lai* '(ex)change', Garo *sre* 'id.', Dimasa *salai* (*lai*) 'interchange, exchange', Lushai *lěi* 'buy, barter', Tiddim *-lay?* 'change' (vs. *lei* 'buy' < **r-ley*).

/As noted above, this set overlaps with **r-ley* ≷ **b-rey* 'buy, barter' (above [54]); the distinction reflected in Tiddim is neutralized in WT *rdźe-ba* (≷ *brdźe-bo*), which could descend either from **-ay* or **-ey* and means both 'barter' and 'change'. The Lushai form could also descend either from **-ăy* or **-ey*. This set could well have been included under 4. 211, above./

To the forms given in STC #283, add the following: WB *hlâi-phei* 'exchange; Mpi *lʏʔ*$_1$ 'exchange, sell'[57] Boro *salay* 'transfer, change', *bilay* 'distribute', *laykón* 'borrow, loan, debt', *bəslay* 'replace', *ganslay* 'take off (dress)', *guslay* 'slough (snake), change color of skin'. (So many of the daughter forms point to prefixal **s-* that I have added it to the PTB reconstruction.)

57) In Matisoff 1978 (#96), I ill-advisedly tried to compare Lh. *hî* 'sell' to this Mpi form.

[70] I/SELF$_1$: PTB **ŋăy* [STC #285]
WT *ŋed* ("with suffixed *-d*") 'I, we' (elegant), Jg. *ŋāi* 'I', Lushai *ngei* 'self'.

/also perhaps Meithei *ei* 'I'/

This root is obviously related to the primary TB pronominal etymon **ŋa* 'I' [STC #285], and is thus an excellent example of the 'new' TB variational pattern we are documenting: **-ay* ≵ **-a* (see note 52).

Chinese also shows (morphologically conditioned?) allofamic variation: 我 **ngâ/ngâ* [GSR #2g] 'I' and 吾 **ngo/nguo* [GSR #58f-i] 'I' (STC pp. 160, 186, 188).

[71] SELF$_2$/NAVEL$_2$: PTB **s-tăy* [STC #284 and #299]
STC (p. 65) umbilicentrically implies that 2 sets it presents separately should really be grouped into a single etymon:
SELF [#284] Jg. *dāi* 'self', Lushai *tei,* 'myself'
NAVEL [#299] WT *lte-ba,* Jg. *dài ~ śədāi* 'navel', Garo *ste* 'abdomen'.

/add Lakher *tlai* 'oneself, self', Abor-Miri *ai* 'self'; also the following forms meaning 'navel': Mru *dai;* Chepang *toy?*; Jirel *teq*; Karen [Jones] *de* (Moulmein Pho), *dé* (Bassein Pho, Sgaw); Tangkhul [Bhat] *haytoŋ, hayzo*; PNNaga **ta·y* [French p. 521] (> e.g. Nocte *po-te*)/

4.233 Where irregular reflexes point to proto-variation

[72] TAIL: PTB **r-măy* [STC #282]
... Bahing *me-ri* ... Jg. *(ṅ-)mài* ... WB *ʔəmrî,* Garo *kime,* Dimasa *khermai ~ bermai,* Lushai *mei* ... Mikir *arme.*

/add Tangkhul *akhəməy,* Meithei *məməy,* and PNNaga **C-me·y* (> e.g. Moshang *a-mi,* Nocte *a-me,* Konyak *a-ñei,* Chang *mei*)/

The WB reflex is irregular (we would expect **ʔəmrâi*), and Benedict is 'tempted to interpret the Bahing and Burmese forms in terms of metathesis', but decides rather that 'the Burmese form must ... be regarded as a contraction of **a-mai-ri,* with the regular *-ai* correspondence' [n. 204].

Before leaping to espouse this rather *ad hoc* explanation, however, we should note that several other languages also have discrepant forms: Lahu *mɛ̄-tu*[58] Akha *dɔ̀-mì,* Mikir [KHG] *-mí* 'tail, anus'. Both the WB and Akha forms could derive from **-ey,* and the Mikir doublet confirms that we are dealing with a complex word family.

The obvious Chinese cognate to this puzzling set is 尾 **miwər/ mjwɐi* [GSR #583 a-b].

58) For other unexpected examples of Lh. ɛ < **-ay,* cf. 4.38 below.

[73] TEN: PTB *ts(y)i(y) ≷ *tsyay [STC #408 and n. 272]
Jg. *tśī ~śī* . . . Garo *tśi*, Dimasa *dźi* . . . < **ts(y)iy*; "WB *ʔəchai* appears to be related to this root through vowel gradation"; also Karenic *shi* (Pwo, Sgaw), *tśi* (Taungthu) [p. 131].

In a footnote (n. 272) Benedict withdraws his eminently reasonable allofamic explanation of the WB form in favor of a single 'stuffed' proto-form **tsyay*, "yielding both WB *ʔəchai* and the various palatalized forms with final *-i*". Against this, however, is the different Jg. reflex for **r-tsya·y* 'play' (> Jg. *tśāi*) [STC #289; set 64, above]!

As indicated above [2], Lahu *chi* 'ten' shows the same *-i* reflex after palatal initial as in TOOTH and CRAB. Mpi $(to_2)thv_6$ also has an aberrant reflex, *-v*. Other Loloish cognates of this still puzzling etymon are Akha [PL] *tseˇ* Lisu $htsi_4$, Phunoi *təsé*.

[74] BREAK: PTB **pay* ≷ **bay*

This set was originally reconstructed **pe* ~ **be* [STC #254], because of Lushai *pe?* 'break; be broken',[59] alongside WB *pai'* 'be broken off, chipped', *phai'* 'break off a piece'; Garo *be* 'break; broken', *pe* 'break down'; Dimasa *bai* 'get broken', *sabai* 'break', *gabai* 'broken', *phai* 'hatch', *do-phai* 'break with an instrument'.

French (p. 458) reconstructs PNNaga **pay* (> e.g. Konyak *pai* 'break', Chang *pei-ñin* 'split'), and indicates that Benedict [p.c. to French] has changed his PTB reconstruction to **pay* ≷ **bay*.

4.24 STC sets in *-way

The STC nowhere specifically tabulates the reflexes of **-wa(·)y* in the six diagnostic languages, though we can partially do so from the examples given. See Table 4.

Table IV Reflexes of *-wa(·)y

PTB	WT	Jg.	WB	Garo	Dimasa	Lushai
*-wa·y	?	-oi/-we	-wai	?	?	-oi/-uai
*-wăy 'left'	?	-ai	-wai	?	?	-ei

Six sets in **-wa(·)y* are reconstructed in STC [75–80, below]. Of these, three have a Lushai cognate in *-oi* or *-uai*, and are reconstructed with a long nuclear vowel, **-wa·y* (BUFFALO, BEE, HUSKS/CHAFF). Two others have no Lushai cognate and are reconstructed **-way* 'by default' (CONCEAL, EASY).

59) The poorly attested rhyme **-e* is reconstructed when Lushai has *-e* corresponding to WB *-ai* (cf. PEA [STC #253]), or when Jg. and Himalayish both have *-e* (PUNISH [#252], NECK [#251], SLIP/SLIPPERY [#141]).

The sixth, LEFT, actually belongs to a complex word-family that has ramifications into the semantic area of 'awkward, misaligned; lame, limp'.[60] Lushai has several allofams, of which one (*vĕi* 'left') seems to reflect a short vowel, and others a long one (*băi* 'limp', *păi* 'stagger').

As we see, the evidence for a length distinction in the PTB **-way* rhyme is skimpy in the extreme.[61]

[75] BUFFALO: PTB **lwa·y* [STC #208]
Jg. *ʔū-lōi, ŋā-lōi, ŋəlōi,* WB *kywai* (< *klwai*), Lushai *loi,* Siyin *loai.*
/add Tangkhul [Pettigrew] *silui,* [Bhat] *siruy;* PNNaga **C-lua·y* (French p. 460); this is a SE Asian areal word (cf. Proto-Tai **grwaay* > Siamese *khwaay*)/

[76] BEE: PTB **kwa·y* [STC #157]
WB *kwâi* 'dammer bee', Lushai *khuai* ~ *khoi,* Thado *khoi* ~ *khui-va* (*va* 'bird'), Tangkhul *khui,* Lakher *əkha,* Nung *kha,* Gurung *kwe,* Thakali *koy.*
/add Angami Naga *mèpfĭ* (Kohima dial.), *makwi* (Khonoma dial.);[62] Meithei *khoy;* and PNNaga **C-guay* (> e.g. Wancho *ve-koi* 'bug' [French p. 460]; PTamang **gway* [Mazaudon] and the WB form also point to a PTB allofam with *voiced initial/
The Lakher and Nung forms given in STC are quite interesting in that they imply a variant in **-a* — still another instance of **-ay* ≷ **-a*![63] Actually I have not been able to verify STC's Lakher form (it is not in Lorrain 1931, p. 76), but have come up with another one, *khei* 'bee' [Lorrain p. 176]. If both Lakher forms are valid, it nails down the **-ay* ≷ **-a* alternation.

[77] HUSKS/CHAFF: PTB **pwa·y* [STC #170]
WB *phwâi* 'husks, chaff', Lushai *phuai* 'shavings', Pankhu *phəwai,* Thado *wai,* Rangkhol *śəbai* ~ *śəvai,* Sopvoma *upfai.*
/add Tiddim *-va:i,* Meithei *way,* Jg. *pōi* 'be blown, airborne, as fine chaff; be carried away by the wind', *šəpói* ~ *šəpōi* [Maran] 'let scatter, cause to float in air', Lakher *pai* 'be scattered, disperse; emigrate, migrate', Tangkhul *khəŋəpuy* 'fly in a group (bees), swarm; be scattered everywhere'; many more cognates are to be found in Marrison

60) See below [124].
61) All the more so since the labial element in the root for LEFT functions in most languages as the *root-initial,* not a medial glide (below [80]).
62) For a detailed discussion of this and other Angami words that descend from etyma with initial 'labiovelars', see Matisoff 1980, *passim.*
63) See note 52.

(p. 130): Mikir *phe-ke,*[64] Zemei *kepai,* Liangmai *chaphai,* Lotha *ofu,* etc.; in Loloish we have Mpi *ko$^{?}{}_{2}phu_{2}$* and Lahu *và$^{?}$-phî* (1st. syll. prob. 'pig'—chaff is fed to pigs)/

The central Lahu vowel *-î* perhaps represents the 'regular' Lahu type of reflex of **-wa(·)y* after a labial root-initial.[65]

[78] EASY: PTB **lway* [STC #302]
Bunan *lo-i,* Jg. *lòi ~ lwè,* WB *lwai.*

/several additional Jg. forms are cited in Matisoff 1974 (#121): *lòi* 'easy; of early growth', *ʔəlôi* 'easily', *nlôi* 'of early growth', *səlòi* 'an early bean'; the 2nd. syll. of Lahu *cà-lwē* 'early growing rice' looks like a loan < Bs./

[79] CONCEAL/HIDE/SHUN: PTB **kway* [STC #303]
Jg. *kōi* 'shun', *məkōi* 'hide, conceal'; WB *kwai* 'conceal, keep out of sight'.

[80] LEFT: PTB **b(w)ăy* [STC #47]
Thebor *ba-e*; Jg. *pāi* 'left', *ləpāi* 'left-handed, awkward', *əpāi* 'be awkward, speak with a brogue'; WB *bhai* 'left', *lak-wâi* 'left hand', *wâi* 'speak with a brogue'; Tangkhul *wui-śoŋ* 'left', *phui kəsiŋə* 'left-handed', Lepcha *vi-m,* Lushai *vei,* Mikir *arvi* 'left'.

/add Tangkhul [Bhat] *yuypaŋ* 'left hand' (note the triple Tangkhul allofams in *y-* ≋ *w-* ≋ *ph-*), Abor-Miri *lak-ké* 'id.' (< *lak-é*?), Meithei *òy,* Lisu *Lá^{6}-rgh^{1},* Mpi *lα^{2}-ʔo^{2}*/

Black Lahu *là$^{?}$-mē* (cited in STC n. 80) looks quite irregular,[66] but forms in other Lahu dialects look closer to those in other TB languages: Yellow Lahu (Bakeo) *là$^{?}$-fā,* (Banlan) *là$^{?}$-vē-ɔ̄* [Bradley 1979b set #446-A].

As we shall see ([124] below), these forms are allofamically related to a group meaning 'misaligned; lame; to limp'.

4.25 STC sets in *-oy

The STC reconstructs **-oy* in an interesting series of 12 consecutively num-

64) French (p. 502) sets up PNNaga **C-we·k* (> Konyak *wek,* Chang *ek*), postulating metanalysis of a compound like the Mikir form.

65) Cf. FINISHED/PAST [164] and YAM [165], where Lahu also has a central vowel /ə/. Among other **-way* words with Lahu cognates are LEFT [80], (> Lh. *mē*) a highly aberrant root, and WITHER/FADE (>Lh. *hwē*) (below [98]), which has an unusual initial. Note that we must carefully distinguish between **-way* (i.e. medial **-w-* plus *-ay*) and syllables of the type **way,* where **w-* is the *root-initial,* and which we claim > Lh. *ve* [below 5.11].

66) It is ingeniously explained by Benedict [*ibid.*] as due to a development **lak-bai* > **laŋwai* > **mai* > *mē*.

bered roots [#'s 304–315], on the basis of forms from Jingpho, Lushai, and Burmese. The reflexes tend to be variable, and there is some overlapping with the rhymes *-*way* and *-*wiy* (=*-*wəy*). See Table V.

Table V[67]

PTB	WT	Jg.	WB	Garo	Dimasa	Lushai
*-wa·y	?	-oi/-we	-wai	?	?	-oi/-uai
-wəy/-wiy	-(y)i	-ai/-(ə)wi	-we	-i	-i	-ui/-i
*-oy	?	-oi/-we/-wi	-we	-e	-ui/-i	-oi/-ui/-uai

Benedict reconstructs *-*oy* when Jg. and Lushai have -*oi* but WB has -*we*; when a WB cognate is lacking, *-*oy* is conventionally reconstructed instead of *-*way* (STC p. 67).

The discussion of this material in STC can hardly be improved upon, and we shall merely list the examples for ease of reference:

[81] BEAUTIFUL: **moy* [STC #304]/add Laizo [Osburne] *móoy/mŏoy*; this is undoubtedly an allofam of **ma(·)y* 'good' [STC #300] (above [65]), perhaps from ***m(w)a·y* (the putative Chinese cognate is 美 **miər/myi*: [GSR #568 a-c])/; [82] BUD/BLOSSOM: **(r)-moy* [STC #305]; [83] GRAZE (almost hit) **soy* [#306]; [84] BEND/CURVED **koy* [#307] /add Meithei *kho·y* 'fishhook' [Thoudam p. 6], and perhaps Abor-Miri *ge* 'crooked'; also probably related somehow is Jg. *khài* 'be hooked'/; [85] COWLICK **boy* [#308]; [86] YOUNGER SIBLING$_1$ **doy* ≷ **toy* [#309]; [87] CROW/HOWL/SCREECH **groy* [#310]; [88] SHELL (-FISH) **kroy* [#311]; [89] BORROW/LEND/DEBT **kroy* [#312]/WB *krwê* 'debt' reflects PLB Tone *2, but several interesting Loloish forms bespeak a Tone *1 variant with *prenasalized initial: Lh. *jè*, Luquan *ntʂ'e*^{11}, Akha [PL] *dzi*$^{\vee}$/; [90] SURROUND **kroy* [#313]; [91] MONKEY **b-woy* [#314]/add PNNaga **wo·y* (French p. 518); see the discussion in Matisoff 1980 (pp. 12–13); [92] GENTLE/QUIET/MODERATE **ŋoy* [#315]/this root 'shows much fluctuation in final' /add Abor-Miri *ngi* 'to comfort, soothe, cheer, console, pacify (as a child)' and PNNaga **C-ŋuay* 'easy' [French p. 477]; this etymon is undoubtedly related to **ŋ-(w)ay* 'LOVE' (below [124])/

4. 3 New etymologies with the rhymes *-ay and *-ey

In this section we shall present a number of new etymologies in this phonological area, as well as new wrinkles to several old ones. The 90-odd sets to be discussed are categorized as follows:

67) This table does not appear in STC, but is pieced together from the available examples.

4.31 New etyma in *-*ay* attested in more than one branch of TB, where Lahu has a cognate in -*e*.
4.32 New etyma in *-*ay* or *-*ey* attested in more than one branch of TB, but for which no Lahu cognate has been found.
4.33 Further ramifications to already established etymologies.
4.34 New *-*ay* etymologies restricted to Lolo-Burmese, where Lahu has a cognate in -*e*.
4.35 New *-*ay*/*-*ey* etymologies attested only in Kamarupan languages.
4.36 New *-*ey* etymologies, where Lahu has a cognate in -*i*.
4.37 Etyma (some new, some old) displaying interesting phonological variation.
4.38 Etyma in *-*ay* where Lahu has a cognate with vowel other than -*e* (-*i*, -*ɛ*, -*i̱*, -*ə*).
4.39 Promising new etymologies for which the evidence is still skimpy.

4.31 New etyma in *-ay attested in more than one branch of TB, where Lahu has a cognate in -e

[93] STING/SCOLD. PTB *$ta \cdot y$

Lh. *dê* 'sting (as a bee); scold, curse'; Akha [PL] *deh*$_{\smile}$, [ILH] *dè* 'sting, scold'; Mpi te_1 'sting' < PLB *$n\text{-}day^2$ [the voiced Lh. initial implies a PLB *nasal prefix]; Jg. *dái* 'be sharp (as a tooth or edge tool); be sharp, tart, or caustic of tongue'; Tiddim *'ta:i*/*`ta:i* 'scold, blame, nag; Lushai *tai-ṭêm* ~ *tai-ṭêng* 'name of a stinging nettle', *tai-vâng* 'name of a large ant [that presumably inflicts a sting]'; Mikir [KHG] *ingdèy* 'sting (as a nettle)'; Abor-Miri *té* 'sting, as a bee'; Boro *ray* 'scold; rebuke', *ray-sin* 'scold severely'.

/Boro (also called Bodo) shows interchange between dental stops and *r*/

[94] SPLEEN.[68] PTB *$r\text{-}pay$

Lh. *ɔ̀-pe*; Akha [PL] *shi*$_{\smile}$*pyeh*$^{\smile}$, [ILH] *sjhì-pjhé* (cf. also Ak. *bé-sì* 'kidney'); Mpi $?o?_2\text{-}phe_6$ < PLB *$?pay^1$; Jg. *pāi, kān-pāi, kūm-pāi, sìn-pāi* (all 'spleen'); Tangkhul [Pettigrew] *āpai* 'bulb; dross; spleen; pith', *pei* 'spleen', *pei katā* 'liver complaint'; [Bhat] *pəy* 'liver' [*sic*]; Abor-Miri *tûr-pe* ~ *tûr-pui* 'spleen', Mru *pai* 'id.'; Newari *am-pi*, Kham (Nepal) *phis* 'id.'.

/Angami *ú-prì* and Mikir *pli-ha* may be influenced by Indo-Aryan (cf. Sanskrit *plīhan*, Bengali *bilij*) [VSTB, n. 271]/

The undoubted Chinese cognate is 脾 *$b'i\check{e}g/b'ji\varepsilon$ [GSR #874h] 'spleen, tripe'.

68) This root was first presented in Matisoff 1978 (VSTB), pp. 217–9.

[95] BELT/ZONE/WAIST. PTB *ta·y

Lh. *de, ɔ̀-de* 'belt of land lying between the high rain-forest and the plains; large expanse of terrain' (e.g. *á-pɔ̂-de* 'banana plantation', *šê-de* 'desert' ["sand-expanse"]; Akha [PL] *deh-ga* 'levelish place (esp. near streams) where paddy terraces are made', *deh-k'aw*$_{\wedge}$ 'a fairly level place with high mountains near or around it'; Luquan $nt'e_{11}$ 'plain, flat expanse' < PLB *n-day[3]

/the Lh. and LQ forms unambiguously point to a PLB *prenasalized initial/;

WT *sde* 'part, portion (e.g. of a country); province, district, territory'; Lushai *tai* 'waist', *tai-von* 'wear in the belt'; also perhaps Jg. *tāi* 'pull a rope around a tree, etc., as a pulley' and Mikir *daykha* 'middle, intermediate'.

Definitely cognate is Chinese 帶 **tâd/tâi-* [GSR #315 a] 'girdle, sash; carry at the girdle' (the modern word also means 'zone; area', e.g. 熱帶 'torrid zone').

For the semantics, cf. Eng. *zone* < Gk. *zōnē* 'girdle' < PIE **yōs-nā* (**yōs* 'to gird').

[96] ENCIRCLED/RINGED/STRIPED AROUND. PTB **pay* ≷ **bay*.

Lh. *là?-pē* 'finger-ring' (*là?* 'hand'), Ak. [PL] *la*$_{\wedge}$ *beh*$_{\vee}$ [ILH] *làq-bɛ̀* 'id.' < PLB **bay[2]* (Ak.) ≷ **?bay[2]* (Lh.); Jg. *bài* 'be encircled, girded; striped', *bài-bài* 'be marked, as with streaks or rings of variegated colors', *pài* 'appear striped or spotted'; Mikir *páy* 'fence, hedge, line; stripe, ring (of leopard's skin); turn'; Tangkhul [Bhat] *ŋəwəy* 'fence', *khəŋəwəy* 'to fence', *wəykhuy* 'fence around village'.

/in view of the Tangkhul forms, perhaps we should reconstruct **p(w)ay* ≷ **b(w)ay*/

[97] COHESIVE/STICKY/ELASTIC. PTB **$^{?}_{s}$-nay* ≷ **$^{?}_{s}$-nway*.

Lh. *nê* 'have consistency; be cohesive, viscous, chewy'; Akha [ILH] *nɛ̀* 'tough, chewy' < P Loloish **nay[2]*;

Jg. [Maran, p. 830] *?nāi* 'sticky; adhesive, pliable; elastic', *?nāi-?nāi* 'sticky and thus soft; flabby'; the latter form provides the semantic link with WB *nai'* 'loose, not firm', *hnai'* 'loosen', *hnâi* 'rub hair with limejuice to make soft' (< PLB **?-nay[2/3]*);

Jg. also has an allofam *?nōi* 'limp, soft, tender, pliable, elastic', which reflects **?nway*, as does Tangkhul *khəmənuy* 'sticky'.

Lakher *hnei* 'have cohesion' could reflect either variant.

[98] WITHER/FADE. PTB **h^{w}a·y*

Lh. *hwē*; Jg. *wái ~ wói* (Hkauri dial.); Lushai *ūai, vūai*; Tangkhul

[Pettigrew] *khaŋahui*, [Bhat] *hùy*.

/the Lahu/Jingpho comparison was made already in Matisoff 1974 (#321); Tai has a phonologically similar, but unrelated root (cf. Siamese *hìaw*)/

We are tempted to reconstruct a unitary initial phoneme *h^w- for this root, to account for the very unusual Lahu *hw*- cluster (this is the only native word in which it occurs, except for *hwē* 'grandchild' [ult. < PTB **b-liy* (STC #448)]).

[99] LIE/DECEIVE/DISSEMBLE. PTB **ha·y*

Lh. *hē* 'cheat; deceive; tell a lie; be dishonest', *hē-pā* 'liar; a cheat';[69] Lushai *hāi* 'to mistake; not know; not recognize; be ignorant of; forget; mistake one for another', *hāi-dēr* 'connive at; overlook intentionally; pretend not to know/recognize/hear'; Lakher *hai* 'misrepresent, lie; false, untrue; a lie', *hai-pa* ~ *hai-thai-pa* 'liar', *hai-bi* 'falsehood', *hai-na* 'id.', *hai-di-hai-dua* 'guile, deceit', *hai-phia* 'dishonest, unreliable'.

[100] MOTHER/GRANDMOTHER/MATERNAL AUNT. PTB **(y)ay*.

Lh. *e, ɔ̀-e* 'mother', *a-e* [Red Lahu] 'id. (vocative)', *ay-ma* [RL] 'earth mother; fertility goddess', Yellow Lahu (Banlan) *a-ye*; Nasu [Gao 1958] $jɛ_{33}$ 'mother' < PLB **yay*^{3};[70]

Abor-Miri *yai* 'grandmother', *yai-o* 'id.', *yai-a* (voc.); Boro *áy* 'mother'; Tangkhul [Pettigrew] *āyi* 'grandmother; mother's brother's wife'.

[101] DIVERT/CAST/OFF/PUSH ASIDE. PTB **s-lway* ≋ **s-rway*.

WB *hrâi* 'make an opening in a crowd by scattering on both sides'; *lwâi* 'be out of the way; vary', *hlwâi* 'go out of one's way, turn aside; (n.) outlet by side of reservoir'; *ʔəlwâi* 'contrariwise', *ʔəywai'* 'id.', *ywai'* 'be drawn aside, distorted, awry'; Lahu *hē* ~ *hī* 'cast off (as a snake's skin); push aside (as over-hanging plants from one's path)' [the Lh. tone points to a PLB *preglottalized initial]; Mikir *sēy* 'make a way by parting (e.g. grass); dispel; clear (as the sky)'.

[102] POUND/CRUSH. PTB **ta·y* ≋ **da·y*.

Lh. *tē* 'pound, crush, press, squeeze; wear away by friction; nudge (with the elbow)'; Akha [ILH] *dè* 'push down' (both from PLoloish **day*^{2}) [cf. also Akha *dì* 'hit, beat, strike']; Mpi *the*$_5$ 'pound in a mortar' re-

69) PTB **h*- is actually better preserved in Lahu than I had thought! Besides [98] and [99], cf. also [99a] RAISE/BRING UP (as children): PTB **hu* >Lh. *hu*, Luquan $ʔhu_{11}$, Abor-Miri *u*.

70) Contra Bradley *Proto-Loloish* (#200B), who sets up PLB **yan*^{3}.

flects PLoloish **tay*[1]; WB *te* 'beat, pound, pulverize' points to still another variant, perhaps PLB **diy*[1]; Lakher *dai* 'pound, as grain', Tangkhul *khaŋatai* 'grind, pulverize'.

[103] DO/MAKE. PTB **dăy*.
Lh. *te* 'do; make'; Lakher *tei* 'to work; to do'; Boro *soday* 'make'.

/also perhaps Jg. *tāi* 'become, metamorphose, transform, play the part of another person or character; be skilled or knowledgeable, well-versed'; WB *te* 'do repeatedly and constantly' is possibly related somehow [see preceding set]/

[104] QUOTATIVE PARTICLE. PTB **džay* or **tšay*.
Lh. *cê* 'quotative prt.' [see Matisoff 1973a, pp. 377–80], Akha [PL] *je˘*, [ILH] *djé* 'id.' < PLB **džay*[1/2] (the Lahu form points to PLB Tone *2, but the Akha form is < Tone *1; but tonal discrepancies are common in functors);[71] WT *ces* (with *-s* suffix) 'so, thus; in ancient literature regularly placed after words or thoughts that are literally quoted' [Jäschke, p. 142].

4. 32 New etyma in -*ay or *-ey attested in more than one branch of TB, but for which no Lahu cognate has been found

[105] PUS. PTB **s-na·y*.
Lushai *hnāi* 'juice, sap, pus, exudation; exude, discharge'; Lakher *hnia* 'pus from a wound, etc.' [for the correspondence Lu.*-ai*/Lk. *-ia*, see FACE (below [109])]; Tiddim *na:i* 'pus'; Meithei *nay* 'id.'; Mikir [KHG] *tenè ~ tengne* [Walker] 'pus, matter'; Tangkhul *shinai* 'pus'; Newari *nhi*, Sunwar *nene*, Kaman Mishmi *ni* 'id.'

/perhaps belonging to a separate but related root are Mikir *tingnir* 'pus, slime, matter, excrement of snail' and Kham (Nepal) *sanis* 'pus'/

[106] TEMPERAMENT/APTITUDE/TALENT. PTB **(t)sa·y ≋ *(d)za·y*.
WT *że* 'inclination, affection, heart, mind; volition', *żen-pa* (with suffixed *-n*) 'desire, long for, be attached to'; Lushai *zāi* 'temperament, disposition, nature'; Lakher *thai-na* 'ability', *thai-pa-ki* 'talent, aptitude, skill'; Jingpho *sái* 'disposition, tendency', *tsái* 'intellect, wisdom', *zái ~ əzái* 'id.'; Achang $a^{41}tʂai^{55}$ [Dai 1983] 'heart'.

Certainly cognate is Chinese 才 **dz'əg/dz'ậi* [GSR #943 a] 'endowment, ability, talent'.

71) See INTERROGATIVE PARTICLE, below [131].

[107] REPEAT/PRACTICE. PTB *bay.

Jg. *bái* 'repeat, do over'; Mikir [KHG] *bé* 'practice; to accustom, practice', [Walker] 'id.; obey, exercise'; Lakher *bai, bai-chhah* 'add to'; Boro *báy* 'do again and again' (usable as an auxiliary verb, as in *bi-báy* 'beg again and again', *pay-báy* 'come again and again').

Probably cognate is Chinese 倍 **b'wəg/b'uậi* [GSR #999c´] 'accompany, support; augment, double'.

[108] RUST/DROSS/STAIN/SHIT. PTB **(t)sa·y*

Jg. *sài* 'be stained (as lips from tobacco)'; Lushai *tâi* 'draff, lees, rice from which beer has been brewed', *tŭi-ék* 'rust' [the second element means 'shit', < PTB **e·k* (STC pp. 26, 146), as in the Abor-Miri[72] and Lakher forms, below]; Lakher *sai-i* 'rust, rusty' (*i* 'defecate'); Abor-Miri *tai-é* 'excrement; dross; rust', *tai-é dut-shu* 'to rust, get rusty; to mess oneself (as a child)'.

/Tangkhul *páy* 'feces', *apáy* 'rust' is to be assigned rather to PTB **ba·l* (cf. Lushai *bàal*) [Matisoff 1972 c, p. 280]/

[109] FACE PTB **s-ma·y.*

Lushai *hmăi*; Tiddim *ma:i*; Lakher *hmìa* [for Lu. *-ai*/Lk. *-ia,* cf. PUS (above [105]) and also CRAB (above [4], Lk. *tśəia* < **d-ka·y*)]; Tangkhul *mai* 'face, visage'; Meithei *məmay*.

/STC (p. 173) compares Lushai *hmel* 'face' to Chinese 面 **mi̯an/mi̯än* [GSR #223 a], presumably from a related root, PST **s-myal.* It is hard to avoid speculating that there is also ultimately some connection with **s-myak* 'eye' [STC #402; TSR #145], since the eyes are such a salient feature of the face (cf. Lh. *mê?* 'eye', *mê?-phû* 'face').[73]

[110] BOLD/HEROIC. PTB **s-ray* ≳ **s-yay* ≳ **s-way.*

WB *rai* 'bold, courageous', Lisu *ni*^{2} *wu*^{5} [cf. Lisu *wu*^{4} *sa*^{4} 'God' and Lh. *g̈ì-ša,* below 6.0]; Jg. *yē* 'daring', *šərē* 'hero, leader, captain' (with 'vowel gradation'); Tangkhul [Bhat] *khəyay* 'be a hero', Lushai *huāi* 'bold, daring'.[74]

[111] SMALL$_1$/INFERIOR/OFFSPRING. PTB **ŋay.*

Jg. *?ŋāi, šəŋài* 'bear children'; WB *ŋai* 'small, little, inferior', *ŋai cañ toŋ kyê* 'since childhood', *ŋai-ŋai kəthañ ka'* 'id.'; Boro *maŋáy* 'small'.

72) Contra STC this root for 'feces' is not confined to Kuki-Naga.

73) Two other body parts that are intimately related to each other in TB are NOSE **s-na* [STC #101] and EAR **r-na* ≳ **g-na* [STC #453].

74) See Matisoff 1974, #240. In n. 105 of that paper, I speculated that Lh. *yè* 'steadfast, brave' might be a loan from Burmese *râi,* but it is now clear that this Lahu form goes rather with WB *san* 'strong, vigorous' < PLB **zan* (above [16]).

[112] SCOOP/DIP OUT (of water, a hole, etc.) PTB*(*t*)*sa*·*y*.

Jg. *sài* 'scoop out of water; skim'; WB *chai* 'take out of water; extricate, deliver, save from drowning', *chai-nut* 'draw up out of (as from a pit)'; Lakher *sai-kyu* 'a dipper; ladle . . . used for dipping up water', *thai* 'draw out, dip out, ladle out (as water); Mikir [KHG] *chày* '[perform action] in sthg liquid'.

[113] LANGUID/LEISURELY. PTB **nay*.

Jg. *nāi* 'languid, lethargic'; Lakher *nai-so-so* 'loiter; be slow; take things easily', *nai-ny* 'not exert self in word and speech', *nai-pi* 'slowly, leisurely'.

[114] PLANT (v.). PTB **kay* ≳ **gay*.

Jg. *khái* 'plant seed', Boro *gáy* 'plant', *gaysóng* 'transplant; erect the first housepost'.

Also PNNaga **C-ga*(·)*y* 'to sow' [French pp. 551–2] > Nocte *khet, a khiet* (with *-t* suffix); Konyak *tei*; Phom *šei* 'sow', *šei-li* 'seed'; Liang-mai *maruk-khai* 'to sow'. Also Dimasa *gai* 'id.'

French also cites Jg. *gàt* 'sow, scatter as seed', hypothesizing that the *-t* is suffixal.

[115] NOISY/AGITATED. PTB **šay*.

WB *sâi* 'noisy'; Jg. *šài* 'noisy', *əšài* 'excited, stirred up', *gəšài* [Maran] 'be known widely', *gəšái* 'confuse' [see Matisoff 1974, #218]; Mikir [KHG] *sèy* 'moving, shaking, not still, noisy'.

[116] PUT TOGETHER. PTB **dway*.

WB *twâi* 'put together; connect (as with rope), *ʔətwâi* 'two or more things tied together'; Jg. *tōi* 'put together; lead or tow (as with rope)'.

[117] EFFACED. PTB **bray*.

Jg. *prāi* 'be effaced; settled and forgotten (feud); healed (old sore)', *šəprāi* (v.t.); WB *prai* 'be wasted; become weak, less vivid' [cf. Matisoff 1974, #4]; Mikir [KHG] *prév* 'to spoil, botch, erase'.

[118] RETALIATE/BEAR A GRUDGE. PTB **m-ta*·*y*.

Jg. *tài* 'avenge, retaliate', *mətài* 'vengeance'; Lushai *tăi, in, -tăi* 'be at enmity with one another (intense); have a grudge against'.

I would like to suggest a relationship between this new PTB root and Chinese 對 **twəd/tuậi* [GSR #511 a-g] 'respond, in response; reply', 懟 **d̂'i̯wəd/d̂'wi-* [GSR #511i] 'cause resentment'.

[119] EVEN WITH/UP TO. PTB **dway*.

Jg. *tòi* 'be even with', *tòi-tòi* 'id.' (as in *ləphùt tòi-tòi* 'knee-deep');

Lakher *tai* 'as far as; up to; all the way to; even to; even to the extent of' (e.g. *kei o tai a khy te* 'Come up as far as my house').

[120] SHALLOW. PTB **day*.
Tiddim *´dai/`dai*; Mikir [KHG] *ingdèy*.
/Tangkhul *kəpày* 'shallow' seems unrelated/

[121] LEAD$_1$/TEND/WATCH/GUARD. PTB **s-r-way*.
Jg. *wōi* 'tend, care for (as a child); lead, guide, conduct'; Lakher *vai* 'guard, look after'; Mikir *wí* 'watch, guard (cattle)'; PNNaga **rua·y* 'lead' (French p. 506) > Konyak *woi*, Chang *lei-an, lei-laŋ*; Benedict [p.c. to French] suggests a comparison with Lushai *hrúai* 'lead, guide, escort, conduct'.

[122] PROPITIATE/APPEASE: PTB **toy* or **tway*.
Jg. *tòi* 'propitiate (as certain kinds of *nat*)'; Lushai [Weidert] *`thoi* 'offer a sacrifice or utter an incantation for one who is ill'.
The verb in Lh. *nê te ve* 'appease the spirits' [*nê* 'spirit' (above [36])] is perhaps simply 'do, make' (above [103]).

[123] LEAF/PAPER. PTB **lay*.
Jg. *làikā* 'book', Tangkhul *lairik*, Meithei *lailik* 'id.'; Tiddim *`la:i* 'paper, letter'; Boro *láy* 'leaf', *layzab* 'book'; PNNaga **lay* 'leaf, book' [French, pp. 506–7] > Konyak *lai* 'book', Phom 'id.', Chang *lie* 'leaf, book'; also Dimasa *ba-lai* 'leaf'.

4.33 Further ramifications to already established etymologies

[124] LAME/LIMP/ASKEW. PTB **pay* ≋ **bay*
Tiddim *-ba:i/`ba:i* 'be lame'; Lushai *băi* 'limp, be lame; hop', *păi* 'stagger, reel; have a foreign accent; be out of line askew'; rGyarong [Nagano] *Nbi* 'person who limps'; Kaman Mishmi *a-be*; PNNaga **ba·y* 'jump' [French p. 503] > Phom *tət-ei*, Chang *ai*.
This group of forms is certainly related to PTB **b(w)ăy* 'LEFT' (see above [80], esp. such forms as Jg. *əpāi* 'be awkward, speak with a brogue'). French [p. 445] sets up a PNNaga root **pha·y* 'after' (> e.g. Chang *pai* 'backwards, behind'), which he also suggests relating to the LEFT etymon.

[125] FALL. PTB **glay* ≋ **klay*.
Lh. *ce* 'fall from a height', Luquan *ts'e*^{33} 'fall down' ~ *ts'e*^{11} 'fall over, topple' < PLB **glay*^{3} or **ʔglay*^{1}; Boro *kəkláy* 'to fell', *gəgláy* 'fall, lie down', *klay* 'V downward' (e.g. *za-klay* 'eat from top to bottom',

kam-klay 'burn down', *bar-klay* 'jump down' [Lh. *ce* may also be used as an auxiliary in this way, e.g. *bɔ̂ʔ ce ve* 'fell by shooting', *bà ce ve* 'throw down']; also perhaps Mikir *ingjùy* 'fall off, drop off (hair, leaves, etc.)', V+*jùy* 'V away' (e.g. *kát-jùy* 'wegrennen', *arphlúng-jùy* 'wegjagen') [Grüssner 1978, p. 114].

This group of forms certainly seems related to **kla* 'fall' [STC #123], which is known to have been what one might call an 'eminently suffixable' root [cf. Jg. *khràt* (with *-t*), Lushai *tla · k* 'fall', *thla · k* 'let fall' (with *-k*)].

This etymon is thus another example of the 'new' TB variational pattern we are bringing into focus: **-a* ≷ **-ay*. (See note 52.)

[126] LOVE/MAKE LOVE. PTB **ŋ-(w)ay*.

STC compares PKaren **ʔai* (> Pwo *ai*, Sgaw *ɛ*) to Chinese 愛 **·əd/·ậi* [GSR #508 a] 'love', but does not cite any forms from 'TB proper', though all of the following are certainly related:

Jg. *ńwái* 'respect, love'; Tiddim *-ŋa:i/-ŋaiʔ* 'love; fall in love', *´ŋɛ:i* 'tenderly'; Lushai *uai*, 'hang on to'; *in, uai,* 'clasp one another and be reluctant to leave'; *in, uai, lūng-lēng* 'make love to one another'; *ngāi* 'long for, miss, feel earnest desire for; copulate'; Tangkhul [Pettigrew] *sa-ngai kachi* 'that which one likes to do'; *ngailon* 'gentle'; [Bhat] *khəŋáy* 'desire'.[75]

This root is undoubtedly related to the phonologically unstable etymon **ŋoy* 'GENTLE/QUIET/MODERATE' (above [92]).

4.34 New *-ay etymologies restricted to Lolo-Burmese, where Lahu has a cognate in -e

[127] FLARING: PLB **bray*^{2}.

WB *prâi* 'gape, expand, flare'; Lahu *pé è* (<**pê è*) 'flaring; wider at the tip'.

/The Lh. adverbializing particle *è* frequently affects the tone of the previous syllable (e.g. *ni* 'red', *nì è* 'redly')./

[128] GO$_1$: PLB **ʔay*^{1}. [Bradley (1979a) #'s 647A/822]

Lh. *e* 'verb particle indicating motion away from the center of interest' [GL, pp. 318–9], Akha *iˇ* 'go down', Lisu *ye*^{4} ~ *jye*^{4} 'go', Phunoi *ʔé/lé*, Bisu *ʔɛ́/lɛ́*, Mpi *je*^{5} 'go (south or west)'.[76]

75) Solnit (p.c.) adds several Karenic forms meaning 'copulate' that point to a PKaren allofam with initial **ʔw-* (Pa-O *ʔwé*, Pho and Palaychi *ʔwɛ*, Sgaw *wɛ*, Keyeh *wɛ̯*, Kayoh *wɛ̀* [all < PKaren Tone *B-l]).

76) De Lancey (p.c.) points out that this is a general TB root, occurring also in Himalayish (Bunan *e* 'go', Chitkuli and Manchati *i-* 'go and V; V away') and in Barish (Garo *-e* 'go and V').

[129] CATTLE$_2$/DOMESTIC ANIMAL. PLB *$dzay^2$.

Lh. *cê-cà* 'domestic animals; cattle'; Akha [PL] *je$_\smile$ za$_\smile$* 'animals, whether domesticated or not', [ILH] *djè-zà*; Luquan *dʐe*^{33} 'livestock',

[130] BAMBOO STRIP. PLB *$ʔnay^{1/2}$ ≳ *$ʔney^2$

WB *hnî* (<*$ʔney^2$); Lahu *vâ-ne* [*vâ* 'bamboo'] (<*$ʔnay^1$); Akha [ILH] *á-nè* (<*$(ʔ)nay^2$); also Bisu *nɛ́-phɔ̀* [Bradley 1982][77]

[131] QUESTION PARTICLE. PLB *$lay^{1/2}$.

WB *lâi* 'final particle marking substance questions' (< *lay^2); Lh. *le* 'id.' [cf. GL, pp. 374–5] 'id.' (< *lay^3).

In both languages these particles stand in opposition to a 'yes-no question' particle: WB *lâ*, Lh. *lâ* < PLB *la^2.

It is tempting to see here another instance of our *-*a* ≳ *-*ay* alternational pattern. (See note 52.)

The tonal discrepancy between WB and Lahu is par for the course with particles. (See QUOTATIVE PARTICLE, above [104].)

4.35 New *-ay or *-ey etymologies attested only in Kamarupan languages

[132] LANGUAGE. PTB *rey. [Kmrp]

Lakher *rei* 'language, tongue, dialect, speech'; Boro *ray* 'language, speech'.

[133] BRIDGE/LADDER. *s-lay ≳ *s-ley [Kmrp]

Tiddim *`lei*; Lushai *lei, leih-lâwn* [for the 2nd. syll. of the latter, cf. perhaps Mikir [KHG] *arlân* 'be across, stretch over (as bridge over river)']; Lakher *hlei-dy, hlei-ri* 'stair, bridge, ladder; flight of steps' (all <*s-ley); Tangkhul [Bhat] *śay* 'small bridge', *śayron* 'ladder' (<*s-la·y).[78]

[134] HANG. *$k(w)ay$ [Kmrp]

Lushai *khâi* 'carry in the hand (sthg that hangs); hang up, suspend; lift up'; *kuai,* 'droop, hang down'; Tiddim *-ka:i/`ka:i* 'be suspended', *-xa:i/`xa:i* 'hang'.

/cf. perhaps Jg. *kâi* 'wear flowers or ornaments'/

[135] FLURRIED/DAZED/FOOLISH. *$h(w)a$·y [Kmrp]

Tiddim *´hai/`hai* 'foolish'; Lushai *hâi* 'be giddy, dizzy, dazed; have

77) It is now clear that this etymon is not restricted to LB at all, but is a general TB root. Cf. Proto-Karen **ñai* 'fiber' and Proto-Tamang **hnaĩ* 'id.', both cited in Mazaudon 1984.

78) This etymon also has much wider affiliations than I had thought. Baxter 1984 (#48), following Bodman 1980, cites Chepang (Nepal) *hlay?* 'ladder', and Chinese 梯 **tʻi̯ər/tʻiei* [GSR #591-l] 'wooden steps, staircase'.

one's head swim'; *hāi-huih,* 'be flurried, confused; lose one's presence of mind, be bewildered'; *vai,* 'bewildered'.

[136] MANGO. **ha·y* [Kmrp]
Tiddim *-ha:i;* Lushai *hāi*; Tangkhul [Bhat] *həynɯthəy* 'mango' (*-thəy* 'fruit'), *həykhάthəy* 'kind of fruit', *həymaŋthəy* 'cardamom'.

[137] DEW. **da·y* [Kmrp]
Tiddim *ˊdai*; Lushai *dai,* 'dew; rainwater settled on leaves'.
/These forms are perhaps ultimately to be related to PTB **ti(y)* 'water' [STC #55]./

[138] PULL/DRAG/LEAD$_2$. **ka·y* [Kmrp]
Tiddim *ˋka:i/-kaiʔ*; Lushai *kai,*.

[139] COME$_1$/GO$_2$. **pay* [Wmrp]
Boro *pay* 'come'; PNNaga **pa·y* 'come; stand; lift' [French, p. 467] > Konyak *pei* 'come', Phom *pei* 'come; stand', Chang *pai* 'walk'; Dimasa *phai* 'come'.[79]
/This is accidentally homophonous with a Tai root, PTai **pay* 'go'./

[140] CONCEIVE/BE PREGNANT. **pa·y* [Kmrp]
Tiddim *ˊpa:i/ˋpa:i*; Lushai *păi.*

[141] PUMPKIN. **ma·y* [Kmrp]
Tiddim *ma:i* 'golden pumpkin'; Lushai *māi* 'red pumpkin' [Lorrain 1940 lists many species (p. 306), this being apparently an important food].

[142] LEG. **pey* [Kmrp]
Tiddim *phei* 'thigh'; Lushai *phei,* 'foot, leg'; Lakher *phei* 'leg'; Tangkhul [Pettigrew] *(ā)phei* 'foot; leg', [Bhat] *phə́y*.

[143] ELEPHANT/CATTLE$_3$. **tsa·y* [Kmrp]
Tiddim *sa:i* 'elephant'; Lushai *sāi* 'id.'; Tangkhul [Bhat] *səy* 'cattle' (for the semantics, cf. WT *glaŋ* 'ox, bullock; elephant', *glaŋ-dor* 'team of bullocks', *glaŋ-sna* 'trunk of elephant').
Also perhaps the *2nd.* syll. of Abor *si-ta,* Miri *si-te* 'elephant' (*si-* is an 'animal prefix').

79) De Lancey (p.c.) cites a large number of apparent cognates, meaning either 'come' or 'go', both from Kamarupan (Sizang *pai* 'go' Hrangkhol *phe* 'id.') and from other branches of TB (Nakhi *bi* 'go', Rawang *-bü* 'V away', Thakali *phe* 'go out', Kanauri *bi* 'go', Chaudangsi *pi* 'go; come', Bahing *pi* and Vayu *phi* 'come', Miju [LSI] *phai* 'go'). We should now reconstruct a general PTB root, perhaps **pay* ≷ **bay*.

[144] EAT PNNaga **they*.

This root is reconstructed by French (p. 477) on the basis of Yogli *sei* 'eat', Konyak *hei* 'food', Mzieme *tei* 'eat'. He further compares these to Lushai *ei* 'taste; eat'. However, it seems likely that these forms are ultimately derivable from the basic TB root **dz(y)a* [STC #66], with the strange vocalic reflexes already noticed in STC (p. 58).

4. 36 New *-ey etymologies, where Lahu has a cognate in -i

It will be remembered that *-i* is the regular Lh. reflex of **-ey* (above 4. 21). To the examples already given ([46] FRUIT, [47] FIRE, [48] KNOW, [49] PENIS), we may add the following two roots:

[145] LOOK/TRY TO. PTB **ney*.

Lh. *ni* 'look at; look after, care for' (< PLB **ney*^{3} or **ʔney*^{1}); (as auxiliary verb) 'try V'ing' [GL, p. 237], e.g. *câ ni ve* 'try eating; have a taste', *te ni ve* 'try doing'; Boro *nay* 'look', *nayso* 'look after'; (as auxiliary verb) 'try V'ing', e.g. *za-náy* 'to taste', *labo-nay* 'bring and try', *daŋ-nay* 'feel by touching'.

Also Garo *ni* [with unexplained vowel], Dimasa *nai* 'look, see' (both cited in STC, p. 65 n. 206).

[146] YOUNGER SIBLING$_2$/Y. SIB's HUSBAND. PTB **nyey*.

Lh. *ɔ̀-ni-pā* 'younger brother', *ɔ̀-ni-ma* 'y. sister'; Akha [ILH] *à-njí* 'y. sibling'; WB *ñi* 'man's younger brother' < PLB **ʔ-ñey*^{1};

Boro *bəynay* 'wife's younger brother, y. sister's husband', *bibɔ́nay* 'his wife's y. brother', *nəmbɔ́nay* 'your wife's y. brother'.

4. 37 Etyma (some new, some old) displaying interesting phonological variation

[147] THROW/DISCARD. PTB **ba* ≋ **ba·y*.

Lh. *bà* 'throw; throw away'; (as auxiliary verb) 'discard by V'ing' < PLB **mba*^{1}.

Jg. *kəbài*~*gəbài* 'throw'; Lushai *paih,* 'throw away, fling away; strike out, cancel, annul, discard, subtract'; Tiddim *`pa:i/-paiʔ* 'throw away' < PTB **g-ba·y*.

This is a classic example of our 'new' TB variational pattern **-a* ≋ **-ay*. (See note 52.)

[148] SINGLE/ONE$_1$/WHOLE. PST **day* ≋ **dan* or **tay* ≋ **tan*.

Jg. *tāi* 'single'; *ətāi* 'one, as of a pair'; *gùntāi* 'single', *šìŋtāi* 'only'; Boro *otay* 'whole'; Lakher *dei* 'only; alone'; Lh. *tê* 'one; a; the whole'

(< PLB **day*^{2}).[80]

An excellent candidate for this word-family is Chinese 單 **tân/tân* [GSR #147 a-d] 'single, simple'. If this comparison is valid, it is a striking example of our newly noticed (and yet to be evaluated) alternational pattern, **-ay* ≷ **-an*. (See below [147], [148].)

Lh. *tê* could of course descend either from PLB **day*^{2} or **dan*^{2}, but given the lack of any independent attestation for a final nasal in LB, I believe **day*^{2} to be correct in this case.

Another allofam that must be recognized for LB should perhaps be reconstructed **tey*^{2}, to account for WB *thî* 'single; alone', *ʔəthî* 'alone', as well as Akha *ti◡*, Lisu *hti*$_5$, Hani [Gao 1955] *t'ɔ*$_{21}$, and Woni *tši*$_{21}$.[81]

Still another (probably distinct) root which must be recognized in this semantic area is PLB **ʔ-dik* > WB *tac* 'one', Lahu *ti* 'only' [TSR #31 a, c, #48], perhaps to be related to WT *gtśig* 'one', *tśig* 'a little, few, some' [TSR #70].

[149] WAR/STRIFE. PTB **g-ra·l* ≷ **ran* ≷ **ray*.

STC sets up a PTB root **g-ra·l* ≷ **ran* [pp. 15, 71, 113, 155, 173, 178, 191], on the basis of WT *ḥgran* 'vie with, contend for, strive', *ral-gri* 'sword'; Lushai *ra·l* 'war against, warrior'; and WB *ran* 'quarrel', which Benedict relates to Chinese 戰 **t̬ian/tśi̯än* [GSR #147 r] 'battle; to fight'.

We now see that this set furnishes another example of the 'replacement of **-l* by *-y*' which Benedict had already noted as an occasional Burmese development [STC p. 15, n. 54]. This time the yodizing language is Tangkhul Naga: *rai* 'war; battle; feud', *rai kapiŋa* 'warrior', *rai khaŋarar* 'warfare; make war', *rai-mi* 'soldier; military'.[82]

[150] RED. PTB **t(y)a-n* ≷ **t(s)a·y*

The STC, which sneaks in more allofamic reconstructions than Benedict used to be willing to admit, presents a root **tyan* 'red' (> Lushai *śen*, Thado *ăsén*, Tiddim *san, tśhan* [add Laizo *sén/sĕn*]), which is compared to Chinese 丹 **tân/tân* [GSR #150 a-b] 'red, vermilion; cinnabar', 綪[83] **ts̬i̯ăn/ts̬i̯ĕn-* [GSR #378 g] 'pale red' and 綪 **ts'iən/ts'ien* [GSR #812 t'] 'dark red'. A second allofam **t(y)a* is set up to account for WB *ta* ~ *tya* 'flaming red, very red (in-

80) This Jg./Lh. comparison was made already in Matisoff 1974 (#154). The Lakher form in *-ei* perhaps points to a short vowel (**dăy*). Also possibly related are Lakher *sai* 'only, nothing but' and WT *śe* 'mere, only, nothing but'.

81) These Loloish forms were too hastily grouped with Lahu *tê* in TSR #31b, though of course I remarked on the discrepancy between the unaspirated Lh. initial (< **d-*) and the other (Ak., Ls., Ha., Wo.) forms that reflect **t-*.

82) Kaman Mishmi has developed a *-u* from the **-l* in this root (*tuu-kra*^{55} *krau*^{55} 'quarrel', *tuu-ruuu*^{54} *krau*^{55} 'fight') [p.c., Scott De Lancey], reminding us of the history of French (e.g. *cheval* 'horse', *chevaux* 'horses').

83) This character is mistakenly given as 經 in STC p. 159h.

tensive)' and Chinese 朱 **ĭu̯/tśĭu̯* [GSR #128 a-c] 'red'. [See STC pp. 17–18, 159, 169, 188, 189, 190.]

To all these we may now add a pair of Chin forms: Lushai *tâi*, 'rosy; ruddy; red' and Lakher *sai* 'rosy; ruddy; red; crimson', *sai-law* 'scarlet' [< **t(s)a·y*].

This complex of forms thus illustrates both the **-ay* ≋ **-an* and the **-ay* ≋ **-a* variational patterns that we have been positing.

[151] SQUIRREL/WEASEL. PTB **s-ley* ≋ **s-leŋ* ≋ *s-rey* ≋ *s-reŋ*

STC (pp. 79, 171, 183) sets up a PTB root **sre[ŋ]* 'squirrel; weasel', on the basis of WT *sre-mo(ŋ)* 'weasel', Mikir *iŋren* (< **m-ren*) 'mongoose', and WB *hrañ* 'squirrel' (< **sreŋ*), and identifies the Chinese cognate as 狌 (=鼬) **sri̯ĕŋ/si̯äŋ* [GSR #812 t, u] 'weasel'.

Certainly to be added to this word family are Lushai *hlěi*~*thehlěi* 'squirrel' (< **s-ley*); the first syllable of Abor-Miri *lí-po*~*lí-bo* 'id.'; and a group of forms from Tangkhul referring to various species of squirrel (*saŋri, khərəy, cireŋ* [Bhat]) that illustrate both the nasal- and palatal-finalled allofams.

Possibly related is the 2nd. syllable of Lh. *fâ?-šwɛ* 'red-cheeked ground squirrel; long-nosed tree squirrel' (< **sreŋ*). though the *-w-* is a problem.

[152] EARTH. PTB **m-ləy* ≋ **m-ley*

STC #152 sets up a root **mliy* (=**mləy*) on the basis of forms like Mikir *mili*~*meli* (note the vowel gradation!) 'sand-bank, bare-ground'; Nung *məli* 'country, mountain'; WB *mre* 'earth'; and Phön (Samong dial.) *təmli*~*təmyi* 'id.'

To these we must now add Lushai *lěi* 'earth, ground' and Tangkhul [Bhat] *ŋərəy* 'id.', which point to an allofam **ley*. This is also a perfect prototype for the hitherto inexplicable Lahu form *mì* 'earth' [< **m(l)ey*]. It now seems clear that the **m-* is prefixal (or that this root descends from a fully disyllabic prototype, the 1st. syllable of which came to be treated as a prefix).

At least one other case of **-ey* ≋ **-əy* variation is 'snuck into' STC, i.e. TIGER **d-key* ≋ **d-kəy* (n. 324, p. 116). (See above [52].)

[153] HANG FROM/CLING TO/CREEPER. PTB **dway* ≋ **nway*.

A creeper is defined as 'a plant having stems that grow along a surface, either rooting at intervals or clinging for support.' A very interesting set of forms in this semantic area point to a type of initial consonant variation hitherto unrecognized for TB: **dw-* ≋ **nw-*:

WB *twai* 'cling to, attach', *twâi* 'be pendent; hang', *twai'* 'hang suspensively', *nwai* 'stretch along, as a creeper; creeper', *ʔənwai* 'creeper' (< PLB **dway* ≋

**nway* [Tones *1 ~ *2 ~ *3]);[84] Lahu *te, ɔ-te* 'creeper' (< **dway*^{3} or **ʔdway*^{1}); Jg. *nōi* 'cling to, depend on (as child on mother)', *nói* 'suspend, hang', *ʔənōi* 'hang on to, adhere to', *mənói* 'hang on to, cling to; be united (of mind or purpose)', *mənōi rù (shang)* 'a variety of creeper or climber' (< **nway*).

Cf. also Tangkhul [Pettigrew p. 377] *nei kahai* 'climb up, as a creeper'.

[154] INCHOATIVE PARTICLE. PLB **sVy*^{2}

Three LB languages have a particle indicating 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:

WB *sê*, Lh. *šē* [GL, pp. 336–8], Akha [ILH] *á-shì*.

However, the vowel correspondences are irregular (WB *-e* < **iy*, Lh. *-e* < **ay*, Ak. *i* < **-ey*). Rather than invoke an elaborate alternation here, we should point out the phonological instability of functors, and the possibility of contamination from Tai (cf. Siamese *sĭa*, with similar grammatical functions).

[155] SULFUR. **gan* ≷ **gat* ≷ **gay*.

This interesting word displays wide variation in final in several TB languages: WB *kan'*, Tiddim *-ka:t*, Lakher *kai*. We are undoubtedly dealing with a polysyllabic loanword, probably ult. < Skt. *gandha* 'odor; odoriferous substance; sulfur' (cf. Mikir [KHG] *kóndhók* ~ *kóndohók* 'sulfur' < Assamese *gandhaka*).

4. 38 Etyma in *-ay where Lahu has a cognate with vowel other than -e

As we have seen, by far the most frequent Lahu reflex of **-ay* is *-e* (above 4. 31 [93–104], 4. 34 [125–129]).

There are, however, a number of cases where Lahu has a different vowel (*i*, *ɛ*, *ɨ*, or *ə*). At first glance, this looks rather chaotic—fully 5 out of the 9 Lahu vowels may sometimes reflect **-ay*:

i	ɨ	u
e	ə	o
ɛ	a	ɔ

Lahu Reflex — Examples

-ɛ — TAIL [72], LEFT [80], CEASE [156], LATE [157], DUCK [158], SAND [159];

84) WB has still another form which might be related, *chwai* 'attach to, connect with' [< **tšway*].

-i TEN [73], TOOTH [3; 160], VEGETABLE/CURRY [161], HABIT [162];
-ɨ LAUGH [1]; CHAFF [77]
-ə STAR/SCATTERED WIDE [163], FINISHED [164], YAM [165].

Five of these etyma (TAIL, LEFT, TEN, LAUGH, CHAFF/HUSKS) have already been discussed. Here are the others:

[156] CEASE. PTB **m-dzay* ≷ **s-dzay*.

WB *câi* 'cease, stop, subside'; Lh. *jɛ̂* 'stop, come to a stop, wait, pause, rest; be patient, long-suffering' [this WB/Lh. comparison is made in Bradley 1979 a (#739 B), who reconstructs PLB **m-jay*^{2}]; Ak. [PL] *tsi*$^{\vee}$ 'for rain to stop; to no longer have offspring';

Jg. *šətsāi* [Hanson] 'cleanse, purify'; [Maran] 'neutralise, erase; bring to a balance; forgive and forget, disregard (as minor irritations); trickle off, cease, terminate (as rain)';

Lakher *tlei* 'cease, stop, come to an end'.

[157] LATE/TOO SLOW. PTB **s-la·y*

WT *le-lo(-nyid)* 'indolence, laziness, tardiness'; Lushai *tlăi* 'be late; slow (as a clock)'; Lakher *tlai* 'late'; Lh. *lɛ* 'be late; be the last one'; Mpi *lv*^{5} 'late'.

The Lahu and Mpi forms reflect PLB **ʔlay*^{1}. (In *Proto-Loloish* #565, Bradley reconstructs **(k)-l(y)ay*^{3}, but Mpi □^{5} reflects PLB Tone *1. Lahu mid-tone (unmarked) reflects either Tone *3 or (as we take it here) Tone *1 with *preglottalized initial.)

[158] DUCK. PLB **bay*$^{1/2}$

WB *bhâi* (< Tone *2); Lh. *á-pɛ̀* (< Tone *1); Mpi *tɕa*^{2}*pe*^{24} seems to reflect a prototype with final stop. The unusual WB initial (Bradley #53 a reconstructs **ʔb-*) adds to the impression that this is a loanword. This certainly seems to be a SEA'n areal etymon. Cf. PTai **pet*. Benedict reconstructs PAustro-Thai **bets* [1975, p. 276].

[159] SAND. PTB **say* ≷ **zay*.

This is another areal word. Benedict reconstructs PAT **bəw(n)draj* [1975, pp. 369–70] > Proto-Tai **draay* > **zaay*.

Bradley #334 reconstructs PLB **say*^{2}, citing WB *sâi*, Lh. *šɛ̂*, Akha [PL] *k'a*$^{\vee}$*shui*$_{\wedge}$ Phunoi *khisăi*, Bisu *sàj*, Mpi n_{4} *si*$_{5}$. The Lahu form must be a loan (prob. from Modern Burmese), since native Tone *2 syllables in **s-* acquire Lh. very-low tone □̄ (i.e. we would expect *šɛ̄*). The Akha form reflects a *stopped antecedent.

To the above add Jg. *zài-brù* (with voiced initial) and Abor-Miri *shi-yé* 'sand', *yé-pu* 'soft sand', *yé-rol* 'coarse sand'.

[160] TOOTH$_1$/TUSK.[85] PTB**m-jway*.

WB *cwai* 'eyetooth; tusk', Lh. *cì* 'tooth', Akha [ILH] *djý* 'tusk', Lisu *si*^{5} *hchi*^{3} 'tooth', Mpi *tɕɯ*^{6} 'classifier for tusks' < PLB **jway*^{1} (Bradley #96B reconstructs **ʔ-cway*^{1}, prob. because of the Lisu tone);

WT *mche-ba* 'canine tooth, eyetooth, fang, tusk'.

[161] CURRY/VEGETABLE/DISH TO EAT WITH RICE. PTB **r-tsa·y*

Lushai *_tlha:i* 'vegetable'; Lahu *ɔ̄-chî* 'dish to eat with rice' (*ɔ̄* 'cooked-rice'), Akha [ILH] *tshè* 'food (except rice)' [not in Lewis, p. 306].

I used to think the 2nd. syll. of Lh. *ɔ̄-chî* meant 'to lift up, exalt' (i.e. curries or vegetable dishes 'lift up' the taste of plain rice; most Lahu informants endorse this analysis), but Akha has another word *tjhì* [ILH] 'lift up', which indicates that Lh. *chî* 'lift up' might really be etymologically distinct from the 2nd. syll. of *ɔ̄-chî*.

It seems likely that Chinese 菜 Anc. *ts'âi'* [Karlgren, *Analytic Dictionary* #1025] 'vegetables; things plucked' is cognate.

[162] HABIT/MANNER/CUSTOM. **lVy*

Jg. *lài* 'habit, custom', *ʔəlài* 'conduct', *lài-lèn* 'pattern, model, precedent'; WB *le'* 'practice, acquire a habit'; Lh. *ɔ̀-lî* 'custom, rule'.

The vowel correspondences are quite irregular, for this etymon is undoubtedly a loan from Chinese 理 **liəg/lji*: [GSR #978 d] 'regulate, reason, principle' or 禮 **liər/liei*: [GSR #597 d] 'propriety; ceremony; rite, ritual'.

[163] STAR$_2$/SCATTERED WIDE. PTB **gray* ≷ **glay*.

WB *krai* 'star', *krâi* 'scatter, throw about; sow, as seed', *kyai* 'wide, broad', *kyâi* 'be wide apart', *khyâi* 'make wide apart', *khyai* 'wide, spread out', *khrai'* 'diffuse';

Lh. *mɔ̀ʔ-kə* 'star' (for the 1st syll. see [35] above), Akha *a-gý* 'star' [the Lh. tone points to a variant with *glottalized initial];

/for the semantic connection between 'star' and 'scattered wide (in the firmament)', see Matisoff 1980a, pp. 30–1/;

Also Bisu *klù* 'wide', Mpi *kɯ*$_5$ 'id.' < PLB **glay*$^{1/2}$ [Bradley 1979 a #527];

Lushai *ṭai* 'scatter, disperse'; Boro *ogray* 'be wide (face)'; Pa-O Karen [Solnit] *lai* (< PKaren Tone *B-2) 'wide'.

[164] FINISHED/PAST. PTB **bwăy*.

Jg. *bōi* 'be finished, ended'; WB *pwâi* 'be past the season (as of blossoming or bearing fruit)'; Lushai *peih,* 'finish, complete; ready, willing', *`vei* [Weidert] 'come to an end'; Tangkhul [Bhat] *kəpəy* 'be complete'.

Lh. *pɔ̀* 'finish, come to an end' certainly seems related somehow, though it

85) See [2] above.

reflects PLB Tone *1 (vs. WB *pwâi* < *2).

This word family is still far from understood. Also waiting to be accommodated is WB *prî* 'be done, completed' (also < PLB Tone *2).

[165] YAM. PTB **m-n(w)ay*.

STC (p. 150) compares Jg. *nai* (actually *ʔənài*~*ʔəʔnài*) and Sgaw Karen *nwɛ*, without offering any reconstruction. To these we may add Lahu *mɔ̀*, Akha [PL] *mahˇ* [*mɒ̃*], and, most revealingly, Lotha Naga *máni*. This splendid Lotha form reveals that the labial nasal is prefixal, so that the Lahu and Akha cognates display *prefix preemption*.

This etymology is also significant because of the light it sheds on the relationship between God and the copula. For, as the Lord of the Tubers said, "I Yam that I Yam."

4. 381 Discussion of these 'special' Lahu reflexes

Of the 15 sets where Lahu has a reflex other than *-e*, three are loanwords or area words (DUCK, SAND, HABIT), and may be disregarded. Three have palatal initials (TEN, TOOTH, CURRY/VEGETABLE) and thus perhaps the 'higher than normal' reflex *-i*. Four more have *initials consisting of a labial element plus *-w-*, and in 3 of these cases the Lahu reflex is a central vowel: HUSKS/CHAFF **pwa·y* > Lh. *phɨ́*, FINISHED **bwăy* > Lh. *pɔ̀*, YAM **m-n(w)ay* > Lh. *mɔ̀*, LEFT **b(w)ăy* > Lh. *mɛ̄*. This last, "exceptional" set presents many problems, and cannot be taken as criterial (see [80], [124], and n. 66).

The set for TAIL also has an irregular Burmese reflex and is a tricky, aberrant etymon.

In two cases, a Lahu central vowel appears after an initial which does not tolerate a following *-e*. Thus *ɡɨ́* 'laugh' < **ray*, since there are no syllables **ge*; and *-kə* 'star' < **gray*, since there are no syllables **ke*. [See 5. 11, below.]

That leaves CEASE and LATE, which cannot plausibly be explained away at present.

At any rate, for any one of these four 'special' reflexes there is only a tiny number of solid examples. By far the best attested and least restricted Lahu reflex of **-ay* is *-e*.

4. 39 Promising new etymologies for which the evidence is still skimpy

For a large number of fragmentary sets, we cannot yet be sure whether we have the beginnings of valid etymologies or not. Rather than throw them away entirely, or try to make premature reconstructions, we shall merely list the data in this section.

[166] PRECOCIOUS/ACHIEVEMENT ORIENTED: Jg. *kài* 'be forward, premature, precocious (as a child); be ardent and thus exacting, as in work'/Lushai *kāi* 'cross (over), proceed; attain, achieve'.

[167] NARRATE: Jg. *khāi* 'tell, narrate'/Abor-Miri *ki* 'narrate, tell, relate'.

[168] SPRAWL/LEAN: Jg. *gài* 'sprawl (esp. in a vulgar way)'/Abor-Miri *ke* 'lean', *ked-ge* 'lean back'/Laizo *kaay/kǎay* 'lean, curve, slant'.

[169] $GOAT_2$: Jg. *bàinām* 'goat'/Mikir [KHG] *bī* 'sheep; goat'.

[170] NEIGHBORHOOD/HAMLET: Lakher *vai* 'hamlet; neighbor'/Mikir [KHG] réy 'side, neighborhood, vicinity'.

[171] $GOOD_2$: Jg. (Hkahku dial.) *ài* 'good, proper, becoming'/Abor-Miri *ai* 'be good, well'.[86]

[172] COPULATE: Lakher *hnei*/Jg. *nè?*.

[173] SAW (n.): Tangkhul [Bhat] *horay*, [Pettigrew] *khurai, horai* (n.), *khurai kahāt* 'to saw'/Meithei *holay*. [This dissyllabic word is probably a loan into both languages (< Indo-Aryan?).]

[174] SPREAD (of intangibles): Jg. *sōi* 'spread (as a rumor)'/Mikir *sày* 'spreading here and there (with a slight noise)'.

[175] ABSTAIN/REFRAIN: Lh. *ce-kan* 'abstain, fast, refrain'/Mikir [KHG] *sé* 'abstain from (smoking, alcohol, etc.)'.

[176] STRING THROUGH: Jg. *šōi* 'pass ring through nose (of bovine); put fish on a stringer'/WB *si* 'string, as beads'/Mikir [KHG] *phròy* 'to insert a new rope into the nose of a buffalo'/Tangkhul *khərùy* 'string flowers', *khəŋəruy* 'go in between, go through'.

[177] $SMALL_2$/SLENDER: Jg. *šói* 'small, weak, paltry'/WB *swai* 'slender and tapering' [see Matisoff 1974, #275].

[178] INTERROGATIVE PRONOUN: Jg. *kədāi~gədāi* 'who'/Meithei *kəday* 'where'.

[179] TIME/TURN: Lushai [Weidert] *`voi* 'time, times/Mikir [KHG]

86) Solnit (p.c.) cites a PKaren form **re* (A-2) 'good; beautiful', which looks like it belongs with these Jingpho and Abor-Miri forms, implying an etymon **ray* ≷ **(w)ay*. But this takes us right into the phonological and semantic territory of our basic GOD/COPULA etymon [below, Section 5]! For a similar semantic link between GOD and GOODNESS/BEAUTY ("that which is, is right!"), cf. WT *hla* 'the gods', WB *hla'* 'beautiful' [STC #475].

ingwé 'time, turn, round'.

[180] SQUINT/GAZE: Jg. *sói* 'gaze at'/Lh. *mɛ̂? še e ve* 'look at sthg sidelong; squint at out of the corner of one's eye' (*mɛ̂?* 'eye').

[181] STRAIGHT: WT *the-re* 'straight, upright, firm; smooth (without folds or wrinkles)'/Lh. *thɛ̂* 'straight, upright'.[87]

[182] ONE$_2$: Jg. *âi*~*ləŋâi*~*ńŋâi*/Mikir [KHG] *e-* (allomorph of *isí* 'one'.

[183] SCRATCH UP FROM GROUND: Jg. *ʔəkhrái* 'scratch with fingers when searching for sthg on ground'/Lushai *hài* 'scrape or draw along; scratch up, scrape; unearth by scratching; clear out loose soil with hands'.

[184] VULVA/RECTUM: Tangkhul [Bhat] *hay(-khur)* 'vulva'/Meithei *hoyloŋ* 'rectum' [for the semantics, cf. e.g. WT *rkub* 'anus; vulva', *gżaŋ* 'anus; privy parts']; also perhaps Limbu *hi-rā* 'vulva', *hi-rā-hong* 'vagina', Mru *kai* 'vulva'.

[185] COME$_2$/ARRIVE: Mikir [KHG] *lè* 'arrive, reach'/Chinese 來 **ləg/lậi* [GSR #944 a] 'come'. This is a good example of **-a* ≍ **-ay*, since there is a well-established PLB root **la*^{1} 'come' [WB *la*, Lh. *là*, Akha [PL] *la*$^{\smile}$, Phunoi *lá*, Bisu *lá*, Mpi *lo*$_5$] (Bradley #649 A).

5. 0 The Sino-Tibetan copula: morphophonemic shape and semantic ramifications

From the purely phonological point of view, the ST copula may be regarded as basically just another etymon in **-ay*—that rhyme on which we have already lavished so much attention. As is usually the case, however, no single invariant proto-form can begin to do justice to the multiplicity of reflexes in the various ST languages. We are dealing with a complex (though relatively well-behaved) word family, wherein the root could be preceded by a number of prefixes and/or followed by suffixes, and where the root itself took several variant shapes, showing alternations of the root-initial consonant and even the nuclear vowel.

Our claim is that there were two irreducible variants of the ST copula from earliest times, one with root-initial **r-* and the other with root-initial **w-*.[88] At least 5 prefixes attached themselves to the root in one or another

87) Alternatively, the Lahu form may well descend from a prototype **tan*, in the light of the Achang forms *tan*^{21} 'straight'/*than*^{21} 'make straight' [Dai 1983].

88) There is no need to dwell on the articulatory and perceptual similarities between [r] and [w]. I have referred to the interchange between the two as the 'wittle wabbit syndwome'. See, e.g. Matisoff 1978a, p. 56. The lateral *l-* also turns up in several daughter languages (esp. in Kamarupa), though this appears to be a secondary development from **r-*.

daughter language (*ʔ-, *s-, *g-, *d-, *m-), occasionally two of them at the same time. The dental suffixes *-t and *-n could follow the root, bringing certain increments of meaning. As for the rhyme, our contention is that it was basically *-ay, with a well-attested variant in *-i.[89] There is also sporadic evidence for a variant *-əy (=*-iy), but I feel this can by no means be considered to be the basic vocalism of the root, especially in view of the key Jingpho cognates in -ai (ʔai, rái, rài, ràiʔ) and the WT cognates in -e.[90]

We are thus positing the fundamental shape of the copula as

*way ≷ *ray.

When we include all the affixes and root-variants for which there is evidence, and include them in a single 'pan-allofamic' formula, we get something like the following:[91]

*s-						
	(Q)					
ʔ-					-t	
	r					
g-			a	y		
	w					
(d-)					-n	
	(l)		(ə)			
(m-)						
				-t		
≷≷	*s-	r	i		≷≷	*s-rut
				-n		

Constraints: (a) *-ay-t is a possible rhyme, but *-ay-n, *-əy-t, and *-əy-n are not attested;

(b) the vowel *-u- appears only before *-t.

89) A subvariant of the combination *-i-t was *-u-t, another instance of the widespread -i- ≷ u- alternation in TB closed syllables. See above 3.0 and below 5.34.

90) PTB *əy(=*iy) > WT, Jg. -i [STC p. 61]. We are thus taking issue both with Benedict, who (on the basis of a much narrower range of forms than are considered in this study) reconstructed PST *s-rə·y ≷ *sri(-n -t) [1976, p. 190], and with Thurgood (1982) who reconstructs the copula as *wəy.

91) Less frequent increments and variants to the root are in parentheses. 'Pan-allofamic' formulas like this are necessarily something of an oversimplification, since they seem to imply that all variants are of equal antiquity, whereas in reality some are undoubtedly 'younger' than others. For example, the zero-initial (> e.g. Jg. ʔāi) is clearly secondary with respect to *w- (one of our *ab initio* root-initials). The virtue of such formulas is that all variants of some antiquity are displayed simultaneously, so that the full phonological range of the word family can be appreciated.

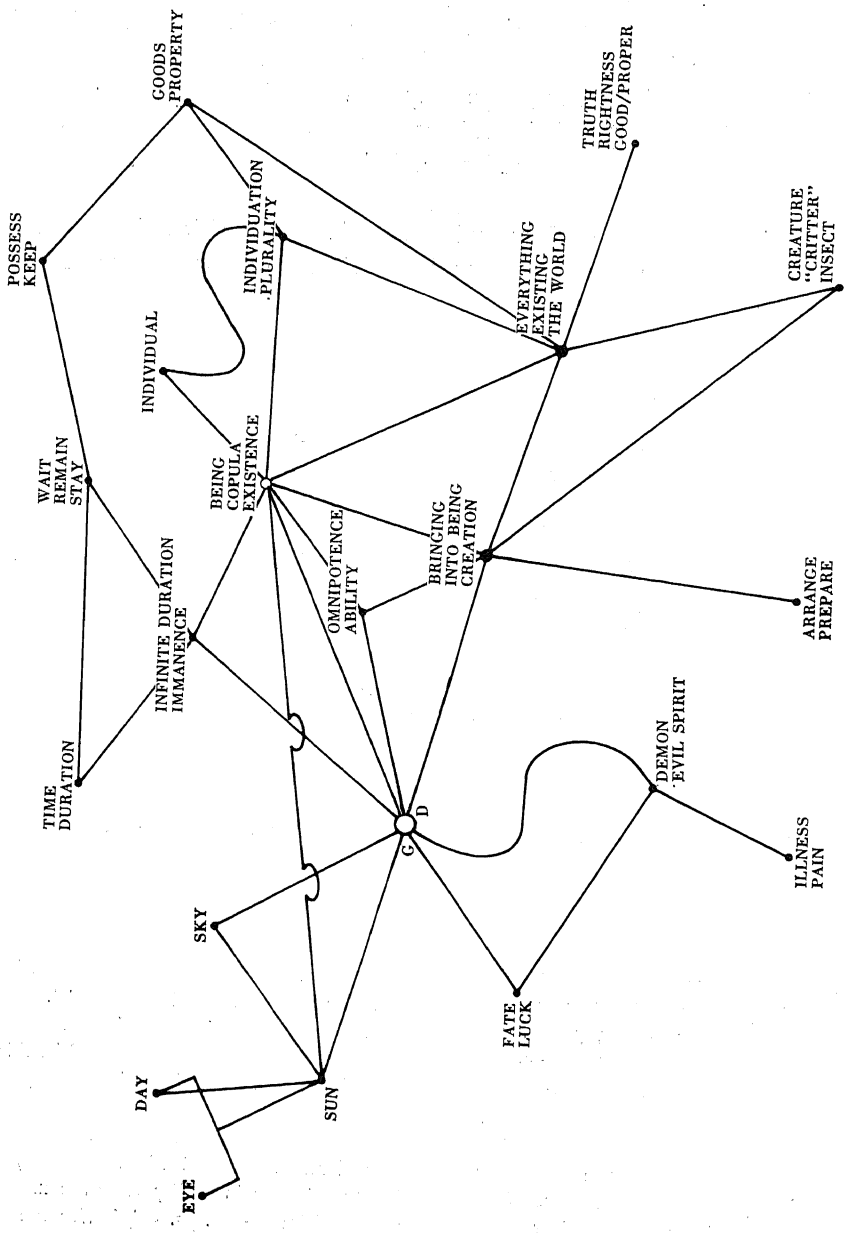

Figure 1. Semantic Ramifications of the Copula

Semantically, our etymon covers a wide range. We take the basic meaning to be BEING/IDENTITY/EXISTENCE, and it is in the abstract grammatical realm that the root is most widely attested: as copula, subordinating particle (relative or genitive marker), evidential morpheme, aspectual or modal particle, nominalizer of verbs, etc. Fanning out from this area of semantic space, we find extensions into the ideas of *creation* (bringing into being, arranging, preparing); *ability* or *potentiality* (efficacy, omnipotence); *things existing* (everything, the world, creatures, "critters"); *truth, rightness* ("that which is, is right") *individuation* (plurality, multiplicity); *time* or *duration* (immanence, staying, remaining, waiting); *possession* (keeping, property, goods); and of course, implicit in all these, *God* (and his counterparts or antitheses, *spirits* and *demons*).

These semantic relationships are crudely tabulated in Figure 1.[92]

5.1 Abstract grammatical morphemes reflecting the *way allofam

This is not the place to try to explain the interconnections among all the grammatical roles and functions that our etymon has assumed in the ST languages.[93] In his important study (1982), Thurgood has assembled cognates from a dozen TB languages and Chinese, all of which have copula-related abstract grammatical meanings and a phonological shape which allows them to be derived from a prototype like **way* (Thurgood's **wəy*).

The forms Thurgood cites include the following:[94] Sherpa *wəy ~ wye* [occurs in final position in the VP, with both transitive and intransitive verbs, in certain tenses and persons]; Khaling *we* 'past tense suffix after negated verb', *e* 'evidential particle marking reported speech'; Newari *ye* (after vowel) ~ *e* (after consonant) 'marker of citation-form of verbs; of non-past conjunctive forms of verb stems ending in *-n* or *-l*'; Gallong *re ~ ye* [note the variation in initial!] 'future indefinite or negative; question-marker; incompletive past'; Jingpho *we* '1st. person sg. present indicative particle';[95] Lushai *e ~ ve* 'a verbal expletive, or verbal ending[96] [*ve* is used in combination with *va* at the end of

92) We are following our usual conventions for 'metastatic flow-charts' (see Matisoff 1978a, pp. 193–229; 1980a "Stars, moon . . ." p. 39; 1980b "Arm, wing . . ." p. 32). A straight line connects semantically related points; a curved line ~ symbolizes a relationship of opposition (which is a particularly *close* type of semantic association).

93) Matisoff 1972b is a study of the relationships among the grammatical processes of nominalization, relativization, and genitivization—all of which are signalled by the Lahu particle *ve*.

94) For the moment we are reserving discussion of the forms from the LB branch of the family.

95) Several other Jingpho forms must also be brought into the discussion. See below, esp. 5.2.

96) 'Throughout the tenses and persons of the indicative mood, *e* may be affixed without affecting the meaning' (Lorrain and Savidge, p. 19). This makes *e* look very much like a sentence-nominalizer, closely analogous to Lahu *ve*.

exclamatory sentences']97) Garo *-e-* 'marker of adverbial clauses'; Nocte *-e-* 'continuous action; stativity'; Karen *-wé-* 'reported speech'.

In his comment on the first version of Thurgood's paper, Benedict (1981) cites several related Chinese forms, especially 惟 or 維 'copula; to be', reconstructed by Karlgren [GSR #575 n-o] as **dịwər/ịwi*, revised to Archaic **sgịwər* by Benedict on the basis of *xié-shēng* evidence, and referred to a doubly prefixed prototype **s-g-wəy*. The 'negative copula' 非 **pịwər/pjwẹi* [GSR #579 a-b] is plausibly analyzed as a fusion of a negative labial element with **-wəy*.98)

To all these, we may add cognates from several other TB languages: Abor-Miri *ai* [Lorrain 1907, p. 409] 'clause-final particle' (apparently an indicative nominalizer), *ái* 'interrogative particle'; Dulung (T=Trung) e_{53} [Sun Hongkai 1982] 'copula' (e.g. $ă\eta_{53}$ $jă\eta_{53}$ sa_{55} a_{21} ja_{55} bu_{53} e_{53}, na_{55} $plă?_{55}$ mu_{21} e_{53} 'What he saw was a snake, it was not a fish' [p. 163]); Tangkhul Naga *wui* [Pettigrew, p. 466] 'genitive particle';99) Meithei *oi-ba* 'copula [cited but not exemplified in Thoudam, p. 48].100)

Of especial importance is the Jingpho particle *ʔāi* (already discussed in Matisoff 1972 b; not cited in Thurgood), which has a number of interrelated functions quite analogous to Lahu *ve*: [Hanson p. 154/Maran p. 131] 'copulative conjunction for which there is no equivalent in English; connective used as a relative pronoun; verbal particle, 3rd. pers. sg. pres. indicative; noun affix used in the formation of abstract or verbal nouns' [in more modern terminology we would say: 'relativizer; marker of citation form of verbs; nominalizer of embedded clauses; indicative sentential nominalizer'].

This grammatically vital etymon is very much in evidence in Loloish.101) Besides Lh. *ve* 'genitive marker; relativizer; marker of citation-form of verbs; indicative nominalizer', we find Akha [PL] *eu*~*eu*◡ 'subordinator; citation-form marker; terminator of utterances in declarative mood', Lisu [Fraser] rgh_5 (i.e. $ʏ_5$), Phunoi Ø, Bisu *hú*, Mpi Ø (all cited in Bradley [#'s 838 and 844], who reconstructs PLoloish **way*$^{3/2}$).102)

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97) We should add Lushai *ai* 'in place of; the instrumental means of', which corresponds exactly to one of the functions of Jg. *ʔāi* 'instrumental'.

98) Cf. the long list of Chinese negative morphemes with labial initial: 弗 **pịwət* [GSR #500 a-c], 不 **pwət* [#999 a-d], 未 **mịwəd* [#531 a], 勿 **mịwət* [#503 a], 無 [#103 a-f], 无 [#106 a], 毋 [#107 a] (all **mịwo*).

99) Note the parallelism between Tangkhul *wai*, Lh. *ve* (< **way*) and Tangkhul *hui*, Lh. *hwē* 'wither' (< **hway* [98]).

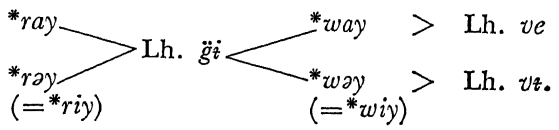
100) The only copula actually illustrated in Thoudam is *ni* (pp. 167–8), from a distinct root. See below 6.0.

101) As Bradley (1979a, p. 254) puts it, 'This particle . . . occurs in every Loloish language for which there is any significant data available on particles'.

102) We should also add Luquan ve_{33}~ve_{55} 'subordinator; final particle' [Ma 1949], as well as Tangut (Hsi-hsia) *vịe* 𗏁 [e.g. Kepping 1975].

5.11 Lahu reflexes of *-ay and *-əy(=*-iy) after *w- and *r-

Before proceeding, we would do well to justify the reconstruction **way* (rather than **wəy*) on the PLoloish level. The evidence indicates that Lahu merged the two rhymes after **r-* (to a central vowel, usually *ɨ*), but kept them distinct after **w-*, as follows:



The reason for this assymmetry is that Lahu does not tolerate the syllable **g̈e*. See Table VI.

Table VI. Lahu Reflexes of *-əy and *-ay after *w- and *r-

	PLB	WB	Lahu	Others
I. **rəy (=**riy)*				
'water'	**rəy¹ (=*riy¹)*	*re*	*g̈ɨ̀*	Akha [PL] *ui˘*, [ILH] *ý*
'run$_2$'	**b-rəy² (=*b-riy²)*	*prê*	*g̈ɨ̂*	Lisu *rgh$_5$*
II. **ray*				
'laugh'	**ray¹*	*rai*	*g̈ɨ̀*	Ak. [PL] *ui˘*, [ILH] *ý*
'plural'[103]	**ʔray¹ or 3*		*hɨ̀*	Lakher *hrai*, Mikir *háy*
'star$_2$'	**ʔ-gray¹*	*krai*	*(mə̀ʔ-) kə*	Ak. [PL] *a-gui˘*, [ILH] *a-gý*
'God$_1$'	**ray¹*	—	*g̈ɨ̂ (-šə)*	Ak. [Bradley] *gui(-shah˘)*, Lisu *wu$_4$ (-sa$_4$)*
'things; stuff'[104]	**ray¹*	—	*g̈ɨ̀*	
III. **wəy (=*wiy)*				
'far'	**wəy¹ (=*wiy¹)*	*wê*	*vɨ̂* 'be far' ⨯ *fɨ̄* 'cause to be far; demarcate, separate' (<**ʔwəy¹*)	Lisu *rgh$_5$*
'snake'	**m-r-wəy¹ (=*m-r-wiy¹)*	*mrwe*	*vɨ̀*	Lisu *hu$_3$*
IV. **way*[105]				
'copula$_1$'	**way³*	—	*ve*	Ak. *eu∼eu˘*, Lisu *rgh$_5$*

103) See below [186].

104) See below 5.2.

105) It will no doubt be immediately noticed that we are omitting from consideration the etymon BUY$_2$ (WB *way*, Lh. *vɨ̀*) [cited in the chart in Benedict 1983, p. 85]; but this is because it descends from **ywar* [STC pp. 15, 51, 89] (cf. Lushai *zuar*, Mikir *dʑor*, Meithei *yol∼yon*), and is "definitely a loan from Austro-Thai" [STC n. 170]. Note that this root is not restricted to 'Kuki-Naga' (contra STC's Index of TB Roots, p. 209). It appears that this **-ar* rhyme merged with **-əy* at an early date to yield Lahu *-ɨ*.

5.2 Copula-related morphemes reflecting the *ray allofam

A number of important Jingpho forms that descend from **ray* reflect both the 'core' and the 'extended' meanings of the copular etymon:

Jg. *rái* 'to be, exist (occurs frequently as a verbal auxiliary or emphatic, e.g. *shī sā nā rái* 'He *will* go')'; be true, be a fact (*dài khū rái ŋà ʔāi* 'This is the true way'; *dài rái ù? gà?* 'Let it be so; Let us call this the truth'; *rê* 'to be; the copula *is*' (e.g. *ǹdài wa ń-rê ʔāi* 'This is not the person');[106] *rài* 'be able, can; form, create, fashion'; *rái* 'stay over; remain overnight' (i.e. "be immanent"); *rài?* 'stop, wait'; *rái* 'things, goods, property', *ʔərái* 'id.'

Other forms from **ray* with meanings relating to 'possession/ownership' or 'staying/remaining' include: Mikir [KHG] *ràỳ* 'keep; set apart; reserve; collect; preserve', *cho-rāy* 'to own'; Tangkhul [Bhat] *khərəy* 'have' (*-əy*<**-ăy*), *khəŋərəy* 'cling' *khəŋəray* 'wait for smn', *raykan* 'watchman', *ngarai* [Pettigrew] 'stay, remain', *khəwáy* [Bhat] 'have' (< **-way*). Also belonging here is the Lahu classifier *ɡ̈ì* (< PLB **ray*[1]) 'collectivity', which only occurs after the numeral *tê* 'one; the whole', as in *chi tê ɡ̈ì* 'this bunch of things; all this stuff'.

5.21 *s-ray

Many words descend from the allofam **s-ray*, with the **s-* usually to be identified with the causative prefix that is one of the best-attested morphological elements in TB:

Jg. *šərái* 'to consider, deliberate; get ready, make preparations; to effectuate, take action' (i.e. "cause sthg to be a certain way"); Jg. also has a fused doublet (where the *šə-* prefix seems to have 'preempted' the root-initial) *šāi* 'couplet of *rài* "form, create" '[107]; Lushai *hrai* 'turn (as the wick of a lamp), fasten (as a shirt) [i.e. "cause to be a certain way, adjust"]; keep (hostage), detain forcibly ["cause to remain in a certain place"]; WT *sgre-ba* (<**s-g-ray*, a doubly prefixed allofam) 'put or place in order; put together; compare (e.g. records)'; Tangkhul *hai kasā* 'set aside, put by, reserve' (*hai* apparently < **hrai*, with preemption of the *r* by the ***prefix); *kəháy* [Bhat] (< **g-s-ray*) 'place, put, keep, set, place, retain; to be' [Bhat 1969, p. 68]; *se-háy* 'place to keep cows', *hok-hay* 'enclosure for pigs'.

One particularly well-defined semantic extension of **s-ray* is 'plurality; everything':

106) It looks as if this *rê* is simply an allegro (i.e. fast-speech) variant of *rái*. It is under the 'secondary' high-falling tone ◌̂, which often represents a sandhi variant of another underlying tone. (E.g., verbs under the low tone acquire ◌̂ when preceded by the negative prefix: *lù* 'have', *ǹ-lû* 'not have'.)

107) When *rài* and *šāi* co-occur as couplets in an elaborate expression they constitute what we have called an 'incestuous compound', i.e. one which contains two different allofams of the same word-family. See Matisoff 1978a, pp. 118–9.

[186] PLURAL/EVERYTHING. PTB **s-ray*.
Lakher *hrai* 'plural affix for denoting company, etc.'; Mikir [KHG] *háy* 'plural of non-animate nouns'; Boro [Bhat 1968, p. 158] *sray* 'to V everything' (e.g. *za-sray* 'eat everything', *zankri-sray* 'shake everything', *ran-sray* 'distribute everything); Lahu *hɨ* 'pluralizer, esp. of personal pronouns' [Matisoff 1973a, p. 65], e.g. *ŋà-hɨ* 'we', *nɔ̀-hɨ* 'you (pl.)', *yɔ̂-hɨ* 'they', *Cà-lɔ̂=hɨ* '*Cà-lɔ̂* and his friends/group' [See Table VI].

5.22 *g-ray

Also well-attested in combination with our copular root is the semantically elusive **g-* prefix. We have already noted this in tandem with **s-*: WT *sgre-ba* 'put or place in order' < **s-g-ray*, which is directly comparable to Chinese 惟 or 維 'copula' < **s-g-wəy* [above 5.1]. With these forms belongs Jg. *gəràì* 'lay in order, as wood for a sacrifice or funeral pyre'. (This word also means 'very; very much' [probably an outgrowth of the 'pluralizing/maximizing' sense] and '(not) yet' [used adverbially esp. before negated verbs; see the discussion of the 'time/duration' sense, below 5.24].)

The most striking appearance of a velar prefix with this root is the Jingpho word for 'Supreme Being; Creator' (*kəràì kəsāŋ*), the existence of which was one of the chief motivations for undertaking this study.

Burmese also provides evidence for a velar-prefixed variant in the shape of two pairs of particles that display an unusual variation of initial consonant: WB *kai* ~ *rai* (Mod. Bs. *ke* ~ *re*) 'co-ordinate marker; and (esp. in lists)' [Okell 1969, Vol. I: 5.10, 8.2; Vol. II: p. 459] and *kai'* ~ *rai'* (creaky tone: Mod. Bs. *ke'* ~ *re'*) (1) 'verb-sentence marker: non-future, translatable by English present or past tense'; (2) 'subordinate marker, possessive' (e.g. *hsei ye' ənañ'* 'the smell of the medicine') [Okell, I: 5.8, 7.4; II: p. 460]. The variants with velar initial occur only if the preceding syllable is under the stopped tone (Bs. 'Tone 4').[108] Note the close parallelism in grammatical functions between *kai'* ~ *rai'*, Lahu *ve*, and Jg. *ʔāi*, all of which are both 'non-future verb-sentence markers' and subordinators.

Both in its 'verb-sentence marker' and 'subordinate marker' functions, *rai'*/*kai'* has an elegant variant *ʔi'*, which looks even closer phonologically to Lh. *ve*/*Jg. ʔāi*.

5.23 *m-ray

Jingpho has a pair of forms with a prefixal *mə-* that is perhaps a reduction of the widespread TB root **mi(y)* 'man, person' [STC pp. 107, 119, 158]: Jg.

108) Burmese has another particle with this morphophonemic behavior, WB *kaw*~*raw* (Mod. Bs. *ko*~*yo*) 'coordinate marker' [Okell II: pp. 469–70].

mərāi 'human being', *mərài* 'individuality, manhood, force, strength of character, charisma' [gloss and tones from Maran].

5.24 *lăy ≵ *la·y

A well-attested variant with lateral initial has sometimes been semantically specialized into the area of TIME/DURATION, but sometimes retains its basic copular meaning.

(a) **lăy* 'copula': Tangkhul [Pettigrew, p. 340] *lei* 'it is; be, have'; *leiya kachi* 'to exist; existence'; *lei kaphuŋ* 'residue, remainder'; Proto NNaga **ley* 'to be' [French, pp. 450–1] > Yogli *lei,* Wancho *le*; French also cites Meithei *lei,* Zeme *lei,* Maring *lai,* Ao *(a)li,* all 'to be'.

(b) **la·y ≵ *g-ray* 'DURATION/DURATIVE/STILL/YET':
Lushai *lāi* 'time, season; in the act of; about, almost, nearly, quite' (≵ *ˌliai* 'barely'); Tiddim *la:i* 'still, yet'; Jg. *gərài* [see above 5.22] '(not) yet', as in *shī gərài ṅ-dû ʔāi* 'He has not yet arrived', *gərài khúm sā* 'Don't go yet!', *gərài nóʔ* 'Wait a little!; Not yet!', *gəràiràiʔ* 'Wait a moment!; Hold on!' [Hanson, pp. 185–6].

5.25 Words for 'demon/evil spirit' from *-ray

We are now getting very close to God. It is a commonplace of semantic theory that antonyms or opposites are particularly close conceptually, differing from each other by only a single feature for which one pole of the opposition is *plus,* and the other *minus.*[109] 'God' and 'demons' stand as moral antitheses, but they share the attributes of immanence, power, eternal existence.

A couple of TB languages have words for 'demon' that descend from the unprefixed root **ray*:

Tangkhul *rai* 'unclean spirit' [Pettigrew notes 'high tone']; Boro *ráy* 'devil'.

Tibetan has a group of demonic forms that reflect the **g-* and **d-* prefixes: WT *gre-bo* 'a species of demons', *gre-mo* 'female demons of this kind' (< **g-ray*); *ḥdre* 'goblin, gnome, imp, demon, evil spirit, devil; colloquially the most frequent word for such beings' [Jäschke, p. 284] (<**ʔ-d-ray*).

Lushai *huāi* 'evil spirit, demon, devil, *nat*' comes from an allofam **s-wa·y*.

Another group of words for 'demon' is characterized by *-i(-)* vocalism [below 5.32].

Although this is somewhat speculative, I would also like to suggest a relationship with Chinese 壞 'destroy, ruin, be ruined' **g'wɛr/ɣwăi ~ *kwɛr/kwăi- ~*

109) See Matisoff 1978a, pp. 151–65, and the discussion of 'enantiodromia', or the conversion of concepts to their opposites, in Matisoff 1979, pp. 631–3.

**g'wər/ɣuậi*: [GSR #600 d]. Demons can be devilishly destructive, after all.[110]

5.3 Copula-related words with vocalism other than *-ay

5.31 *rəy (=*-riy)

The WB forms *rê, ʔərê* 'business, affair' seem quite parallel, both semantically and morphologically, to Jg. *rái, ʔərái* 'things, goods, property' [above 5.21], The WB vocalism, however, points to PLB **rəy*^{2} (=**riy*^{2}).

Notice the same *e* ≷ *ai* variation (within a single language and synchronically) in Jingpho *rái* ≷ *rê* 'copula' [above 5.2].

5.32 *s-ri[111]

In "Sino-Tibetan: another look" [STAL] (1976), Benedict cites WT *sri* 'a species of devil or demon [devouring children]; a vampire', Lushai *hri* 'the spirit supposed to cause sickness', and Chinese 离 **xlia/ĥ'iɛ̨* [GSR #23 a] 'a mountain demon' < PTB **sri-n* [p. 190]. (For the allofams with final *-n*, see below 5.33.)

A few degrees removed in semantic space, but descending from a phonologically identical prototype is WT *sri-ba* 'retain' (cf. the forms meaning 'keep, possess, retain', above 5.2).

Note that Benedict does not go so far as to relate these forms for 'demon' in STAL to the root he reconstructed as the copula in STC #264.

5.33 *s-ri-n

Benedict [*ibid.*] cites WT *srin-po* (fem. *srin-mo*) 'demons' (cf. also *ḥdre-srin* 'goblins and srinpo's') [for *ḥdre*, see 5.24]), comparing it to Chinese 神 'spirit, divine, supernatural' [Benedict modifies Karlgren's Archaic reconstruction from **d'i̯ĕn* to **lyi̯ĕn*], and implicitly to Chinese 身 **śi̯ĕn/śi̯ĕn* [GSR #386 a] 'body, person' [Benedict modifies Karlgren's Archaic reconstruction to **slyi̯ĕn*].

I would like to include also WT *srin-bu* 'insect, worm, vermin' (2nd. element < *ḥbu* 'worm, insect'). This fits very neatly into the same niche of semantic space as English *critters* (< *creatures*), i.e. creepy-crawly little varmints that are sometimes regretfully recognized to be part of God's creation.[112]

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110) Benedict [p.c.] now suggests several more demonic/terrifying Chinese allofams that reflect **s-k-way* or **s-k-ray*, including 鬼 **ki̯wər/kjwɛ̨:* [GSR #569a] 'spirit, ghost, demon'; 威 **·i̯wər/·jwɛ̨i* [GSR #574a] 'terrifying; to overawe; majesty, dignity; to fear, loathe', and 畏 **·i̯wər/·jwɛ̨-* 'fear' (for the last two, Benedict reconstructs Archaic **s-ki̯wər*).

111) This is the root reconstructed as **s-ri* (actually **s-ri-t*) in STC #264: "WT *srid-pa* 'existence' (with suffixed *-d* [i.e. dental stop]), WB *hri*' 'be'."

112) It is fascinating to note that a graph meaning BUG is used as a loan for the Chinese copula in the oracle bones, and in early bronze inscriptions 蟲 [p.c., P. Serruys and K. Takashima], though of course this in itself doesn't prove any organic semantic connection, but only a strong phonological similarity between BUG and COPULA.

5.34 *s-ri-t < **s-ray-t

We have already discussed this proto-allofam in the context of the Lahu *-eʔ* reflex (above 3.0 and set [5-A]). It is represented by WT *srid-pa* 'existence; state of being; life; things existing in the world' and Lh. *hêʔ* 'be the case, be so'. As explained above, WB *hut* 'be so, be true' is a sub-variant (< **s-rut*) exemplifying a typical TB **-i-* ≷ **-u-* variational pattern.

The WT form *red-pa* 'be; be ready' [Jäschke, p. 535] looks as if it acquired its dental suffix after the shift PTB **-ay* > WT *-e* had taken place. It seems to me that the Tibetan 'negative copula', WT *med-pa* 'be not, exist not' is most straight-forwardly explained as a fusion of the negative adverb *mi* 'not' with *red-pa*. This analysis differs both from that of Jäschke (p. 417), who derives *med-pa* from *mi yod-pa* [*yod-pa* and *yin-pa* are two more WT copular verbs, neither apparently related to our present word-family], and from that of Benedict [STC p. 183, n. 481], who tries to connect *med-pa* to Chinese 滅 **miạt* 'extinguish, destroy'.[113]

6.0 Conclusion: of gods and copulas, and the finals *-an and *-ay

The indigenous TB words for God seem to be localized in two basic semantic areas: on the one hand there are associations with SUN and SKY, and on the other with BEING.[114]

The SUN/SKY/GOD association is especially clear in Mikir. Mk. *arnam* 'god' is definitely to be related to PTB **nam* 'sun, sky', as tentatively suggested in STC (p. 148, n. 405). Furthermore, Mikir has another word *arnì* [KHG] which means both 'god, deity' and 'sun, day'. This word is certainly from PTB **niy* (=**nəy*) (better, **r-niy*) [STC #81], which also underlies such forms as WT *nyi-ma* 'sun, day'; Lushai *ni* 'id.'; Jg. *nī* 'day'; Lh. *ni* 'day', *mû-ni* 'sun'; WB *ne* 'sun', *ne'* [creaky tone] 'day'.

We should, I believe, go further, and also relate to this etymon WB *ne* 'be, dwell; stay, remain; have a residence; continuative auxiliary verb' [see Okell II: 269].[115]

The chain of associations

SUN / SKY / GOD / BEING / DWELLING / COPULA$_3$

113) See above, set [43] and note 25. Another word which might well represent an old fusion of the negative morpheme with the TB copula is WB *mai'* [creaky tone] 'be wanting, be not full' [Judson, p. 767], perhaps < **ma-* + *way*.
See also the Chinese negative copula 非, above 5.1.

114) Many TB languages of India use Indo-Aryan loanwords for 'God', especially in translations of the Bible. It would make an interesting study to trace the patterns of borrowing from religiously prestigious languages into the minority tongues, e.g. Garo *isol*, Boro *ishór* 'God', ult. < Skt. *īśvara*.

115) While we are at it, I believe we should also bring in a group of forms with the durative meaning 'have, get, obtain', reconstructed as a separate root **(r-)ney* in STC #294 (Bahing *ne* 'take', WT *rnyed-pa* 'get, obtain', Lushai *nei* 'get, have, obtain'). See [50], above.

becomes blindingly clear when we consider a group of homophonous forms from Luquan Lolo: *ñɛ*[11] 'be; copula'; *ñɛ*[11] 'heaven, sky'; *ñɛ*[11] *dʐɔ*[55] *dzy*[33] 'name of a spirit/god', *ñɛ*[11] *ʔu̱*[33] *ṭ'u̱*[33] 'id.' [Mǎ Xuéliáng 1949].[116]

Throughout TB, in fact, there are copular morphemes which must belong to this etymon, e.g. Jino (Loloish) *nɛ*[3] 'copula', Meithei *ni* 'id.', Lushai *ni* 'id.' (cf. Lu. *keima ka ni* 'I am' [Thurgood 1982, p. 74].

To return to our **ray* root, which is planted primarily in the realm of BEING (rather than SUN/GOD), we may sum up its distribution in TB in the sense of 'God; deity' as follows:

(a) It is represented by at least three forms in Loloish, the first syllables of Lh. *g̈ɨ-ša*, Lisu *wu*[4] *sa*[4],[117] and Akha *gui-shah*$_{\smile}$.[118]

(b) The first element of the Jingpho word *kərài kəsāŋ* is certainly cognate to the Loloish forms. Like *g̈ɨ-ša* and *wu*[4] *sa*[4], it embodies a sophisticated and abstract conception of the deity. As Hanson (1913, pp. 167–8) puts it:

> "While ... the everyday religion of the Kachins is spirit worship, which originated in fear of the ancestral 'shades', they have always apparently had an idea of a supreme power. A great spirit, *Karai Kasang,* is above all the *nats,* and he alone is the original creator, he is the Supreme One ... immortal, omniscient, omnipotent, omnipresent."

(c) Our root has acquired the antithetical meaning of 'demon, evil spirit' in many languages, often via a prefix and/or suffix. See the discussions of **-ray, *s-ri, *s-ri-n* [above 5. 24, 5. 32, 5. 33].

(d) This root apparently occurs with the meaning 'God' in several Kamarupan languages, perhaps underlying the 2nd. syllables of Maring *tharai* 'God' and Kok Borok *subrai* 'Lord'.

In Meithei (Manipuri), the word *lay* 'God' that is still in common use [Thoudam, p. 242] is attested in an inscription as early as the 8th century A.D.:

Laai-ki thouchaan-taki laairik puraan amaa phangchā-e
GOD of grace of book ancient book; purāna one/a obtain PRT
'having obtained an ancient manuscript through the grace of God'.[119]

116) Also related conceptually must be LQ *ñɛ*[11] *ma* 'lucky, auspicious, happy'.

117) Fraser (p. vii) defines this Lisu word as 'creator of heaven and earth ... acknowledged to be the supreme head of all spirits, good and evil.'

118) This form is not in Lewis' dictionary, and is provided by Bradley (*Proto-Loloish,* pp. 328–9; *Lahu Dialects,* p. 47). As Bradley notes, the Akha initial *g-* does not correspond regularly to the initials of the other Loloish forms.

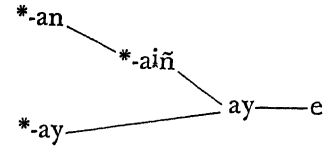
119) N. Khelchandra Singh, *Manipuri Language: Status and Importance* (pp. 10–11), quoting from the 'Phayeng Copper Plate', said to be from the reign of King Khongtekcha of the 8th c. A.D. The same inscription contains the form *Laai-pu* 'God', with the same (honorific?) suffix as *Shivapu Devipu* 'Shiva Devi', *ibid.*

The Meithei still preserve animism along with an overlay of Vaiśnavism and Śaivism. (Manipuri Sahitya Parishad, *Glimpses of Manipuri Language, Literature, and Culture,* pp. 7–12).

We may note parenthetically that one of the epithets for Shiva is *bhava,* literally 'being, existence' [p.c. Robert P. Goldman].

The lateral initial here is paralleled in other copula-related words in Kamarupan languages (above 5. 24).

In conclusion, let us return to Lahu for a moment. We have demonstrated that the basic Lahu reflex of *-*ay* is -*e*, which is the same as the reflexes of *-*an* and *-*at* (above, section 2). We may in fact envision a gradual evolution of the *-*an* rhyme, perhaps passing through intermediate stages of palatalization like *-*aiñ* before merging with the reflex of *-*ay*:[120]



Ironically, perhaps, three of the four Lahu words we have identified as descending from the copula **ray* ≫ **way* have -*i* rather than -*e* as their vowel (*gì* 'classifier for collectivities' [< PLB **ray*[1]], *hi* 'pluralizer' [< PLB **s-ray*[1 or 3]], *gì*(-*ša*) 'God' [< PLB **ray*[1]], but that is because **r-* conditions this special reflex of the *-*ay* rhyme. The fourth is of course *ve* [< PLB **way*[3]], our ineffable ubiquitous particle, which displays the proper -*e* reflex, and is certainly connected to the other members of this family in the most intimate copular way.

What God hath joined together, let no man put asunder.

7.0 Appendix by Richard Kunst, Duke University: A NOTE ON SEVERAL POSSIBLE CASES OF THE COPULA *WÉI* 隹/*HUÌ* 叀 IN THE LINE TEXTS OF THE *YIJING*

This brief note may serve as a footnote to the paper presented by Graham Thurgood to the XIVth Sino-Tibetan Conference, entitled "The Sino-Tibetan Copula **wəy*" (1981), and to the "Comment" on Thurgood's paper circulated at the conference by Paul Benedict (1981). Its purpose is to call attention to the possibility of some interesting occurrences in the oldest (Western Zhou) stratum of the *Yijing* 易經, or *Book of Changes*, of the Old Chinese (OC) copula *wéi* < **dịwər*, variously written in classical texts 惟, 維, 唯, or simply 隹, and also the copular *huì*<**g'iwəd* 叀 or 叀 (inscriptional form), 惠 (received text form).[1] Benedict, followed by Thurgood, sees the two forms 隹 **sgịwər* and 叀 **g'iwəd* as closely related, "single- and double-prefix forms, from an earlier **g-wəy* or **s-g-wəy*" in Sino-Tibetan.

The copular forms *wéi*/*huì* usually appear in early OC at the beginning of a phrase, preceding a noun which is often in exposure, out of its normal place in word order, and which receives extra stress. Sometimes *wéi*/*huì* precedes

120) We have in fact noticed several cases of interplay between *-*an* and *-*ay*: cf. RED [150], ONE [148], WAR [149].

a whole sentence. In the bone and bronze inscriptions, this pattern is especially common. E.g., *wéi jiǔ yuè fā* . . . 隹九月伐 "It shall be in the ninth month that we attack . . ." Serruys (1974:74, 114–119) has studied the pattern in the oracle bone inscriptions (OBI), and proposes seeing a slight distinction between *wéi* and *huì* in this usage, which he describes as that between a "normal copulative verb" *wéi* 隹 and its "causative counterpart" *huì* 叀, which behave differently grammatically, e.g., in negation (p. 115). Serruys captured the nuance in English by translating *wéi* as "It is . . ." and *huì* as "Consider (it to be) . . ." The latter verb "consider" turns out also to suggest neatly the related form *huì* 惠, which is at the same time a full word meaning "considerate" and, in *Shijing*, a possible alternate form for the copula *wéi/huì* (p. 116).

Now when we come to the text of the *Yijing*, we find a couple of fairly obvious cases of the copular *wéi/huì* and others that are quite debatable. As is well-known, the language of the *Yijing* is difficult to understand, and was probably so from the beginning, since it is an anthology of brief, unconnected notes compiled as an aid to diviners who were already familiar with the subject matter, as we are emphatically not. Centuries of subsequent reinterpretation to suit the prevailing philosophical tastes have obscured the text still further. Here are all the cases in the *Yi* of the graphs 維, 唯, 惟, 隹, 雖, 叀, and 惠, whatever their interpretation may be:

jí lù wú yú, wéi rù yú lín zhōng 即鹿無虞, 惟入于林中 "He approached a deer without a gameskeeper, (it was that?) he entered into the middle of the forest." (3.3)

jū xì zhī, nǎi cóng (zòng?) wéi zhī 拘系之乃從(縱?)維之 "They grabbed and bound him, then loosely (?) tied him." (17.6)

yǒu fú, wéi xīn, xiǎng, xíng yǒu shǎng 有孚(俘)維心, 亨(享)行有尚(賞) "There will be captives. It is the heart (or "tie the hearts"?). Sacrifice. Travel will have its reward." (29.0)

jìn qí jiǎo, wéi yòng fā yì 晉其角, 維用伐邑 "It thrust forward its horns: means use it (as an omen) in attacking the town." (35.6)

jūnzǐ wéi, yǒu jiě, jí 君子維, 有解, 吉 "A noble's tether-rope (or tethere thing) was unfastened (or "a noble who was tied up was released"?): auspicious." (40.5)

yǒu fú, huì xīn, wù wèn, yuán, jí, yǒu fú huì wǒ dé 有孚(俘)惠心, 勿問, 元吉, 有孚(俘)惠我德 "There will be captives. It is the heart. Don't ask! Very auspicious. There will be captives. It is our spirit-power (*mana*)." (or, with 得 for 德, "may it be we who gain"). (42.5)

suī xún wú jiù, wǎng yǒu shǎng 雖旬无咎, 往有尚(賞) "Though it be a ten-day week, there will be no misfortune. Going will have its reward." (55.1)

Those cases, like 17. 6 or 40. 5, in which *wéi* 維 is clearly a non-copular main verb 'to tie,' or a noun 'rope,' may be ignored. The one case of *suī* <**siwər* 雖

in 55. 1 is included not only because it is a copular usage, but also because it illustrates very well how the specialized, concessive sense of "although" which it had throughout the later history of the Chinese language gradually evolved from the generalized copula *wéi* itself. In 55. 1 another form of the copula could substitute quite nicely: e.g. 唯旬无咎. In fact, this is just the way the line appears in the Mawangdui MS of the *Yijing* (Gao Heng 1979:47). Note that even the context of 55. 1 is similar to that of 29. 0, with a reference to the reward resulting from going somewhere. In the same fashion, the specialized sense of "only" later applied to some of the other forms of *wéi,* especially 唯 and 維, as in, e.g.. *wéi èr rén dé huán* 唯二人得還 "only two men managed to return" (*Shiji, juàn* 107). Other cases of *suī* as an incipient 'although' could be cited from *Shijing* and other early texts.

Here, however, our main interest is in those cases in the line texts 29.0 (actually a "hexagram text") and 42. 5 where in the exact same context *yǒu fú . . . xìn,* in one sentence (29. 0) the graph *wéi* 維 is used, while in the other (42. 5) the graph *huì* 惠 is used, and in that same line 42. 5 *huì* appears a second time in another apparently copular function, *huì wǒ dǒ* "it is our spirit-power," "consider it our Virtue." If these are accepted as both parallel and indeed copular, this provides useful hitherto unnoticed evidence about the close relation, both phonological and semantic, of *wei* <**dịwər* 隹 and *huì* <**g'iwəd* 叀, and also in support of the argument that the copula *huì* 𠂤 or 叀, which is so common in the oracle bone inscriptions, could be rendered with the graph 惠 in certain received texts, with the added "heart" element being perhaps analogous to the heart element added to *wéi* 隹 in the graph 惟.

The "if" in the previous sentence is a big one, since there are so many other proposed interpretations of the sense of these passages, several of them radically different, yet carefully bolstered with evidence.[2] Even as they are translated above they are susceptible to varying understanding. What might "it is the heart," "let it be the heart," "it should be the heart," etc. mean? If it were not so anachronistic for the Shang-W. Zhou era of the *Yijing* hexagram and line texts, a line such as 42. 5, in which the later Confucian terms 心 *xīn* 'heart', 惠 *huì* 'to favor,' 孚 *fú* 'trustworthy,' and 德 *dé* 'virtue' all appear, might well be expected to involve an ethical statement. Yet this is more characteristic of post-Confucian China than the pre-moral magico-religious ethos of Shang and Western Zhou China. Given the frequency of concern with sacrifice both in ancient Chinese society and in the *Yijing* text itself, the most obvious interpretation would be that when a captive was offered in sacrifice, it included in this case some ritual involving the victim's heart. The removal of a victim's heart and various other organs is described in Confucian ritual texts like the *Liji.* Both the removal and consumption of a victim's heart are reported ethnographically both for traditional China (Eberhard 1968:172) and twentieth-

century Chinese minority ethnic groups, and familiar to readers of traditional Chinese novels like *Shuihuzhuan* 水滸傳 *Outlaws of the Marsh*. But any interpretation along these lines was quite thoroughly suppressed by Confucian China in following ages.

Certainly more evidence and careful study is needed before any final conclusions may be drawn about the sense of the lines 29. 0 and 42. 5, and the possible role of the copula *wéi/huì* in them. But at the present time, I believe viewing these lines as parallel cases of copular *wéi/huì* provides a simpler, more attractive interpretation than any other. They should be taken into account in future studies of the copula in OC and in Sino-Tibetan in general.

Notes to Appendix

(1) Reconstructed Old Chinese forms are, unless otherwise noted, the Archaic Chinese forms from Bernhard Karlgren, *Grammata Serica Recensa* (Stockholm, 1957). Note that the graph 隹, when it (rarely) occurs, is traditionally read *zhuī*, meaning "a kind of short-tailed bird."

(2) For example, Gao Heng 高亨 (1979:273) would read the phrase in 29.5 as "If there is a captive who harbors two 'hearts,' make a sacrificial offering (of him)." He would read 42.5 as "There is a captive who complies with my heart . . . there is a captive who complies with my virtuous conduct" (p. 365). Li Jingchi 李鏡池 (1981:57-8) following Wen Yiduo 1956, paraphrases 29.5 as "Put a captive in a pit, and use nice talk to persuade him, or fete him with wine and food, to make him be content to be a slave." He sees in 42.5 a reference to the capture of many Shang soldiers by King Wu of Zhou at the time of the Zhou conquest. There are two ways of dealing with captives: one is "If there are captives, comfort them with nice words, and do not make presents (*wèn* 問)," while another is "If there are captives, they will be grateful for what they receive (德 u.f. 得) (as presents)" (p. 84). Wen Yiduo (pp. 30–31) renders the phrase *huì . . . xīn* like *huì dé*: "extend one's virtue to others."

In accord with the sense of line 17.6, quoted above, which is also in a sacrificial context, it might also be possible to treat *wéi* 維 in 29. as the full verb 'bind': "There will be a captive. Bind the heart." Such an interpretation is encouraged by a reference to binding with ritually-colored cords a few lines later in the same hexagram-chapter, but it would not explain the same phrase occurring with *huì* in 42.5.

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waist	95 = BELT/ZONE
war	149 = STRIFE

watch	121	= GUARD/LEAD (1)/TEND
water	Table VI	
wave	60	= BRANDISH/WHIRL
wear (clothes)	32	= DRESS SOMEONE
weasel	151	= SQUIRREL
whirl	60	= BRANDISH/WAVE
whole	148	= ONE (1)/SINGLE
wind around	31	= CONNECT BY ARCHING
wither	98	= FADE
wolf	17	= DHOLE/DOG, wild
yam	165	
younger sibling/1	86	
younger sibling/2	146	= SPOUSE OF YOUNGER SIBLING/Y. SIB. OF SPOUSE
zone	95	= BELT/WAIST

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ISSN 0387-2807

アジア アフリカ 言語文化研究

JOURNAL OF ASIAN AND AFRICAN STUDIES

No. 29 1985

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