

Four Forays into Karen Linguistic History

by

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comprising

- I. A Note on Loss of Final Stop in Karen
- II. A Note on the Reconstruction of Karen Preglottalized
Surd Stops
- III. A Note on the Reconstruction of Karen Final *-s
- IV. A Note on Karen Genital Flipflop

edited and expurgated

by

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Abbreviations [for full citations see Bibliography]

- AT Austro-Thai
- ATLC Austro-Thai Language and Culture [Benedict 1975]
- B. Bassein
- BL Burmese-Lolo [= Lolo-Burmese]
- Ch. Chinese
- clf. classifier
- comp. compound; composition
- fn. footnote
- Jg. Jinghpaw [= Kachin]
- KLFS "A Note on Loss of Final Stop in Karen" [Foray I]
- KPSS "A Note on the Reconstruction of Karen Preglottalized Surd
Stops" [Foray II]

KFS	"A Note on the Reconstruction of Karen Final * <u>-s</u> " [Foray III]
KGFF	"A Note on Karen Genital Flipflop" [Foray IV]
LB	Lolo-Burmese [= Burmese-Lolo]
Lp.	Lepcha
Lu.	Lushai
M.	Moulmein
PBL	Proto-Burmese-Lolo [= Proto-Lolo-Burmese]
PK	Proto-Karen
Pl.	Palaychi Karen
PST	Proto-Sino-Tibetan
PT	Proto-Tai
PTB	Proto-Tibeto-Burman
PTK	Proto-Tibeto-Karen
ST	Sino-Tibetan
STAL	"Sino-Tibetan: another look" [Benedict 1976a]
STC	<u>Sino-Tibetan: a Conspectus</u> [Benedict 1972]
TB	Tibeto-Burman
TSR	<u>The Loloish Tonal Split Revisited</u> [Matisoff 1972a]
VSTB	<u>Variational Semantics in Tibeto-Burman</u> [Matisoff 1978a]
WB	Written Burmese
WT	Written Tibetan

Author's Foreword

This all started as one small note and then it got out of hand! It began as a short note on loss of final stop in Karen, a fn. to STC: 144-6, if you will, but the Pa-o form pi 'skin' had particularly interested me (STC: fn. 393) since it seemed to tie in with the 'Matisoff Rule' of glottal dissimilation. In checking this out, it turned out that one of the features (the unaspirated initial) was present in at least 13 other roots, and that the matter had been discussed both by Burling (1969) and Jones (1961), but apparently Haudricourt had not made a point of it for some reason. But then I quickly realized, as any good BL'ist would have, that the correspondences look very much like the BL set in which Maru and Atsi have retained the preglottalized stops! And I needed that to establish the rule for 'skin!' So that got me into the Note on Preglottalized Stops. One of the above roots was for 'nine' and I needed to reconstruct the final also, just to cite the root in my table. I soon realized that the Pa-o -t and the -i elsewhere could only reflect PK *-s, and that all those Pa-o forms with -t, especially the numerals, fitted

here. So, with a curse on myself for past stupidity, I set out writing a third note on PK final *-s. And I had to relate it to ST generally, so it got pretty long. And as all this was going on, I happened upon that beautiful form, Pa-o lî 'clf. for long cylindrical objects,' even on the right tone (*B)! By that time I already knew about PK *te^B 'penis' from the second paper, but had not been able to find any cognates for it in TB. Of course, as I say in the Note, I was looking under the wrong headings! I'm not sure just how the next step came about, but I had been rereading Jim's VSTB, and after looking over that stuff almost anything is likely to occur to you - even genital flipflop. (Incidentally, I don't think Jim even has a diagram for semantic flipflop in his VSTB - if not, that would be about the only thing missing! As for the 'tongues' and all that, the wonderful Garo maŋ-sre got me started on that train - you'll note that nowhere do I say that I really think any of these forms are related!

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Editor's Foreword

The present format of these mini-articles is the result of a communal effort. Benedict's original "Notes" were included with letters to Graham Thurgood and me in March, 1979. Subsequent letters back and forth resulted in numerous additions, deletions, and changes, some of which were initiated by Benedict himself, others by editorial reactions and comments. These have either been incorporated into the text or enshrined in footnotes. The footnotes are numbered consecutively in a single series for all four "Notes." Those that are unmarked are by Benedict. Editorial notes are indicated by the initials "JAM." A single composite Bibliography has been provided at the end.

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I. A Note on Loss of Final Stop in Karen

STC: 144-6 outlines the regular replacement of final stops by -ʔ in Karen, with the deviant Pa-o (Taungthu) occasionally retaining final *-t (sóʔt 'eight,' khɾüt 'grind') and rarely *-k (lyák 'lick'), then points to several examples of complete loss of stop, adding (p. 145) "...the conditions governing this phenomenon remain obscure." Further analysis has clarified matters somewhat, although problems still remain. The following should be noted:

(1) For roots represented in all dialects on which data are available (Pa-o, Pho = Pwo, Sgaw and Palaychi [Pl.]) the loss is complete only for [a] 'six,' a member of a set (numerals) for which irregularities can be anticipated (see STC: 130-2 for the Karen numerals), [b] 'dung' (PK *ʔe^B; cf. Kuki-Naga *(ʔ)e.k 'excrement'), where two conditioning factors are involved (see below), and [c] 'flesh/meat' (STC: fn. 488) PK *hña^B (see below for the initial), Archaic/Middle Ch. 肉 *ñiôk/ñziuk < *ña.k. Additionally, three roots (two of which are not cited in STC) show a similar loss of final stop (from *-k), but a cognate is lacking in Pa-o (on the basis of available data):

PK *xa^A 'frighten (by noise)' : cf. PST/PTB *krâk 'frighten'
(STC, No. 473; see pp. 141-2 and fn. 382 for the initial cluster).

PK *?wa^B 'go under, hide under' : cf. PTB *pwak 'hide' (STC, No. 46; WB phak ~ hwak, Lahu phá ~ fá < *?bak ~ *?wak).¹

PK *ku^B 'chop, strip off (e.g. bark)' : cf. PTB *ku.k 'shear, strip, pare' (STC, No. 388).

(2) Several other roots, all cited in STC, show either doublet formation or retention of the stop (from *-k) in at least one Karen dialect, at times with evidence that the loss is of recent origin:

PK *sa^B (Pho, Sgaw) ~ *sa^A (Pa-o, Pl.) 'breathe,' but *sa[?] at times in comp.; also PK *sa[?] 'heart;' PTB *sak 'breathe, breath, life' (STC, No. 485).

PK *tha^B ~ *tha? (Pa-o) 'weave/weaving/warp/loom;' PTB *tak 'weave' (STC, No. 17; see fn. 395, which cites evidence of recent [since 1920-22] loss in Pho).

PK *tho^B ~ *b-tho? (Pa-o) 'spittle;' PTB *(m)tuk ~ *(s)tu.k ~ *(s-)du.k 'spit/vomit; spittle' (STC: fn. 231; see fn. 396, which cites evidence of recent [since 1937] loss in Sgaw).

Additionally, two roots without known TB cognates have Pa-o final -? corresponding to Pho and Sgaw final vowel:

PK *[]^A ~ *wa? (Pa-o) 'drink;' the Pho/Pl./Sgaw form has an anomalous 'low series' (< *voiced initial) tone, perhaps to be interpreted as evidence of a loanword origin; cf. the Mon-Khmer forms: Thin ʔok, Loven ʔok, and probably also Vietnamese uống, Mường ʔon 'id.'

PK *phri^A ~ *phre? (Pa-o) 'sow, scatter.'²

Both roots are probably to be reconstructed with PK final *-?, indicating loss in Pho and Sgaw. A third root, perhaps showing influence from Burmese, has the converse of the above, with the Pa-o form lacking final -?; the PTB root here has vocalic final but the WB cognate has auk-myit (secondary glottalization):

PK *-ʔa? 'dumb/mute' (Pho/Pl./Sgaw) but Pa-o -ʔá, from *-ʔa? by 'rule' (cf. 'skin,' below); PTB *(m-)a 'id.' (WB ʔa'; STC, No. 105).

Loss of stop from final *-t is indicated only for PK *soli^A 'water leech' (Pho, Sgaw); PTB *li.t (Jg. lip, with final stop apparently influenced by vowel length) ~ *s-li.t (Lp. hlet-, Lu. hli.t, with *s- 'animal prefix' as in Karen) ~ *m-li.t (Mikir inlit, Ao Naga melet). Pl. has only the reduced form lə-, but this is found both in ləzu 'water leech' (-zu is a morphan³) and ləro 'land leech' (combining two roots!), the -ro (another morphan) providing a rare example (STC: fn. 356) of retention of prefixed *r- in Karen;⁴ cf. PTB *r-pwat 'leech' (STC, No. 45). This combined form in Pl. gives the clue to the puzzling Pa-o form: lyó? 'water leech,' from *hli-wa? < *s-li-wa? (!). The general PK root for 'land leech' is *(s-)wa? (Pho) ~ *su? < *swa? (Sgaw) ~ *d-wa? (Pa-o). Boro has a parallel formation: liwar (< *liwat)

meaning 'water leech,' with a doublet luar, apparently 'contaminated' by ruar (< *rwat) 'land leech;' compare also Magari ləwat 'leech,' with l-, contrasting with r- in armin 'name' < PTB *r-min (STC, No. 83), suggesting that this language, like Pa-o and Palaychi, combined the two roots.

Loss of stop from final *-p is found in Sgaw xa (< tone *A) in the root for 'winnow' (STC: fn. 382; cf. WT 'khra-pa 'strike, beat; winnow, fan,' Lushai tha.p [< *khra.p] 'sift, winnow'), but Pho retains final -ʔ.⁵

(3) The tonal assignment after loss of stop from *-t or *-p is *A (two examples only), but from *-k (the bulk of the examples) it is usually *B, as might be anticipated in view of the known glottality associated with this tone in Karen.⁶

(4) There appears to be a significant association of loss of final stop with medial vowel length /·/, which is specifically indicated for six roots ('flesh/meat,' chop/strip,' 'spittle,' 'dung/excrement,' 'waterleech,' 'winnow') and can hardly be ruled out for two other roots lacking Kuki-Naga cognates ('hide,' 'frighten'). Medial length is excluded, however, for 'six' (Lu. ruk) and 'weave' (Lu. taʔ, for the anticipated *tak) and is unlikely for 'breathe,' with a Chinese cognate in final -iək (STC: 191). Conversely, the final stop is well maintained in all dialects in the root for 'son-in-law,' PK *maʔ, PTB *ma.k. Despite this, the preponderance of roots with medial vowel length is surely significant in view of the relative scarcity of such roots in TB (and ST). The association of final stop loss with medial vowel length is paralleled in Bodo-Garo, where Garo has -ap < *-ap, but -o < *a.p (STC: 72-3) and elsewhere, e.g. Dioi (N. Tai group) maintains final *-k after short (single) vowels, but shows loss after long (geminate) vowels.^{7,8}

(5) Finally, the 'Matisoff Rule' of glottal dissimilation (Matisoff 1970), ʔ + ʔ = ∅, can be invoked in certain cases of loss of final stop. Note especially PK *ʔe^B < *ʔeʔ 'dung' (this root also had original vocalic length; see above), and PK *ʔwa^B

< *wa? 'hide;' also PK *pi? 'skin;' cf. Jg. phyi?, Jili məphik, 'id.' (STC: 145 and fn. 393), yielding the 'irregular' Pa-o pì as compared with forms of *phi? type elsewhere. (For the initial, see KPSS).

The same rule may have served, along with vocalic length, as a conditioning factor in the case of 'flesh/meat,' since it is likely that some of the 'high tone' (< *surd initial) nasals, conventionally reconstructed as *hn-, *hm-, etc., were actually preglottalized nasals: *n-, *m-, etc. (as in Tai, where the distinction is maintained in the related Kam-Sui language group).⁹ Thus, *a-ńa·k = a-ńa·k > *ńa·k > *ńa? > *ńa^B (for *hńa^B). Note that the only two roots (apart from the numeral 'six') showing complete loss of final stop had the two significant conditioning factors, if this analysis is correct, giving the final stop little chance of survival! The Pa-o reflex in the case of 'skin' (*pi? > pì), with loss of both stops, is closely analogous to that described by Matisoff (1970) for Lahu, apart from the absence of any influence on tone (the 'glottal dissimilation' in Lahu leads to the high-rising tone).

For an analysis of the operation of the rule in Tibetan in a quite different way (PTB *a- + ? [glottal onset] > WT ∅ [non-glottal onset]), see STC: fn. 339, where yet another parallel in Yao phonology (Purnell 1965) is mentioned. Note that in two other Karen roots of 'skin' type (preglottalized surd initial and final *-?), viz. *plɛ? 'be free from (evil)' and *kle? 'turtle,' Pa-o retains the final stop (plé? [apparently with irregular vowel] and klé?), showing that the rule holds only for syllables of CV (rather than CCV) type, the added C in the latter 'distancing' the two glottal features sufficiently to nullify the rule.

As a final observation, the loss of final *-? in Karen seems not to have obtained after voiced initials (the partial exception under 'drink' involves an anomalous form and a possible loanword). Strangely enough, this is so even where the root-initial is preglottalized *b or *d, e.g. *bu? 'near' and *de? 'wing,' suggesting that the glottal feature here was 'softer' (more 'implosive') than in the case of *p and *t.¹⁰

II. A Note on the Reconstruction of Karen Preglottalized Surd Stops

A striking 'irregularity' in Karen phonology obtains in the initial stops, where in a sizeable number of roots [Northern] Pa-o (Taungthu) has plain surd stops corresponding to aspirated stops elsewhere. R.B. Jones (1961) sets up no fewer than four rules to cover this situation (Burling's numbers):

'[1] Aspirated stops became unaspirated in the low tone on loss of final /q/, and [2] also in high tone before /-l-/ in items with final /'/. [3] So also the initial becomes unaspirated in items with final /k/ and /D/; and [4] /kh/ > /k/ before /w/ on loss of final /'/'...'

R. Burling (1969) cites the above as a prime example of Jones' rules, which he describes (p. 7) as '...extremely complex, and in places downright eccentric.' Rule [2] is characterized as 'frightfully complex,' and the four rules as a whole are said (p. 10) to have a 'hopelessly ad hoc quality' and to be 'so meagerly exemplified that I find it difficult to take them seriously.' I have heard Jones' rules described in even harsher terms; certainly here, in any event, his four rules appear to be capriciously (if not 'eccentrically') ad hoc. Burling abandoned the rules and simply set the deviant forms aside as 'unexplained.' Much later (1975), Jones himself abandoned his earlier rules and invoked (p. 5) '...the assumption that the irregular nonaspirate initials of the Taungthu forms may be explained as resulting from analogical confusion involved in the tonal merger of this set with another which already included initials of this type' (!). The key word in this quote appears to be 'confusion.'

Burling (op. cit., p. 10) states that only 11 cognate sets (including four that are 'deviant' in some other way) exhibit this lack of aspiration in Pa-o, as compared with over 50 sets that do not, but actually there are at least 14 such sets, all quite substantial and rarely 'deviant' in any way. It seems manifestly impossible to dismiss them, as Burling does, or to

explain them away, as Jones attempts to do. See Table I, which includes the suggested PK reconstructions. [M. = Moulmein; B. = Bassein; Pl. = Palaychi]:

TABLE I

	<u>PK</u>	<u>Pa-o</u>	<u>M.Pho</u>	<u>Pl.</u>	<u>B.Sgaw</u>
to step	*ʔka ^A	kà	khà	khàq	khá
leopard	*ʔke ^A	kè-	khè-	-	khé-
fathom	*ʔklem ^A	klèm	khlē̃	-khlĩq	khlí
jaw	*ʔka ^B	ká	kháʔ-	-kháq	khà
tick (bug)	*ʔki ^B	kí-	khíʔ	-	khǐ
nine	*ʔkus	kút	khwí	khwí	khwí
turtle	*ʔkleʔ	kléʔ	khlaiʔ	khlĩq	khliʔ
child	*ʔpo ^A	pò	phóʔ	-	phó-
skin	*ʔpiʔ	pì	phaiʔ	-	phiʔ
to be free from (evil)	*ʔplɛʔ	pléʔ	-phleʔ	-phlèq	-phlɛʔ
sell	*ʔca ^A	cà	shà	-shaq	sha
pick up	*ʔtɔm ^A	tòm	thè̃	-thùq	thó
penis	*ʔte ^B	tê	théʔ	-	thè
bag	*ʔtɔŋ ^B	tôŋ	thóʔ	-	thè

Notes on Table I:

'to step' : cf. Lu. ka·r 'to step, pace, stride' (see STC: fn. 401 for loss of final *-r after vocalic length), which STC (No. 11) includes in a cognate set with WT gar 'a dance' and WB ka 'dance' as well as (fn. 65) Lahu qā 'id.', implying PBL *ʔka (Matisoff), with preglottalization as in PK;¹¹ the Jg. doublet in this set (gan ~ kəgan ~ khan 'leap, bound, canter'), along with the PBL and PK evidence, indicates that let *ga·r ~ *ka·r should be set up for this etymon at the PTB/PTK level.

'leopard' : [also 'tiger'] cf. Kuki-Naga *d-key¹ (< tone 'tiger' (STC, No. 462), also 'leopard.' See Addenda to Benedict 1978, for discussion of this complex TB/TK and ST etymon).

'fathom' : possibly related to PTB *(s-)la(.)m 'armspan/fathom' (STC: fn. 220); PK regularly has *-am for PTB *-am (STC: fn. 384).

'jaw' : cf. PTB *(m-)ka (STC, No. 470).

'tick' : cf. Lp. gi-bŭ 'dog-louse, tick';¹² Archaic/Middle Ch. 𧈧 *kiər/kyei: 'louse' < PST *kəy^B (~ *gəy^{BL}).

'nine' : the M.Pho (but not B.Pho) and Pl. tones point to a PK doublet *gus; cf. PTB *-kəw^{A/B} ~ *-gəw^{A/B} (for the 'numeral suffix' *-s, see KFS).

'turtle' : cf. WB lip < PTB *l[e]p, 'id.'; Archaic/Middle Ch. 𪛗 liap (or gliap)/liäp [loan] 'a kind of turtle' < PST *(-)lep.

'child' : the Pho form 'irregularly' reflects tone *B.¹³

'skin' : for Pa-o pì < *?pi?, see KLFS; cf. Jg. phyi?, Jili məphik, 'id.' (STC: 145 and fn. 393).

'to be free from (evil)' : cf. also PK *phlɛ? 'to wriggle (free of bonds)' : B.Sgaw phlɛ?, Pl. -phlèq, but M.Pho phlai? (contrasting with -phle?) [initial uncertain; Pa-o cognate lacking].¹⁴

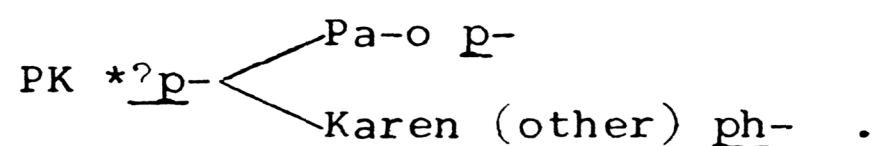
'penis' : the Pa-o tone points to secondary voicing of the initial, 'as in 'bag' [see fn. 13]; cf. Miri it-ti < *i-ti < PTB *t[ey] 'vulva' (see KGFF).

'bag' : the Pa-o tone points to secondary voicing, as in 'penis.' This is an early loanword from Tai, with vocalism of Shan (thon) or Lao (thoon) rather than Siamese (thŭn) type.

As first recognized by Haudricourt (see the discussion in STC: fn. 347), a rich array of initial stops must be reconstructed for PK: */p, t, c, k/; */ph, th, ch, kh/; */b, d, j, g/; */?b, ?d/ (but not *?j or *?g). This is precisely the Tai pattern, with the same effect upon tones (STC: fn. 347). It now appears that another preglottalized stop series must be set up for PK: */?p, ?t, ?c, ?k/, as illustrated in the table above. This is very much a BL pattern, with the preglottalized stops yielding aspirates (ph, th, ch, kh) in WB, but nonaspirates in Lahu, Lisu, and other languages of the

group (but Bisu appears to follow the WB pattern). Burling had no difficulty in reconstructing preglottalized stops here, because they have been maintained as such in Maru and Atsi! This does not appear to be the case in Karen, however, since the many Karen dialect forms cited in Jones (1975) all show aspirates, as in Pho and Sgaw, corresponding to Pa-o nonaspirates. Note that in Karen, unlike BL, it is the nonaspirate reflex (Pa-o) that is the unusual one. Support for this reconstruction schema is furnished by the Pa-o form for 'skin,' pi [$< *^?pi^?$], with loss of the final $*-^?$ by 'Matisoff's Rule' : $? + ? = \emptyset$. (See KLFS.)

The reconstruction of preglottalized surd stops for Karen makes good diachronic sense. Pa-o was probably the first 'split' from the common Karen stock (PK), on the basis of replacement of basic lexical items (Burling is in agreement here), hence it seems especially significant that it is Pa-o that shows the distinctive reflex, making possible the following diagram (labial stop used for illustration):



As might be anticipated, the main source of the glottalization appears to have been the versatile and widespread PTB/PTK $*a-$ ($= ^?a- > ^?-$) prefix, often found with body part words ('jaw,' 'skin,' and 'penis') and kinship terms ('child'), as well as with numerals ('nine') and elsewhere (STC: 121-2). This prefix is only marginally represented as such ($^?ə-$) in Karen (STC: 130 and fn. 354), having in general given rise to preglottalized stops.

The Karen initial stops as presently reconstructed present an intriguing illustration of how disparate areal influences, coming in this instance from BL on the one hand and Tai on the other, can interact so as to create a new, highly idiosyncratic pattern of phonology. Consider the following chart:

<u>Proto-BL</u> ¹⁵	<u>Proto-Karen</u>	<u>Proto-Tai</u>
* /p/ = ph th ch kh	ph th ch kh	ph th ch kh
*C+p = p t c k	[-] [-] c k	p t c k
ʔp ʔt ʔc ʔk	ʔp ʔt ʔc ʔk	- - - -
b d j g	b d j g	ḅ d j g
ʔb ʔd ʔj ʔg	ʔb ʔd - -	ʔb ʔd - - .

PK initial *p- and *t- have marginal (loanword, etc.) status, as noted in STC (fn. 367), having been replaced by *ʔb- and *ʔd- even at times in loanwords, e.g. PK *ʔdwa? 'reckon' < WB twak. An inspection of the above collation suggests that a stop pattern of PBL type was superimposed on one of Tai type, hence the 'gaps' at *ʔj and *ʔg, yet neither the PBL nor the Tai system would call for the substitution noted above. The over-all picture, however, would tend to support the hypothesis of a Tai substratum in Karen, accounting for the Tai pattern of tonal development as well as the VO (Tai) rather than OV (TB) word order.

* * *

III. A Note on the Reconstruction of Karen Final *-s

STC: fn. 401 states that final *-s was probably replaced by -t in Karen rather than being simply dropped, as indicated in the text (pp. 146-7). The possibility that this final was retained in PK seems hardly to have been considered, but such now appears to be the case. At least eight roots must be set up with this final, and all but one or two have known TB cognates. See Table II [M = Moulmein, B = Bassein, Pl. = Palaychi]:

TABLE II

	<u>PK</u>	<u>Pa-o</u>	<u>M.Pho</u>	<u>B.Pho</u>	<u>Pl.</u>	<u>M.Sgaw</u>	<u>B.Sgaw</u>
five	* <u>ŋas</u>	ŋát	yé	yái?	yè	yè	yè
pungent	*[hy]as	hát	xè	-	hèq	γé/xé	-
seven	* <u>hnəs</u>	nót	nwè	nwè	nwiq	nwí	nwí
to comb	* <u>khwis</u>	khút	khwi	khwi	khwèq	khwí	khwí
nine	* <u>ʔkus</u>	kút	khwí	khwi	khwí	khwí	khwí
bone	* <u>khrus</u>	chút	xwí?	xwi	-xiq	xí	xí
carry by headstrap	* <u>ʔbüs</u>	bút	ʔwí?	ʔwi	ʔwiq	wí	wí
four	* <u>lis</u>	lít	lí	lí?	lwi	lwi	lwi

Notes on Table II:

'five' : for the initial, see STC: 137; cf. PTB *(-)ŋa^{A/B}, 'id.'

'pungent' : cited in Jones 1975; reconstruction of initial uncertain; cf. Kayah hya? (the final -ʔ here is a tonal feature).

'seven' : PK *hnəs < *snəs < *sənəs < *sənis (assimilation), from PTB/PTK *snis, through vocalization of the initial cluster.

'to comb' : cf. PTB *kwis, cited erroneously in STC (No. 480) as *kwi (Lu. khui? < *khuis; cf. STC: 16-17).¹⁶

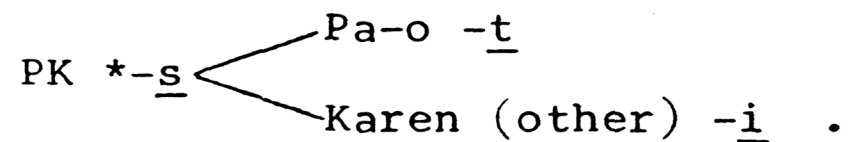
'nine' : the M.Pho (but not B.Pho) and Pl. tones point to a PK doublet *gus; cf. PTB *-kəw^{A/B} ~ *-gəw^{A/B} 'id.'

'bone' : cf. Kayah khrwi? ~ krwi?; cf. PTB *rus, 'id.' (+ prefixed *k- characteristic of many body part words; see STC: 113).

'carry by headstrap' : perhaps an *-s suffixed form; cf. PTB *bəw^B 'carry (on back or shoulders)' [STC, No. 28]; also PK *phün^B ~ *ʔbü[n]^B (Pa-o; regular loss of *-n) 'carry on back' [contra STC: fn. 368], with suffixed -n, both from PTK *bəw^B (-n, -s).

'four' : the PK form should perhaps be reconstructed as *b-lis, to account for the Pl./Sgaw medial -w- (see STC: fn. 355).¹⁷

It will be seen from an inspection of the above table that PK final *-s regularly yielded -t in Pa-o and -i elsewhere, fitting nicely with the basic 'split' in Karen:



Note the following developments: *-as > -ai > -ε; *-əs > *-ei (not a Karen cluster) > -wi [dissimilation]; *-wis > Pl. -wε (apparently influenced by *-s), but *-us > *-ui > Pl. *-(w)i, these finals merging both in Pa-o and in Pho/Sgaw; *ʔbüs > *ʔbüi (not a Karen cluster) > *ʔbwi > ʔwi (regular shift); *-is > *-ii > -i.¹⁸

Tone is not reconstructed for these PK roots in final *-s, as for roots in final *-ʔ (< *final stops), but the matter of synchronic tonal assignment is of some interest. Pa-o has tone /' / (< *surd initials) throughout, even for the two roots with (generally) voiced initials ('five' and 'four'), and it appears that this tone was conditioned by the final *-s; the alternative is to reconstruct the initials for this pair of roots as *(h)ŋ- and *(h)l-, respectively, from an earlier prefixed *s-, yielding a parallel for the Chinese form for 'four' (below). Both these roots were assigned to tone *B elsewhere in Karen. However, six remaining roots, all with unvoiced initials, show much diversity in assignment: 'seven' and 'comb' both on tone *A; 'nine' on tone

*A in Sgaw and B.Pho, but on tone *B (< *voiced initial) in M.Pho, while the Pl. tone (') is a specific reflex for PK final *-? and voiced initial (cf. the Lushai reflex, below)! The three remaining roots ('pungent,' 'bone,' and 'carry by headstrap') are members of an interesting set of some 30 Karen roots (M.Pho has an irregular tone for 'pungent') for which Haudricourt (1975: 339-43) has proposed setting up a 'third tone.' He compares it with the 'third tone' (basically a glottal accent) of BL,¹⁹ but the severely restricted forms involved (all with unvoiced initials and, except for two nasals, with vocalic finals) suggest rather that it is an obscurely conditioned subset of tone *B: unvoiced initials - and the above trio of roots can now be subtracted!²⁰

One exceptional root, of 'cultural' type with restricted distribution, shows Lushai final -? corresponding to vocalic final in Karen: Lu. bu?, PK *bu^[B] 'rice/paddy;' it is perhaps significant that the PK root has the 'third tone' (above). There are at least three possible lines of explanation here: (1) the Lushai (and Kuki-Naga) form reflects a suffixed (rather than root-final) *-s, lacking in Karen; (2) the word was an early loan into Karen from a K-N language which had final -ø for *-s (or *-?); (3) the glottal element in Lushai was metathesized (hence does not stand for PTB *-s).

PK final *-s, as reconstructed above, is clearly distinct from the regular reflex (*-?) for PTK final *-t (first three roots below) as well as for suffixed *-t (last two roots). See Table III [next page].

Notes to Table III:

'land leech' : WB k- 'animal prefix'; Pl. -ró < *-rwa?; B.Sgaw əu? < əwa? (cf. B.Pho ə̀ə̀?-wà?) < *s-wa? (*s- 'animal prefix').

'cut/break' : WB tut < *[d]ut 'break slightly, without severing the parts;' cf. Jg. dùt 'cut, sever, disjoin, break;' Rawang thut 'cut (hair with a fringe);' PK 'cut, broken off;' Pl. has irregular tone (< *B).

'chop/fell' : WB 'gash, chop, cut, beat (metal);' PK 'fell trees.'

TABLE III

	<u>WB</u>	<u>PK</u>	<u>Pa-o</u>	<u>M. Pho</u>	<u>Pl.</u>	<u>B. Sgaw</u>
land leech	krwat	* <u>(r-)</u> wa?	-wa?	wa?	-ró	əu?
cut/break	tut	*du?	thò?	thau?	tù	tù?
chop/fell	khut	*gu?	-	khau?	-	kù?
vessel	no (Lu.)	-	-	-	-	-
*s- + *-t	hnut ('mouth/ womb')	*(h)no? ('mouth')	-	no?	-	no?
ill	na	-	-	-	-	-
*s- +	-	*hna ^{A/B} ('demon')	-nà	-ná?	-nàq	-nà
+ *-t	nat ('demon')	-	-	-	-	-
*s- + *-t	-	*hna? ('suffer')	ná?	nà?	nàq	na?

'vessel' : Lu. no (< *now) 'cup, vase, jug;' WT snod-pa 'vessel,' bu-snod 'womb' = 'vessel of child (bu);' WB hnut 'mouth' = 'vessel [of food];' also 'womb,' from *s-no(w)-t (PTB *-ow > WB -u, explaining the vocalism; an unsuffixed form such as *s-not would have yielded WB *hnat); Pho no? < *no?, but Sgaw no? < *hno?.

'ill' : PK *hna^A (Pa-o/Pl.) ~ *hna^B (Pho/Sgaw) 'demon,' from *s-na^{A/B} = '[spirit] causing (s-) illness (na);' WB nat 'demon' = '[spirit of] illness' (cf. WT nad 'illness'); Loloish also has *nan 'demon' (cf. Matisoff, TSR, No. 136; also WT nan-te = na-ba 'ill'); PK *hna? < *s-na-t 'suffer,' with prefixed *s- as 'intensive' (STC: 105).²¹

Complete loss of PTK final *-t after vocalic length has been noted in PK *səli^A 'water leech;' cf. PTB *(s-)li·t, 'id.' (See KLFS.) Replacement of final -t by -? in borrowings has also been noted, e.g. in the early loan: PK *ʔdɛ? 'pick/pluck,' from Proto-Tai (PT) *ʔdet, 'id.'²²

In addition to the above, it appears that Pa-o final -t is at times a reflex (conditioning factors undetermined) of PTK *-t rather than *-s, notably in the numeral 'eight' : Pa-o sót in

the face of Pho/Sgaw *xo? (< *voiced initial); cf. PTB *(b-)r-gyat (see STC: 141 and fn. 382 for the initial); also Pa-o kh^hüt (< *grüt) 'grind (noisily),' corresponding to Pho/Sgaw *yi?; cf. PTB *krit (~ *grit) [Rawang əgyit] 'grind;' also (without known TB cognates) Pa-o kh^hét 'pry up, dig up,' corresponding to Pho/Sgaw *khe?; also Pa-o tèt (< *dət) 'rub (back and forth),' corresponding to Pl. təq < *tə?. Some of the Pa-o items with final -t appear to be loanwords, e.g. Pa-o pòt (< *bot) 'rub (together); wear away (by friction);' cf. WB pwat < *[b]wat 'rub, grind, churn.'

In the broader ST framework, PK final *-s represents both root-final *-s ('seven,' 'comb,' 'bone') and suffixed *-s in the numerals 'four,' 'five,' and 'nine' (and cf. 'carry by headstrap,' above), as shown in Table IV, which includes additional examples of Archaic/Middle Ch. -t as reflex of PST *-s both as root-final ('fern,' 'pluck,' 'not/un-,' and probably 'fruit/child'), and as suffix ('middle/navel' and perhaps 'four').²³ [See Table IV on next page.]

Notes on Table IV:

'two' and 'seven' : PK *khni^A < *q-ni^A (regular shift) 'two,' based on Pl./Sgaw *khi^A ~ Pa-o/Pho *hni^A; the unsuffixed root for 'two' is represented also by Rawang əni (sənit 'seven') and Chang Naga ńi (ńet 'seven'), paralleling Jg. as well as Karen and Chinese;²⁴ PST *snis 'seven,' with rare initial cluster and final *-s (rather than affixed *s- and *-s), had already become a 'frozen' form at that early level, but clearly had developed from a still earlier *s-nəy-s (*nəy^{A/B} 'two'); cf. WB khu'-hnats [or khu'-hnac] 'seven' (khu' 'a unit');²⁵ Ch. ts'jər/ts'i- 'second,' from *snəy (cf. 'seven'), with prefixed *s- converting the form to an ordinal, the initial development as in 'seven' : PTB *snis, Ch. ts'jět/ts'jět (for the phonology, see Benedict 1976a ("STAL"): fn. 9).

TABLE IV

	<u>WT</u> <u>Gyarung</u>	<u>Lp.</u>	<u>Jq.</u>	<u>Lu.</u>	<u>WB</u>	<u>PK</u>	<u>Arch./Mid. Ch.</u>
two			nī			*khni ^A	二 níər/nízi-
*-s	{ gnyis kěñs	nyăt		hni?	hnats		
second	-	-	-	-	-	-	次 ts'ier/ts'i-
seven	{ - kěsněs	-	sənīt	-	-hnats	*hnəs	七 ts'iet/ts'iet
four	bzi	făli	məlī	lī	lê		四 sliəd/si-
*-s		lit '4th'				*b-lis	*sliət/-
five	lŋa	faŋo	məŋā	ŋā	ŋâ		五 ŋo/ŋuo:
*-s						*ŋas	
nine	dgu		jəkhû		kûi		九 kiwəg/kiəu:
*-s		-kyót				*?kus/ *gus	
*-a				kûa			
comb	-	-	-	khui?		*khwis	-
fern	skyes-	-	-	-	-	-	蕨 kiwăt/kiwət
fruit/ child		-	-	ra?	-	-	
*-s	sras						實 s-liět/dz'iet
pluck	-	-	-	lo?	-	-	將 lwăt/luăt
not/un-	-	-	-	mo?	-	-	末 mwăt/muăt
bone	rus-	-hrăt	nrút	ru?	rûi	*khrus	骨 klwət/kuət
head	dbu	[u]	-	ū	?û	-	頭 d'u/d'əu
middle/ navel	dbus	-	-	-	-	-	脖子 *b'wət/b'uət

Notes [continued]:

'four' : Lp. lit 'the fourth finger;' Ch. sliəd/si- is from *s-ləy^{A/B} (standard -d/ reflex in sandhi tone), showing typical Chinese replacement of earlier (PST) prefix (*b- in this root) with *s- (see above for possible parallel in Karen); Ch. *sliət/ is based on a Chi yün citation of an early Shensi (dialectal) form.

'nine' : Lp. kǎ-kyót is one of three distinctive kǎ- prefixed forms for the numerals 'seven' through 'nine,' and the affiliation is in doubt: -kyót < *skót < *s-kó-t or perhaps *s-kwa-t (cf. Lu-shai), rather than the anticipated *kyüt (or *kyăt) < *s-ku-t; Lu. kǎa < *ku-a, with a curious suffix relected also in the Naga languages²⁶; Ch. kiwǎg/ for Karlgren's kiǎg/ [work in progress].

'fruit/child' : WT sras 'child' (resp.) = 'fruit [of the womb]'; Lu. 'fruit; to bear fruit;' Ch. 'fruit' (the vocalic shift is regular before the final dental); for the semantics, cf. PK *sa^B 'fruit; offspring,' from PTK *za^B 'child' (WB sâ, Lahu yâ), with regular unvoicing of the initial (STC: 135). Pa-o has the curious sén rá (< *hra^B), which would regularly represent an earlier *s-ra^B but possibly in this case reflects *za^B (with *z- > r-: cf. Lisu rà-). If this Pa-o form is indeed from *s-ra it would require reconstructing the PST root with suffixed rather than root-final *-s.

'not/un-' : Lu. 'to be unable; affix like the English [suffix] "-less" or the prefix "un-;"' Ch. 'not' (loan use in Lunyü).

'bone' : Ch. klwət/ or possibly kwət/, with -lw- > -w- paralleled in other forms; both Ch. and Karen show the 'body-part prefix' *k-.

'head/middle/navel' : WT dbu 'head,' dbu-ma 'the middle [way, etc.],' dbus 'middle, midst, center;' Lp. [u] is a loan from Tibetan; Lu. ū 'older (= head) sibling;' WB ʔû 'head; (comp.) uncle;' Loloish both *ʔu^B and *ʔdu^B as well as the compound *ʔu^B-*ʔdu^B 'head,' with prefix preemption as apparently also in Chinese. The alternative is to set up a distinct PST (Ch./Loloish) root *du^{A/B} 'head.' Ch. *b'wət/b'uət 'navel' is known only from Middle Chinese texts.

The material tabulated above is of morphological as well as phonological interest, especially as it relates to numerals. Many TB languages reflect suffixed *-s in 'two,' while Karen, which paradoxically has only the plain (unsuffixed) form in 'two,' shows suffixed *-s (PK reconstruction) in 'four,' 'five,' and 'nine.' Lepcha has the regular reflex (-t < *-s) in 'two' and perhaps also (plus prefixed *s- > Lp. medial -y- reflex) in 'nine.' More sig-

nificantly, it also has final -t in lit 'the fourth finger,' an ordinal form. Garo has substituted *s- for PTB *d- in 'nine' (sku), while Chinese has made a similar substitution in 'four' (above) and in 'ten' (STAL: 169 [table]); the same table shows that LPT (the early Ch. dialect yielding loans [L] to Proto-Tai) substituted *s- also in 'two,' 'five,' and 'six.' The PTB (WT/WB and perhaps Trung) root for 'thousand' has prefixed *s-: *s-ton^A (STC, No. 32). In the PST root for 'seven' (*snis), as indicated above, both prefixed *s- and suffixed *-s had already become 'welded' to the root (*ney^{A/B} 'two') at the PST level.²⁷ In view of the specific 'ordinalizing' function of prefixed *s- in Ch. 'second' and suffixed *-s in Lp. 'fourth' (above), it is tempting to assign still another function of this kind to the already overworked PST *s- (followed by relocation as suffixed *-s), viz. 'ordinalization,' perhaps to be viewed as a specialized aspect of the over-all 'causative/transitivizing/directive/intensive' function of this ubiquitous PST prefix.²⁸

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IV. A Note on Karen Genital Flipflop

In a recent re-perusal of Variational Semantics in Tibeto-Burman (hereafter VSTB), that seminal work by James A. Matisoff (hereafter JAM), I was startled to realize that the author, in a rare outburst of conservatism, had failed to include words for the private parts (partly 'internal organs'),²⁹ contenting himself with a footnote (No. 229) to the effect that the A[ustro] T[hai] root *(m)pu(N)qi 'vulva' had yielded Tsou (Formosa) boki 'penis,' from *buki < *mpuNqi (material drawn from Benedict 1975 (ATLC), hailed by the author as 'a striking example of interlingual antonymic association' (the original source points out that the two organs are often found 'in association')).

As noted in a recent article (Benedict 1976a, hereafter STAL), Karen shows the reverse type of 'antonymic association' : PK *lin^B 'vulva;' cf. PTB *li^B 'penis' (STC: No. 262), based primarily on Bodo-Garo *li (Garo ri, Dimasa li) and WB lî, but with probable cognates also in Kanauri kut-li (not analyzed) and Bahaing bli (< *b-li);³⁰ Loloish forms in initial n/n̄- have been interpreted (JAM) as reflecting *mli^B (< *m-li^B), vying with forms reflecting *(s-)li^B, e.g. Phunoi nè and Bisu hlè, but similar forms elsewhere are of doubtful affiliation: Jg. (mə)nē 'penis,' nè? 'copulate;' Chang Naga (Konyak group, with special ties to Jg.) nie 'penis' and ne- 'copulate' as well as the specialized ñi 'copulate (of the male)' (perhaps = 'make with the penis').³¹ An *m- prefixed doublet, of a type paralleled elsewhere in TB (STC: 68-9), is represented by WT mje and Thakali (Nepal: Tamang group) mle (< tone *B), from *m-ley^B or *m-lay^B (the -e reflex is ambiguous).

Chinese appears to lack cognates for this etymon,³² apart from Hakka lin³ - 'penis' (Hashimoto 1972; < tone *B), showing suffixed */n̄ with body-part words (STAL: fn. 30), as in Karen, but retaining the meaning 'penis.' There is one bit of evidence

suggesting that the semantic shift to 'vulva' was relatively late in Karen: the deviant Pa-o (Taungthu) has lî (< *li^B) as 'clf. for long cylindrical objects,' on tone *B as elsewhere in this etymon. It would appear that the unsuffixed form, having fallen into disfavor, was fitted into a slot among the classifiers ('pencil one-penis,' etc.). The eventual shift to 'vulva' was apparently only one side of the semantic flipflop [see below]. The mechanism is unknown, of course, but the Nahsi (Moso) forms are of some interest here (tone marks omitted): standard (Li-ch'iang) ńi 'penis' (as in Loloish; see above), ńi pi 'vulva' (Bradley 1975), combining the loan from Mandarin 尻 pì, 'id.',^{33,33a} [Weihsí dialect has simply pi], and thus providing one possible basis for flipflop (ńi pi ~ pi ńi).

Having established, at least to my own satisfaction, the fact of the Karen semantic shift to 'vulva,' I began a vain search in TB for cognates of PK *?te^B 'penis' (for the initial, see KPSS). Unfortunately, I kept looking under the wrong entries! The Miri word for 'vulva' is it-ti, for *i-ti, from an earlier form with unstressed *a- prefix (ǎ- rather than ?a-), later assimilated to the vowel of the root, a characteristic feature of this language. If we accept the Karen and Miri forms as cognates, the indicated PTB/PTK reconstruction is *tēy^B. Cf. the following:

	<u>PTB</u>	<u>Miri</u>	<u>PK</u>
fire	*(s-)mey ^B	i-mi	*hme ^B
vulva (> penis)	*tēy ^[]	it-ti	*?te ^B

I am suggesting that the Karen terms for 'penis' and 'vulva' flipflopped, in a manner analogous to that found in tonal systems ('high' and 'low' flipflopping). This implies, of course, that the basic TB/TK (perhaps also ST) term for 'vulva' is represented by the *tēy^B root, maintained in Miri (and hopefully elsewhere).³⁴ Paradoxically enough, Miri replaced the 'penis' root (above) with what appears to have been the basic ST etymon for 'male'³⁵ :

e-ma.k 'penis' (ma.k in comp.) and the doublet (Abor) with typical secondary voicing after the long vowel: ma.g-, found in ma.g-re.k 'man's girdle or belt;' cf. Taraon (Digaro) mau-a (< *ma.g-) 'male;' Archaic/Middle Ch. 牡 môg/məu [irreg.] 'male,' both reflecting an earlier *ma.k (secondary voicing after vowel length; see the discussion in Benedict 1977). This root gave rise to a general kinship term, PTB/PTK *ma.k 'son-in-law' (often also 'brother-in-law'), represented also in Miri ma.k-bo 'cousin' (the prospective brother-in-law in cross-cousin marriages) and ma.g-bo 'son-in-law; brother-in-law' (possibly influenced by WT mag-pa).³⁶

The lack of any widely represented TB root for 'vulva' is in line with the flipflop thesis. WT stu 'vulva,' with some areal extension (Gyarung testu, Thakali tu, Lepcha (a-)tũ [a loan], also Lisu tu¹bi⁶ [loan?],³⁷ is probably to be derived via 'a joining/joint (branch, crotch),'^{38,39} from PTB *du(-t) ~ *tu(-t) 'join, tie, knot' (STC, No. 421). Garo has the identical form bistu 'knot, node, joining of the seam' (bi- is a 3rd person pronominal element). A parallel development (if not a PTB root) appears to be represented by Lu. chù 'vulva,' perhaps from an earlier *thù (< Kuki tone *2; STC: fn. 63); cf. Lu. chū (< Kuki tone *1) 'strike, pound, batter, stamp, knock, tap;' Jg. thu 'pound, husk (by pounding);' WB thu 'pound, hammer, beat;' Lahu thu (< PBL *tu³) 'chop down (trees), clear land' (see STC: No. 317 and fn. 214 for the related complex PTB doublet for 'hammer').

The 'fork/crotch' semantic association also appears in Bodo-Garo *pak, represented by Garo ja-pak 'the fork between the legs (ja),' Bodo ci-pha, Dimasa si-pau 'vagina' (cf. si-di 'urine' [di = 'water']).⁴⁰

The Burmish root *jok 'vulva' (WB cok, Maru jok, Atsi ju?) is compared in STC (fn. 178) with Chang Naga su.k 'id.,' but perhaps fits better with Jg. məcó? 'socket,' ri məcó? 'socket of spear-head; vagina' ('euphonic expression'), and Rawang (Nungish). məzo (probably for *məzo?) 'vagina,' a likely loan from Jg. preserving the voiced root-initial. Hanson derives the Jg. form from có?

'to be joined, matched, and thus fitting,' a cognate of Archaic/Middle Ch. 屬 âiuk/ziwok 'to be joined to, attached to' ~

tiuk/tsiwok 'attach, connect,' hence 'copulate,' applied to male as well as female genitalia (see Tsu-lin Mei 1977), from PST *jo.k ~ *co.k (note the maintenance in Chinese of the basic PST voiced [simplex] vs. voiceless [causative] distinction in root-initial).^{41,42}

The Loloish root for 'vulva' has been reconstructed (JAM) as *b(y)et,⁴³ a form not cited in that scholar's VSTB but bearing a remarkable resemblance to his newly reconstructed PTB *b-yet ~ *m-yet 'heart/liver/mind;' it may well be that he will yet seek to link the pair via 'uterus' (internal organ)!⁴⁴

It will perhaps have occurred to the perceptive reader that the PTB roots for 'penis' [*(m-)li^B ~ *(s-)li^B and *m-ley^B or *m-lay^B] strongly resemble (apart from tone) PTB *m-lay^A ~ *s-lay^A 'tongue' (STC, No. 281), as well as PK *ble^A (< *b-le^A < *b-lay^A) 'id.' (STC: 133; cf. Bahing bli 'penis,' above), making for a truly Matisoffian concatenation, especially in view of Gyarung *lem 'penis' (Nagano 1978), very likely from an earlier *lyam, and thus comparable with PST *(s-)lyam 'lick/tongue' (STC: No. 211 and fn. 158), perhaps also WB hlya (< *hlyam-ma) 'tongue;' note also the alternative view of Mandarin liáo, Amoy liâu 'penis' (Note 32) as cognates of PTB *(s-)lya.w 'lick/tongue' (STC: No. 211). In addition, surely someone will want to consider Hakka lin³ - 'penis' and/or PK *lin^B 'vulva' to be early loans from Proto-Tai *lin^B 'tongue' (even the tones match!),⁴⁵ while the still more adventuresome also will seek to bring into play the basic AT root: *blidaq 'lick/tongue' (cf. Bahing bli 'penis' and PK *ble^A 'tongue') and even Eastern Austro-Asiatic *liat 'lick' (affixed: 'tongue') [ATLC: 480], as well as the AT root for 'penis/male': *(u)(N)q[a]lay,⁴⁶ apparently connected (early loan or substratumate) with forms in northern Mon-Khmer languages: Palaung-Wa *kle (< *klay) 'penis' [Danaw le, Riang kle, Tung Va (Wa) kli (ATLC: 483 - note also Thin lai 'vagina!')].⁴⁷ And finally, lest the incredulous reader look upon all of this as too 'far out,' he might do well to ponder the 'other' Garo term for 'penis' (kept dangling until the very end!) maq-sre = 'body-tongue!'

Footnotes to the "Notes"

- 1 The Lahu variant form phá shows irregular aspiration (we would expect *ʔbak > Black Lahu pá), and seems to be a borrowing into Black Lahu from another dialect (JAM).
- 2 Here too there is a possibility of a Mon-Khmer connection: cf. Mon prah 'be scattered about, widely distributed, spread' (Shorto 1962, p. 140), which incidentally certainly looks relatable to PTB *bra 'scattered, forked, divided, spread, dispersed' (STC: No. 132). The vowel correspondence between these and the PK forms is not too good, however (JAM).
- 3 This handy term, referring to an 'orphan morph' that only occurs in a single compound, was first used in Matisoff 1973 (pp. 60-1).
- 4 This is a case of prefixal retention via 'preemption' (JAM).
- 5 We must certainly set up other allofams for WINNOW on the PTB level. Instead of *kra.p, we need something more complicated, like *g-(r)ya.p. Cf. the doublet forms WT yab-mo ~ gyab-mo 'the act of fanning, waving; a fan' (≠ *khrab-pa), and Lushai za.p 'fan, winnow, flap, flutter' (≠ *tha.p); also Mikir hi-dzap, Jinghpaw kətsəp 'id.', Tangkhul Naga khayap 'call by waving the hand,' WB yap 'fan.' For more discussion, see Matisoff 1972b, p. 282 (JAM).
- 6 See Benedict 1973.
- 7 In Tamang, some original final stops have dropped, leaving long vowels, whether or not the proto-vowel was long to begin with. Thus ma: 'son-in-law' < *s-ma.k, but sa: 'breath' < *sak (see Mazaudon 1973). Tamang also has final stops synchronically, some of which seem to be secondary. At any rate, it is striking that Tamang now has a length contrast only in synchronically open syllables, the opposite of what one might expect on general typological grounds (JAM).
- 8 Benedict points out that vowel length only in open syllables, though rare, is also found in the Tungho dialect of Saisiyat, an Austronesian language of Taiwan (Li Jen-kuei 1978). He also notes that Tamang vowel-length contrasts sometimes reflect proto-differences in vowel quality: thus Tamang me 'fire' < PTB *mey, vs. me: 'tail' < PTB *r-may.
- 9 A three-way contrast in nasal manners of articulation (e.g. *n, *hn, *ʔn) is also posited for PLB [cf. Matisoff 1969, 1972a] (JAM).
- 10 The Karen glottal dissimilation conditions just described

are actually quite different from the Lolo-Burmese case. It is only with voiced initials that the Lahu dissimilation rule operates, thus pre-Lahu *ba? > Lh. pá, but *pa? > Lh. pâ?. See Matisoff 1972a. The Loloish glottalized initials may have been more strongly ejective than the Karen ones (JAM).

11 There is much tonal irregularity in this etymon. The Karen forms point to tone *A, the Lahu form qā reflects tone *B with glottalized initial, and the WB form shows (presumably secondary) creaky tone (tone *C)! This tonal instability may have something to do with the final *-r, as well as the alternation in the voicing of the initial (JAM).

12 I wonder about this Lepcha form! The Lp. word for 'dog' is kǎ-ju, which is not related in any obvious way to the universal PTB root *kwiy (STC: No. 159). [A more complex reconstruction than *kwiy is offered in Matisoff 1979b, section 2.2.] The second syllable of the Lp. form, -bǔ, means 'reptile, worm, caterpillar, leech, bug' (< PTB *buw [STC: No. 27]: cf. WT 'bu). Could it be that the first syllable, gi-, is actually the long-lost Lepcha reflex of the DOG etymon (cf. WT k'yi 'dog'), rather than a morpheme meaning 'tick, louse?' Thus the Lp. compound would mean something like 'dog-bug' (JAM).

13 The reflexes of PK tone *B on forms with unvoiced (especially glottalized) initials present problems which are still unsolved. It seems likely that the two parallel roots here ('penis' and 'bag') owe their deviation to some as yet undetermined common factor. The irregularity noted in the text for 'child' (Pho < tone *B) is paralleled in some 30 other Karen roots, which Haudricourt (1975) has placed under a '3rd' tone in PK [see the discussion in KFS].

14 This Karen etymon seems definitely to be cognate to Lahu phê 'come forth; send forth, launch; set free, release, liberate' (cf. the expression vên-bá phê bà ve 'absolve from sin.' The Lahu form (as well as its Akha cognate pyeh-) point to tone *B, but the reconstruction of the rhyme is still in doubt. [Akha pui 'untie' is cognate rather to Lahu phǎ 'id.' [tone *A] (JAM).

15 Without in the least vitiating Benedict's general point here, it should be noted that his schema for PBL obstruents might be confusing to those familiar with the system presented in Matisoff 1972a, 1979a. I reconstruct only two series of obstruents, *voiced and *voiceless. The *voiced series remained voiced in many languages (e.g. Akha, Lisu), but devoiced in others (e.g. Burmese, Lahu). The *voiceless series generally acquired (or always had) aspiration. Thus:

<u>PLB</u>	<u>WB</u>	<u>Lh.</u>	<u>Ak.</u>	<u>Lisu</u>	<u>Lu-ch'üan</u>
*p	ph	ph	p/ph	ph	ph
*b	p	p	b	b	b

[note continued on next page]

Both of these series could be *prenasalized or *preglottalized in the proto-language. (With such prefixal elements, the difference between voiced and voiceless is only reflected in the tonal developments.) The *glottalized series, as Benedict indicates above, became aspirates in some languages, but voiceless unaspirates in others. The *prenasalized series acquired voicing in Lahu and remained prenasalized (with redundant aspiration) in Lu-ch'üan:

<u>PLB</u>	<u>WB</u>	<u>Lahu</u>	<u>Akha</u>	<u>Lisu</u>	<u>Lu-ch'üan</u>
* [?] p } * [?] b }	ph	p	p	p	p
*mp } *mb }	p/b	b	b	b	mph

It remains to be seen whether there are any grounds for setting up *prenasalized initials for PK (JAM).

16 The Lahu cognate of this etymon is pî, with labial initial, pointing to a PLB labiovelar initial. The tone indicates that the initial was also glottalized, so that the PLB reconstruction should be *[?]k^wiy². This is the third labiovelar root to be discovered for PLB, alongside DOG (PLB *^wk^wiy² > Lahu phî) and NEST (PLB *^wk^wiy¹ > Lahu phî). For discussion of labiovelars in LB and TB, see Matisoff 1978b (pp. 6-7) and 1979b, passim (JAM).

17 The final dental stop in the Maru (Burmish group) word for FOUR, bî, does not constitute evidence for a final *-s in this etymon, since -it is the regular Maru reflex of PTB *-iy (just as Maru -uk descends regularly from PTB *-uw). This fact was discovered early by Benedict (STC: p. 60), rediscovered by Burling [1966, 1967], discussed by Lyovin [1968], and vehemently but incorrectly assailed by Miller [1968] (JAM).

18 The final *-s > -i shift, rare in TB, is exactly paralleled in Tai, where PT has final *-i for Austro-Thai *-s. This represents yet another tie, along with the VO word order, the patterning of initial stops (see KPSS), and the 'split' tonal development, in the Karen/Tai areal bond.

19 The most extensive treatment of the origin of LB 'third tone' (= 'creaky tone') is Thurgood 1976, who convincingly derives it from syllables with voiced initial preceded by prefixal *s- (JAM).

20 In the article just referred to, Haudricourt (p. 342) assumes that PK 'second tone' (or tone *B), as well as the corresponding 'tone *2' or 'tone *B' of PLB, have their origin in final *-s (either radical or suffixal). Whether or not one wishes to accept this as a general explanation for the origin of tone *2, it is a striking fact that every single Lolo-Burmese cognate to

the PK etyma in Table II and Table IV (below) is under PLB tone *2, while none of them are under the equally frequent tone *1! The Lahu cognates of these etyma are all under tones /[^]/ or /⁻/, which both derive from *2, though as Benedict points out, some of these (SEVEN, COMB, NINE) have shifted to tone *1 in some or all Karen dialects. The Lahu cognates are as follows:

'five' ṇâ, 'seven' ṣṭ, 'comb' pṭ, 'nine' qṭ, 'bone' ḡṭ,
'carry by headstrap' pû, 'four' ḡ, 'two' nî, 'head' û- (JAM).

21 For a graphic display of the PST word family *na ✕ *nan ✕ *nat, see Matisoff 1978a (VSTB), p. 110. The WT form nan-te should have been included there, in the middle column of Figure 7 (JAM).

22 Note the preglottalized initial *ʔd- in this borrowing, both confirming the PK (and PT) reconstruction and also marking the loan as early; contrast the late loan represented by PK *na? 'sword' (< *voiced rather than *unvoiced initial): PT *ʔdaap 'id.', Shan làap ~ nàap (Khamti form).

23 The Chinese reflex (-t) is ambiguous for PST suffixed *-s vs. *-t; cf. PTB *(a-)pi(-s,-t) : WT 'phyi-ba ~ 'phyid-pa 'to wipe, blot out; Lu. phi? 'to wash (the face); Ch. 洗 piě/miě [GSR 405s] 'to wipe a vessel clean' (with prefixed *a- > ʔ- as in WT).

24 The unsuffixed root for TWO is also represented by several Loloish forms, including Lahu nî, Akha nyî, Ahi ni 21, Sani n 11, Lisu nyî⁵ (all < PLB tone *2 [TSR, No. 160]). The open syllable allofam of SEVEN is also well represented in Loloish, with preemption of the root-initial nasal by the s- prefix (Lahu ṣṭ, Lisu shî⁵ < PLB tone *2 [TSR, No. 128]). Benedict (1976b, p. 289) has suggested that the alternation between open-syllable and stop-final in these roots might indirectly point to PLB final *-s here. Note the association between this putative *-s and PLB tone *2 mentioned above [note 20] (JAM).

25 It is likely that this WB morpheme khu' is related to a TB root for 'hand' *kut [not in STC], represented by Lushai kut, Meithei khut (khu- in compounds), Hayu got, etc. The semantic connection is via the five fingers of the hand, which serve as a 'unit' in counting. [Cf. Proto-Indonesian *lima 'five,' *ka-lima 'hand.' Also Cambodian pram 'five,' pii 'two' > prampil 'seven.'] (JAM).

26 See Matisoff 1979b, section 2.5.

27 This fore-and-aft affixation of *s- and *-s to the same root has a parallel in Limbu, where there is evidence that the causative *s- prefix (realized synchronically as aspiration of the initial) occurred in syllables which simultaneously or subsequent-

ly acquired the *-s causative suffix. Thus, Limbu pər 'fly'
 ✕ phəs 'cause to fly' [Michailovsky 1979, p. 18] (JAM).

28 It is hoped that the material presented in this paper will help lay to rest the notion that PST root-final or suffixed *-s was maintained as such in Chinese in any form. The suffix, however, may very well have been syllabized: -sV, and as such it would have produced the sandhi (ch'ü) tone both in 'two' and in 'second' (see Table IV: tone marked "-"): *ñiər-sV; *ts'iər-sV, with a rule to the effect that this suffix contrasted with stop-initial suffixes (as in 'four,' on same sandhi tone) in yielding Archaic -iər/ rather than -iəd/ as a reflex of PST *-əy (see the discussion in STC: fn. 486).

29 This egregious lack is partially remedied in my notes below. But in fact I must defend myself against the charge of neglecting the private parts in VSTB. Without actually offering any reconstructed forms, I did devote pp. 159-65 (including Figures 10 and 11) to an in-depth exploration of the metaphorical associations connected with that interesting area of the body (JAM).

30 To these cognates we may add Akha à-lò (JAM).

31 I would tentatively set up a root *m/s-nya-k to handle the Jg. and Chang forms, along with Lepcha gar-nek 'penis,' Mru nia 'id.,' and perhaps Limbu le-hek 'top of penis' [maybe from *s-nyak with prefix preemption] (JAM).

32 This is hardly surprising, since that language seems long ago to have entered into a diabolical conspiracy to conceal basic terms in the 'genital' category. An interesting exception is furnished by Mandarin liáo, Amoy (Campbell) liâu 'penis,' apparently not attested early (it does not appear in the 11th century Kuang yün), but it would regularly be the product of Middle Ch. *liäu, Archaic Ch. *gliog, from an earlier *glaw or *graw (see Benedict 1977), thus fitting perfectly with WT sgro 'large feather/quill,' Central Tibetan sgro-ba 'penis' < PST *(s-)graw.

33 The Mandarin word is itself a likely loan from the AT root cited in the text: *pu(-qi) > *pi(-qi) through assimilation, perhaps via Miao. Cf. the White Miao doublet: pu? (without assimilation) ~ pi? 'vulva.' World language enthusiasts will also, I dare say, match up the Indonesian form of this AT root (*puki) with an English colloquialism via the common AT */n/ infix: nookie (var. sp.) < *(p/)n/uki!

33a I have been unable to locate the White Miao variant pu? in Heimbach 1969, who gives only pi? (pim in his orthography) on p. 229 (JAM).

34 We can now nourish these hopes by supplying a Mikir cognate, the second syllable of venthe 'vagina' (Walker 1925, pp. 175, 449). The first syllable ven- may be from a verbal root meaning 'wipe,

rub, absorb, efface,' though it seems unlikely that the second syllable is related to the homophonous Mikir word the 'fruit' (< PTB *sey [STC, No. 57]) (JAM).

35 For the semantics, cf. AT *(u)(N)q[a]lay 'penis, male' (ATLC: 352), where only the mainland languages (Kadai and Miao-Yao) appear to have preserved the earlier meaning ('penis') of the root, although recently published material on Saisiyat (Formosa) indicates a possible retention of this sense in that language also: kakolay 'penis (of animals)' < *ka/Nqulay (Paul Jenkuei Li, 1978).

36 The Miri morpheme just cited also appears in a nasal-finalled allofam, in composition before a following nasal initial: ma·ŋ-mi 'semen,' ma·ŋ-muit 'male pubic hair' [Lorrain 1907, p. 132].

By the way, it may come as a shock to phallocrats, but even this 'basic ST etymon for MALE' seems to have flipflopped into female semantic space, with the evidence again coming from Mikir: mak 'os Veneris' [Walker, p. 98] and mak-phu 'mons Veneris' [*ibid.*, p. 344] (-phu means 'head' or 'bud') [JAM].

37 I doubt this is a loan, in view of the probable Phunoy cognate pè-tò (2nd syllable). The 1st syllable is from *b(y)et (below). As Benedict poetically observes (personal communication), the real question for randy young Lisu males must always have been, "tu¹bi⁶ or not tu¹bi⁶?" (JAM)

38 Yao shows a parallel development: tsha ~ tša 'to branch out, fork; (comp.) bifurcation, fork,' also (kǎ)tša 'vulva.' The development in English is illustrated in the old line: 'She's only a woodsman's daughter, but what a crotch she has!'

39 The Yao form just cited bears a striking resemblance to the first syllable of Lahu cha-pè? 'vulva' (2nd. syllable < *b(y)et, below), about whose affiliations I have been puzzled for some time. Although this resemblance is undoubtedly coincidental, it does make one wonder about early Yao-Lahu relations (JAM).

40 Bodo ci- and Dimasa si- may actually derive from a distinct TB root, *tsi-n/ŋ, represented also by Jg. jìn 'female private parts,' Hayu pu-tsiŋ, Tamang [Mazaudon, pers. comm.] pi-ci and Bahing pi-si.

Perhaps this is the place to insert a couple of other genital roots which pop up from the body-part files I assembled while working on VSTB:

*həy or *kəy 'vulva': Tangkhul Naga hai [həy] 'vulva,' hai-khur 'vagina' (khur = 'hole'), Limbu hi-ra 'vulva,' hi-ra-hong 'vagina,' Mru kai 'id.' No one can fail to notice the resemblance to Proto-Tai *hi (modern Siamese hǐi), ultimately from Benedict's *(m)pu(N)qi (AT) root discussed above.

[note continued on next page]

*zaŋ 'penis' : Lushai zang; Lakher za 'penis,' za-vo 'foreskin;'
Tangkhul Naga shaŋ-kui 'penis;'
WT gsaŋ-mje 'id.' (respectful term,
probably related to gzaŋ 'anus; privy'); Taron sā:-brā ~
sha:-brē 'scrotum' (JAM).

41 The Karen genital flipflop has apparently flipped even further than Benedict's wildest imaginings. Alone among the Karen dialects in Jones 1961, Palaychi has a form shóq 'penis' (while all the other dialects have forms with dental initials < *[?]te^B). Surely this Palaychi form must be a flipflopped descendant of the *jok root just discussed (JAM)!

42 A very similar semantic interchange between the male and female organs may be noted in the Mayan language family [data from Fox 1978, reported by Jack DuBois via Graham Thurgood]:

Proto-Mayan *a:t/a:t^Y : Quiche ačíy 'husband, man, male, boy,'
Cakchiquel ačí 'hombre, animal macho,' Jacalteco át-e 'pene,'
Chuj at 'penis,' Tojolabal at-ál 'sex organ,' Huastec at 'miembro genital de hombre,' Tzeltal y-at 'su pene,' Tzotzil at 'penis,' Chol at 'vulva,' Yucatec ač 'membrum virile.'

Note the Tojolabal form, applicable to the genitals of either sex, and the Chol word, now unambiguously designating the female member, in the face of all the macho forms in the other Mayan languages.

43 TSR, No. 5.

44 Benedict is making a little joke here. [To the three forms derived from *b(y)et cited in TSR #5 (Lahu cha-pè?, Akha à-bè?, and Lisu tu¹bi⁶), we may now add Phunoi pè-tò, Tamang pi-ci and Bahing pi-si.]

I would no more relate my *b-yet & *m-yet 'heart/liver/mind' root [VSTB, p. 185] to *b(y)et 'vulva' than I would to, say, Jinghpaw phyèt 'fart.' [It should be noted, however, that some TB languages make a semantic connection between the private parts and the anus (all 'nether orifices'), thus WT rkub, glossed as "(1) 'anus' (2) 'vulva'" [Jäschke 1881, p. 16]; also WT gzaŋ "(1) 'anus' (2) 'privy parts'" [ibid., p. 479] (JAM).

45 It would take a cunning linguist indeed to espouse such a view (JAM).

46 JAM was the first to compare the TB and AT roots for 'penis' (Matisoff 1976).

47 One can only throw up one's hands and sigh at the Thin word for 'penis' : ōy !

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