

Laha reexamined

Paul K. Benedict
 Ormond Beach, Florida

A preliminary note on this North Vietnam language, based on very limited material gleaned from a 1972 Vietnamese source, is included in Benedict 1975 ("ATLC":[*Introduction to Glossary*]186-900). A later Russian-Vietnamese work (Solntsev et al., eds. 1986) on one of the three known dialects, Khla-Phlao (KP)¹, now provides excellent material for a full analysis of Laha, with findings as outlined below. Note must be made, however, of a major complicating factor: the language is spoken in an area (Than-Uyên, Thuận-Châu) well south of the China border and, along with the anticipated Vietnamese loans, displays marked influence from the neighboring White Tai and related languages, e.g., in KP the numerals above 'four' have been borrowed from Tai. This has yielded two lexical layers, an earlier Kadai-level along with a later Tai-level, yielding a variety of reflexes, with many problems still awaiting solution.

1. Consonants.

The Laha consonants are presented in Table 1.

| | | | | | | | |
|---|----|----|-----|---|---|----|-----|
| p | pl | ph | phl | b | m | ml | v/w |
| t | | th | | d | s | n | l |
| c | | | | | ñ | | y-z |
| k | kl | kh | kh1 | | ŋ | | |
| ʔ | | | | h | | | |

Table 1

Initial v- is in complementary distribution with final -w; z- is a free variant of y- and is apparently earlier in some forms (see 'rain' under 9).

The consonantal pattern is of the Tai type, perhaps showing Tai influence, and the historical development is also similar, including *ʔb- >

¹ For a list of language, reference, and other abbreviations, see the Appendix. [Ed.]

b-, *ʔd- > d- [d-]; also *ʔdz- > z- via *dz- (in 'rain'). Post-velars merged with velars, with both *kh- and *q(h)- (= PT *x-) > kh-, but *G- (= PT *ɣ-) > k- vs. *g- > kh-. The latter parallels *b- > ph- and *d- > th-, with p- or t- reflexes seemingly pointing to Tai loans, e.g., pa⁶ 'carry on back', PT *ba (A2/B2). Note c- for *j- in ca¹ 'rough', PT *ja (A2) and the variation shown by the following:

- (1) Laha saw¹ 'early', PT *jaw (A2)
- (2) Laha se⁵ 'male/man', SW/C-Tai (SW/CT) *jaay (A2) ~ NT *saay (A1)
- (3) Laha caak⁴ 'pestle', PT *saak
- (4) Laha cot⁴ 'tail', NT *cot 'end', SWT sut 'end', Buyang šut⁴⁴ 'tail'.

Note also s- for *z-:

- (5) Laha sɛ² 'straight/erect', PT *zɛ (C2).

Both p- and ph- show ties with PT *f- ~ *v-, with v- for PT *w-; also Laha h- corresponds to PT initial *r-, while Laha -l- corresponds to PT medial *-r-.

2. Vowels.

The Laha vowels are shown in Table 2.

| | | | | | |
|---|----|---|----|----|----|
| u | ɨ | i | uə | ɨə | iə |
| o | ə | e | əɨ | | |
| ɔ | a | ɛ | | | |
| | aa | | | | |

Table 2

This is essentially the basic Tai pattern, with diphthongs maintained but with a length distinction only for /a/. The actual rimes, however, tend to be idiosyncratic, with -əy appearing at times for an anticipated *-i, -əw for *-u or *-aw, as well as -ow for *-aw.

3. Labial clusters/dyads.²

For dyads, the anticipated forms with medial -l- are found:

- (6) Laha pləŋ⁶ 'leech', PT *p-liŋ (A1)
- (7) Laha plɔk⁴ 'bracelet', PT *p-lɔk 'ring, band'
- (8) Laha bla² 'fish', PT *p-la (A1)³
- (9) Laha phləŋ⁶ 'bee', PT *ph-rɛŋ (B1)
- (10) Laha phlɛw⁴ 'sweep', PT *phɛw (B1) 'sweep, clean' (see Li 1977), for *ph-rɛw (B1).⁴ Here disambiguating cognates are lacking; Laha plays a key role.
- (11) Laha phlaat¹ 'slip/slide', PT *b-la at 'slip and fall'.

Note Laha phl- for a secondary cluster (as opposed to a dyad) in the following:

- (12) Laha phla⁶ 'knife', PT *bra (B2) 'knife (dao), sword' (possibly an early loan).

Note also:

- (13) Laha plaat⁴ 'blood', PT *lɛ at⁵.

For PAT/PKD-level clusters (see the Table in Benedict 1991; also Benedict 1990a:75), the Laha reflexes vary:

- (14) PAT/PKD *pr > Laha /t/ (ta³ 'eye')
- (15) PAT/PKD *pl > Laha /ph/ (phən⁵ 'die' ~ phən² 'kill')
(see under 9)
- (16) PAT/PKD *p_l > Laha /p/ (paal³ 'forest')
- (17) PAT/PKD *br (preglottalized) > Laha /d/ (dəp 'unripe/raw')
- (18) PAT/PKD *b_l > Laha /th/ via *d (thəw⁴ 'ashes').

² For the distinction between 'clusters' and 'dyads' (the latter reflecting disyllabic prototypes) see Benedict 1989a.

³ Note the Laha voiced initial.

⁴ For various reasons, Benedict and Li Fang Kuei use the symbols B and C for opposite tonal categories of Proto-Tai: Benedict's "B" corresponds to Li's "C" (written with *māj tho* in Siamese), while Benedict's "C" corresponds to Li's "B" (written with *māj ʔgək*). This word 'sweep' is particularly confusing in this respect: as the Siamese spelling *uW phêw* shows, this word belongs to Li's Tone *C1, and is so marked in the text of Li 1977 (p. 64); however, in the Index to Li 1977 (p. 354) it is erroneously cited as "B1." [Ed.]

⁵ See Benedict 1989b.

4. *Final -1.*

See my forthcoming paper on Saek in *Comparative Kadai II* for details of comparisons with Saek -1 as well as White Sand Li -1.

5. *Tones.*

Laha has three high tones (including one glottalized: indicated by an underline, 55) and three low tones, with the following correspondences with Tai tones (*B/C = *C/B of F. K. Li; the numerals in the chart refer to the number of examples found for each Laha/PT tonal correspondence). See Table 3.

| Laha PTai | 1 /55/ | 2 / <u>55</u> / | 3 /53/ | 4 /22/ | 5 /21/ | 6 /14/ |
|--------------|--------|-----------------|--------|--------|--------|--------|
| A1 | 2 | 11 | 23 | 26 | 11 | 8 |
| A2 | 14 | 12 | 4 | -- | 2 | -- |
| B1 | 3 | -- | 4 | 9 | 5 | 21 |
| B2 | 8 | -- | 5 | -- | -- | 1 |
| C1 | 1 | 1 | 6 | 8 | 10 | 5 |
| C2 | 4 | 4 | 3 | 1 | -- | -- |

Table 3

Tone 5 shows some association with aspiration (initials: stop + h, h-, s-), especially for A1. There is only one exception:

(19) Laha $\text{n}\text{ɔ}\text{ŋ}^5$ 'pond', PT * $\text{h}\text{n}\text{ɔ}\text{ɔ}\text{ŋ}$ (A1).

Syllables with *voiced initials and stopped finals (PTai Tone *D2) correspond to Laha Tone 1 /55/, while stopped syllables with *voiceless initials (PTai Tone *D1) correspond to Laha Tone 4 /22/, with a very consistent pattern, allowing, e.g., khot^1 'curved/crooked', to be grouped with PT * got 'bent, winding', rather than with PT * khot 'coil' ~ 'bent/curved'. Laha parallels Be in the tonal flipflop here; note also that, unlike Tai, the glottalized tone here (2) is completely dissociated from tone *B and linked rather with *A; this again parallels Be, where tone 1 ('low-rising legato tone with very conspicuous laryngeal constriction towards the

end of the syllable⁶) closely corresponds to PT *A1. Note also that the high-level Be tone 2 corresponds to PT *A2, again a tonal flipflop.

6. *Prefixed k-*.

This element occurs occasionally, usually with nouns, and is much commoner in Publao (qa-) and in Pupeo, rare in Laqua (Bonifacy 1905). Its pattern of occurrence is markedly irregular, e.g., for 'eye' only in the Than-Uyên (TU) dialect of Laha (kəta). Lati/Laji has ?a- in a similar role; cf. Laha kdəy³ 'tiger', Lati a-ti, Laji ?a-tə³⁵. The source in most if not all instances appears to be the ubiquitous (AN/KD/MY/Jp) PAT *q(a)- ~ (unstressed) *k(ă)- prefix (ATLC:147), reflected elsewhere in KD at times by either ?- or 'high' (< *surd initial) tone:

- (20) Laha kdən³ 'nape of neck' ~ kədən³ 'occiput'; cf. NT (Buyi) *?dən (Bl) 'nape'; PKD *?dən (Bl) 'neck'
 (21) Laha kmaəŋ¹ 'devil': PKS *maəŋ (A1) 'ghost/spirit'.

In this second root, however, Tai exhibits variation between the *k- prefix and the *?u- marker (see Benedict 1988):

- (22) SWT *hmaəŋ (A1) < *?maəŋ (A1) 'imaginary evil spirit supposed to live on fish' (Ahom) ~ '[bedevil:] make imprecations against, curse; shame' ~ NT *mwaəŋ (A2) 'ghost/spirit' (through vocalic transfer [VT]),

while Hlai reflects a destressed (*?u- > ?ə-) version:

- (23) P-Hlai *?məəŋ⁴ '[bedeviler:] sorcerer' (through VT).

Compare the following pair of roots:

- (24) PAT *?alak > PAN and PKD *(?u-)alak 'child' (Jp. wara- < *u-ala[k]); PKS *laak (D2) and Laha laak¹ (through VT, without prefixation); SW/CT *luuk (D2) ~ (via destressing) *?lɛɛk (D2) (Lao only) ~ NT *?lɛk (D2), all < *?u- marked; P-Hlai *?lɛək (cf. 'sorcerer')
 (25) PAT/PAN *(qa-) [l, ɿ]ima 'hand; five'; PKD *(qa-)lima, with *l- reflected via metathesis in KD only in the doublet 'five' series (Gelao: Duoluo group ml- forms). 'Hand' is represented

⁶ Hashimoto 1980:viii.

by SW/CT *mɛ < *mya (A2) (through VT) and Laha ma², both unprefixed; PKS *mya (A1/A2), reflecting variable *q- prefixation; Pubiao qa-hmi²¹³, P-Hlai *meɛ¹, with prefixed kɛ- (Jiamao) ~ ɛ- < *ü- (Tongshen).

Before -l- there is merging with velar + -l- clusters:

- (26) Laha klɯŋ² 'star'; cf. Pupeo kaluŋ, Pubiao qəluŋ³³, but Laqua (Bonifacy 1905) luŋ
- (27) Laha kləy³ 'float; flow'; cf. PT *hl(u)ay (A1) 'flow'
- (28) Laha klaal³ 'grandchild' ♂ *laal³ '[child of bow:] arrow' (note TB parallels), both reflecting *ka- through VT. Cf. Be lo¹ < *hlaal (A1) 'lad' (with VT) ~ lan¹ < *hlaal (A1) 'grandchild' (without VT); P-Hlai *[l/?l]a:l '(small) child'; PT *hlaan (A1) 'grandchild'; PKS *khla:n (A1) 'grandchild'; Lakkia khya:n (A1) 'grandchild'; Gelao (Wanzi) klu¹ 'grandchild', from *klaal^A; cf. su¹ 'rice' (gloss from comparative list in Chen 1984), PKD (Tai/Laha) *saal^A '(husked) rice', itself a VT form: cf. PAN (Paiwanic) *qasal '(husked/unhusked) rice'; the KD root here is a partially reduplicated derivative of PAT-level *lah(-lah); cf. Saisiyat (Paiwanic) oläh < *ulah, with the *ʔu- marker commonly employed with younger-than-Ego kin terms, for 'grandchild'.

Laha kh1- represents an earlier cluster/dyad rather than the *k- prefix, notably in khla² 'ear', PKS *khra (A1), despite the related NT *rɛa (A2) (see Benedict 1989c, pp. 3-4).

7. Prefixed *m-

The Kala-Phlao dialect of Laha has this only in mna⁵ 'tomorrow' and four faunal terms. It is more prominent in the Than-Uyén dialect, in 'moon', 'earth', '(head) hair', 'bird' (manok, looking strangely like PAN *manuk < PAT *mamrok; PKD *mrok), 'egg', 'sugarcane'; also for k- in 'star' (məluŋ), paralleling BB mluŋ. This prefix is typical for Lati/Laji and is also found in Buyang; it appears to be a KD innovation.

8. Infixed -n-

This occurs only in mal¹ 'fat/grease/oil', mnal¹ 'fat/stout', from *m- l-a1¹ through dissimilation. Compare PT *mal (A2) (Haudricourt 1963

cites /ma¹2/ for Saek) 'fat/grease/oil; greasy, oily'; PKS *man (A2) 'fat/grease/oil'; also the infix derivatives: P-Gelao *m-lan^{2/6} < *m-l-a¹2/6; Duoluo (Liuzhi) mləŋ^{1/2} 'fat/grease/oil', Kelao (Bonifacy 1905) nuə 'oil' ~ nu (compounded with 'pig') 'fat/grease'; Aou (Pudi) miaŋ^{5/6} 'sesame [oil] (taste)'; Gao (Wanzi) nan² 'fat/grease/oil; fat/stout'; Buyang nen⁴⁴, Pubiao nin³³ 'fat/stout'; Laqua nen 'fat/grease' (Bonifacy 1905); Lati mnə 'oil' ~ (compounded with 'pig') 'fat/grease' (ibid.); cf. PAN (Formosan/Philippines) *simay 'fat/grease (animal)'. Infix *-l- is well attested in AN and there is other evidence for it within KD, notably in Gelao forms for 'tooth', 'dream', and 'year' (see Benedict 1990b).

9. Forms of special interest.

Laha presents a number of forms of special interest, including one numeral, three pronominals/deictics, as well as several items with final -l and a pair of cultural/historical import:

(29) 'six': Then-Uyên (TU) dram (KP has a Tai loan), labeled "enigmatic" (ATLC:188) but apparently reflecting an earlier *nram < *mram < *mlam; Gelao has *ml-: Longjia mləŋ^{1/2} ~ Pudi miaŋ^{1/2} (both Aou), Qinglong (Hagei) ñaŋ², Wanzi (Gao) nan¹, supporting the reconstruction of PAT-level *ʔumləm, indicated now also by Formosan as well as Japanese.

(30) 'I': ɔ³ 'first singular', from *uaw, with regular -ɔ < *-wa(a)w, as in kɔ⁶ 'scratch'; cf. Saek khwaaw (A2), from an earlier *ʔu-a[g]u < *ʔu-aku < PAT *(ʔu-,ʔi-)aku (see Benedict 1990b). This form, paralleling in AN the Central MP development, e.g., Niala (Ceram) wau, provides the only evidence to date for the use of the *ʔu- marker for this pronoun in KD.

(31) 'second singular': ma¹; cf. Buyang ma⁴⁴, Lakkia (Lk.) ma² 'second singular', pointing to an underlying person-oriented ('you there') deictic in KD (see Benedict 1993), in view of the apparent relationship to P-Hlai *ma⁵ 'that (far)'; PAT-level *(ʔi-)ma(-n) 'that/3rd p. prn.' (see Benedict 1988:336).

(32) 'that': ña³, matching Buyang ña⁴⁴, Pubiao ña⁴⁵; cf. PAN *-ña '3rd p. prn.' (enclitic), supporting the reconstruction of *ña along with *na at the PAT level, *contra* the suggested (in ATLC:406) *ña < *na + iya. However, *ʔña < *ʔi-na is suggested by the probably "high" tone, in Laha mostly corresponding to PT *A1 (see 5), and at this point can hardly be ruled out.

(33) 'flower': baal² < *ʔbaal², from *q-baal (see 6) < *q-ba[ŋ]al (note KD parallels for medial *-ŋ- > Ø in ATLC:169); PAT *baŋal: P-Paiwan (Form.) vaŋal 'fruit' ~ 'flower'; Jp. hana, Old Jp. Fana 'flower'. Hlai: Jiamao ŋɛa¹ 'flower', from *SYL + ŋa (with VT), may also belong here, with parallels for *-a < *-al (see 4), along with P-Gelao *hnaŋ³ 'flower', also from *SYL + ŋa (regular *-aw < *-a), but final -n is anticipated here (analysis incomplete) and there is an alternative etymology for both the Hlai and Gelao forms, from PAT *(m)buŋah (ATLC:294-5), which *inter alia* yielded Laqua, Pupeo puŋ, Pubiao puŋ²² 'flower'.

(34) 'mouth': Laha mul¹, BB muol, TU mon, from PKD *(qa-)mul: Pubiao qəmən⁴⁵, Pupeo kəmən, Laqua mon (Bonifacy 1905) ~ ka-mu (Laji); PAN *mułut 'mouth'. Compare also *mułmuł > PMP *mulmul 'mouthe:] put into the mouth and suck' (Blust); note that the *qa- prefix here has 'shaped' the development: *qa-mułut > *qa-mul[ut].

(35) 'cheek': piŋ³ < PKD *(m)piŋ: P-Hlai biŋ⁵ 'buttocks' (cf. Khamti kəm 'cheek', kəm kon = kon 'buttocks'); PAN-level *(qa-)piŋ(piŋ) 'cheek': Cebuano ʔapiŋ, N. Phil. ʔapiŋ ~ piŋpiŋ; for apparently related forms see Benedict 1990a:174.

(36) 'deaf': ŋal³, TU ŋan, BB kaŋan < PKD *ŋal: P-Gelao *ŋan⁴; cf. PMP *bəŋəl 'deaf', from PAN-level *bəŋəl. There are parallels for the indicated shift in AN from *bəŋaɭ through assimilation to V₁.

(37) 'yellow': Laha ŋil³, from PKD *(?)ŋiil; Laqua nin < *ŋin (through assimilation); P-Gelao *ʔñi^{4/6} < *ʔŋi^{4/6} through assimilation (for *-l > Ø, cf. 'flower'); Lati a-hni (written an hi; cf. Gelao); also Saek ŋiil (C1/B2) '[sthg. yellow] turmeric'; cf. Germ. *Gelbwurz*; also PMP *kuniŋ 'yellow'/*kuniŋ 'turmeric' ~ (Chamic) 'yellow', from PAN *kuli(ñ)jaŋ (Siraya [Form.] kuliaŋ) < PAT id. Without the nasal increment (ñ) this root yielded PT *hlɛaŋ (Al) < *ʔlɛaŋ (through *u > /ə/ destressing followed by VT), P-Hlai *(?)lyəŋ^{1/4}. Without the /ñ/, it yielded PMP *kuniŋ (regular *-l- > /n/; typical AN "drift towards disyllabism" [Blust]) as well as the above KD forms. With the ñ it yielded PMP *kuniŋ (PMP lacks -ñ) and perhaps the above root through metathesis: *kuliñjaŋ > *kuliŋ > *ʔliŋ > *ʔŋil (Saek length secondary). As anticipated, Japanese reflects SYL-l: ki < *ki < *kui < *ku[l]i[jaŋ].

(38) 'die' ~ 'kill': Laha pən⁵ ~ pən², the only pair of this kind cited for Laha. Compare P-Gelao *plən¹ 'die': Gao (Wanzi) pən¹; Duoluo (Liuzhi) plan¹ ~ Kelao ple[n] (Bonifacy 1905) cites ple u, apparently a script misreading for *plən; Lati phi, Man P'ang piən, Ban Phung pe 'die', Laji phi⁵⁵ 'die', Lachi (unpublished word list by Nguyen Van Huy) pè 'die' ~ pì 'kill'; also Laqua and Pupeo tie, Pubiao tie⁵³ 'die'; also PT *praay (A1) (VT form, reflecting *[m]a-) 'die'; PKS *pray (A1) (without VT) 'die'; Lk. plei (A1) 'die'; Be dai¹ 'die' < *tay (A1). This etymon is apparently unrepresented in Hlai while Buyang piaŋ⁴² 'kill' looks like a "look-alike." These are the KD representatives of PAT *ma-play 'die' ~ *pa-play 'kill' > PAN *ma-Cay 'die' ~ *pa-Cay 'kill' ~ (especially MP) 'die' ~ 'end'; Jp. hate- 'end, die'; PMY *day^C 'die' ~ *tay^C 'kill'. The Laha/Gelao/Lati nasal-final (*-ən or the like) presents a problem; note that both Laha and Lachi have maintained the morphophonemic distinction between 'die' and 'kill'. Lachi pè 'die' ~ pì 'kill' supplies the vital clue here, the related Lati and Laji forms indicating that /pè/ reflects the simple root-final *-ay, whereas /pì/ reflects a nasal suffix of the *-ən type. Surely this is to be identified with the PAT/PAN *-ən goal- or object-focus marker, represented also in the KD forms for 'eat', from *(ma-)kaʔ(-ən) (Benedict 1988:334-5). As such, it qualifies as a 'kill' marker; it would seem that with the loss of *ma- vs. *pa- through syllabic reduction, the *-ən suffix came into use to mark 'kill', followed by partial merging with 'die', with *ma- vs. *pa- making for the Laha tonal difference.

(39) 'steam rice': pul⁴ < PKD *(?)m)pul; cf. White Tai bun (A1) 'incomplete cooking of rice (by steam), making it into a paste'; the most likely AN cognate has *b-: P-Phil. (Zorc) *buɣbuɣ 'cook wet rice'. Whatever the AT status, an early (Archaic) loan to Chinese is in evidence; cf. 饅 (GSR-438e) p̄wən/p̄juən 'steam rice' (Shijing cit.); for the final, cf. PTB *pur ~ *pir 'fly'; 飛 (GSR-580a) p̄wər/pywəi 'fly' ~ 翯 (GSR-471f) p̄wən/p̄juən 'soar, fly' (see STC:172 for the doublet, regularly < *-ur ~ *-ul).

(40) 'needle': bli², from *?bli < PAT *(?u-)(m)baliq via partial reduplication: *?bali[-baliq]; Jp. hari < *bali[q] 'needle' (regular shifts).

On both the mainland and offshore, as iron replaced bone, the meaning also shifted via 'sthg. iron' to 'iron', as in the following:

(41) AN: Formosan (Atayal/Paiwanic) *(m)baliq (also 'nail')

- (42) KD: NT *mwa(A2) < *mbwa (regular shift) < *u-mba[liq] (through VT)
 SW/CT *hlək < *[bali]q-liq (through VT and typical *-iak > -ek leveling)
 PKS *khlet (with *-k > -t assimilation) (KD has *-k for *-q, which is lacking)
 Lakkia khyāk < *khlyāk < *m-khliak (through VT, without leveling; typical Lk. secondary nasalization)
- (43) Early loans:
 Tib. lcaqs < *hlyak-s (regular shift; -s for loans)
 織 (GSR-1256b) *xliat/t'iet (regular shifts; *-k > -t assimilation)
 PMY *hliɑ? (regular *-? for *-q or *-k, both lacking in PMY)
- (44) Later loan:
 Jinghpaw phri³ (low tone) < *phli (Jg. lacks phl-) < *bli (cf. Laha shift)
Note: Jg. has other, relatively early loans from KD, distinct from the obvious later loans from Tai (see Benedict, forthcoming)
- (45) Parallel: P-Tibeto-Karen *(s-)kap 'needle' (Wr. Tib. khab), P-Karen *tha? (< *skap) 'needle' → 'iron' (see Benedict 1987, Table 5).

APPENDIX

Abbreviations

| | | | |
|------|---------------------------------|--------|--------------------------------|
| AN | Austronesian | NT | Northern Tai |
| ATLC | See Benedict 1975. | PAN | Proto-Austronesian |
| BB | Ban Bung (dialect of Laha) | PAT | Proto-Austro-Tai |
| CT | Central Tai | PKD | Proto-Kadai |
| GSR | See Karlgren 1957. | PKS | Proto-Kam-Sui |
| HCT | See Li 1977. | PMP | Proto-Malayo-Polynesian |
| Jg | Jinghpaw | PT | Proto-Tai |
| Jp | Japanese | P-Phil | Proto-Philippine |
| KD | Kadai | STC | See Benedict 1972. |
| KP | Khla Phlao (dialect of Laha) | SWT | Southwest Tai |
| Lk | Lakkia | TB | Tibeto-Burman |
| MP | Malayo-Polynesian | Tib | Tibetan |
| MY | Miao-Yao (=Hmong-Mien) | TU | Than-Uyên (dialect of Laha) |
| | | VT | vocalic transfer |

REFERENCES

- Benedict, Paul K. 1972. *Sino-Tibetan: a Conspectus*. Contributing editor, James A. Matisoff. Cambridge University Press. ("STC")
- _____. 1975. *Austro-T(h)ai Language and Culture, with a Glossary of Roots*. New Haven: Human Relations Area Files Press. ("ATLC")
- _____. 1987. "Archaic Chinese initials." In *Wang Li Memorial Volumes* (English Volume), pp. 25-71. Hong Kong: Chinese Language Society of Hong Kong/Joint Publishing Company.
- _____. 1988. "Kadai linguistics: the rules of engagement." In J. A. Edmondson and D. B. Solnit, eds. *Comparative Kadai: Linguistic Studies Beyond Tai*, pp. 323-40.
- _____. 1989a. "Kadai clusters/dyads: Proto-Tai *p1/*p-1/*ph1." In *Kadai: Discussions in Kadai and Southeast Asian Linguistics*, No. 1, pp. 10-14. Arlington, Texas.
- _____. 1989b. "Kadai 'red' > 'blood.'" In *Kadai: Discussions in Kadai and Southeast Asian Linguistics*, No. 1, pp. 15-16.
- _____. 1989c. "Proto-Hlai initial *l y-." In *Kadai: Discussions in Kadai and Southeast Asian Linguistics*, No. 1, pp. 1-4.
- _____. 1990a. *Japanese/Austro-Tai*. Ann Arbor: Karoma Publishers.
- _____. 1990b. "Proto-Kadai." Paper presented at the 23rd International Conference on Sino-Tibetan Languages and Linguistics, Arlington, Texas.
- _____. 1991. "The wild in Kadai." In *Kadai: Discussions in Kadai and Southeast Asian Linguistics*, No. 3, pp. 67-69.
- _____. 1993 (forthcoming). "The deictic triangle revisited: Southeast Asian demonstrative systems." To appear in *LTBA*.
- Bonifacy, Auguste Louis. 1905. "Etude sur les langues parlées par les populations de la haute Rivière Claire." *Bulletin de l'Ecole Française d'Extrême Orient* 5:306-27.
- Chen Qiguang. 1984. "Pubiao-yu gaikuang" (An introduction to the Pubiao language.) *Zhongyong Minzu Xueyuan Xuebao* 4.
- Hashimoto, Mantaro J. 1980. *The Be Language: a Classified Lexicon of Its Linkow Dialect*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- Haudricourt, André-Georges. 1963. "Remarques sur les initiales complexes de la langue Sek." *Bulletin de la Société de Linguistique de Paris* 58:156-63.
- Karlgren, Bernhard. 1957. *Grammata Seria Recensa*. Stockholm: Bulletin of the Museum of Far Eastern Antiquities, No. 29. ("GSR")

- Li Fang Kuei. 1977. *A Handbook of Comparative Tai*. Honolulu: University Press of Hawaii. ("HCT")
- Solntsev, V. M., et al., eds. 1986. *Jazyk Laxa: Materialy Sovetsko-Vjetnamskoj lingvističeskoj èkspeditsii 1979 goda*. [The Laha Language: Materials from the Soviet-Vietnamese Linguistic Expedition of 1979]. Moscow: Nauka Publishing Co.