

Austroasiatic Loanwords in Sino-Tibetan¹

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Austroasiatic (AA) and Sino-Tibetan (ST) have shared an extensive border or, perhaps more accurately, a series of borders (like the line encircling Khasi) for the past few millennia, yet it is a curious fact that there has been relatively little exchange of lexical material between the two stocks, apart from strictly local borrowings. Mon, to be sure, has made a sizeable contribution to the lexicons of Burmese and Karen, as might be anticipated in view of the history of the area, with Mon playing the literary, ‘civilizing’ role, but Khmer, the other AA literary language, became involved primarily with a non-ST language (Thai). Chinese has remained quite distant from both these seats of literary influence, as witnessed by the fact that in a recent study of early loanwords in Chinese (Benedict 1976b) little mention is made of AA whereas Austro-Thai (AT) loan sources appear in some abundance. A reexamination of AA materials has not appreciably changed this situation but it has served to point up the over-all picture, as presented below.

As might well be anticipated, the ST languages show little if any lexical evidence of specific Munda (as apart from AA) contact. Munda does have a number of unexpected lexical ties with SEA in items apparently not represented (except by loans) in MK, as shown in a recent paper on AA and AT (Benedict 1975 [hereafter *ATLC*]; Appendix II), e.g. the body part word: PM **nunu* ‘breast, nipple, suck, suckle’ (contra Pinnow, distinct from PM **nu* ‘drink’ (< PAA **nu*[ʔ]; cf. PW **ni*? < *nu*?, id.): note Santali *nunu* ‘breast’, *nu* ‘drink’); PAT **nu*[h]/*nuh* ‘breast’ (Ho. ‘nipple’) as well as two roots of extraordinary cultural interest:

PAT *(*qa*)/[*s*]/*alu* ‘mortar/ pestle’: PWA **halu* ‘pestle’; Formosa (Paiwanic/Tsouic/Atayalic) *(*qa*)/*salu*, id.; Li (Hainan) **raw* ‘(rice) mortar’, from */*s*/ *aru* (with vocalic transfer [*ATLC*:183]; PAT */*l*/ > Li /*r*/ is a regular shift); PM **saXʔ*: ‘The Proto-Munda form for the ‘husking hole, or mortar’, usually a hole in the stone of the verandah of a Munda house’ (A./N. Zide).²

¹A list of abbreviations is given in the Appendix.

²AC/MC 杵 *skʼjo*lʔsʼiwo ‘pestle’, which has the calendar term 年s-ηo/ηuo: ‘horse’ (see text) as phonetic, is a possible early loan in Chinese, from **s-kʼja* (regular shift) < **skal* (loss of *-*l* is not rare) < **ksal* (metathesis) < **qsal* (regular Chinese replacement of /q/ by /k/ in loans); cf. the related loan: AC/MC 春 *š-glj*uŋʂjwoŋ ‘hull grain with mortar’ (sec. voicing; regular **o* > /u/ and **B* > **A* tone after **s*- prefix); PT (only SW) **klooŋ*^B, (~ **glooŋ*^A) ‘hull rice’; Kam-Sui **tyuŋ*^B < **klooŋ*^B, id. (contra *ATLC*:338-39).

The */X/ is a reconstructed glottalization feature (N. Zide), of uncertain significance here. The */ŋ/, however, appears to have been metathesized, representing the Formosan (and widespread AN) *qa/ prefix, a pattern often found in the Philippines. The loan confirms the reconstruction of */s/ as initial (a long distance to go for this!) and also indicates that the mainland meaning ('mortar') is earlier than the PAN meaning ('pestle'), as usually obtains within AT in cases of this kind. This is a very 'primitive' cultural item, especially as described for Munda, and the loan must have been made at a remote time period, the phonology clearly indicating the direction (AT > Munda). It is difficult to see how this root could lack representation in MK—perhaps it will eventually turn up.

The second root comes from a later time period and appears to have Mon as well as ST associations:

PAT. *lu[y]aŋ 'copper/brass': P[roto-] W[est] A[ustronesian] (Dempwolff's 'Indonesian' *luyaŋ 'brass'; Atayal (Form.) məlaʔoŋ 'brass' < *m/laʔuŋ, apparently by metathesis from *lu/ ʃaŋ; N[orthern] T[ai] *luəŋ^A: Dioi luəŋ 'copper', Saek luəŋ⁴ 'copper, brass, bronze'; cf. also Mon sluy 'copper', nicely demonstrating the presence of medial */y/ in this root while also revealing a prefixed *s- element (app.paralleling Mon slāk 'bronze', an isolated form in SEA); PM *luəŋ 'iron'.

It is difficult to say much about this correspondence other than that it's remarkable! PAT has a separate root for 'iron': *(m)baxliəŋ, at a much earlier level than it has any (archeological) right to be (see the discussion in ATLC:185-86), so that the PM 'iron' must be viewed as a derived meaning. Did the ancestral Munda people take *luəŋ with them on their westward journey as their 'metal' term *par excellence*, since 'copper' as well as 'bronze' were certainly earlier than 'iron', then apply the term to 'iron' after reaching India, presumably for cultural reasons (perhaps bronze was not readily available)? Linguistic complications for this root appear when we consider the apparent early loan into Chinese and the backloans into Kadai (KD: Tai and related languages). We might start by pointing out that the intervocalic loss of PAT medial */y/ is regular for KD (ATLC:163), so that Mon sluy could hardly have been borrowed from a KD source. The apparent S[outh] W[est] T[ai] and C[entral] T[ai] cognate has initial *d- rather than *l-: SW/CT *doŋ^A (* /oo/ regularly < */ua/; note the tonal agreement) 'copper' (Lao, Black Tai, Tho and Nung); 'copper/bronze' (White Tai); 'brass' (Ahom and Khamti); 'gold' (Siamese, which also has *doŋ^A ɣam^A, id., with *ɣam^A from a PAT etymon for 'dark/red') (Shan does not employ the term alone), the latter two languages also having (the reconstructed forms are cited, as above) *doŋ^A*?deŋ^A 'copper' (*?deŋ^A 'red') and *doŋ^A *hliəŋ^A 'brass' (*hliəŋ^A 'yellow'); cf. also Li (Hainán) duŋ 'copper'. It was originally thought (ATLC:92-93) that a *dl- cluster was to be reconstructed for this root but this does not work, and recent advances in the reconstruction of the early stages of Chinese (Benedict 1976a, hereafter *STAL*, with emendations in Benedict 1977: fn. 2!) point to a resolution of the problem. The evidence from the graphs along with comparative ST material indicates that Chinese experienced a major shift in initials between the earliest known stage: A[rchaic] C[hinese] (Dobson's 'Early Archaic'), the language of the *Book of History* and the earlier inscriptions (down to Karlgren's Zhou II: 900 - circa 770 B.C.), and O[ld] C[hinese], the language of the *Zuozhuan* and later classics and of the later inscriptions (Karlgren's Zhou III and IV). Most of these shifts were associated with the ubiquitous *s- prefix, which yielded AC/OC

contrasts such as **s-k/?-* (prefix type) vs. **sk/t-* (cluster type). The same prefix with /l/ yielded a highly significant contrast, viz. **s-ll/d'-* (prefix type) vs. **sll/s-* (cluster type). We have evidence in Mon *sluy* 'copper' (above) for prefixed **s-* and this is confirmed by what now appears to be the correct reconstruction of the early loan into Chinese: 銅 **/s-luŋ/| d'uŋ^A* 'bronze, copper', known only from the later OC period (in *Zuozhuan*, as place name), hence the conjectural reconstruction; AC/OC lacked the diphthong /ua/ and the anticipated substitution would be **u/*, regularly from long medial **u'/* as well as **o'/* and even **a'/* (Benedict 1977).³ The early Chinese loans into P[roto] T[ai] reflect a distinctive dialect of the language, which *STAL* labels as L[oaans to] PT and **/oo/* for **u/* was characteristic of this early dialect, explaining the vocalism of the PT back-loan here. A number of AT roots of a 'cultural' variety show a separate spread into TB (see *ATLC*:78-79) and this root may be one of them although the phonology remains in some doubt; cf. WB *hraŋ-* (< **sraŋ-*, poss. from **srwaŋ* < **slwaŋ*, both of 'non-WB' type), found only in *hraŋ-sam* 'platinum' (*sam* 'iron'); Lushai (Kuki-Naga group) *raŋ-*, found only in *raŋ-ka-cak* 'gold' (cf. *cak* 'red') and *raŋ-va* 'tin' (-*va* not identified); Garo (Bodo-Garo group) *raŋ* 'brass gong', *raŋ-ni sil* 'bronze' (*sil* 'metal').

To turn now to the MK languages, they have long been in close contact with Karen, Burmese and other TB languages, with lexical exchange as might be predicted. This subject has been reviewed at some length by Shafer 1952 and more recently by Shorto 1973; cf. also Matisoff 1973. Most of the items involved are of strictly local interest, e.g. loans in either direction between Khasi and the surrounding TB languages. Of the terms for cultivated plants only one appears to have spread very far in TB:

PMK **ʔbay* 'bean' (Shorto): SM /*bo/a*/ 'bean, pea; 1/16 tical'; Kh. /*pèy*/ 'obsolete small coin'; cf. WB *pai*: (< [*b/ay*^B]) 'bean'; Lushai, Maram, Thado, Kabui (all Kuki-Naga group) *be*, id. (cf. Mod. B. *be*:—contra Benedict 1972 [hereafter *STC*], which sets up a root: PTB **be*); Dimasa (Bodo-Garo group) *sābai*, id.; Tsangla (Tibeto-Himalayish group) *še-pai* (both the latter with PTB **sey^B* 'fruit').⁴

Among the cultural items travelling from ST to AA, the PST root **sryam^A* 'sharp/iron' is to be noted as an excellent illustration of how a loan can at times 'tie together' the pieces of a puzzling root:

³Proto-Min has initial **s-d-* here, possibly reflecting an earlier **s-l-*, but an alternative etymology is a possibility here; cf. WT *sdoŋ-ba* 'unite, join' (> 'alloy') and AC/MC 同 *d'uŋ/d'uŋ* 'together, assemble' < PST **(s-)doŋ* (cited in Benedict 1976b).

⁴Cf. also Palaung *rəbai*, Riang *rəbai* ~ *bai*; in *ATLC* (p. 478) these forms are compared with PM **ramba* [*r, ɲa*] 'green gram [chickpea]' (A./N. Zide cite **Vm* 'black gram') in exploring the possibility of setting up for PAA a distinction between **l/* and **l/* paralleling that found in PAT (as usual in that study of AA and AT, the writer was playing the 'devil's advocate' role in pushing reconstruction possibilities to the limit in order to make the best case possible for 'Austic'—yet at the end he concluded that the best was not nearly good enough!)

a-hem (< */*hriam*) ‘sharp’, Garo *sram* ~ *srem/srem* (< **sryam*) ‘sharp (-edged)’; also AC/MC 𑜄𑜂𑜫 *sljam/slām* ‘sharp’ < PST **sryam*^A, with an early loan to Tai: PT **siam*^B ‘sharpen/sharp’ (PT lacks **sl-*); the tonal change was probably brought about by a ‘causative’ affix.

This root was duly noted in *STC*: fn’s 179, 457 under the form *(*s-*)*ryam* (as if **s-* prefixed, but **ry-* forms are lacking) and a ‘possible relationship’ was pointed out with a root of limited (eastern) distribution meaning ‘iron’:

PTB **śam*^A (note the tonal agreement): Gyarong *śom* and *śam* ~ *śom* (diff. dialects), Ch’iang *śye* ~ *śyi* ~ *śi* (diff. dialects); Nungish: Trung *śyam*, Rawang *śam* (also ‘sword’; cf. Lushai *hriam*); WB *sam* < PBL **śam*^A.

What was lacking in the *STC* presentation was any evidence that a PST root **sryam*^A, supposedly underlying a secondary *śam*^A, ever actually meant ‘iron’. What was overlooked here was the Proto-Waic loan **hrem* ‘iron’ (Diffloth), from a secondary (**sr-* > *hr-*) TB form such as Lushai *hriam* with (**-ya-* > *-e!*)

MK loans from TB at times ‘match up’ directly with early (written) forms, e.g. Proto-Waic (PW) **mronj* ‘horse’ (Diffloth), WB *mraŋ*; id., from PTB **m-raŋ* ~ **s-raŋ* (*STC* #145). Occasionally they display interesting special features, as in the case of PW **ryah* ‘100’ (fn. 5). Of special interest here are Khmu *s-* prefixed forms presenting direct correspondences with similar forms reconstructed by the writer for AC (!), notably Khmu *skam* ‘needle’, AC/MC 𑜄𑜂𑜫 *śkǝm/tśǝm* (phonetic is 𑜄𑜂𑜫 *gǝm/ǝm* ‘all’), id.; cf. also Khmu *skiao* ‘little cry of pain’; AC/MC 𑜄𑜂𑜫 *s-k’iog/xieu* (Mand. *xīāo*) ‘cry of alarm’. In other instances a curious areal bond appears to envelop forms from these two disparate language families (AA/ST), e.g. PW **piŋ* ‘to blow’, **m-piŋ* ‘wind’, from **puŋ* and **m-puŋ* (Diffloth 1980a:92), appear to ‘echo’ ST morphology in the following: PST *(*m-*)*buŋ* (cited in part in Benedict 1977): Jg. *buŋ* ‘to blow’, *mbuŋ* ‘wind, air’; Rawang (Nungish) *nam-buŋ* ‘wind’ (*nam* ‘sky’); Konyak **p[u]ŋ*; Nocte *poŋ* ‘wind’; Kuki-Naga (K-N) *(*m-*)*p[u]ŋ*; Yacham-Tengsa *mapuŋ*, Nruanghmei *mpoŋ*, Lotha *mpon*, Sangtam *-poŋ*, id.; AC/MC 𑜄𑜂𑜫 *b’uŋ/b’uŋ* (loan) ‘to blow (sc. the wind)’.

There is little evidence of any borrowing of lexical items of ‘core’ type by TB/ST from AA/MK. The kinship terms of these two language stocks do display rather more similarity than one might anticipate and perhaps here also we are dealing with areal features (note PT **ta*^A ‘mat. grandfather’, **ya*^C ‘pat. grandmother’) as well as ‘universals’ of a kind, e.g. of the twelve kinship terms proper cited by Diffloth for Proto-Waic no fewer than five show excellent ‘fits’ in TB (note that PW lacks vocalic finals while TB lacks final -ŋ):

pointing to earlier forms with **s-* prefix (variable, like other ST prefixes). In this connection, P[roto-] W[aic] has the intriguing early loan: **ryah* ‘hundred’ (Diffloth), apparently from a Karen source, cf. P[roto-] K[aren] **rya*^A, from the complex PTB *(*s-*)(*b-*)*r-gya* root, but with final -*h* (rather than -ŋ, PW lacks vocalic finals), suggesting a variant **s-* prefixed form; cognate form not available for Chepang, which has a parallel development (above); Lu. has *zà* < **yà* < **s-[r]gya*^A but WB has only the **a-* prefix derivative: *ʔara* < **a-r[gy]a*^A; Chinese parallels *mikiir* (phǎró) in reflecting prefixed **s-* as well as **b-*: 𑜄𑜂𑜫 *b-glāk/pōk* (for the initial, see the writer’s ‘Archaic Chinese initial’, to appear in the forthcoming Wang Li Festschrift).

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PW **taʔ* ‘grandfather, old man’; PTB **ta* ‘grandfather/ father/older brother’, AC/MC 祖 *tso/tsuo*: ‘grandfather, ancestor’, from **sto* (see below) <**sta* < PST **(s)-ta*.

PW **yaʔ* ‘grandmother’; PTB **ya* ‘mother/grandmother’ (secondary term).

PW **baʔ* ‘father’: PTB **pa* but PK **ba* (~ **pha*), id., AC/MC 父 *b’iwo/b’i*u: < **ba*, id.

PW **maʔ* ‘mother’: PTB **ma*, id. (not represented in Chinese as kinship term).

PW **ek* ‘older brother’: PTB **ik*, id. (only in WB and Mikir).

The striking fact about this group of terms is that they all refer to older-than-ego kin, parallelling patterns of kinship term loans elsewhere in Southeast Asia,⁶ to be attributed to the gerontocratic tradition of the region.

A pair of body part/function terms involve possible loans, at a relatively late level, from MK to the ST family. PK **goʔ* ‘neck’ can be compared with Riang *kok*, id., an apparent cognate of PW **ɲɔk*, id., but PK final *-ʔ* corresponds to PTB **-t* and **-p* as well as **-k*, hence other comparisons (within ST) are possible, notably with WB *kup* ‘nape of neck’. Another Northern MK language, Danaw, has *kɔŋ* ‘neck’, comparable this time with terms within TB proper (K-N): Ao Naga *tekoŋ*, id.; cf. also Lu. *ŋoŋ*, id., possibly from **m-goŋ*.

A more likely instance of borrowing, favoured both by Shafer and Shorto (cit. supra), involves the PMK root for ‘feces’: **ʔeec* (Shorto) and K-N **(ʔ)e-k*, id. The final does not present a phonological problem in view of the absence of palatal finals in TB (with the conspicuous exception of WB) but there is a morphological difficulty since the final **-k* may be late, marking the derived (non-finite) form of the root **e* ‘defecate’ (the Lu. pattern). PK **ʔe^B* ‘feces’ has been cited by the writer (Benedict 1979a) as an example of loss of final stop in Karen but this root can also be compared directly with the K-N **e* rather than **e-k* form; cf. also Proto-Tai (PT) **ee^A* ‘defecate (of children)/discharge (feces, urine)/copulate (=discharge semen)’, apparently of AT origin (ATLC:283). Another possible loan from the MK root, presenting no serious difficulties, is represented by Lepcha (Sikkim) *it* ~ *äyit* ‘feces’, as suggested by Forrest 1962, the latter form reflecting PTB prefixed **a-*; this is one of the key roots, along with that for ‘year’ (below), used by Forrest in support of his suggestion that Lepcha has a MK substratum of sorts. Finally it should be noted that the MK root is involved in a group of early loans to the Chamic languages: P[roto-] C[hamic] **eh* ‘defecate’ (Headley 1976).

This brings us finally to a discussion of the two ‘animal life’ MK roots that apparently ‘made it’ as loans in ST at a very early (possibly PST) level, and in this case the basic question (Why these two?) can be answered after a fashion, viz. both are raptorial: ‘tiger’ and ‘eagle/hawk/kite’. The tiger has always inspired a mixture

⁶See the discussion of loans from Chinese to Vn. and the Tai languages, also from Indic to TB languages, in Benedict 1947.

of dread and respect among the native populations of SEA, e.g. Rawang (Nungish) *khaj* ‘tiger’ is simply the direct address form (‘honourable sir!’) of *ākhaŋ* ‘grandfather’, *aŋkhaŋ* ‘master’ (< PST **kaŋ*; see *STC*:fn. 488); Pateng (Miao group) has the precisely parallel *pu* ‘tiger’, *a-pu* (same tone) ‘grandfather’; cf. also Pekinese 老虎 *lǎo-hǔ* ‘(old) tiger’; for a somewhat different semantic development, cf. the Abor-Miri forms for ‘tiger’: *sim-nyo* ~ *simyo* ~ *myo-* (*si-* is the ‘animal prefix’), apparently derived from *nyo* ‘taboo’. One question may only lead to another, however, since now we must ask: why has the ‘tiger’ root (below) been so well retained on the whole in MK, even in the deviant Vietnamese (several ‘tiger’ terms: *cop*, *hùm*, *hạm*, as well as *khái* < **khal*; cf. Muong *khal* ~ *khlal* < **khla/khla*). Similarly, why was the ‘eagle/hawk/kite’ root so resistant to replacement throughout MK while at the same period the equivalent roots in the neighbouring languages were being replaced by this same MK root? There is scarcely anything like it in other roots, the closest parallel coming from the root for another ‘predator’, at a lower level of animal life: PMK **pl[ə]m* ‘leech’: PNB **pləm* (Smith), Proto-Semai **pləbm* (Difflloth); cf. Proto-Chamic **plūm* (Headley); Yao has both **plom^A* (Highland Yao *piom*) and **klom^A* (Chiengrai Yao *kiom*), the former regularly from an earlier **pləm^A* (*ATLC*:180-81), the latter curiously tying in with Mon *klom*, further complicating an already baffling problem. It does appear that it was the ‘villains’ who travelled linguistically, whatever the circumstances, and perhaps some underlying theme is to be sought there. The roots themselves are of unusual interest; they have a similar structure [**k(l)-l-*] and in TB each experienced some loss of the initial **k-* through metanalysis (TB ‘animal prefix’ **k-*)⁷ while in Chinese each is represented by an **s-* prefixed form (< PST ‘animal prefix’ **s-*), making identification difficult under the earlier (Karlgren) scheme of reconstruction.

PMK **kla?* ‘tiger’ (Shorto) = **kla*,⁸ cf. WB *kya*: < **kla^B*, id., but PBL **(k-)la^B* through metanalysis (above); also Garo *matca*, id., from B[odo]-G[aro] **ma(t)-ca*, from an earlier **skla* (with ‘animal prefix’ **s-*), paralleling other B-G roots formed with **ma(t)* ‘animal’ (*STC*:fn. 391);⁹ for the phonology cf. the parallel (with voicing) Garo *ja-* ‘moon’ < PTB **s-gla* (*STC*:fn. 109); the apparent Chinese representative is AC/OC 虎 *xo/xuo*: ‘tiger’, as reconstructed by Karlgren (1957, hereafter *GSR*); this ‘tiger’ is phonetic in the *GSR*:69 series: 慮 **glo/luo* ‘food vessel’, 慮 **gljio/ljwo* ‘think of’, 扈 **sk’lioi/i’jwo* ‘extend’, et al. and is to be reconstructed **s-k’lo/xuo*:, from an original **s-k’la^B* (with regular final *-o* for **-a*).

⁷This prefix has been viewed (Matisoff 1973) as a loan from MK, where it appears in the eastern as well as northern languages (see Smith 1975 for Sedang examples), with an ultimate origin perhaps in PMK **kuan* ‘child’ (see Shorto 1973, citing Vn. *con chim* and Old Mon *kiñcem* ‘bird’) but it should be noted that in the B-L group, where it is best represented, it occurs also with ‘non-animal’ roots, e.g. ‘cane/tattan’ and ‘stone’ (*STC*:fn. 301), hence it is perhaps best seen as an areal feature.

⁸See the discussion in *ATLC*: 468; PNB has final **-Ø* (vocalic) as well as **-a?* and **-ā?*, etc., in widespread MK roots; if this distinction is to be reconstructed for PMK the ‘tiger’ root has vocalic final (PNB **kla*); it is noteworthy that the early PBL loan: **(k-)la^B* (PBL tone *2) does *not* have the ‘glottalized’ PBL tone *3, as would be anticipated if the original had in fact been **kla?*.

⁹D. Solnit 1979 has compared Konyak (‘N. Naga’) **[c]a* ‘tiger’ with the PBL root. There is an over-all special relationship within TB of the Konyak and B-G groups (*STC*:6-7); with strikingly similar phonology in part, and it is likely that the suggested **skla* etymology holds here as well as in B-G.

regular PST root (incl. tone) can be reconstructed on the basis of the forms cited: PST **(s-)kla^B* ‘tiger’. There is also a good deal of evidence (Benedict, cit. supra) that the PST root that was partially replaced was **(s-)key^A* ‘tiger/leopard’, with several doublet forms.

PMK **k(a)laŋ* ‘bird of prey’ (generic); ‘hawk’ (Palaung, Waic, Khmu, Bru); ‘eagle’ (

PMK **k(a)laŋ* ‘bird of prey’ (generic); ‘hawk’ (Palaung, Waic, Khmu, Bru); ‘eagle’ (Waic); ‘to fly without wing movements’ (Mon); ‘vulture’ (Nicobar); ‘sea-eagle’ (Nicobar); also **knlɛŋ* ‘hawk’; ‘a small hawk’ (Lawa); ‘eagle, kite’ (Khasi); ‘eagle’ (Hre); ‘bird of prey, kite’ (Khmer); also ‘kite, the toy’ (Khmer); (abbrev. from Diffloth 1980a); cf. PTB **(g-)laŋ* (tone variable) ‘bird of prey (generic)’: Jg. *lāŋ* ‘bird of the falcon family’, mainly in comp: *lāŋdā* (~ Assam dial. *laŋdaŋ*) ‘vulture, eagle’ (*da* ~ *daŋ* not anal.); *laŋdut* ‘sp. of night-hawk or screech-owl’ (*dut* not anal.); *laŋji* ‘hawk, kite’, (*ji* is dimin.); *gəlāŋ* ~ *kəlāŋ* ‘eagle, hawk, kite’; WB *laŋ*: – only in comp.: *laŋ:-ta* ‘vulture’ (cf. the Jg. comp.); *hrwe-laŋ:-ta* ‘eagle’ (*hrwe* ‘gold’); *laŋ:-yun* ‘sp. of hawk’ (cf. *yun* ‘hare’); perhaps also *laŋ:-tshwai*: ‘large sp. of bat; the flying fox’ (*tshwai*: ‘hang’) and *laŋ:-wak* ‘night heron’ (*wak* not anal.); G-B **l/a/ŋ* (in comp. with G-B **dau* ‘bird’): Garo *do-reŋ* ‘kite, hawk; (comp.) falcon, eagle, osprey’; Bodo *dau-leŋa* ‘eagle’ (recorded only by Hodgson over a century ago [publ.1847]; cf. Meitei [below] for the final -a); Dimasa *dau-liŋ* ‘kite’; Deori Chutiya *du-roŋ*, id.; Konyak (‘N. Naga’) **laŋ* ‘eagle/hawk’ (~ ‘raven’) (often in comp. with **au* ‘bird’; both Konyak and Phom have *laŋta* ‘eagle’, app. loans from Jg.); K-N (scattered citations; phonology not established but some forms in comp. with PTB **məw* ‘eagle/hawk’ [STC #247]): Khoirao *kalaŋ* ‘hawk’, Tangkhul *khaləŋ saśa* ‘eagle’, *laŋpop* ‘hawk’; Maram *laŋmau* ‘hawk’, Zeme *kaleŋre* ‘eagle’, *kele* (prob. for **keleŋ*) ‘hawk’, Liangmai *kaleŋ* ‘eagle’, *takau-leŋna* ‘hawk’, Yimchunggrü *müleŋ* ‘eagle’; Mzieme *liəŋum-pui*, id.; Meitei *telaŋa*, id.; Mikir *wə-mū-lāŋ-dō* ‘osprey’, *wə-mū-lāŋ-lò-pī* ‘kind of eagle’ (*wə-mū* ‘hawk’, *dō* and *lò* not anal., *pī* is augment.); WT *glag* (< **glaŋ*) ‘eagle, vulture’; possibly also Lepcha *kun-thyóŋ* ~ *pun-thyóŋ* (< **skhlaŋ?*) ‘eagle, kite’. The PMK root is set up by Diffloth as an **/aa/* ~ **/ee/* doublet (read **k/(n/)leŋ* for his **knlɛŋ* in view of Khasi *khleŋ*, Bahnaric **kleŋ*, Khm-Stand. *khlaeŋ*) with suggested semantic distinction but the glosses do not appear to bear out the latter.¹⁰ It is clear that within TB the loan was handled as a **g-* prefixed TB item rather than an initial **kl-* root, hence the many forms with initial *l-*, including the Jg. doublet, and WT *glag* rather than **klag*. The medial length (PTB **/a/* for PMK **/aa/*) can be reconstructed on the basis of Konyak, which now has been shown to maintain length distinctions,¹¹ as well as by the variant B-G set of *-iŋ*

¹⁰This doublet is perhaps to be interpreted as the product of ‘vocalic transfer’ at an early (PAA/PMK) level, with **kelaŋ* yielding both *klaŋ* and *kleeŋ*; see Benedict 1979b. An analysis of this kind is favoured by the apparent lack of any basic semantic distinction in the doublet.

¹¹First pointed out (for high vowels) by D. Solnit 1979. W. French (unpublished draft of Ph.D. dissertation, Grad. School, City University of New York) has shown that Konyak (his ‘N. Naga’) makes such distinctions generally, e.g. all languages of the group have final *-aŋ* for PNN **-aŋ* but an entirely different set of reflexes for PNN **-aŋ*; cf. **laŋ* ‘eagle, hawk’: Tangsa (Yogli) *laŋ*, Phom *laŋta*, Nocte *la*, Wanche *ao-la*, Konyak *au-lan* ‘hawk’ but *laŋta* ‘eagle’ (identified as loan by the final *-ŋ* since *-n* is the regular reflex), Chang *au-lu* (Chang also has *-o* and *-uo* as reflexes here).

~ -eŋ ~ -oŋ reflexes (cf. *STC*:72), which now appear to reflect PTB *-aŋ, as contrasted with -aŋ < PTB *-aŋ. WT *glag* contributes further support for medial length since it is now evident that WT regularly has final -g for PTB *-ŋ after this feature (*STAL*:fn. 11 to p. 173).

The *(g-)laŋ root as set up above compares favourably with most TB etyma both as regards firmness of reconstruction and range of occurrence, hence there can be little doubt that the loan was made at the PTB level. The early Chinese loan, however, is far less obvious. *STC* (fn. 225) cites AC/MC 雉 *glâk/lâk* 'kind of bird' as a likely cognate of WT *glag* but the ?- (< *a- = ?a-) prefixed form fits better here: 鸞 *ʔglâk/ŋâk* 'osprey' (= 'sea eagle'); old loans from Tibetan appear to be involved here (cf. the discussion of Tibetan and Chinese in *STAL*:177 under 2.). The same source also cites 鷹 *ʔiəŋ/ʔiəŋ* (Karlgren's reconstr.) 'eagle, falcon' in this connection but this word is better reconstructed *s-kjəŋ/ʔiəŋ* and compared with WT *skyiŋ/ser* 'eagle, vulture' (*ser* for *gser* 'gold', cf. the WB form cited above) (*STAL*: 182; this is probably the native [ST] root). The real loan in Chinese is well hidden: 揚 *sgjəŋ/iəŋ* (loan use in *Shijing*) 'hawk', from *sgljiəŋ* with -j- for -lj- (cf. 'tiger', above) and typically palatalized; note that here in Chinese, as well as in TB, the loan is handled as a *g- prefixed item (plus the widespread PST *s- 'animal prefix').

Both the 'tiger' and the 'bird of prey' loans were made at the PST level or shortly thereafter (the *Shijing* loan for 'hawk' places it at the AC level in Chinese) but only the MK root for the latter was widely 'invasive', replacing native forms in almost all the neighbouring language stocks, including mainland AN (Proto-Chamic **kaləŋ* [Headley], with which Achinese [Sumatra] *kləŋ* is to be associated, and Malay *laŋ* ~ *heləŋ* [Shorto]); also Miao-Yao (PMY **klaaŋ*^B), with only the Kadai languages holding out against it: SWT **ruŋ*^B 'bird of prey', a cognate of PWA **buruŋ* 'bird'.¹² These raptorial birds present a dramatic picture, to be sure, as they soar through the skies and swoop down on their prey but they scarcely present a serious menace to man, hence the secret of the extraordinary 'invasiveness' of this root, quite unmatched by any other in SEA, eludes one.

A handful of Chinese terms in addition to the above have come under serious consideration as possible loanwords from MK/AA. Three of these ('river', 'tusk/ivory/tooth' and 'crossbow') have been talked and written about for years, most recently by Norman and Mei 1970 and Benedict 1976b, while two others have only recently been proposed: 'year' (Benedict, cit. supra) and 'tube' (Shorto, cit. supra):

江 *kūŋ/kəŋ* 'river' (*GSR*), often reconstructed **krūŋ* or **krəŋ* and compared with PMK **krəŋ* or *krəŋ*, id., which is also found as a loan in Chamic (Headley cites Proto-Chamic **krəŋ*); Norman and Mei make a strong case for this as an early loan in Chinese, pointing out that the word is relatively late in that language, absent in the oracle bones and occurring only once in the bronze inscriptions (but it does

loan by the final -ŋ since -n is the regular reflex), Chang *au-lu* (Chang also has -o and -uo as reflexes here).

¹²PT **reerŋ*^B 'vulture', represented only by Siamese *réerŋ*, Sack *reerŋ*^B, perhaps through 'vocalic transfer' (see fn. 10) from an earlier **iraŋ* via **riaŋ*, offers a possible Munda link, cf. Sora *ɔrəŋ* 'kite (bird)'.

occur in AC texts), also that it was applied only to the Yangtse and rivers to the south; *l-* forms do not appear in the phonetic series involved (*GSR*:1172) but there is indirect evidence for an initial cluster; this might also be reconstructed **kl-*, however, hence one can compare the form with PTB **kluŋ* ‘valley/ river’ (*STC*, No. 127); note that Proto-Waic (Diffloth 1980a), which has both **kl-* and **kr-* as initial clusters, has **klŋ* ‘river’ with variant **krŋ*, pointing to a PMK doublet of this type, also that Siamese has *khlŋ* < **glŋA* ‘canal’, with a voiced initial not found elsewhere (possibly unrelated).

牙 *ŋa/ŋa* ‘tooth’ (*GSR*), an early (OC) loan in Tai (PT **ŋaA* ‘tusk, ivory’) as well as in Vn. *ngà* < **ŋaA* ‘ivory’; as emphasized by Norman and Mei, the earlier meaning of the word in Chinese was ‘tusk/ivory’, with the generic ‘tooth’ a later development, reflected in the later loan to Yao (PY **ŋaA* ‘tooth’, with **ŋ-* < **ŋ-* as regular shift); the above scholars reconstruct AC **ŋra/* and compare with Proto-Mnong **ŋɔla* ‘tusk’; in this case, however, the phonetic series involved (*GSR*:37 and 47), kept separate by Karlgren since his reconstruction schema could not handle the problem, clearly indicate the reconstruction *s-ŋɔ/ŋa* (< **s-ŋwa*), phonetic in 𪛇 *s-kɔ/?a* ‘raven, crow’ < PST **(s-)k(w)a* as well as in 𪛇 *sgjɔ/ja* ‘place name’ (this interchange of initial combinations found in other *GSR* series, as in one cited in fn. 2); again there is a likely comparison in TB: Lushai *hŋo* ‘tusk, tooth’, Mru *hŋou(k)*, from **s-ŋo* < **s-ŋ/wa/* (with ‘body part prefix’ **s-*); Pa-o (Karen) has *təŋa* ‘tooth’.

弩 [*no/nuo*]: ‘crossbow’ (*GSR*; no AC cit.), an early (OC) loan to Tai (PT **hnaB*, id.) and to Kam-Sui (Sui *hna³* < **hnaB* ‘bow’, the only ‘generic’ gloss for this root); these loans point to AC **s-nol* rather than **nol* (both yield OC */nuo*). The southern origin of this weapon seems indisputable but the origin of the term is uncertain; Norman and Mei cite Proto-Mnong **səna* as representing a likely source in MK; in TB the root is represented by Nakhi (BL group) *təna*, Rawang (Nungish) *thəna*, both probably late.

稔 [*njəm/njəm*]: ‘harvest, year’ (*GSR*; no AC cit.); Lepcha *nam* ‘year’, cf. PMK **s/a/nam*, id.: Mon and Palaung *snam*, Khasi *sneŋ*, Khmer *chnam*, Stieng *sənam*, PNB **hanām*; Vn. *nām*; Lp. *nam* must be considered a relatively late loan since it does not show the regular PTB **/a/* > Lp. */o/* shift (*STC*:70), and it apparently reflects a reduced MK form such as Vn. *nām*; in any event it cannot be linked with the AC/OC form to set up a PST root. The AC/OC form appears to show both initial (**ŋ-* for **n-*) and vocalic (**/ɔ/* for **/a/*) discrepancies, but the latter is paralleled in an early Chinese loan from AN (cited in Benedict 1976b): 𪛇 [*njəm/njəm*] ~ 𪛇 [*njəm/njəm*] ‘weave’ (*GSR*; no AC cit.); cf. PWA **aŋam* ‘weave, plait’, but the irregular Jav. *anam* reflects a doublet (**anam*) also mirrored in the Chinese loan! The initial remains a problem, however, since the comparative evidence (Benedict 1977) indicates that palatalization of this kind occurs only after an original (PST) prefixed **r-*, hence the chances are that we are dealing here with a ‘pseudo-loan’.

筒 [*dʰuŋ/dʰuŋ*]: ‘tube’ (*GSR*; no AC cit.); cf. PMK **k_uŋ* ~ **k_iŋ*; it is of some interest, in view of the possible early loan here from MK, that Chinese should also have another apparent loan in the ‘tube’ category, this time from AT, viz. 𪛇 [*bʰiuk/bʰiuk*] (*GSR*; no AC cit.) ‘quiver’; cf. PAT **[t]a(m)buk* ‘bore, pierce, hole, tube, quiver’ (cited in Benedict 1976b).

Further questions as to just how any of the above loanwords might have got into Chinese can scarcely be answered in view of our dearth of data on the languages spoken by the various non-Chinese peoples of southern China with whom the early Chinese were in contact. The Yue (Zhejiang and Fujian: 5th and 6th centuries B.C.) are generally identified as the ancestral Vietnamese and at least one of the few Yue words preserved in ancient texts fits well here: 會 *tsăt/ṭṣăt* (*GSR*) ‘to die’; Norman and Mei (cit. *supra*) amend the reconstruction to *tset/* and compare with Vn. *chét*, id., et al. The same scholars also identify the second element of the Yue word for ‘dog’: 𤝵 [*ṣjōŋ/ṣjəu*] (*GSR*; no AC cit.), amended by them to *ṣjō/* for the period of the text citation (2nd century A.D.) and compare with Vn. *chó*, id. et al., but the initial seems to present a problem here and the identification is in doubt. The Vietnamese kinship terminology, which has been described (Benedict 1947) as MK at the earliest level with successive overlays of Tai and Chinese, has specific ties in the parent terms with Wu (ancient state of south Jiangsu) rather than with Yue. Norman and Mei also discuss at some length the Chu term for ‘tiger’ (from a *Zuo*zhuān cit.) 於菟 *ŋi-o-d’o/ŋi-wo-d’uo* (*GSR*) but their analysis is hampered by Karlgren’s reconstruction; as in ‘tiger’ (above), the first element can be reconstructed with a prefixed velar initial: *s-kjō/ŋi-wo*, showing that this is the very same ‘tiger’ loan from MK analyzed above but with *-j-* for *-l-* (see discussion of this above), from **s-klo < *s-kla*, followed by an element (*d’o/d’uo*) of unknown origin; this analysis is confirmed by the appearance of the tiger graph 𤝵 as a phonetic in two series without **-l-*: 虛 *k’jō/k’jwo* ‘ruins’ and (loan) *s-k’jō/xjwo* ‘modest’; 處 *šk’jō/tš’jwo*: ‘dwell, stay; keep still’, the (palatalized) prefixed cognate of 居 *kjō/kjwo* ‘sit down; dwell; repose’ (contra *STC*:fn. 472, which reconstructs with medial **-l-*).

A final note on the Chinese calendar terms is in order. These have been assigned an AT origin (*ATLC*:88-91), with special emphasis on ‘horse’: 午 *ŋo/ŋuo*: (*GSR*), to be reconstructed **s-ŋo/* (see fn. 2); from **s-ŋa* (regular vowel shift), as reflected in the early loan to Tai: **saŋa*, (> Dioi *sa* through regular loss of intervocalic **/ŋ/*), and compared with Kadai **ŋa* ‘horse’: S. Li *ŋa*, N. Li *ka*, Lati *ŋo*, Kelao *ŋia* (cf. Vn. *ngu*; *a*). Norman and Mei (cit. *supra*) describe this as a ‘bold and exciting idea’ but then attempt to work out an AA origin for the cycle. Their comparisons are not, on the whole, very convincing, and in fact one of them involves AT (!), viz. 𤝵 *mjwəd/mywəj-* ‘goat’ (*GSR*); cf. Atayal (Formosa) *mi:ts*, id., but this is from **milit* via **miyit* (regular Atayal shift), as shown by the closely related Sedik: *mi:rits ~ milit* as well as the loan to Kuvalan: *məli:it*. AC *mjwəd/* regularly represents *inter alia* an earlier **mud < *mut + suffix*, hence at first glance the finals here seem to be discrepant. There is some comparative evidence (*STC*:fn. 474), however, that the PST initial cluster **mr-* yielded AC *mjw-*, hence an original **mlit (< *milit)* might very well have yielded an AC **mjwět/*, since AC final *-jět < PST *-it* is a regular shift. AC had only *mjwət/*, however, so the finals here no longer present a problem. Even more to the point, the early Tai loan of this calendar term must be set up as a doublet: **mut* (Ahom *mut*) ~ **mwet* (Lü *met*, Dioi *fat*) (both *f- < *mw-* and *-at < *-e(t)t* are regular shifts for Dioi), corresponding precisely to the hypothetical [AC level] **mjwət/ ~ *mjwět/!* This serves not only to clarify the Tai forms but

also to furnish valuable support for yet another AT – but *not* AA – source for the mysterious Chinese calendar terms.^{13, 14}

Appendix. List of abbreviations.

AA	Austroasiatic	Lp.	LepchaPC	Proto-Chamic
AC	Archaic Chinese	LPT	Loans to Proto-Tai	SEA Southeast Asia
AN	Austronesian	Lu.	Lushai	SM Spoken Mon
AT	Austro-Tai	M	Munda	ST Sino-Tibetan
ATLC	(=Benedict 1975)	MC	Middle Chinese	STAL (=Benedict 1976a).
B-G	Bodo-Garo		(=Karlgrén's 7th Cent. A.D	STC (=Benedict 1972)
B-L	Burmese-Lolo		'Ancient Chinese')	SW Southwest
CT	Central Tai	MK	Mon-Khmer	T Tai
GSR	(=Karlgrén 1957)	Mod B	Modern Burmese	TB Tibeto-Burman
Ho.	Hova	MY	Miao-Yao	Vn. Vietnamese
Jav.	Javanese	NB	North Bahnaric	W Waic
Jg.	Jingpho	NN	Northern Naga (=Konyak)	WA Western Austronesian
K	Karen	NT	Northern Thai	WB Written Burmese
KD	Kadai	OC	Old Chinese (see text)	WT Written Tibetan
Kh.	Khasi	P	Proto	Y Yao
K-N	Kuki-Naga			

¹³The curious cryptoglyphics of Chinese (Benedict 1978) conceal an apparent loan from MK with representation in the Cambodian calendar. A well-disguised 'pig/boar' is present as phonetic in the *GSR*:526 series: 豕 *ʔsgjwəd/zwi-*, glossed by Shuowen as 'follow' but, as Karlgrén points out, resembling 豕, the principal 'pig/boar' script element in Chinese. In view of the equivalence of final *-j(w)ər* (tones A and B) and *-j(w)əd* (sandhi tone C), along with the marked tendency in the language towards secondary voicing as well as loss of medial *-w-*, we can take 豕 *s-k'jər/xyçj* 'swine' as a cognate form, pointing to an original of the type: **s-k(h)jwər*. This would be the regular product of an earlier **s-kur* (with 'animal prefix' **s-*); cf. the Cambodian calendar term *kur* 'pig', which Cœdès has connected with Muong forms: *kul ~ kui ~ kun*.

¹⁴In a recent study, Nicholas Bodman (1980) has pointed out what appears to be a certain MK loan to Chinese at an early period: Khmer *krōc*, Proto-Hre-Sedang **kruc* 'citrus fruit', AC/OC 橘 *kljwəʔ/kljuət* 'orange', which appears at the earliest (AC) period (*Shujing*); the final *-t* for *-c* and medial *-l-* for *-r-* are the anticipated shifts, while AC *-jwə-* regularly represents an earlier **/u/ or */o/* (Bodman suggests the AC reconstruction **krwit* [=the writer's *kljwət*], which leads to difficulties in the medial vowel correspondence). A southern origin for a citrus fruit term in Chinese is hardly surprising but the very early date of the loan is worthy of note.

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