Austroasiatic Loanwords in Sino-Tibetan

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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 Pinnnow, distinct from PM *niu 'drink' (< PAA *niu?); cf. PW *ni? < ni?, id.): note Santali nuni 'breast', niu 'drink'); PAT *niu/h/nuh 'breast' (Ho. 'nipple') as well as two roots of extraordinary cultural interest:

PAT *(qa/)j[sa]lu 'mortal/ pestle'; PWA *halu 'pestle'; Formosa (Paiwanic/Tsouic/Atayalic) *(qa/salu, id.; Li (Hainan) *raw 'rice' mortar', from *[sa]aru (with vocalic transfer [ATLC:183]); PAT *[l/]/ > Li /r/ is a regular shift); PM *saX?: '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 森 sk'jo/ts'jwo 'pestle', which has the calendar term 卩-s-po/jwo: 'horse' (see text) as phonetic, is a possible early loan in Chinese, from *s-k'ja (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 菩 s-glu/ji woj 'hull grain with mortar' (sec. voicing; regular *o > /u/ and *B > *A tone after *s- prefix); PT (only SW) *kloñB, (− *gloñA) 'hull rice'; Kam-Sui *tyuñB < *kloñB, id. (contra ATLC:338-39).
The */X/* is a reconstructed glottalization feature (N. Zide), of uncertain significance here. The */fl/, 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 obtained 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[a]/ ‘copper/brass’: P[roto-] W[est] A[ustronesian] (Dempwolff’s ‘Indonesian’ */lu/y[a]/ ‘brass’; Atayal (Form.) məlaŋ ‘brass’ < */mə/ŋ, apparently by metathesis from */lu/ y[a]; N[orthern] T[a]i */luŋA/: Diol luŋ ‘copper’, Saek luŋ ‘copper, brass, bronze’; cf. also Mon sly ‘copper’, nicely demonstrating the presence of medial */y/ in this root while also revealing a prefixed *s- element (app. paralleling Mon sλāk ‘bronze’, an isolated form in SEA); PM */luŋ/ ‘iron’.

It is difficult to say much about this correspondence other than that it’s remarkable! PAT has a separate root for ‘iron’: *(m)baxliŋ, 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 */luŋ/ 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 sly could hardly have been borrowed from a KD source. The apparent S[outh] W[est] T[a]i and C[entral] T[a]i cognate has initial */d/- rather than */l/-: SW/CT *doŋA (*/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 *doŋA yamA, id., with *yamA 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) *doŋA*y[ə]ŋA ‘copper’ (*ʔdoŋA ‘red’) and *doŋA*hliŋA ‘brass’ (*hliŋA ‘yellow’); cf. also Li (Hāinān) duong ‘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[rhoaic] C[hinese] (Dobson’s ‘Early Archaic’), the language of the Book of History and the earlier inscriptions (down to Karlsgren’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 (Karlsgren’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-l/d’- (prefix type) vs. *sl/s- (cluster type). We have evidence in Mon sluV ‘copper’ (above) for prefixed *s- and this is confirmed by what now appears to be the correct reconstruction of the early loan into Chinese: 聿 *s-luŋ/ d’uŋA ‘bronze, copper’, known only from the later OC period (in Zuo zhuan, as place name), hence the conjectural reconstruction; AC/OC lacked the diphthong /ua/ and the anticipated substitution would be */u/, regularly from long medial */w/ as well as */o/ and even */a/ (Benedict 1977). The early Chinese loans into P[rotogeno] T[ai] reflect a distinctive dialect of the language, which STAL labels as L[oans 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 hran- (< *srarj- poss. from *srarj < *srarj, both of ‘non-WB’ type), found only in hran-sam ‘platinum’ (sam ‘iron’); Lushai (Kuki-Naga group) ran-, found only in ran-ka-cak ‘gold’ (cf. cak ‘red’) and ran-va ‘tin’ (-va not identified); Garo (Bodo-Garo group) ran ‘brass gong’, ran-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 *?bay ‘bean’ (Shorto): SM /boa/ ‘bean, pea; 1/16 tical’; Kh. /pêy/ ‘obsolete small coin’; cf. WB pai: (< [ba]yB) ‘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) sâbai, id.; Tsangla (Tibeto-Himalayish group) še-pai (both the latter with PTB *seyB ‘fruit’).

Among the cultural items travelling from ST to AA, the PST root *sryamA ‘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:

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

4Cf. also Palaung rebai, Riang rebai ~ bai; in ATLC (p. 478) these forms are compared with PM *tamba [r, r]a ‘green gram [chickpea]’ (A./N. Zide cite *rVm ‘black gram’) in exploring the possibility of setting up for PAA a distinction between *f/ and */fl/ parallelism 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 ‘Austria’—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 سلح/sجام ‘sharp < PST *sryamA, with an early loan to Tai: PT *siamB ‘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 *șamA (note the tonal agreement) Gyarong som and șam ~ som (diff. dialects), Ch’iang sye ~ syi ~ și (diff. dialects); Nungish: Trung šyam, Rawang șam (also ‘sword’; cf. Lushai hřiام); WB șam < PBL *șamA.

What was lacking in the STC presentation was any evidence that a PST root *sryamA, supposedly underlying a secondary șamA, 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 hřiام with (*-ya- > -e-)

MK loans from TB at times ‘match up’ directly with early (written) forms, e.g. Proto-Waic (PW) *mraŋ ‘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 钪kin/تباع ‘(phonetic is ḡ’b’m/yǎm ‘all’), id.; cf. also Khmu skiaō ‘little cry of pain’; AC/MC 钪k’ioə/xieu (Mand. xiāo) ‘cry of alarm’. In other instances a curious areal bond permits secondary forms to envelop forms from two disparate language families (AA/ST), e.g. PW *pinj ‘to blow’, *m-pinj ‘wind’, from *punj and *m-punj (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 *pluŋ ‘Nocte poŋ ‘wind’; Kuki-Naga (K-N) *(m-)p [uŋ]ŋ Yacham-Tengsa mapuŋ, Nruangmei mpoŋ, Lotha mpon, Sangtam -poŋ, id.; AC/MC 钪b’uŋ/b’uŋ (loan) ‘to blow (sc. the wind’).

There is little evidence of anything 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 *taA ‘mat. grandfather’, *yaC ‘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 -ʔ):

pointing to earlier forms with *s- prefix (variable, like other ST prefixes). In this connection, P[proto-] W[ai]c has the intriguing early loan: *ryah ‘hundred’ (Diffloth), apparently from a Karen source, cf. P[proto-] K[aren] *ryaA, from the complex PTB *(s-)(b-)r-gya root, but with final -k (rather than -ʔ. PW lacks vocalic finals), suggesting a variant *s- prefixed form; cognate form not available for Chepang, which has a parallel development (above); Lu. has ʔά < *ʔά < *s-[rg]yaA but WB has only the *a- prefixive derivative: ḡara < *a-r[gy]aA; Chinese parallels mikir (phăró) in reflecting prefixed *s- as well as *b-: 百 b-glåk/pnk (for the initial, see the writer’s ‘Archaic Chinese’, to appear in the forthcoming Wang Li Festchrift).
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PW *taʔ ‘grandfather, old man’; PTB *ta ‘grandfather/ father/older brother’,
AC/MC 祖 iso/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 ḕ rune/b’ju:
< *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, paralleling 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 *goi ‘neck† can be compared with Riang kok,
id., an apparent cognate of PW *ŋok, 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 kŋi
‘neck’, comparable this time with terms within TB proper (K-N): Ao Naga tekonŋ,
id.; cf. also Lu. ŋoŋ, id., possibly from *m-gorŋ.

A more likely instance of borrowing, favoured both by Shafer and Shorto (cit.
supra), involves the PMK root for ‘feces’: *ʔee (Shorto) and K-N *ʔe- 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 *leB ‘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)
*eeA ‘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 ~ ʔyit
‘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

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

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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) *khán ‘tiger’ is simply the direct address form (‘honourable sir’) of *ákhan ‘grandfather’, *áŋkhán ‘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-nya ~ 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, hüm, hăm, as well as khái < *khal; cf. Muong khal ~ khal < *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 another ‘predator’, at a lower level of animal life: PMK *pl[ɔ]m ‘leech’; PNB *pləm (Smith), Proto-Semai *pla̯m (Diffloth); cf. Proto-Chamic *plim (Headley); Yao has both *plamA (Highland Yao piom) and *klamA (Chiengrai Yao kjom), the former regularly from an earlier *plamA (ATLC:180-81), the latter curiously tying in with Mon klon, further complicating an already baffling problem. It does appear that 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-/*k/ 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) = *klə;8 cf. WB kya: < *klaB, id., but PBL *(k-) laB 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 凶 xo/xuo: ‘tiger’, as reconstructed by Karlgren (1957, hereafter GSR); this ‘tiger’ is phonetic in the GSR:69 series: 獅 *glo/luo ‘food vessel’, 獅 *gljo/lj wo ‘think of’, 獅 *skljo/ljwo ‘extend’, et al. and is to be reconstructed *s-k'-lo/xuo:, from an original *s-k’laB (with regular final -o for */-a).

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8This 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 kīncem ‘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/rattan’ and ‘stone’ (STC:fn. 301), hence it is perhaps best seen as an areal feature.

9See the discussion in ATLC: 468; PNB has final */-O (vocalic) as well as */-a? and */-a?, 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-)laB (PBL tone *2) does not have the ‘glottalized’ PBL tone *3, as would be anticipated if the original had in fact been *kla?.

D. Solnit 1979 has compared Konyak (‘N. Naga’) *[c]la ‘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-)*klaB ‘tiger’. There is also a good deal of evidence (Benedict, cit. supra) that the PST root that was partially replaced was *(s-)*keyA ‘tiger/leopard’, with several doublet forms.

PMK *k(a)ləan ‘bird of prey’ (generic); ‘hawk’ (Palaung, Waic, Khmu, Bru); ‘eagle’ (generic) ‘hawk’ (Palaung, Waic, Khmu, Bru); ‘eagle’ (Waic); ‘to fly without wing movements’ (Mon); ‘vulture’ (Nicobar); ‘sea-eagle’ (Nicobar); also *kənə ‘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. læŋ ‘bird of the falcon family’, mainly in comp. lændə (~ Assam dial. lændəŋ) ‘vulture, eagle’ (da ~ daŋ not anal.; lændut ‘sp. of night-hawk or screech-owl’ (duŋ not anal.) laŋji ‘hawk, kite’, (ji is dimin.); gəλəŋ ~ kələŋ ‘eagle, hawk, kite’; WB laŋ – only in comp.: laŋ-ta ‘vulture’ (cf. the Jg. comp.); hrəwe-laŋ-ta ‘eagle’ (hrəwe ‘gold’); laŋ-yə ‘sp. of hawk’ (cf. yən ‘hare’); perhaps also laŋ-tshwai ‘large sp. of bat; the flying fox’ (tshwai: ‘hang’) and laŋ-wak ‘night heron’ (wak not anal.); G-B *ləŋ (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-reŋ, id.; Konyak (‘N. Naga’) *ləŋ ‘eagle/hawk’ (~ ‘raven’) (often in comp. with *au ‘bird’; both Konyak and Phom have laŋa ‘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 kələŋ ‘hawk’, Tangkhou khaləŋ sasa ‘eagle, lanpop ‘hawk’; Maram lanmau ‘hawk, Zeme kaleŋre ‘eagle, kele (prob. for *kelen) ‘hawk’, Liangmai kaleŋ ‘eagle, takau-leŋa ‘hawk’, Yimchungri məleŋ ‘eagle’; Mzieme lieŋum-pui, id.; Meitei telara, id.; Mikir wə-mə-liŋ ‘osprey, wə-mə-ləŋ-ə-p³ ‘kind of eagle’ (wə-mə ‘hawk, də and lə not anal., p³ is augment.); WT glag (< *gəlaŋ) ‘eagle, vulture’; possibly also Lepcha kun-thyŋ ‘pun-thyŋ (< *skəlaŋ) ‘eagle, kite’. The PMK root is set up by Diffloth as an *aʔa/- *eεe/ doublet (read *k(n)ləŋ for his *kənə in view of Khasi khleŋ, Bahnaric *kleŋ, Khm-stand. khləŋ) with suggested semantic distinction but the glosses do not appear to bear out the latter. 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 */a/) can be reconstructed on the basis of Konyak, which now has been shown to maintain length distinctions, as well as by the variant B-G set of -ŋ
~ -eq ~ -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 鷹 glak/lök 'kind of bird' as a likely cognate of WT glag but the ?- (< *a- = ?a-) prefixed form fits better here: 鷹 ?glak/nák '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 tiŋ?naŋ (Karlsgren’s reconstr.) ‘eagle, falcon’ in this connection but this word is better reconstructed s-kiŋ?naŋ and compared with WT skyin/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: 搖 sgiŋ?iaŋ (loan use in Shijing) ‘hawk’, from sgliaŋ with -i- for -ŋ- (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 *kalŋ [Headley], with which Achinese [Sumatra] klen is to be associated, and Malay lan~ helan [Shorto]); also Miao-Yao (PMY *klaŋB), with only the Kadai languages holding out against it: SWT *runB ‘bird of prey’, a cognate of PWA *burung ‘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 kun/koŋ ‘river’ (GSR), often reconstructed *knun or *knon and compared with PMK *knun or knon, id., which is also found as a loan in Chamic (Headley cites Proto-Chamic *kron); 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).

12 PT *rēŋB ‘vulture’, represented only by Siamese réŋ, Sack reŋ6, perhaps through ‘vocalic transfer’ (see fn. 10) from an earlier *rīŋ via *riŋ, offers a possible Munda link, cf. Sora ḍrāŋ ‘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, 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 *klunŋ ‘river’ with variant *krunŋ, pointing to a PMK doublet of this type, also that Siamese has khlaŋ < *gloŋA ‘canal’, with a voiced initial not found elsewhere (possibly unrelated).

牙ŋɔ/ŋa ‘tooth’ (GSR), an early (OC) loan in Tai (PT *ŋaA ‘tusk, ivory’) as well as in Vn. ngã < *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 *ñia ‘tooth’, with *ñ- < *ŋ- as regular shift); the above scholars reconstruct AC *ŋra/ and compare with Proto-Mnong *ŋa ‘tusk’; in this case, however, the phonetic series involved (GSR:37 and 47), kept separate by Karlsgren since his reconstruction schema could not handle the problem, clearly indicate the reconstruction s-ŋɔ/ŋa (< *s-ŋwa), phonetic in 鲷 s-ko? ‘raven, crow’ < PST *(s-)k(w)a as well as in 鳍 sgjɔ̌/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/wal/ (with ‘body part prefix’ *s-); Pa-o (Karen) has tɔŋa ‘tooth’.

弩 [no]/nuo: ‘crossbow’ (GSR; no AC cit.), an early (OC) loan to Tai (PT *hnaB, id.) and to Kam-Sui (Sui hna < *hnaB ‘bow’, the only ‘generic’ gloss for this root); these loans point to AC *s-no/ rather than *no/ (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 *sna as representing a likely source in MK; in TB the root is represented by Nakhon (BL group) tana, Rawang (Nungish) tʰana, both probably late.

穫 [nǐəm]/nǐəm: ‘harvest, year’ (GSR; no AC cit.); Lepcha nam ‘year’, cf. PMK *s/a/nam, id.: Mon and Palaung snam, Khasi snem, Khmer chnam, Stieng sonam, PNB *hanam; Vn. nâm; Lp. nam must be considered a relatively late loan since it does not show the regular PTB */a/ > Lp. jo/ shift (STC:70), and it apparently reflects a reduced MK form such as Vn. nâm; 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 (*ñ- for *n-) and vocalic */a/ for */a/ discrepancies, but the latter is paralleled in an early Chinese loan from AN (cited in Benedict 1976b): 𡯽 /nǐəml/nǐəm ~ [nǐəm]/nǐəm ‘weave’ (GSR; no AC cit.); cf. PWA *añam ‘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.

管 [d’un]/d’un ‘tube’ (GSR; no AC cit.); cf. PMK *k_ŋ ~ *k_ŋ; 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. 管 [b’iŋ]/b’iŋ (GSR; no AC cit.) ‘quiver’; cf. PAT */tja(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: 札 tsaṭ/tṣāt (GRS) ‘to die’; Norman and Mei (cit. supra) amend the reconstruction to tsev and compare with Vn. chê, id., et al. The same scholars also identify the second element of the Yue word for ‘dog’: 狸 [sio]g/ʃjwu (GRS; no AC cit.), amended by them to ʃiə̀ 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 Zuoqizuan cit.) 於 劍 o-d’ou?jwdo-i wo (GRS) 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-kjo?jwo, 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’ou/d’uo) of unknown origin; this analysis is confirmed by the appearance of the tiger graph 作风建设 as a phonetic in two series without *-l-: 處 k’jok’jwo ‘ruins’ and (loan) s-k’jol/xjwo ‘modest’; 處 ʃk’jolts’jwo: ‘dwell, stay; keep still’, the (palatalized) prefixed cognate of 唐 kjo/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 ɲo/ɲuo: (GRS), to be reconstructed *s-ŋo (see fn. 2); from *s-ŋa (regular vowel shift), as reflected in the early loan to Tai: *saŋa, (> Diao sa through regular loss of intervocalic */ŋ/), and compared with Kadai *ŋa ‘horse’: S. Li ŋa, N. Li ka, Lati ŋa, 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. 未 mjwɔd/mywe: ‘goat’ (GRS); 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: mali:ı. AC mjwɔd/ 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 mj-w-, hence an original *milit (< *milit) might very well have yielded an AC *mij-wt/, since AC final -jɛt < PST *-it is a regular shift. AC had only mjwɛt/, 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) ~ *mvet (Lü met, Diao fat) (both f. < *mw- and -at < *-et/tt are regular shifts for Diao), corresponding precisely to the hypothetical [AC level] *mjwɔt/ ~ *mijwɛt/. 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Language/Region</th>
<th>Code</th>
<th>Language/Region</th>
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<tbody>
<tr>
<td>AA</td>
<td>Austroasiatic</td>
<td>Lp.</td>
<td>LepchaPC</td>
</tr>
<tr>
<td>AC</td>
<td>Archaic Chinese</td>
<td>LPT</td>
<td>Loans to Proto-Tai</td>
</tr>
<tr>
<td>AN</td>
<td>Austronesian</td>
<td>Lu.</td>
<td>Lushai</td>
</tr>
<tr>
<td>AT</td>
<td>Austro-Tai</td>
<td>M</td>
<td>Munda</td>
</tr>
<tr>
<td>ATLC (=Benedict 1975)</td>
<td>MC</td>
<td>Middle Chinese</td>
<td></td>
</tr>
<tr>
<td>B-G</td>
<td>Bodo-Garo</td>
<td>(=Karlsgren’s 7th Cent. A.D)</td>
<td></td>
</tr>
<tr>
<td>B-L</td>
<td>Burmese-Lolo</td>
<td>‘Ancient Chinese’</td>
<td></td>
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<tr>
<td>CT</td>
<td>Central Tai</td>
<td>MK</td>
<td>Mon-Kmer</td>
</tr>
<tr>
<td>GSR (=Karlsgren 1957)</td>
<td>Mod B</td>
<td>Modern Burmese</td>
<td></td>
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<tr>
<td>Ho.</td>
<td>Hova</td>
<td>MY</td>
<td>Miao-Yao</td>
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<tr>
<td>Jav.</td>
<td>Javanese</td>
<td>NB</td>
<td>North Baharic</td>
</tr>
<tr>
<td>Jg.</td>
<td>Jingpho</td>
<td>NN</td>
<td>Northern Naga (=Konyak)</td>
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<td>K</td>
<td>Karen</td>
<td>NT</td>
<td>Northern Thai</td>
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<tr>
<td>KD</td>
<td>Kada</td>
<td>OC</td>
<td>Old Chinese (see text)</td>
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<tr>
<td>Kh.</td>
<td>Khasi</td>
<td>P</td>
<td>Proto</td>
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<tr>
<td>K-N</td>
<td>Kuki-Naga</td>
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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: Firestore, glossed by Shuwen as ‘follow’ but, as Karlsgren points out, resemblingFirestore, the principal ‘pig/boar’ script element in Chinese. In view of the equivalence of final -i(w)ar (tones A and B) and -i(w)ar (sandhi tone C), along with the marked tendency in the language towards secondary voicing as well as loss of medial -w-, we can takeFirestore s-k'ar 'swine' as a cognate form, pointing to an original of the type:Firestore s-k(h)ar. This would be the regular product of an earlierFirestore s-kur (with ‘animal prefix’ *s-); cf. the Cambodian calendar term kur ‘pig’, which Ceđes has connected with Muung 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 krôc, Proto-Hre-Sedang *kruc ‘citrus fruit’, AC/OC Firestore klj wôt/kjwët ‘orange’, which appears at the earliest (AC) period (Shuijing); the final -i for -e and medial -i- for -r- are the anticipated shifts, while AC -jwâ- regularly represents an earlier */u/ or */o/ (Bodman suggests the AC reconstruction *krewt [=the writer’s *kljwët], 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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