Interphyla Flow in Southeast Asia

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Welcome to the field of Southeast Asian linguistics! This welcome comes with a warning: Southeast Asia is the Bosnia of historical linguistics, with a lovely landscape strewn with land mines! Those of us who have long lingered here have stepped on a few, with resultant errors (self-corrected) or booboos (corrected by others). 'Look-alikes' (look less and less alike the more we know about them) abound, as in Malay beras and Wr. Tibetan 'bras for 'rice', as do also unlikely-appearing cognate sets such as Thai pu 'grandfather' and Japanese o:i 'nephew' (Benedict 1990: 1909-200). The general brevity of roots, in part the result of interphyla flow (below), plays a prominent role here; P-Tai *?a (tone *A) 'aunt (fa's y. sis.)' (Li 1977:243) and the like readily give rise to all sorts of phonological and/or semantic mischief. One might even formulate here a Law of Historical Linguistics, viz the number of linguistic errors perpetrated is inversely proportional to the median length of the roots involved. Comparative Kadai linguistics (Benedict 1988) is not for the faint of heart!

Southeast Asian linguistics is also the home of a pair of linguistic believeit-or-not's. One of these, vocalic transfer (VT) (Benedict 1979), involves the transfer, at times in a complex manner, of V-1 in a root to the following syllable in the process of monosyllabification, e.g. Proto-Austro-Tai (PAT) *aku 'I' > / kaw/ as well as /ku./ forms in Tai (below). The speaker has been told on more than one occasion by fellow comparativists working in other areas that this is "impossible", furnishing him with an excellent excuse for having missed it for many years! The (1) other one of the pair, calculated to raise still louder cries of "impossible", was missed far longer and he has berated himself for having overlooked the basic factor involved here, viz. a men's language, still maintained as such in the Mayrinax dialect of Atayal, reflected also in the Sediq branch of the Atayalic group, affording a date for this feature at least as early as the Proto-Atayalic date of 1,600 BP (Li 1983). Further investigation, both of Austronesian and the mainland Kadai and Hmong branches of Austro-Tai, has shown that this feature must be assigned to the earliest level of Austro-Tai, before the first Austro-Kadai vs. Hmong-Mien (=Miao-Yao) split (Benedict 1990: 1), as shown by the occasional supplanting of regular forms by non-canonical forms (nonc's) of men's language type, all detailed in the splendid study by Li (cit. supra). The key early (PAT) date is supplied by PAT *(m)paga 'thigh', which regularly yielded the monosyllabic P-Kadai *qa (variable tone) and is represented in Austronesian by the doublet: *(m)paqa~*paqi, the latter derived from a men's lang. *-qi substituted for the final syllable: *-qa; Hmong-Mien, on the other hand, has *paay = *paai (tone *A), from *pa?a?-i <*paqa-qi, with the *-qi suffixed, the ? + ? yielding /zero/, as is often the case in SEA (Benedict 1972: fn. 339 to p. 123).

Additionally, all three language phyla represented in SEA have been reconstructed (not without doubting Thomases here and there!) with suprasegmental systems of other than simple stress type (Benedict 1991; see below). This makes for difficulty, especially for those of us reared to recognize

only /light/ vs. /heavy/ and the like, especially when faced with the interplay of one system with another, as outlined below.

Three contrasting language phyla are represented in Southeast Asia:

Sino-Tibetan: monosyllabic; tones (*A = /falling/, *B = /rising/); vocalic length (/short/ more common); OV; prefixing and suffixing.

Mon-Khmer: mono-/(typically) sesqui-syllabic [Matisoff's term: SYL-I with zero stress and vocalism of /schwa/ type]; phonation types (/plain/ vs. / glottal~creaky/); vocalic length (/long/ more common); VO; prefixing and infixing.

Austro-Tai: mono-/(typically) di-/tri-syllabic; pitch-accent (HIGH vs. LOW); vocalic length lacking; VO; prefixing, infixing and suffixing.

The regional scheme of homelands (see diagram: Southeast Asia: Language Stocks) includes a strange 'Empty Quarter' in the Southeast quadrant:

NW = Sino-Tibetan (ST) NE = Austro-Tai (AT) SW = Mon-Khmer (MK) SE = [Empty Quarter]

Prehistorians, for good reasons, like to place homelands in riverine/coastal locations rather than on barren windswept uplands. In the case of ST, for example, a sheer distributional analysis, with the ancestral Chinese in the upper Yellow River drainage and the various Tibeto-Burman (TB) groups ranging all around the base of the vast Tibetan plateau as far west as Nepal and northern India, would place a homeland up on that plateau, with subsequent movements down into the surrounding lowlands. Bellwood, Solheim and other prehistorians of SEA to whom the speaker has offered that scenario have uniformly rejected it, however, and it now appears that the middle Yangtse drainage is the most likely ST homeland, with the first split between the Chinese, moving north into the Yellow River basin, and the Tibeto-Karen, moving generally to the west (TB) and the south (Karen). The AT homeland is also to be placed in the Yangtse drainage, to the east, it would appear, giving ample opportunity for mutual influence (see below). This leaves one excellent riverine location for a MK homeland, viz. the Salween basin, with one movement to the east, all the way to the China Sea (Vietnamese), another far to the south (Aslian), another to the northwest (Khasi) and an early pre-MK migration all the way to eastern India (Munda), thus tying in Austroasiatic (AA).

The 'Empty Quarter', taken from the Arabic Rub al-khali for the most desolate region of the great Arabian desert, remains a problem. It wasn't really empty, for one thing, since there was an early kingdom in the lower Menam basin, visited by Chinese travelers. The Chinese historians recorded this but failed to record the language. One can only speculate here, with the most likely choices another AA/MK branch or fourth language stock.

The historical canvas presented to us has three phyla competing for space and influence in SEA over the past several millenia. Details remain to be worked out but it would seem that an Early High Culture (EHC), based on wet (lowland) rice cultivation, was created in the middle Yangtse valley by PAT -speakers, with the key generic RICE root: PAT *(m)bəyaw represented in Hmong-Mien (HM) and Kadai (KD) as well as in AN (fn. 1) and Japanese-Ryukyuan (JR) (Benedict

1995: 431-2). The linguistic evidence, including the root for PLOW (ibid: 429), further indicates an AT source for Chinese rice cultivation (fin. 2), with Chinese dào (Archaic d'-) 'rice plant' a likely early loan from the PAT root (via *br->d-, paralleling shift of common type in KD). This scenario has the ancestral Chinese moving north into the Yellow River drainage (Wei valley), supplementing their cultivation of rice with that of millet and, in time, benefitting from their location at the terminus of the main transasiatic trade route to develop an early civilization, thus gradually establishing hegemony throughout much of the region.

With the historical stage thus set, we are now in a position to examine interphyla flow throughout the region, the influences exerted by each of the three language stocks upon the others. At the very outset we are struck by the fact that the word order of Chinese was changed from the OV of PST (STists are in general agreement here) to the VO of PAT and PMK - this despite the early cultural ascendancy of Chinese. For the speaker, at any rate, this strongly suggests that the PAT-speakers originally occupied the greater part of the middle Yangtse drainage, with the PST-speakers arriving as an early incursion from the westernmost parts of the area, in time creating a PAT substratum, which yielded the VO. This general line of explanation, often discredited elsewhere, also appears to be called for in an analysis now under way of the complex problem of early ST loanwords in HM (fin. 3)

Chinese was a loser, so to speak, in this word order matter but emerged as a big winner on the two key issues of syllabism and prosody. It was very much as if an imperial ukase had been issued: reduce to monosyllables and if this makes a big problem for you we have a nice tonal system to lend you (Chinese had added a third [<sandhi] tone.) Both mainland AT families went along, HM regularly through canonical reduction-on-the-right (CRR), an inherent AT pattern also seen in some Japanese derivatives (Benedict 1990) and on occasion in eastern Malayo-Polynesian (MP), while KD languages have achieved the same reduction on-the-left (CRL), this is probably to be attributed to (substratal?) influence of the sesquisyllabic MK. It appears that the 'culture loanwords' emanating from the Chinese center, notably the numerals along with assorted others (inc. horse, saddle and ride; silver, father, shaman/priest), each with tone 'attached', played a key role in this prosodic transformation while at the same time providing key historical evidence as to the nature and direction of the prosodic flow.

For further analysis of this phenomenon, it is useful to employ the anthropological distinction between direct diffusion, e.g. the tones of a tonal system or the system itself, and stimulus diffusion, e.g. the 'idea' of making use of tones. Both have played a role in the tone flow in SEA from Chinese; see the chart on Interphyla Flow in Southeast Asia-Tone Flow. A three-tone system can be reconstructed for HM identical to that set up for Chinese (AC), with parallel splitting governed by voicing/unvoicing. In the case of the KD languages, the same circumstance holds for the Daic group: Tai, Kam-Sui, Lakkia, Shidong and Be (Hainan). This does not hold, however, for the Outlier group: Buyang, Laha, Pubiao (=Laqua), Hlai (=Li) (Hainan), Lachi (=Lati) and Gelao (= Kelao), which appear (now under study) to have derived their tones from varying combinations of direct and stimulus diffusion. Vietnamese, under direct Chinese domination, lost the

sesqui's (initial syllables) of MK while directly borrowing the tonal system, with the assignments: /plain/ > lst tone, /glottal/ > 2nd tone, final *-h > 3rd tone. Bolyu (= Lai), a residual MK language uncovered by Liang Min in Guangxi (Benedict 1990bis), has developed its tonal system entirely through stimulus diffusion, making primary use of /plain/ vs. /creaky/, along with /plain unvoiced/ vs. /voiced/ vs. /aspirated/ initial, yielding a six tone system, as the Chinese prototype, created on an entirely distinct basis! Other MK languages, including Khmu, parallel Chinese in developing tonal distinctions based on voiced/unvoiced initials, with an original voicing distinction replaced by a tonal. An outstanding example of stimulus diffusion is supplied by Hu and U, which have developed tonal distinctions based on vocalic length: Hu: /short/ > HIGH vs. /long/ > LOW, very much as if in reply to an imperial ukase (above), "Okay, but we'll do it our way!"

At times, as indicated in the Tone Flow chart, an intermediate language/language group is indicated, e.g. both Tin (<MK) and Moklen (<MP), the latter recorded by the speaker in southern Thailand in 1991, have developed tones through stimulus diffusion from Thai. In the case of the Chamic (<MP) languages, showing the same monosyllabizing/tonalizing trends seen elsewhere in the general flow, the main intermediate, at any rate, surely was Vietnamese. An early Chamic colony in Hainan, the Utsat (=Huihui), one of three distinct groups domiciled on that island along with the Chinese settlers (see Language Stocks diagram), speak a tonal language (Tsat) that has developed one of its tones from final *-h, paralleling the development in Vietnamese, indicating that the influence of that language must be accorded a fairly early date of several centuries (Benedict, 1984). At the present time Vietnamese has been found to play both a monosyllabizing as well as tonalizing role in the Kiengiang and other Khmer dialects spoken in the Mekong delta (Minh 1996), supplying further evidence for this gemination of effects throughout SEA.

Vocalic length has undergone widespread loss/merging in SEA, often at an early period, e.g. PST final *-a:n regularly yielded Wr. Tibetan (WT)-ag; AC-on (paralleling PST final *-a > -o), as in PST *(r-)na:n 'thick (fluid)' > WT r-nag 'pus'; AC non (tone *A) 'id.', with the related Donor-to-P-Tai (DPT) *hno:n (tone *A), *hnoon reflecting the prefix (*r- > h-), subsequently yielding the loan to P-Tai (DPT) (tone *A) 'pus' (Li 1977: 114). It is unclear what role, if any, was played here by AT, which lacks this length feature. It is ironic that the KD languages, and to a far lesser degree the HM, have secondarily developed vocalic length, here to be analyzed as geminate clustering. At times this has been the product of borrowing, as in above example, but in most cases has been brought about by VT (above), as in key secondary RICE root: P-Austro-Kadai (PAK) (HK app. lacks cg.) *qasal: P-Paiwanic id.:Puyuma ?asal 'hulled rice'; Paiwanic qasal ~ qasan 'unhulled rice'; P-KD (Tai/Laha *saal (tone *A) 'hulled/cleaned rice'; (through VT) (Benedict 1995:435)

There is a sharp contrast in the affixation patterns of the three SEA language stocks. ST lacks infixes (Lepcha has secondary -y- > *s-prefix; see Benedict 1972:105) while MK lacks suffixes (at proto-level) and only AT makes use of all three affixes, with at times sharp scholarly disputes as to which are which at early (AN) levels (see below). In the case of AT, moreover, the syllabic reduction in both KD and HM makes it difficult to establish specific affixes at

earlier than a PAN level, e.g. the *u- nominal marker of PAN *(u-)alak 'child' (> Jp. wara-) is exactly replicated in PKD, with P-Kam-Sui *laak <*alak, from the unaffixed root via VT, but P-Tai "luuk < *u-alak (with assim.), while three different pronominal markers of PAN, viz. *i-, *u- and *tsi-, all appear in reduced (but unmistakable) KD forms representing PAT *aku (> P-Tai *ku ~ *kaw) "T" (see Benedict 1994).

There is scant evidence of transphyla flow involving any of these affixes. A key exception here in SEA is prefixed *qa- ~ (weakly stressed) *ka-, which is widespread throughout the region in all three phyla, most often found with animates (esp. fauna, body parts, kin) but at times also with inanimates, e.g. sun (in Bolyu; see the discussion in Benedict 1990bis). An AT source for this flow is indicated by the fact that Japanese appears to have a representative (a- <*qa-) of this prefix (Benedict: 1990:124-5). There is also some evidence for more limited transfers of this kind, e.g. of PTB nominalizing *?a-to Bolyu (Benedict 1990bis); also, on a far grander scale, of an AT ~ MK transfer (direction?) of a pair of /m/ and /n/ functors, present in both stocks in at least roughly comparable roles, used by Schmidt early in this century as the primary building block for his 'Austric', seeking to unite these two phyla. As pointed out by the speaker (Benedict 1993), the material that Schmidt assembled in support of his thesis has proved to be of a 'look-alike' nature, despite the abundance of comparative materials now available, and 'Austric' enthuasiasts, including now even some Anists along with the 'long-rangers', must face a bleak linguistic future, rootless in SEA. Even worse, a fond argument of the Austricists, often recited as a litany, "Infixes don't get borrowed", has recently been undermined by Starosta's analysis (1995) of the subgrouping of AN languages, with an early splitting off of the Rukai and Tsouic groups (both in Taiwan), leading to a reconstruction of both AN functors as prefixes rather than infixes! His fn. 5 to p.11 will bear repeating here:

5. Laurie Reed and Bob Blust [recent converts to Austricism] have pointed out that if this reconstuction is correct [Starosta is a rare modest scholar], it is going to cause problems with Austric comparisons, since the corresponding infixed forms occur in Austroasiatic. However, Reed [a resourceful scholar] has also found the corresponding uninfixed forms in the AA languages being compared, and suggests that given the strong infixing tendencies in these languages the infixed forms could be the result of parallel but independent innovations. [end cit.]

So, we can forget about the infixes at any 'Austric' proto-level - and one can hardly compose a litany about prefixes! However one might want to resolve this issue, it is now clear, with few if any languages to be 'heard from' (one or more may yet remain to be 'discovered', esp. in southern/western China or the Vietnam/Laos border region), that three solid lexical blocs are involved, each with its own pronominals and set of numerals along with a sizable number of Occasional interphylar correspondences have been 'core vocabulary' roots. noted, perhaps attributable to early borrowing, e.g. both ST and AT have a widespread *ka~ *ga locative: cf. AC ka 'house/home' < 'place' ("Come up to my place"); Japanese sumi-ka 'reside-place' = 'residence', also roots of /pu/ type for 'grand parent' and /na/ type for female/female kin. These two stocks also have the same trio of basic forms for parental kinship terms but arranged differently, ST with *pa/ba(masc.) vs. *ma (fem.), as opposed to AT *pa (fem.) vs. *ba/ma (masc.) (Benedict: forthcoming -1). The vast bulk of interphylar lexical connections, however, involve 'culture words', with the earliest identifiable loans from an AT language, Donor-to-AC (DAC), to AC, including along with RICE (above) even such items as LADDER/STAIRS, needed once the Chinese encountered pilehouses in the riverine lowlands (!), and the trading BUY~SELL pair, returned at a later date to the HM (Benedict 1976). Lexical items not readily seen as 'cultural' have been borrowed on occasion, however, e.g. DOG. in Chinese < DAC, with earliest citation in the Zuozhuan (4h cent. B.C.), perhaps a substratal item (cf. Eng. 'dog') (Benedict: forthcoming-2), while Bolyu has borrowed from TB, before moving far eastward to Guangxi, HEAD as as well as FLESH< as if conjuring up past MK-speaking associations with the headhunting/cannibalistic Wa! (Benedict 1990bis).

Finally, one pair of loanwords, of Mon-Khmer origin, involving predators of earth and sky, is deserving of special mention here; see diagram: The tiger/raptor Invasion of Southeast Asia; for further details re: the MK and TB forms, see Benedict 1992. The early loan to KD represented by Tai *sia, Be zoa (cf. Tai *sia 'garment', Be zoa 'clothing'), with *s- preemption in the donor language for P-Tai (DPT), came into evidence only with the uncovering of pair of parallel loans (updated from Benedict 1988; MC Middle Chinese; PST final *-a > AC/MC -o, DPT *-a, as here and elsewhere):

	AC/MC	-/DPT	P-Tai
'tiger'	s-gvo/-	*s-gya/sya	*sia (tone *A)
'butterfly'	s-sgyo/sywo	*s-gya/sya	*-sia (tone *B)
'mat'	sg'yo/d'ywo	*s-gya/sya	*sia (tone *C)
	g'yo/g'ywo		

NOTES Chinese all tone *A but AC here s/>*B>*A, hence in 'butterfly' DPT apparently had maintained an original *B tone (*C is sandhi tone < earlier suffixed form).

For 'tiger', the s-gyo/- form, with -y- for *-l- and secondary voicing after *s-, is known only from its use as a 'hidden' phonetic (Many such in AC) in s-ŋyo 'fish'

AC 'butterfly' only as a loan in Zhuangzi (ca. 300 B.C.) Tai *sia 'ld.' known to date only in Thai phi-sia (phi 'spirit').

AC sg'yo (with cluster sg-) dental-, as apposed to the preempting dyad sg-; see Benedict 1989) and the unprefixed g'yo, both glossed as 'coarse mat', are cognates ('sthg. coarse') of g'yo/g'ywo: (loan use) 'distant from; keep at a distance' and s-gyo/sywo 'wide apart, coarse; distant; (make distant:) separate, eliminate'; sg'yo/d'ywo 'eliminate, remove', all from a PST-level root *ga, maintained (from Vulgar AC) in g'a/ya 'far, distant', typically palatalized, along with the regular*-a > -o shift of the 'proper' AC dialect.

How to account for the success of this overpowering ingression of basically ST/AT linguistic territory by a pair of MK roots for predators, in one case (tiger) via ST, in the other (raptor) directly? A few SEA languages, including Rawang (TB) and Pateng (HM), have employed honorific terms for the tiger, as if in address: "Hon./Sir/Mr. [tiger]", while Chimese (Mandarin) makes use of an honorific /lǎo/ 'aged' both for tiger (lǎo-hǔ) and raptor (lǎo-vīng).

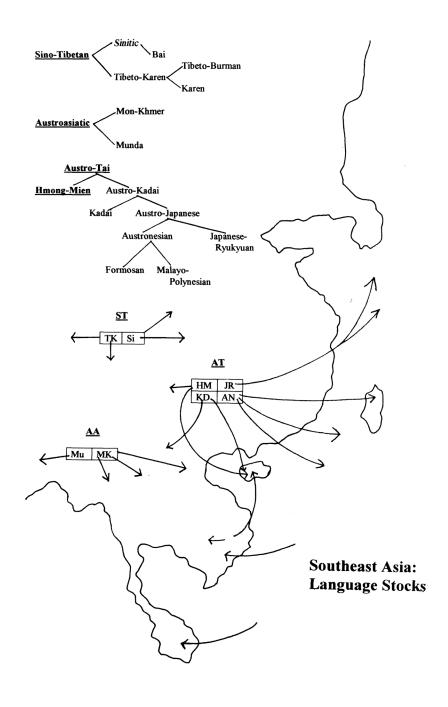
Any explanatory line here must account, nor for one or even two incursions, on one or two occasions, but for multiple invasions on a broad scale over centuries, even millenia. Are we dealing here simply with euphemism, making use of loanwords for 'nasty' predators much as we employ them for 'nasty' body parts and related activities? Surely the tiger has long been figure of great dread for tribal peoples in SEA, as also to some degree (infant-snatcher) the eagle, and this circumstance appears to have played a role here, provided of course that one has the presence of mind to utter the greeting "Honorable Sir" on an unanticipated jungle encounter with a tiger!

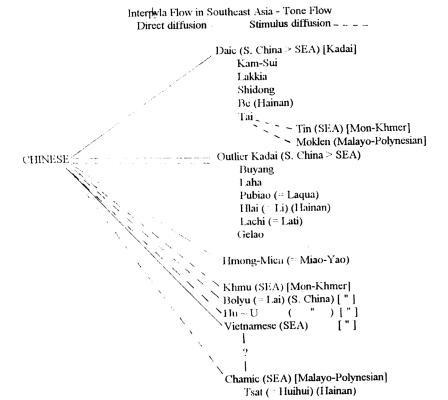
FOOTNOTES

- 1. This generic RICE root is represented by a nonc form (see text) in final -ts (whence Malay beras, cited in the text) throughout AN with the exception of Tsouic (Kanakanabu) and Rukai (Benedict 1995: 431-2), precisely the two Formosan groups regarded by Starosta (text, below) as the first to have split off the PAN proto-language. These two sets of data, drawn from entirely distinct linguistic fields, provide mutual support, for the nonc development as well as for the early Rukai/Tsouic split, with the evidence thus obtained that this division antedated the men's language replacement of the root-final *-w by -ts.
- 2. Another AT root of */sima[a/ə]y/ shape (Malay 'imai' cooked rice'; other MP also 'rice in the husk' (see Benedict 1990: fn.2 to p. 233); P-Mien *hmoy (tone "B) 'husked rice', with regular *s-m- > hm- and */ə/ > /o/ shifts, gave rise to early loans to AC miə:r (<*mə:y on tone *B) and, in TK, to various Bodo-Garo and Karen 'rice' forms of similar /may/~/mey/ shape, with comparable glosses (Benedict 1972: 65, 128, 149, 192).
- 3. The placement of the ST homeland in the westernmost Yangtse valley casts new light upon the early ST > HM [= MY] loan relationship (Benedict 1987), with the archeological excavations now under way in connection with the Three Gorges dam project likely to uncover significant relevant evidence. HM, for its part, has complicated matters by having adopted men's language forms (nonc's)(see text), e.g. in addition to a suffixed -qi in THIGH (text) an infixed -i-(found also in the men's language of the Mayrinax dialect of Jp. hana; P-KD *? baŋal (include. Laha baal) < *qa-baŋal (see text for this widespread SEA prefix); P-HM *biaŋ (tone *A), from *b<i > an[al], with regular CRR for HM (see text) and regular reflexes throughout AT (Benedict 1995:417).

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The tiger./raptor Invasion of Southeast Asia
PMK *kla? *tiger*
                        - → Sino-Tibetan *(s-)kla:
                                                 Chinese *(s-)k(h)la:
  Tibeto-Burman *(s-)kla:
                                                   Min *(s-)khou: < (s-)kh[1]a:
AC * s-klo: < *s-khla:
     Bodo-Garo *ma(t)-ca < *-skla
     N. Naga *Cons. + *gya: < *gla:
                  [second. voicing]
                                                               > Mid. Ch. xuo: > Mand. hu
     Burmese-Lolo *(k-)la:
                                                    Donor-to-Hmong *c(y)o: < *sk(y)o:
               > Wr. Burmese kya:
                                                                           > P-Hmong *co:
                                                    Donor-to-Tai *sya < *s-gya < s-gla
                    > Spoken ca:
                                                                            > P-Tai *sia
               > Lolo (various) *la: ----\rightarrow Bai ( = Minchia) [Yunnan] lo: < *la:
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NOTES ST *s- and Bodo-Garo *ma(t)- are "animal prefixes"; also *k- (see text), through metanalysis in BL, yielding Lolo *la:, with loan to Bai. P-Min *(s-) in view of kh- < *kh[1]- (not x- < s-kh[1]-) in Kienyang, hence *(s-) also for P-Chinese. Note widespread loss of *-l-, often palatalized (> -y-). The *s- preemption, here after second. voicing (cf. N. Naga), is a signature reflex of Chinese (see text: parallel loans in Tai, with note on Be zoa: 'tiger'). PMK *-? replaced by PST tone*B [:](rising, often > glottalized), which has been well retained (BG *-skl/> [tonal merging]; Donor-to-Tai s/ > *A).

NOTES AC dyan hawk' as a loanword in Shijing; the indicated dy-< sgy- shift (vs. sy-< *s-gy-; see Tiger) was widespread in the early language. The vocalic length in this root is well maintaind (Tib. reg. -ag < *-a:n - see text; length lost in Chinese after -y-; Malay lacks this feature). In TB, any rate, the initial *k(a)- has generally been handled as representing the *k- 'animal prefix', while both TB and Chinese show replacement by the 'regular' Sino-Tibetan *g(a)- prefix.

This early 'invasion' followed two entirely different routes: Tiger was borrowed by Sino-Tibetan at the PST level and thereafter secondarily 'distributed' to Hmong and KD (thirdly for TB > Lolo > Bai) whereas Raptor was separately borrowed by TB, Chinese, HM and Chamic/Malay, apparently with only one (Tibetan > AC) secondary loan.