LINGUISTICS OF THE TIBETO-BURMAN AREA
VOLUME 11:2 - FALL 1988

On the Apparent Labio-velar Nasals of Kam*

David B. Solnit
University of Michigan

In historical linguistics, certain commonplace sound changes can be presumed to happen in only one direction, usually for readily apparent phonetic reasons. Palatalization of consonants is an obvious example: it is easy to understand why a front vowel or semivowel should pull a non-palatal consonant towards a palatal point of articulation, but it is hard to imagine why a palatal consonant would ever factor itself out into, e.g. a velar stop plus a palatal semivowel. Again, a medial liquid often turns into a medial palatal semivowel, but we would be skeptical of a proposed sound change *pj- > pl-. Vowels seems to be less subject to this sort of directionality, but nasalization might be an instance: we expect that nasalized vowels will arise from the influence of neighboring nasal consonants, and not the other way around.

It is not necessary to insist on these being exceptionless rules; instances of 'wrong' directionality probably exist for many ordinarily directional changes. But we can presume these changes to go in only one direction, unless proven to do otherwise in a specific instance.

The change of labiovelar consonants into labials is another example of a sound change for which we would require strong evidence before admitting a development in the opposite direction. The Southeast Asian area provides instances of the expected directionality, although labiovelars do not seem to play as important a role in any Southeast Asian linguistic group as they do in Indo-European. Matisoff 1980 discusses many examples in Tibeto-Burman; the Kadai languages Kam, Then and some Sui dialects also show instances[1]:

Table 1

	KamRJ	SuiSJ/SP	Then	SuiSLN	Saek	Siamese
leg	pa^{1}	pa^{1}	paa^{1}	qa^{1}	kwaa^{1}	khaa^{1}
sell	pe^{1}	pe^{1}	pee^{1}	qe^{1}	kwaay^{1}	khaai^{1}
horn	pa:u^{1}	pau^{1}	paau^{1}	qau^{1}	-	khau^{1}
dove	pəu^{2}	pău^{2}	peu^{2}	qău^{2}	-	khau^{1}

* The first version of this paper was produced in December 1983 and submitted to LTBA. Shortly afterwards Paul Benedict, to whom I had also sent a copy, responded with a page of comments. I wrote a response to Benedict's comments in Fall 1984. The present paper incorporates some very minor revisions and corrections; it is followed by Benedict's original comments, then by my reponse to the comments (points 1 and 2), and a recent addendum (point 3).

[1] Kam (Rongjiang dialect, the standard) from Liang 1980; Then and Sui (SJ/SP Jungchiang and Pyo dialects, SLN Li-Ngam dialect) from Li 1965; Sui (SD Sandong) also from Zhang 1980. Tone numbers are by historical category, according to Chinese practice, with 3/3'/4 corresponding to Li's C and 5/5'/6 to Li's B. In KamLS (note 2) I/II is added to reflexes of tone D (checked syllables) to distinguish reflexes with long and short vowels respectively.

In these cases, most of Kadai agrees in showing a velar or uvular, followed by a less well-preserved rounded element. There are three roots with an opposite correspondence, namely with a Kam velar consonant plus rounded (semi)vowel corresponding to labials elsewhere in Kadai:

Table 2

	KamRJ	SuiSLN	Siamese
dog	ŋwa$^{1'}$	m̥a^{1}	maa^{1}
pig	ŋu$^{1'}$	m̥u^{5}	muu^{1}
flea	ŋwat$^{7'}$	m̥at^{7}	mat^{7}

Are we to follow our sense of directionality here, and reconstruct Kadai *labiovelar nasals? For a phenomenon that is otherwise less than usual in the family, it is odd that for these three roots the shift from labiovelar to labial should have been universal excepting only Kam--especially when in other roots (Table 1) Kam is among the languages showing the shift. The opposite development m > ŋ^{w}, counter to the usual directionality, seems equally unlikely.

Benedict (1975, 128) agrees in suspecting these Kam ŋw- of being secondary developments, but offers no explanation for their presence. I would like to suggest one based on evidence from Lakkia and from Kam dialects different from the one cited above[2].

Lakkia is unique in Kadai (or nearly so, as will be seen) in that it preserves evidence of the source of the voiceless and glottalized nasal initials reconstructible for proto-Kadai, and preserved as such in Sui; e.g.

Table 3

	Lakkia	SuiSD[3]	proto-Tai initial (Li 1977)
bear	kŭui^{1}	ʔmi^{1}	*hm
river	tsĭe^{1}	ʔnja^{1}	- (cf. Buyi ɲe^{1}, ɲi^{1})[4]
rat	kĭiu^{3}	n̥o^{3}	*hn

The indication is that the nasals in these roots were originally ordinary (voiced) nasals that were devoiced or glottalized by a preceding

---

[2]Lakkia data was recorded with a native-speaker consultant, Mr. Su Defu, at the Central Institute of Nationalities, Beijing, in Fall 1982. The particular words I cite here are also found, with only minor graphic differences, in Mao et al. 1982 and in Haudricourt 1967 (citing Anonymous 1959). The additional Kam dialects are (1) that of Longsheng, Guangxi, from Li 1982; (2) that of Sanjiang, Guangxi, from notes made by me during a short visit to the Guangxi Institute of Nationalities, Nanning. I apologize to readers for using the latter data, which is sketchily recorded and incompletely analyzed, but I am confident in the phonetic accuracy of the forms I cite, especially concerning the segmental phonetics, which is what is at issue here. My research at the Central Institute of Nationalities and the Guangxi Institute of Nationalities was made possible by a fellowship from the Committee on Scholarly Communication with the People's Republic of China; the aid of all three of these institutions is gratefully acknowledged.

voiceless consonant, that consonant having survived in Kadai only as the initial of the Lakkia reflex. This line of explanation then indicates that the Kadai *voiceless/preglottalized nasals were originally *medial*, not initial.

The Lakkia forms for 'dog', pig', 'flea' are khw$\tilde{3}^1$, kh$\tilde{u}^1$, khw$\tilde{o}t^1$ respectively, with the rounded vowel and glide reflecting the labiality of the lost *m. The development is not ŋ^w- > m-, but K(V)m- > ŋw-; the labial didn't sprout a velar, the velar was there all along. The KamSJ and KamLS forms are virtually identical to the Lakkia, minus the nasalization:

Table 4

	Lakkia	KamSJ	KamLS
dog	khw$\tilde{3}^1$	khwa^{24}	k'wa$^{1'}$
pig	kh$\tilde{u}^1$	khu^{53}	k'wu$^{5'}$
flea	khw$\tilde{o}t^7$	khwat^{44}	k'wat$^{7ii'}$

Having disposed of the problem of directionality, we are confronted with a second problem: why only these three roots? Not only are these the only apparent labiovelar nasals in KamRJ, but they seem to be the only pre-nasal stops preserved in KamSJ; cf. the following KamSJ forms, all relating to voiceless or preglottalized nasals elsewhere in Kadai (tones omitted): na 'face', na 'thick', no 'rat', ɲiəu 'urine', ne 'weep', ɲa 'river'. Perhaps further work in Kam dialectology will uncover additional examples of the 'dog/pig/flea' phenomenon, or else provide an explanation of its rarity.

Semantic links may have played a role: pigs and dogs are associated, as medium-sized domestic animals, and fleas are intimately associated with dogs. It is conceivable that these three words, linked by real-world relations semantically and by chance phonologically (the presence of *kh-m-), could have exerted a pull on each other during their phonological evolution. It would be as if the English word *arithmetic* were to lose its initial a- from habitual occurence in the expression *reading, 'riting and 'rithmetic.*

References

Anonymous. 1959. *Zhongguo xiaoshu minzu yuyan jianzhi: Miao-Yaoyuzu bufen (Sketches of minority languages of China: Miao-Yao section).* Beijing.

Benedict, P. K. 1975. *Austro-Thai language and culture.* HRAF Press, New Haven.

Haudricourt, A.-G. 1967. *La langue lakkia.* Bulletin de la Société Linguistique de Paris 62, 165-82.

Li F. K. 1965. The Tai and the Kam-Sui languages. *Lingua* 14, 148-179.

_____. 1977. *A handbook of comparative Tai.* Oceanic Linguistics Special Publication 15, University of Hawaii.

Li Zhaoxiang. 1982. Xiandai Dong-Taiyu zhu yuyan shengdiao he yunwei de duiying guilü (Rules of correspondence of tones and finals of modern Kam-Tai languages). *Minzu Yuwen* 1982.4, 48-58.

Liang Min. 1980. *Dongyu Jianzhi (Sketch of Kam).* Nationalities Press, Beijing.

Mao Zongwu, Meng Chaoji and Deng Zongze. 1982. *Yaozu yuyan jianzhi (Sketch of the languages of the Yao).* Nationalities Press, Beijing.

Matisoff, J. A. 1980. Stars, moon, and spirits: bright beings of the night in Sino-Tibetan. *Gengo Kenkyu* 77, 1-44.

Nationalities Research Institute (Chinese Academy of Social Sciences). 1959. *Buyiyu diaocha baogao (Buyi language survey report).* Beijing.

Zhang Junru. 1980. *Shuiyu jianzhi (Sketch of Sui).* Nationalities Press, Beijing.

On the Apparent [not actual?] Labio-velars of Kam: Comment

Paul K. Benedict

Fn. 3 Li also cites 'pig' root, on pp. 168-69.

The Kam forms also cited in ATLC (Glossary) but not handled very clearly. It now seems that the Kam/Lk. kh- is from q-, probably in most cases, at least, from PAT prefixed *qa- (ATLC: 147). In Lk., kh- before *m- contrasts with k-, from *k-, as in BEAR (see ATLC). Before *n-, however, the contrast is with ts-, as in tsa^{1} 'thick,' PKT *ʔnaᴬ ; tsak 'heavy,' PT *'nak (both show loss of nasalization). Lk. has ts- for *k-, as in tsen^{1} 'eat,' and this appears to be the source of above ts-; cf. tsiě^{1} 'river;' PT *'nɨaᴬ 'up/north/upstream;' PKS *ʔnyaᴬ 'river,' from *C-ina (with VT) < PAT-level *ki(n)da; Jp. kita 'north' - a long way to go for proof of the *k-, but it fits!

I also now realize that Ml. has preserved kw- in some roots that have yielded dento-labials and even labial stops elsewhere - see below. In doing ATLC I considered both the husks and bamboo roots but not then enough AN data for latter (now good) and I picked the Li over the KS forms for the latter (see HUSKS in Glossary) - it still might go, but the KS fits perfectly, of course, now with the help of Ml. - and also Lk. in this root! I have the RAIN root in ATLC but missed the significance of T'en xwen - and didn't have the Ml. form. Note how Mak maintains *k- in BAMBOO (*-y- > ø and -aa- > -a- before -n both regular). Note how Kam keeps kw- in 'negative' - recon. *k-m (no Ml. cognate).

But Ml. has a problem: hmu^{5} 'pig,' hmat^{7} 'flea' but hnwa^{1} 'dog'! How come? Poss. < *k(h)l- rather than < *q- (see entry in ATLC!)?

See also the KS cognates in ATLC under RIGHT for *xw- > f-.

	AT-level		Ml.	Kam	T'en	Sui	Mak	Mn.	Lk.	Li	Gl.
cloud	*q-(m)pa-	B-1	kwa	ma	-	fa/wa	vaa	fa	fa	fa	-pau
husks/ bran	*q-(m)pa	C-2	kwa	pa-	-	pya/fa	vaa	pa	kwɔ	-	pau
rain	*q-(m)pon	A-1	kwɔn	pyɔn	xwen	fɔn/wɔn	vin	fin	fen	fun	-
bamboo	*kawayan	A-1	kwan	pan	-	hwan/fan	kwan	-	fan	-	-
sharpen	(knife)	A-2	kwan	pan	pan	pan	pyan	pyan	-		
grind	(rice)									ka:n	van
negative	-	A-2	-	kwe	-	me	me	-	hwãi^{1}	vei^{4}	mpa

Tai cognates: S.C *faaᴬ, Lao *fɨɛᴬ, N. fɨɨᴬ (Dioi voueu) 'cloud.'
S. *fonᴬ, C *fɨnᴬ, N. funᴬ ~*hunᴬ 'rain.'
S. *fonᴬ, C *fɨnᴬ, N. (Dibi) *banᴬ 'grind/sharpen.'
S. *mayᶜ (~ *mi-); C *'miiᶜ, N. *miiᴬ 'not'; 'very irreg.' (Li)

App. m- > ŋw- shift! 磨 mɔ́ < MC mwâ 'grind (rice),' app. source of loans to Kam mo^{6}, Ml. mwa^{6} but Mn. ŋwa^{6}! Of course it is also possible that this is an early loan into Chinese: *ŋwa > mwa > Ch. mwâ, etc.

Response and Addenda

1. C-n- clusters. Benedict cites a two-way contrast *kh-n- versus *tɔ-n-. There seems rather to be a three- or four-way contrast of 'pre-initials' before n-, since in addition to kh and tɔ before nasalized vowels Lakkia also has k, and this k+nasalized vowel corresponds to both voiceless and preglottalized n- elsewhere:

tɔ-n- = ʔn	Lakkia	Sui	proto-Tai
thick	tɔ̃^{1}	ʔna^{1}	*hn
heavy	tɔak^{7}	-	*hn
river	tɔĩe^{1}	ʔnja^{1}	*hɲ (Buyi)
k-n- = ʔn			
face	kɛ̃^{3}	ʔna^{1}	*hn
snow	kjãi^{1}	Kam nui^{1}	Zhuang nai^{1}
cold	kĩit^{7}	ʔnjit^{7}	-
maggot	kjũun^{1}	Kam nun^{1}	*hn
k-n- = hn			
rat	kiiu^{3}	n̥o^{3}	*hn
kh-n- = hn			
gather	khep^{7}	Mak nap^{7}	-
pince	khɛ̃ep^{7}	-	*hn

For 'gather' cf. Baoding Hlai tip^{7} (unfortunately Baoding does not have the tone split that would confirm that this t- descends from a modified nasal). For 'snow' and 'maggot' note that Kam tone 1 indicates glottalized nasal (a voiceless nasal would have produced the special aspirate tone 1').

2. Mulam (Mulao) labiovelars. Of the sets Benedict cites, CLOUD, HUSKS, and RAIN make good parallels to the Kam cases, given Benedict's AT-level reconstructions. That is, the Mulam k-, like the Kam ŋ- (RJ)/kh- (SJ, LS), is from a pre-initial, and it is only the Mulam -w- that is directly cognate with the Kadai labials /f v p/. BAMBOO, on the other hand, looks like a genuine case of labiovelar > labial; in fact, even for the other roots we cannot absolutely rule out a development of the Kadai labials/labiodentals from an intermediate

stage like that preserved in Mulam. I can think of no good explanation for the difference of Mulam ŋ̇wa^{1} 'dog' versus m̥u^{5} 'pig' and m̥at^{7} 'flea'.

3. (addendum 1989). For an extended discussion of an analysis of initials and 'preconsonants' similar to that proposed here, applied to both Kam-Sui and Lakkia, see Edmondson and Yang (1989). Data in that article indicate that forms with initial kh- for 'dog', and possibly also for 'pig' and 'flea', are in fact widespread in Kam. Edmondson and Yang report that, of 22 Kam dialect locations, 'dog' is ŋwa$^{1'}$ in one (in the standard, KamRJ, cited above), m'a$^{1'}$ in one, and k'wa$^{1'}$ in eleven. They do not report on 'pig' or 'flea', except to note that 'flea' is kẇat$^{7'}$ in one of the eleven locations that has k'wa$^{1'}$ for 'dog'. Finally, Thurgood (1989) relates the velar initial element in 'dog', 'pig' and 'flea' to the Mon-Khmer velar animal prefix.

References

Edmondson, J. A., and Yang Quan. 1989. Word-initial preconsonants and the history of Kam-Sui resonant initials and tones. in Edmondson, J. A. and David B. Solnit, eds., *Comparative Kadai: linguistic studies beyond Tai.* Summer Institute of Linguistics and University of Texas at Arlington, Arlington.

Thurgood, G. 1989. *Notes on the reconstruction of proto-Kam-Sui.* in Edmondson, J. A. and David B. Solnit, eds., op. cit.