

# THE VELAR ANIMAL PREFIX RELIC IN VIETNAM LANGUAGES

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## 0. Introduction

1. Animal terminology in Sedang
2. Animal terminology in Vietnam languages
3. Sedang animal names with non-final k

## 0. Introduction

Benedict (1972) and Matisoff (1973a.25 (footnote 37), 1973b)<sup>1</sup> have discussed a Tibeto-Burman bound velar animal prefix. It is the purpose of this paper to investigate the possibility that the animal prefix may have been a Southeast Asian areal phenomenon by examining linguistic data from Vietnam. There will be two aspects to this study. Section 1 is an in-depth study of one language, Sedang (a North Bahnaric language of the Mon-Khmer family), to see if a velar component is more frequent in animal names than in the general vocabulary of the language. Section 2 is a look at twenty-one animal terms in 26 different languages of Vietnam to see if there is any evidence for the prefix which such a comparative study might reveal. Section 3 lists all Sedang animal names in which there is a non-final k.

## 1. Animal terminology in Sedang

Many animal names begin with the velar k in Sedang. The possibility that this might be a relic of the hypothesized velar animal prefix is intriguing.<sup>2</sup>

A folk taxonomy of Sedang animals includes 212 different animal names; of these, 68 are modified by a following adjective to discriminate further 283 animals for a total listing of 427 different animals.<sup>3</sup> Among the 212 different animal names 66 (listed in Section 3 below) have a non-final velar k. Such a high proportion of animal names with non-final k, almost 1 in every 3, is what inspires this study from the outset. Only one in every 5 words in the general vocabulary has a non-final k. See Chart 1. This higher incidence of non-final k in animal names will be compared with the over-all Sedang vocabulary in five further ways to see if it is indeed unusual and thus indicative of a now dead k animal prefix. The author's Sedang-English manuscript dictionary is the basis of the general vocabulary counts included here (cf. Smith 1974a, 1974b).

### Comparison 1: Syllabicity

The maximum word in Sedang has two syllables: a main syllable and an optional preceding "presyllable". One would expect that the remains of an animal prefix might be evidenced in part by a higher proportion of bisyllabic animal names among all animal names than the proportion of bisyllabic words in the overall general Sedang vocabulary which has not typically been derived from affixes.<sup>4</sup> The following count shows that animal names do in fact have proportionately more bisyllabic words than does the overall vocabulary. Such bisyllabic words include those with a presyllable kô- (see Comparison 5 below), a medial k, as well as the non-velar consonants.

#### Percentage of words having two syllables:

##### General vocabulary

Presyllable <u>kô-</u>	455	
Presyllable plus medial <u>k</u>	103	
Presyllable plus medial non- <u>k</u>	<u>1356</u>	1914
Proportion:	1914/4768, 40o/o	

##### Animal names

Presyllable <u>kô-</u>	37	
Presyllable plus medial <u>k</u>	8	
Presyllable plus medial non- <u>k</u>	<u>51</u>	96
Proportion:	96/212, 45o/o	

	Animal names	General vocabulary
k-	15	261
kh-	1	64
kl-	5	101
kr-	8	101
kø-	37	455
Total	66	982
Proportion	$\frac{66}{212}$ , 31o/o	$\frac{982}{4768}$ , 21o/o

Chart 1. Incidence of non-final k

## Comparison 2: Initial consonant type

The initial consonant slot of the main syllable in Sedang may be either a single (simple) consonant or a consonant cluster. A relic affix and following consonant could coalesce into a consonant cluster. Thus one would expect that a former animal prefix might be evidenced in part by a higher proportion of consonant clusters in animal names than in the overall Sedang vocabulary. The following count confirms this; animal names have proportionately about 50o/o more consonant clusters than the overall vocabulary has. (Comparisons 2, 3, and 4 pertain only to monosyllabic words.)

Percentage of monosyllabic words having consonant cluster:

General vocabulary	946/2854, 33o/o
Animal names	44/89 , 49o/o

## Comparison 3: Initial single consonants

Among monosyllabic words beginning with single consonants, if the hypothesis were true, one might expect a higher proportion of initial k than other consonants—as the prefix may have suppressed other consonants during word contraction pressures. The following count confirms this; animal names have proportionately almost twice as many initial k's in monosyllabic words than the overall vocabulary has.

Percentage of monosyllabic single-consonant-initial words having initial k:

General vocabulary	158/1910, 8.3o/o
Animal names	7/45 , 15.5o/o

## Comparison 4: Initial consonant clusters

Among monosyllabic words with an initial consonant cluster, one would expect a higher proportion of clusters with cluster head k than other cluster heads (p, t, b, m, etc.) to evidence the animal prefix as consonants were retained during syllable reduction. The following count indicates that this is in fact true in Sedang. There are about 50o/o more k-type consonant clusters in Sedang animal names than throughout the entire Sedang vocabulary. <sup>5</sup>

Percentage of monosyllabic consonant-cluster-initial words having cluster head k:

General vocabulary

<u>kl</u> -	73/946,	8o/o
<u>kr</u> -	75/946,	8o/o
<u>kh</u> -	55/946,	6o/o
Total <u>k</u> -clusters	203/946,	21o/o

Animal names

<u>kl</u> -	5/44,	11o/o
<u>kr</u> -	8/44,	18o/o
<u>kh</u> -	1/44,	2o/o
Total <u>k</u> -clusters	14/44,	32o/o

Comparison 5: Presyllables

Among bisyllabic words it would be expected that the animal prefix would cause a greater proportion of kô-presyllables in animal names than occurs in the overall Sedang vocabulary. The following count indicates that this is so. There are more than 60o/o more kô-presyllables proportionately in animal names than in the general vocabulary.

Percentage of bisyllabic words having kô-:

General vocabulary	455/1914,	24o/o
Animal names	37/96,	39o/o

Conclusion

The above five comparisons show that a former velar animal prefix is retained in some Sedang animal names, evidenced by a k-skewed phonological pattern; namely, in comparison with the overall Sedang vocabulary, animal names have:

- (1) a greater proportion of bisyllabic words,
- (2) a greater proportion of consonant clusters in monosyllabic words,

- (3) a greater proportion of initial k single consonants in monosyllabic words,
- (4) a greater proportion of k-type consonant clusters in monosyllabic words, and
- (5) a greater proportion of kô-presyllables in bisyllabic words.

The prefix, however, is dead, and to determine which k-item is a relic of the prefix and which is only coincidental will require considerable comparative study.

## 2. Animal terminology in Vietnam languages

Twenty-one animal names in 26 languages of Vietnam<sup>6</sup> are compared in Chart 2. These languages represent each of the three principal language stocks found in Vietnam, including Vietnamđông which, with the Mon-Khmer languages, belongs to the Austroasiatic stock.<sup>7</sup> Sixteen languages are Mon-Khmer, representing the North Bahnaric (7), South Bahnaric (6), and Katuic (3) branches. Six languages represent Austronesian and two languages represent Tai.

Of the twenty-one words compared, eight contain features relevant to the discussion.

(a) Word no. 7 'snake': two different etyma are probably included. The Katuic forms each have a k in the presyllable: Brū cusan, Pacōh cuxénh, Katu kasan̄. This Katuic form is unlike anything in any of the other languages except Vietnamese rín and Mông thánh. (Cf. Mid VN trăn, Mod. VN trăn, Chrau Klân 'python', Sedang plán 'boa'.) If perchance the Vietnamđông form has the same origin, the Katuic presyllable possibly reflects an animal prefix.

(b) Word no. 8 'rat': there are five South Bahnaric languages with monosyllabic forms like de, daê, ne, dê, as well as the Tai nu. Throughout the Mon-Khmer languages, however, there is the bisyllabic kône, cunâi, suggesting loss of the affix in one area, but retention in others.

(c) Word no. 9 'rabbit': with cognates apparently in all language groups, the three consonants t-r-p appear to be basic for this word. Sedang and Brū have a velar initial.

(d) Word no. 10 'monkey': Cham kra and Haroi kara, both Austronesian, but no cognates elsewhere.

(e) Word no. 12 'tiger': despite the great diversity of forms<sup>8</sup> among the Mon-Khmer languages the type kla, cula occurs in North Bahnaric and Katuic and the type kliu occurs in South Bahnaric. Mông has khál. One might not associate these because of the considerable vowel difference except that the Tai Nung form slá plus the animal prefix provides a basis for accounting for them.<sup>9</sup>

VIETNAMUONG		MON - KHMER LANGUAGES				NORTH BAHNARIC LANGUAGES			
English	Vietna-mese		Mông	Bahnar		Cua	Halang		Hre
	mese								
1. bird	chim	chim		sem		sèèp	chìm	chìm	chìm
2. dog	chó	chó		kố		so	chô	coq	coq
3. pig	heo	cúi		nhùng		suul	chũr	chùa	chùa
4. chicken	gà	ca		'yér		iil	ier	ia	ia
5. duck	vịt	vịt		bip		ada	hêda	vít	vít
6. fish	cá	cá		ka		ka	ka	ca	ca
7. snake	rắn	thánh		'bih		volh	bèh	bìh	bìh
8. rat	chuột	rẻ		kone		kanê	kone	cani	cani
9. rabbit	thỏ	?		tópai		--	tópai	padóng	padóng
10. monkey	khỉ	?		'dők		talòk	dők	đoc	đoc
11. deer	nai	đai		juéi		jooy	juòi	joi	joi
12. tiger	cọp	khál		kiék		karaq	bố kiê	kiac, buco	kiac, buco
13. buffalo	trâu	tru		képô		kapiiu	képuô	capô	capô
14. cow	bò	?		rêmo		bo	rők	'bo	'bo
15. elephant	voi	voi		rôih		kôt	ruôih	roiñ	roiñ
16. worm	trùn	khun		hêdrông		ók	uok	oac	oac
17. scorpion	bọ cạp	?		--		bô kaap	ya mônguot	pacap, agut	pacap, agut
18. spider	nhện	?		wai		pi rawaay	mắt mềng	vai	vai
19. louse	chí	chí		si		say	chì	chì	chì
20. mosquito	muỗi	mọi		moiñ, sóméch		kajôu	muoiñ	hmech	hmech
21. fly	ruồi	ruôi		roi		rooy	ruoi	rôi	rôi

Chart 2. Twenty-one animal names in 26 languages (--- indicates probable lack of name in language; ? indicates item not on word list).

MON-KHMER LANGUAGES						
NORTH BAHNARIC LANGUAGES			SOUTH BAHNARIC LANGUAGES		LANGUAGES	
English	Jeh	Rengao	Sedang	Chrau Jro	Kôho Chil	Kôho Lach
1. bird	chĩm	chĩm	chẽm	sũm	sẽm	sẽm
2. dog	chou	cho	chó	so	sò	sao
3. pig	chõl	chur	chu	sũr	stũr	sõr
4. chicken	ial	ir	ĩ	iẽr	iãr	iẽr
5. duck	pẽt	hõra	péap	da	ada	õda
6. fish	ka	ka	ká	ca	ka	ka
7. snake	bãyh	bãyh	pah	vĩh	beh	bõs
8. rat	kaneĩ	kõni	kónái	cane	de	daẽ
9. rabbit	tapai	tõpai	kópái	sipai	rõpai	tõrpai
10. monkey	dõk	dõk	to	dõq	mõnõ	dõ
11. deer	juai	jĩl, joy	chói	jun	jun	jun
12. tiger	bu 'mom	kla	klá	yau	kliu, póm	póm
13. buffalo	kapiáu	kópõ	kópõu	gapu	rõpu(h)	rõpu
14. cow	rõk	rõmo	ro	bo	kõnrõ	kõnrõ
15. elephant	ruayh	ruyh	rui	rawẽh	roi h	ruõyh
16. worm	dák tuy	ok	hõdrong	vřn	rãn	tu
17. scorpion	kajĩp	hõgriãng	kõchẽp	siđui	dieng	--
18. spider	pĩng piàng	tũng pẽng	pek pẽng	wål	bung	bõng
19. louse	kachei	chì	chai	si	se	sẽ
20. mosquito	nhẽu nhẽu	jĩrõ, hẽng	tritrõu	moi h	tãl	sõmẽt
21. fly	roi	roi	rõi	rawãy	sõmãc	sõmãc

Chart 2, continued



MON-KHMER LANGUAGES

English	SOUTHERN BARMARIC LANGUAGES			KATUIC LANGUAGES		
	Kôho Sre	Muong	Stieng	Brú	Katu	Pacôh
1. bird	sêm	sîm	chôm	chôm	achim	achêq
2. dog	so	so	pî sô	acho	anuq	acho
3. pig	sur	sûr	sôr	alic	adaak	alic
4. chicken	iar	yyâr	iêr	ntruoi	atôôch	a-ôiq, ntruai
5. duck	ada	kik	da	atia	ada	ata
6. fish	ka	ka	ca	siaq	kadóng	boaiq
7. snake	bôs	bêh	bêh	cusân	kasanh	cuxénh
8. rat	de	ne	dê	cunâi	sóng dong	abîl
9. rabbit	dôrpai	rpay	pî dam sôray	catai	tho	ayôn
10. monkey	dô	dôk	dôôc	tamâr	vook	adôaih
11. deer	jùn	jùn	jùn	yôt	chagaang	cune rông
12. tiger	kliu	yâw	cla	cula	agôôt	r-ai
13. buffalo	rpu	rpu	côrpâ	tariac	tariiq	tiriag
14. cow	kôn-rô	ndrôk	gò	ntroôq	bo	carrôq
15. elephant	roas	rweh	ruôs	achiang	kanpôq	achiang
16. worm	ran	brân	brun	lûi	gôl	tulôl
17. scorpion	diang	ndâr wông	cô-ôp	--	kahip	--
18. spider	bâng	wîl	beeng	apiang	adaang	apiang
19. louse	sai	sî	sî	ntrên	taranh, achai	nehê
20. mosquito	sômac	mác	mos	rayoong	rayong	rayong
21. fly	rhâi	rhway	ruôi	ruai	moih	riroi

Chart 2, continued

A U S T R O N E S I A N   L A N G U A G E S						
	Cham	Chru	Haroi	Jorai	Radê	Rôglai
1. bird	chim	chim	chēm	čim	čim	chip
2. dog	athau	asôw	axau	asáo	asáo	asôu
3. pig	pabui	póbui	paphui	bóbui	ún	un, vavui
4. chicken	mónuk	mñũ	manuq	mónũ	mñũ	manuq
5. duck	ada	ada	phĩt	bip	bip	ada
6. fish	ikan	akán	akán	akan	akan	icát
7. snake	ala	ala	altá	ala	ala	ula
8. rat	takuh	tókũh	chakôh	tókuih	k'kuih	tucuh
9. rabbit	tapai	tôrpây	kapái	pai	pai	tarapai
10. monkey	kra	kra	kara	kra	kra	cra
11. deer	ritha	rôsa	laxa	rôsa	hlô rang	rusa
12. tiger	rimong	kósó	lamũng	rémung	émóng	lumong
13. buffalo	kabao	kabâw	kaphâau	kóbao	kbao	cuvôu
14. cow	limo	lómo	lamo	rómo	émô	lamo
15. elephant	liman	lómán	lamán	kman	éman	luman
16. worm	rining	lónang	lanang	rónang	énang	lanac
17. scorpion	jâng, hadiêng	—	akhuat	guát	aguát	udiac
18. spider	gal-məng	blung	vəai	wang wil	wăk wai	culuma
19. louse	katau	kótôw	katau	ktáo	ktáo	cutôu
20. mosquito	bimók	jómũ	hangan	akeč	kếc, lloh	jamoq
21. fly	rôi	rôway	rôai	ruai	êruoi	ruai

Chart 2, continued

	TAI LANGUAGES	
	English	Nùng      Black Tai
1.	bird	tú nốc      'nốc
2.	dog	tú má      ma
3.	pig	tú mu      mu
4.	chicken	tú cày      cày
5.	duck	tú pét      pét
6.	fish	tú pá      pa
7.	snake	tú ngu      'ngú
8.	rat	tú nu      nu
9.	rabbit	tú thỏ      thỏ
10.	monkey	tú ling      'lính
11.	deer	tú cang      quang
12.	tiger	tú slá      súa
13.	buffalo	tú vai      'quái
14.	cow	tú mò      'ngúa
15.	elephant	tú sáng      'chạng
16.	worm	tú nón nhàng      lôn
17.	scorpion	tú kim pú      —
18.	spider	tú chi hẩu      sítg sac
19.	louse	tú thẩu, mền      hau
20.	mosquito	tú nhung      'nhúng
21.	fly	tú meng ám      'méng 'nguồn

Chart 2, continued

(f) Word no. 13 'buffalo': most of the Bahnaric languages (Proto-North-Bahnaric \*kapò, Smith (1972) word #523) and all of the Austronesian languages have an initial velar. Headley (1973) is unable to determine where the word with the consonants k-r-p comes from; cf. PMP \*kalabaw. Gregerson has informally suggested a derivation of kô- 'animal prefix' plus something like rômo 'cow' (see (g) below) from which subsequent loss of either the k or r and development of a bilabial stop from the nasal would account for all but the Vietnamtông, Katuic, and Tai forms.

(g) Word no. 14 'cow': the Kôho forms kôn-rô are suspicious in light of the other forms in the area which exhibit an initial l/r and/or a subsequent bilabial. The Kôho form may be an animal prefix kô- plus a metathesized bilabial nasal assimilated to the r. Cf. Malay lembu.

(h) Word no. 19 'louse': (1) Jeh kachei is the only bisyllabic form, contrasting with all other Bahnaric and Vietnamtông monosyllabic forms chí/si/chai. The unstressed presyllables in the bisyllabic languages of Vietnam are lost or altered so easily that it is difficult to determine whether this lone bisyllabic form may be a relic of the animal prefix. (2) The Austronesian forms each have an initial k plus t as in ktào/cutôu; the Tai Nung form thâu suggests a correspondence (even the vowel is similar) which lacks only the initial k; cf. PMP \*kutuh.

The above possible instances of a relic k animal prefix are fascinating and merit attention as more data becomes available and comparative studies progress.

Contemporary k-initial forms that have a meaning of 'animal' or 'creature' may also be related to, or be a possible source for, the velar animal prefix. Note:

kon 'child', in Proto-North-Bahnaric (Smith, 1972), as well as in South Bahnaric, Katuic (except Pacoh) languages, Khmer, Vietnamese, Mtông, Pear, Kuy, Mal, Lawa, etc.

khong 'wild beast', in Rengao

Thomas (1969.105) reports that Chrau has a si- presyllable<sup>10</sup> that appears in quite a few animal names but is not recognized by native speakers as an affix: sipai 'rabbit', sima 'porcupine', silêng 'swallow', sidui 'scorpion', sicách 'tick', sicau 'bear', sikway 'mouse deer', sima var 'flying squirrel', simpuq - chappuq 'grasshopper', sipiq 'weasel'.

It has been noted that body parts in the Vietnam Mon-Khmer languages likewise have a high incidence of velars—possibly a fruitful extension of the present topic.

### 3. Sedang animal names with non-final k

#### One syllable names, initial k

1. ká fish<sup>11</sup>; also used with:
    - pah ká type of snake
    - kótám ká type of croc
    - kléang ká fish-eating hawk
  2. kau type of fish; also used with:
    - ket kau type of frog
    - hléang kau type of bee
  3. ket frog<sup>12</sup>
  4. kei mountain goat
  5. keô type of bird
  6. koa turtle<sup>13</sup>; also used with:
    - ket kon type of frog
  7. kón spider monkey; also used with:
    - pek peng kón tarantula
- Cf. kiki, kiki below.

#### One syllable names, initial kl

8. klá tiger<sup>14</sup>; also used with:
  - klá rôl large housefly
9. klái type of squirrel; also used with:
  - kóchiak klái small fox
10. kléang eagles and hawks<sup>15</sup>
11. klián type of leech
12. xi kliu small blue grasshopper

#### One syllable names, initial kh

13. khia tea small winged creature

#### One syllable names, initial kr

14. krei chipmunk
15. krei type of grasshopper
16. krek kreng long-beaked bird

17. kreng mouse deer  
 18. krot type of snail  
 19. krŭ wild cow  
 20. krŭ vulture  
 21. krua type of cricket

Cf. kukreh below.

Two syllable names, initial presyllable kô-

22. kôbôu blue bird  
 23. kôché very small rat  
 24. kôchep centipede<sup>16</sup>  
 25. kôchiak fox  
 26. kôdí small bird with black legs  
 27. kôdéa type of worm  
 28. kôdí type of ant  
 29. kôdie type of eel  
 30. kôdrua honey bee<sup>17</sup>  
 31. kô'dú small flying squirrel  
 32. kô-èak type of tumblebug  
 33. kôjián cricket  
 34. kiki tick  
 35. kiki shell-less snail; also used with  
                     ket kiki type of frog  
 36. kukreh red moth  
 37. kôlea summer fly<sup>18</sup>  
 38. kôlit type of big bird  
 39. kôlit fly-like insect  
 40. kôméa Hoopoe  
 41. kômú termite  
 42. kômua type of termite  
 43. kônái rat<sup>19</sup>  
 44. kônau type of worm  
 45. kônot small rat  
 46. kôpái rabbit  
 47. kôpáu snail  
 48. kôpé small buffalo

- 49. kôpou            water buffalo
- 50. kôtéam        crab<sup>20</sup>
- 51. kôtei          gray bird
- 52. kôte phái     small winged creature
- 53. kôton          bat
- 54. kôtóu          type of porcupine
- 55. kôxiáng tea   type of small lizard
- 56. kôxôi          squirrel
- 57. kôxôm          type of small lizard<sup>21</sup>
- 58. kôxông        small 4-legged jungle animal

Two syllable names, medial k

- 59. rôkái          wild pig, boar<sup>22</sup>
- 60. rôkeh          type of eel
- 61. rôkie          small cockatoo
- 62. rôkôu         bear<sup>23</sup>
- 63. tôkai          large red and black tick
- 64. tôkén          large red ant
- 65. tôko          type of winged ant
- 66. tôkua          chameleon

## FOOTNOTES

- <sup>1</sup>The inspiration for this paper came from Professor Matisoff during his course "Southeast Asia as a Linguistic Area", 1973 LSA Linguistic Institute at the University of Michigan. The Matisoff (1973a) reference refers to his talk at the First International Conference on Austroasiatic Linguistics, Honolulu, January 1973, in which he discussed the probable Mon-Khmer source for the velar "animal prefix" in Lolo-Burmese.
- <sup>2</sup>Another statistical study of Sedang phonology, Smith (1969a), shows that Sedang personal names have a unique phonemic distribution system.
- <sup>3</sup>The long list of animal names was obtained from two Sedang men, Hmôu and Bé, who ordered all the terms into a folk-taxonomy of animals.
- <sup>4</sup>There is a minor kô- affix in Sedang that occurs in loan words from Vietnamese and probably deriving from the Vietnamese classifier cái for things. These occur with objects, not animals. Cf. Smith (1969b.126-7).
- <sup>5</sup>The low incidence of kh in animal names does not detract from, but rather supports the animal prefix hypothesis, inasmuch as comparative studies show that kh never comes from a \*ka- plus \*h; whereas \*ka- plus \*l/r sometimes becomes Sedang kl/kr (Smith, 1972).
- <sup>6</sup>The data is taken from word lists mimeographed by the Summer Institute of Linguistics, Vietnam Branch. Though each is an identical list of 281 words, only 21 of the words are animal names. These animal names are word numbers 43, 52-65, 67-72 on the word lists. The Mông data, which is not mimeographed and has a different set of words, was supplied by David Thomas. Different spelling conventions have not been standardized here.
- <sup>7</sup>For this paper I consider the Austronesian and Tai as separate language stocks.
- <sup>8</sup>As the great master of the Southeast Asian jungles, the tiger is sometimes given honorific names as 'grandfather', 'ghost', etc. Cf. Bahnar, Jeh.
- <sup>9</sup>Furthermore, note (k-)la Burmese-Lolo (Benedict, 1972). This word has very far reaching roots.
- <sup>10</sup>Thomas (1969) gives the presyllable as sa-, but more recently David Thomas has cited it for me as si-.



- <sup>11</sup>Cf. Smith (1972), word #540 Proto-North-Bahnaric \*ka.
- <sup>12</sup>Cf. word #205 PNB \*kít, op. cit.
- <sup>13</sup>Cf. word #202 PNB \*kop, op. cit.
- <sup>14</sup>Cf. word #546 PNB \*kla, op. cit.; also see Section 2(e) here.
- <sup>15</sup>Cf. word #156 PNB \*klang, op. cit.; also cf. lan Tibeto-Burman 'eagle, falcon, hawk', Benedict (1972).
- <sup>16</sup>Cf. word #184 PNB \*gaqjip and Proto-Jeh-Halang \*gajip. The voiced initial g presumably precludes this as an animal prefixed word, although note Chrau (South Bahnaric) ca-áp.
- <sup>17</sup>Cf. word #236 PNB \*gadrot and Proto-Jeh-Halang \*gadrot. The voiced initial g presumably precludes this as an animal prefixed word, although note Chrau (South Bahnaric) candrot.
- <sup>18</sup>Cf. word #196 PNB \*kalap, op. cit.
- <sup>19</sup>Cf. word #527 PNB \*kane, op. cit.
- <sup>20</sup>Cf. word #41 PNB \*katam, op. cit.
- <sup>21</sup>Cf. word #20 PNB \*kasóm, op. cit.
- <sup>22</sup>Cf. word #532 PNB \*sake, op. cit.
- <sup>23</sup>Cf. Headley (1973), section 1.6, Austroasiatic origin: all forms except Vietnamese gấu having the velar element as the second of two consonants.

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