

A Kri-Mol (Vietic) Bestiary:
Prolegomena to the Study of Ethnozoology in the Northern Annamites

James R. Chamberlain

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Ethnozoology in the Northern Annamites

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I have not through idleness omitted anything that I have learnt, as though animals, void of reason and of speech, were beneath my notice and to be despised, but here as elsewhere I have been fired by that love of knowledge which in me is inherent and innate. I am well aware that among those who keep a sharp look-out for money, or who are keen in the pursuit of honors and influence and all that brings reputation, there are some who will blame me for devoting my leisure to these studies, when I might have given myself airs and appeared in palaces and attained to considerable wealth. I however occupy myself with foxes and lizards and beetles and snakes and lions, with the habits of the leopard, the affectionate nature of the stork, the melodiousness of the nightengale, the sagacity of the elephant, and the shapes of fishes and the migrations of cranes and the various species of serpents, and so on – everything which in this account of mine has been carefully got together and observed.

- Κλαύδιος Αἰλιανός, *Περὶ Ζώων Ἰδιότητος*
Aelian (175-235 AD), *On the Nature of Animals*

FOREWORD

A bestiary, also known as a *bestiarum vocabulum*, is often defined as a “compendium of beasts.” Usually associated with ancient Greece or medieval Europe, they often took the form of treatises on natural history, illustrated volumes containing names and descriptions of animals with such information or lore as was available at the time, either scientific, mythological, or imaginary. An epimythium or religious meaning might be attached as well.

For the majority of animals included here, our understanding of their role in the cognitive systems of the Kri-Mol peoples is not complete to the degree that would merit the title of ‘bestiary.’ Still I have labeled it as such with the hope that it might be considered a beginning or a first step towards a more robust compendium. And I encourage the reader to think of it in this light and add to it his or her own thoughts and feelings or additional data that might be relevant.

This work is necessarily a hodge-podge of various kinds of incomplete information. Hopefully when studies carried out, especially by Vietnamese and Lao researchers are forthcoming or more accessible, this knowledge will grow.

Cover:

With respect to the illustration on the cover. I came across this odd image while searching for royalty-free photos and it immediately reminded me of what a Liha man said, that rhinos have powerful spirits attached to them, and these must be ritually appeased before the animal can be hunted. The rhino in the illustration is in fact the Sumatran variety, readily identifiable by its two horns, reddish coloration, and long hair. This is one of the rhinos that inhabited the Kri-Mol speaking area until recently. The last tracks of which we are aware were seen by a Toum man in 1967. Why the advertisers chose this poor creature is a mystery, but it well depicts the “spirits” attached to the rhino, we may imagine, powerful Chicago spirits no less, “fine spirits” as attested in the image. Spirits like these would no doubt be difficult to appease, so I for one am happy to let this rhino go on its way unhunted, together with its carefree burden.

James R. Chamberlain
Vientiane, April 2018

PREFACE

The bulk of linguistic and ethnozoological detail provided in this volume was collected by the author between 1995 and 1997 while working on socio-cultural background studies for the Nam Theun 2 hydroelectric project. Visits to places where local people spoke Kri-Mol languages were necessarily brief, often only a few hours in any one location. For some remote areas access was by helicopter. The work was carried out under two contracts, the first from late 1995 to early 1996 was under CARE International, and the second in 1997 under IUCN. The territory included the District of Khamkeut in Borikhamxay Province (since broken up into three smaller districts), Nakai District, and small portions of Boualapha and Gnommarath Districts. The latter three belong to the province of Khammouane.

Until that time, little was known about this territory. Many of the groups had never been recorded, their names completely new to the outside world. And some such as the Atop, Atel, Thémarou, Mlengbrou and Cheut were true hunter-gatherers who had been rounded up from the forests and resettled on the outskirts of villages belonging to various more sedentary ethnicities. Others were peoples who resided in semi-permanent villages practicing rudimentary swidden cultivation, and who often played the role of middle-men between the hunter-gatherers and the outside world. Still others, had more permanent settlements, and in some cases had developed permanent paddies as well as swiddens.

All of these belong to what we are now calling the Kri-Mol branch of Austroasiatic. There is indeed a kind of continuum of cultural types within this branch, ranging from the urban Vietnamese through rural paddy cultivators, to mixed paddy and swidden cultivators, wholly swidden cultivators, emergent swidden cultivators, hunter-gatherers with cross-bows and hunter-gatherers without crossbows. I would caution that these types should not be construed as evolutionary stages, though to the Marxist thinking of the Lao and Vietnamese governments they are thought of as such. Hunter-gatherers especially are looked down upon more as retrograde *lumpen* cultures and these peoples have suffered much as a direct result of this thinking.

Thus it is not surprising that many scholars who have have either directly or indirectly followed the Marxian academic path, have neglected or ignored the (primitive) linguistic diversity further south in order to associate Vietnamese with the bronze age cultures of Phùng Nguyên, Đông Sơn and the quasi-mythical Văn Lang, implying Vietnamese descent from the “high civilizations” of the Red River basin rather than the more humble hunter-gatherers of the Annamite rainforests. However, as presented here, the rich faunal lexicon of the Kri-Mol groups to the south contradicts the bronze age civilizational narrative and places Proto-Kri-Mol squarely in the upland evergreen forests of the Nakai Plateau at a time when there was no agriculture, and no domestic animals except for the dog.

As for the true hunter-gatherers in Laos today, their way of life is mostly gone, the surviving groups having been rounded up and forced to reside in or near the villages of other ethnic groups, where they are slowly wasting away. As of 2004 the Mlengbrou, former inhabitants of the Nam One river basin, consisted of only twelve speakers. It is a sad tale and I can only lament the layers of ignorance and insanity that have led to this condition.

ACKNOWLEDGEMENTS

I would like to thank the individuals who offered me the opportunity to first carry out fieldwork on the Nakai plateau and nearby areas. Firstly Mike Carroll who was at the time director of CARE International which was under contract to the lead investment company for the Nam Theun 2 Hydropower project. That initial research took place in 1995 and 1996. The following year 1997, Stuart Chape, the director of IUCN in Laos allowed myself and several others the opportunity to work exclusively in the Nakai-Nam Theun Protected Area. Although Stuart and I disagreed rather strongly in the end over such matters as the role of humans in ecosystems, I owe to him as well as to Mike a large debt of gratitude for the chance to work in this amazing realm of ethnic and biological diversity.

Another individual who has been hugely supportive of this effort, himself an ardent devotee of our science of zoonomy, is Gérard Diffloth, the world's reigning expert on Austroasiatic languages. Our interests meshed in 1976 when Gérard was at Chicago and I at Michigan. My focus at the time was Tai (ethno-) zoology, and Gérard had just given a paper on Aslian (Semai) "names and by-names." I believe that was in 1976, long before I had ventured into the realm of Austrosiatic.

Thanks also go to Nathan Badenoch for his support over the years, and for his sharing of recent fieldwork with Palaungic and Pramic branches of Austroasiatic.

Finally, I would like to mention Professor Norihiko Hayashi of Kobe University who generously supported a "Workshop on Faunal Lexicon in Mainland Southeast Asia," in January of 2018, under the auspices of Kobe Gakkoentoshi Unity. The members of this workshop included Nathan Badenoch (Pramic), Weera Ostapirat (Austro-Tai), Gérard Diffloth (Austrosiatic etymologies), Toshiki Osada (Munda), Aung Si (Ethnozology), Masaaki Shimizu (Vietnamese), Atsuhiko Kato (Karen), Yasuhisa Taguchi (Hmong-Mien), and numerous other specialists in various language families. The rudiments of the present volume were offered there and I have benefitted much from interactions with all participants. At the workshop, Professor Hayashi himself examined the animal lexicon of Saek.

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PROLOGUE

Vieto-Katuic Revised

Readers are hopefully curious as to how the term Kri-Mol came into being, hence this section provides rationale for classifying the Vieto-Katuic Branch of Austroasiatic.¹ The proposal consists mainly of replacing the former sub-branch name of Vietic which has become the source of considerable ambiguity, especially among non-linguists where it is often confused with Việt-Mường or even Vietnamese.

The adopted term **Kri-Mol**, or **Kri-Molic** captures the earliest essential bifurcation between **Mol-Toum** (Cheut, Toum-Phong, and Việt-Mường) on the one hand, and **Nrong-Theun** (Mlengbrou, Kri-Phoong, Thémadou, Atel-Maleng, and Ahoe-Ahlao) on the other. **Mol** is an autonym used by the Mường, pronounced *mɔl* or *mɔu*. (Use of *Mol* also eliminates confusion with the Tai speaking Mường in Nghệ An.) **Kri** is used as a proxy to represent the five subgroups which are spoken mostly to the west of the Cordillera in Laos.

Additionally, some new languages are brought to light and the renaming ensures inclusion of all related subgroups, thereby emphasizing their importance to historical linguistics. These include Atel, Atop, Makang, Arao, and Thémadou, all spoken on the Nakai Plateau on the western side of the Annamite Cordillera.

In the past such languages, that exhibit the highest degree of diversity within the branch, have been referred to by somewhat demeaning terms such as “outer” or “minor,” when in fact we should be considering the linguistic systems on their own merits absent extraneous labels. Hopefully this will provide a more scientific objective linguistic frame in which to place all of the various languages. The system also refocuses research more toward reconstruction within the Kri-Mol sub-branch emphasizing that Sino-centric influences are only relevant to a small portion of the branch as a whole.²

In the proposed system, **Mol-Toum** consists of Việt-Mường plus Toum-Ruc. Then **Nrong-Theun** splits into Ahlao-Atel in the north, and Kri-Phoong in the south. Ahlao-Atel divides further into Ahoe-Ahlao and Atel-Maleng. The term Nrong-Theun is derived from the names of rivers, the Theun being the main one. Nrong, a tributary of the Theun, is phonemically /prɔːŋ/ (called the Nam Noy in Lao) and Theun is phonemically /thɜːn/. The Theun flows from south to north, the river name changing to Kading about two-thirds of the way before emptying into the Mekong. ‘Theun’ is the old French spelling and is retained as it is used universally on maps and in the literature. Ahoe /ʔăhɜː/ is also spelled Aheu, but is used here to reflect more recent extensive

¹ This revision addresses the Vieto- side of the branch. For discussions of the whole branch see Diffloth (1991) and, Alves (2005).

² Two papers by Michele Ferlus have addressed issues looking at the “Việt-Mường” [Kri-Mol] languages as a group. Ferlus has worked on many of the languages mentioned though his interpretation of the relationships differs considerably from the one offered here, without providing a phylogenetic classification. Likewise, his insistence on looking to the north and Khmuic for the broader connection is at odds with the analyses of Diffloth and Alves. See Ferlus (1990 and 1996).

usage in Laos.³ Ahlao and Ahao are two varieties of what has been called Thaveung, a place name for a single village (Tha Veng), not an autonym.

Looking at the languages on the Vietnamese side of the Cordillera, in addition to Mường (and of course Vietnamese), Nguyễn Văn Tài's excellent "Mường" dialect study of some 90 locations includes also the Kri-Mol languages of Nghệ An and Quảng Bình. Unfortunately the non-Mường languages, points 71-90, are not included in the published version (except number 84 Cồ Liêm, a Nguồn dialect, number 30 in the published volume).

Nghệ An (Toum-Phong)

Con Cuông District: Đan Lai, Li Hà.

Tương Dương District: Hung, Không Không, Uý Lô, Poọng, Con Kha.

Quảng Bình (Cheut and Arem)

Minh Hoá District: Mây, Rục (A), Rục (B), Sách, Mã Liềng, Bãi Dinh, Tắc Cùi. And the Nguồn dialects of Cồ Liêm, Bốc Thọ, Đà Nẵng, Tân Li and Nguồn proper.

Bố Trạch District: A Rem

(On the Lao side Nguồn is spoken in the district seat of Pak Panang in **Boualapa District, Khammouane Province**.)

Arem in Ferlus (2013) has the alternative name of *Chmbrau* or *Chmrau*. It is unclear, but although this is often treated as a single language, Ferlus points out that the language seems to be a mixture of dialects and influences from other languages, a situation no doubt arising from forced relocations of these peoples in the past.

As will be seen, the greatest degree of language diversity within Kri-Mol lies on the Lao side of the Annamite Cordillera (known as *Sai Phou Louang* in Lao), a fact that needs to be emphasized when discussing the homeland.

The languages on the tree below marked in red font are spoken by hunter-gatherer peoples. This cultural type occurs in every subgroup except for Việt-Mường. Though hunter-gatherers are absent today in Ahoe-Ahlao, the extinct *Tong Leuang* language(s) of the Nam Gnouang mentioned by Grossin (1933) are thought to have belonged to this subgroup as they are geographically closest (Chamberlain 2014).

Note that the hunter-gatherer groups are called *Arem* by the Brou on both sides of the border, equivalent to *Salang* (saa < PKD *khraa C + laang) or *Tong Leuang* in Tai and Lao. No doubt the term used for the Kri-Mol groups in Nghệ An, *Nhà Làng* (Cuisinier

³ That is, *-oe-* is now the preferred romanized form for */ɤ-/* and *-eu-* is */u-/*. This is done to avoid the confusion of *-eu-* /ɤ/ and *-u-* /u/ in the French system. However, in other romanizations the French spelling is preferable: *-ay* for */ay/*, *-ai* for */aay/*, *au* for */aw/*, *ao* for */aaw/*, *ou* for */u/* etc.

1948), is of the same origin. Ostensibly the term was used to distinguish them from Tai speakers, also called “Mường” in Nghệ An province.

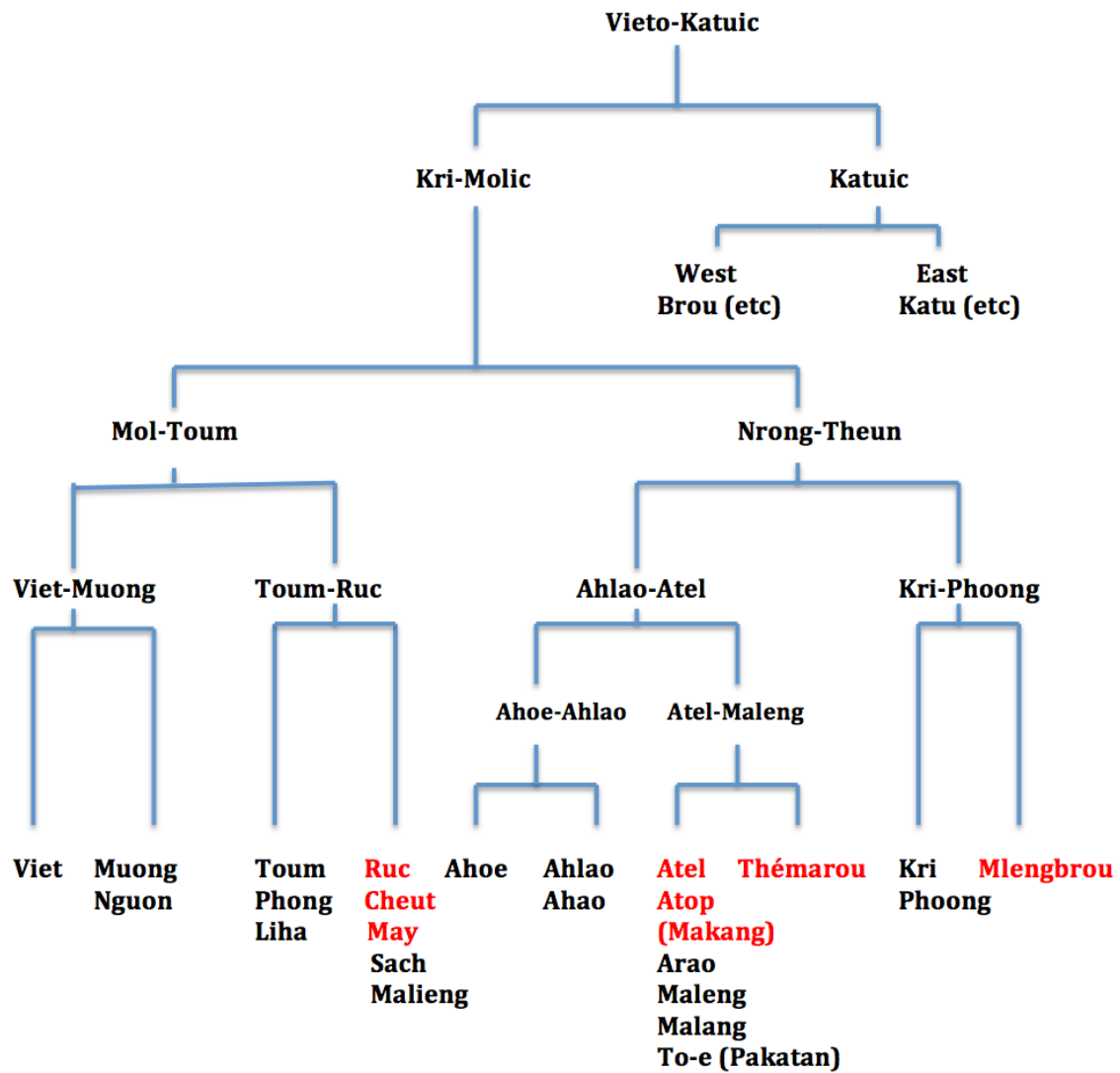
Based on the faunal evidence (and the lack of etyma for synanthropic or commensal species) it can be suggested that Proto-Kri-Mol peoples were hunter-gatherers inhabiting the hinterland forests of the Annamites in present-day north-central Laos and Vietnam, specifically in the vicinity of the provinces of Nghệ An, Hà Tĩnh, Borikhamxay, Khammouane, and Quảng Bình.

The main divisions of Kri-Mol have their greatest diversity here. The division referred to as Việt-Mường begins in the far south with Nguồn, actually a displaced dialect of Mường Cadière (1905), in the vicinity of the Mụ Giạ pass, on both sides of the Lao-Việt border. Mường proper begins in northern Nghệ An and includes Thanh Hoá and Hoà-Bình with a slight spillover into Houa Phan province in Laos.

Vietnamese is in reality Sino-Vietnamese (there is no non-Sino variety), originally a coastal creole, with huge numbers of Sinitic vocabulary, 70 percent of the lexicon according to Phan (2010), though with core vocabulary that is essentially Austroasiatic. The next most closely related subgroups are Cheut (Rục, Mày, Mã Liềng, and Sách) also in the south adjacent to Nguồn, and Toum-Phong (Liha, Phong, Toum) further to the north in Khamkeut District in Laos, Hà Tĩnh and Nghệ An in Vietnam. The remaining five subgroups, Ahoe-Ahlao, Atel-Maleng, Thémadou, Kri-Phong, and Mlengbrou are all found on the Nakai Plateau and adjacent river basins slightly to the north. These five groups are more conservative in their phonology and retain a number of faunal terms not found elsewhere in Austroasiatic, a kind of Formosa (by analogy to Austronesian) for the Kri-Mol Branch of Austroasiatic, isolated biophysically by the Ak Escarpment rather than by the South China Sea.

The preliminary basis for the subgrouping is cognation within the zoological lexical domain. This approach is not unlike the original classification of Tai by Fang-Kuei Li (1959) that has mostly stood the test of time, especially the distinctness of the northern branch. But unlike Tai, no one has carried out a complete phonological reconstruction at the level of Proto-Kri-Mol, and when such is addressed, it almost always refers to an ambiguous Proto Việt-Mường plus Cheut and perhaps including Toum-Phong. That is, the left side or Toum- Rục sub-branch of Kri-Mol on the phylogenetic tree. And it should be emphasized that although our classification here is based upon the faunal lexicon it does seem at first glance to support a comparative phonological approach as well. But until more analyses are available, it is argued that because faunal lexicon is something very close to human life and livelihood in and around forests, it is thus of great comparative value, at the pinnacle of a hierarchy of semantic domains if you will. So for the time being it is convenient to assume the validity of this schema.⁴

⁴ The faunal corpus used here contains 173 species (38 mammals, 42 arthropods, 65 birds, 18 herptiles, and 10 domestic animals). This is only the tip of the iceberg, so to speak, and much additional fieldwork remains to be carried out.



Revised Vieto-Katuic and Kri-Mol Phylogenetic Tree

With respect to the point regarding hierarchies of semantic fields, it has been shown elsewhere⁵ that animals outrank plants in the biotic realm, and this seems to be common in other languages as well. In Rorschak tests carried out by Huzioka (1962) in northern Thailand some 60.5 percent of the responses identified the abstract shapes as animals or animal body parts, compared to 11.6 percent for plants. The remainder were associated with humans or religious objects. It was also found (in Tai languages and in English) that whereas many dozens of plants are named after animals, almost no animals are named after plants except in the most unusual or artificial scientific contexts, and even these are few.

⁵ Chamberlain 1977.

Examples of main divisions in faunal lexicon

The tables below illustrate the basis for divisions between the various subgroups. Most of this data was recorded by the author between 1995 and 1997.¹ The Mường forms are from Nguyễn Văn Tài's dialect study (2004); the Rục data from the work of Nguyễn Văn Lợi (1993).

To begin with, it should be pointed out that some forms have good cognates throughout the branch and can be reconstructed in Proto-Austriasiatic. These include:

	Mol-Toum			Nrong-Theun		
	Việt-Mường	Toum-Ruc	Cheut	Ahoe-Ahlao	Atel-Maleng	Kri-Phong
osprey	tráng	klaʔaŋ	-	kala:ŋ	ka:lə:ŋ	kălə:ŋ
dove	bồ câu ^(v)	kow kow	bò kău ^R	păku: (Ahhoe)	păco:	tăko:
bear	gấu	kəw	căkɯ:	căku:	săkɯ:	căku:
dhole	sói	kləl	klon	kălə:l	ʔalɔər	kla:r, klər
python	klaŋ ² , tlaŋ ²	klən	lyənʔ	tălen	tălan	klaŋ

*Unless otherwise indicated, the sample languages are: Việt-Mường (Mường), Toum-Ruc (Toum), Ahoe-Ahlao (Ahao), Atel-Maleng (Atel), Kri-Phong (Kri). Cheut has been included for comparative purposes, to demonstrate its place within Toum-Ruc, despite its location being very far to the south.²

For example:³

Osprey	PMK *k(a)laaŋ
Bear	PMK *cg__w ‘bear – both species’
Dhole	AA *klɔ:rʔ

Elsewhere the Mol-Toum subgroup possesses many etyma well-attested in Proto-AA, but the Nrong-Theun subgroups have other forms, some not found elsewhere in AA.

¹ Because of time limitations during the collection period, phonologies of the various languages have not been properly analyzed and thus a degree of impressionism remains until analysis of the tapes is completed.

² Abbreviations: Ahoe=Ahoe, Ah=Ahao, Ahl=Ahlao, Cheut=Ch, Kr=Kri, Lh=Liha, Ml=Maleng, Mlengbrou=Mb, Mường, P=Phong, Ph=Phong (Khamkeut), Ruc=Ruc, T=Toum, TE=To-e (Pakatan), Thémarou=Thé, Việt=Vietnamese.

³ Reconstructions are from Gérard Diffloth. 1980. *Etymological Dictionary of Mon-Khmer: Part I Fauna*. (unpublished ms.); and personal communication.

	Mol-Toum			Nrong-Theun		
	Việt-Mường	Toum-Ruc	Cheut	Ahoe-Ahlao	Atel-Maleng	Kri-Phoong
snake	sap	siʔŋ	pɤsɿŋʔ	luk	kope: kobwat Té	ʃǎja:r
bird	cim	tuu ci:m	ncim	ʔaca:ŋ (Ah) ʔcoy (Ahl)	ʔouʔ	ʔooʔ
elephant	βoŋ ~ vɔŋ	vɔ:ŋ	ʔacean	ʔo:ŋ (Ah)	ʔjuw:ʔ	jɤ:
porcupine <i>H.</i>	nim	kǎni:m (Ph)	kǎnuŋ	ji:	gʷi:	keɾ
rat	chuət	nɛ:ʔ	kunê ¹	ʔe:k	ʔe:k	lɤk
muntjac	mang (V)	cɔ:ŋ	tuba:ŋ	ʔakʌ:j (Ah)	thrɛw	pojɥ
grasshopper	co co	bok ba:j	couʔ	ɲɤh (Ahoe)	ɲoɿʃ	ɲoɿɥ

For example:

Snake	PMK *k-m-sap
Bird	PMK *(k-)ceem
Elephant	PMK *kyaan, AA * kəcya:ŋʔ
Rat	PMK *kn(iə)ʔ

In a number of instances, cognates exist in all of the subgroups except Việt-Mường, as in the following:

	Mol-Toum			Nrong-Theun		
	Việt-Mường	Toum-Ruc	Cheut	Ahoe-Ahlao	Atel-Maleng	Kri-Phoong
tick	đánh dấu (v)	pɛet	-	kǎpɛ:t	kǎpɛet	kǎpɛet
centipede	thet ³ , set ³	lip si:p	kasip ³ _R	kǎfɿ:p	kǎfɿ:p	kǎfɿ:p
frog	ek ^{3,5} , ec ³	kaut	kuət	ku:t	kuat	kɔt
gaur	bò tốt	ɲu:l	(ciəluu)	ʃǎɲu:l	ʃǎɲo:r	ʃaɲaor
serow ⁹	duong (V)	kɛ:ʔ _{Lh}	keh	kaɛh	kɛh	kɛh

On the Nrong-Theun side of the tree, differences in faunal lexicon mark the division between the Ahlao-Atel and Kri-Phoong sub-groups, as illustrated in the examples shown here.

⁹ The only Mường form recorded is from Houa Phan/ /kɛk/. Nathan Badenoch p.c. This indicates that Vietnamese borrowed directly from Tai, not from a Mường intermediary. Another instance of this is ‘hog badger’, Vietnamese lừng (<Tai), Mường /poŋ⁵⁵ law^{ʔ31}/ (Houa Phan).

Nrong-Theun						
	Ahoë-Ahlao				Kri-Phoong	
	Ahoë-Ahlao		Atel-Maleng		Kri	Phoong
	Ahoë	Ahao	Atel	Maleng		
porcupine <i>H.</i>	jɿ	jɿ	jɿ:	g ^y i:	keɾ	keer
porcupine <i>A.</i>	ntel	ɲe:k	ɲɛ:k	ɲɛ:k	co:kɯt ^h	skuut
ferret badger	la: ʃuay	-	ʔa:ʃuay ^{TE}	ʔa:ʃo:y ^{Thé}	kafan su:m	tāsūm
water lizard	kāya:ŋ	kāya:ŋ	kāyaon	kāyaŋ	tākɔ:yʔ	tāko:y
physignathus						
gibbon	kajak	jo:k	jauk ^h	jɔ:k	kwəŋ	kwəŋ
fruit bat	-	-	sɲat ^h	săpat ^{Thé}	yayɛŋ	yun yɛl ^{Mb}
rat	-	-	ʔe:k	ʔe:k	lɤk	lɤk
rufous-neck	-	-	ʃtɤk	stɤk	căbo	căbo:ʔ ^{Mb}
hornbill						
crab	-	-	kăpɛ:	kăpi:	kăta:m	kăta:m

These represent the main divisions. In keeping with the spirit of the working papers series, I hope this proposal will at the very least stimulate debate and provide the basis for additional dialogue on the linguistic reconstruction of this very important and crucial branch of Austroasiatic. If nothing else, a frame now exists into which additional data from the field may be fitted, or compared.

PART ONE – TO BEGIN WITH ...

Whence Vietnamese

The Vietnamese language can be regarded as a creole that evolved from the interaction of Chinese with Kri-Molic people(s). As Phan (2010) notes, this would have taken place in the context of commanderies established by Chinese colonists. We do need to be more specific as to the locations and the nature of the relationships that could have existed beginning in the Han dynasty (206 BC–220 AD). Given the origins of Kri-Mol far south of the commandery of Jiaozhi (=Giao Chỉ) in the delta of the Red River, populated locally by Klao, Li, and Tai, it is plausible to suggest that the creolization took place first in the southern settlements, namely:

Jiuzhen	= Cửu Chân	(Mã River)	[Thanh Hoá]
Huai Huan	= Hoài Hoan	(Cả River)	[Nghệ An]
Jiude	= Cửu Đức	(Cửa Sốt River)	[Hà Tĩnh]
Jihnan	= Nhật Nam	(Gianh River)	[Quảng Bình]

The Kri-Mol languages on the eastern side of the Cordillera belong to the Mol-Toum sub-group, that is, Viet-Muang and Toum-Ruc, and we may postulate that the ancestors of these peoples interacted first with the colonists. We might also suggest that given a south to north movement, the southernmost dialects were the source of the earliest creoles that eventually became Vietnamese. It is quite clear from the lexical evidence that these subgroups are closer to Viet-Muong than either Atel-Ahlao or Kri-Phoong.

As to the nature of the relationships between the colonists and the local Kri-Mol people, there are a number of relevant factors, most of which are not clearly understood. It can be hypothesized that the interactions were largely asymmetrical, as relationships between authoritarian states and forest people are today. But a certain level of symbiosis would have existed since colonists would have need of labor sources, both skilled and unskilled. At the same time we read from the histories of colonial ethnocentrism and concern with “civilizing the natives.” It also must have been the case that the Chinese themselves were not a linguistically homogenous group, as the locations of the commanderies were some distance from one another, and over long periods of time – perhaps a thousand years prior to the establishing of Đại Cồ Việt – would have developed more or less separate creoles of Chinese and Kri-Mol in each spot. Influxes of immigrants would have continued to arrive at different periods bringing with them new words and associations. On the Kri-Mol side, given the diversity of cultural types in the Vieto-Katuic branch today, there is no reason to doubt that a similar range existed during the period of colonization. Even today, the Vietnamese dialects spoken in the Central region are highly diverse and distinct from the more homogenous varieties of Hanoi or Saigon, an indication that Central and North Central regions were points of origin.

That Kri-Mol and the Chinese lived in separate universes, however, goes without saying, and needs to be taken into account in any description of the creolization process and how it came to pass.

Essences of the Kri-Mol Universe: The Liha Myth of the Dhole and the Crow

Most people died, but there was one old man who had lived 300 years and still had not died. So they [the ones who died] went up to the Mphloey [the chief heavenly spirit] and complained that they were always dying whereas there was an old man who had lived 300 years and was still alive.

So he [the Mphloey] sent three children down to inquire after the old man. They went and found him fishing.

“Hey, old man, have you ever seen stones float upwards?”

“Ohhhh..., you youngsters, I am more than 100 years old and still haven’t seen this.”

“Are you the one who is 300 years old?”

“Yes, that’s me.”

“Then, come with us.”

“I must take my dog and chicken home first.”

“[No] we go now.”

“What will my dog and chicken do?”

“Then you tell us what to do.”



“Alright then, no one must destroy my dog and chicken. Whoever shoots and hits [the dog and chicken] will get impetigo; whoever shoots and misses will have their flesh rot.

Do not shoot them, do not hit them. Let them go.”

“Then now you come with us.”

So they took him away. He did not return home. For this reason the dhole and the crow cannot be killed or eaten.

The old man’s admonition is given in the form of a rhyme using the Phou Thay language: */ niŋ thuuk leew pen hit , niŋ phit leew pen puay /*. In an earlier recitation by the same informant, the leg was specified:

*if you shoot, shoot the leg,
if you hit, may you get impetigo,
if you miss, may your flesh rot.*

* For interpretation of this myth see the Appendix.

CHAPTER 1 - THE TERRITORY AND ITS INHABITANTS

People

Vieto-Katuic is the name proposed by Gérard Diffloth (1991) to denote the higher order relationship between the two branches of Austroasiatic, Katuic and Kri-Mol (Vietic). The Katuic branch includes languages spoken in Khammouane, Savannakhet, Saravanh, Champasak, northeastern Thailand, central Vietnam, and northern and eastern Cambodia. Kri-Mol speakers are found in Borikhamxay and Khammouane in Laos, and (excluding for the moment Mường and Vietnamese) Nghệ An, Hà Tĩnh and Quảng Bình in Vietnam.

Whereas the Annamite Cordillera serves as a watershed divide, it has not been a barrier to human movement. Kri-Mol peoples, the earliest inhabitants of the Nam Theun basin so far as has been detectable, are found on both sides of the chain. Their considerable diversity as measured by language, attests to the age of their habitation. The location strongly suggests that this was the homeland of proto-Kri-Mol. From here, Kri-Mol peoples moved northward into the present-day provinces of Nghệ An and Thanh-Hoá, the ancestors of Mường who form a more homogenous group all the way to Hòa Bình and adjacent areas (see map below) . The Mường have been well-described by Cuisinier (1948), but their closest relative, the Nguồn are found far to the south in Boualapha District and adjacent Quảng Bình near the corridor that links Nakai-Nam Theun and Hin Nam No National Protected Areas. According to Cadière the Nguồn are descendants of Mường soldiers sent from Thanh Hoá in the 17th century to quell local unrest in Quảng Bình, perhaps among ancestors of the Sách.

An interesting aspect of the Kri-Mol branch is its cultural typology (cf. Chamberlain 2003), ranging from the nation-state of Vietnam with its urbanization and wet rice paddy cultivation, to rural paddy cultivation, to swidden farming, emergent swiddening, and two technologically distinct types of hunter-gathering that can be loosely defined as primarily hunting (Chứt – with crossbows) and primarily gathering (without crossbows). There are probably no other single branches of any language family in Asia that contain this level of cultural diversity. It represents a unique microcosm of Southeast Asia from the distant past to the present, but one whose value has gone largely unnoticed and unappreciated by developers and anthropologists alike.

The figure and maps below illustrate the spatial distribution of the various Kri-Mol groups cited in the Prologue, noting especially the importance of river valleys, with a correlation of hunter-gatherers with the upper portions of rivers.

	NORTH	NAKAI-NAM THEUN RIVER SYSTEM								SOUTH
	Khamkeut	SOT - MONE		THEUN		NOY - PHEO		ONE		<u>Boualapha</u>
		upper	lower	upper	lower	upper	lower	upper	lower	
Ethnicity	<u>Ahoe</u> <u>Ahao</u> <u>Ahlao</u> <u>Liha</u> <u>Toum</u> <u>Phong</u> <u>Pakatan</u>	<u>Atop</u> <u>Atel</u> <u>Makang</u>	<u>Arao</u> <u>Malang</u> <u>Maleng</u> <u>To'e</u>	<u>Thémarou</u>	(<u>Maleng</u>) (=> Bo)	<u>Kri</u>	<u>Phòòng?</u>	<u>Mlengbrou</u>	<u>Phòòng?</u>	<u>Cheut</u>
Cultural Type	IV	I	II	I	II	III	II	I	II	I
Forest Type	Dry evergreen/semi evergreen/wet evergreen	Wet evergreen	Dry evergreen/semi evergreen	Wet evergreen	Dry evergreen/semi evergreen	Wet evergreen	Dry evergreen/semi evergreen	Dry evergreen/semi evergreen/wet evergreen	Dry evergreen/semi evergreen	Wet evergreen
Closest Contacts	Nghê An, Na Pè, M. Cham	<u>Arao</u>	Khamkeut, Nakai Plateau	<u>Kri</u> , <u>Maleng</u>	Nakai Plateau	Vietnam, lower Noy	Nakai Plateau	<u>Phóng</u> , <u>Yooy</u>	Nakai Plateau	Vietnam

Cultural Types: I – Hunter-Gatherer, II – Emergent Swidden, III – Swidden (rotating villages), IV – Paddy & Swidden

Geographical and Ecological Setting of Kri-Mol Peoples in Nakai and adjacent area (Source: Chamberlain 2003)¹⁰

¹⁰ Thanks to Bill Robichaud for providing the correct forest type designations.

The **Katuic Branch** is considered by Diffloth (1991) to consist of two main subgroups: Eastern and Western. Eastern Katuic includes Katu, Pacoh, Chatong, and Ngkriang, while Western Katuic includes the various types of Brou, Makong, Puah, Chary, Tri, Charouy, Thro (So) as well as the Kuay (Souay) and Yoe languages of southern Laos, Cambodia and Thailand. A possible Central group would contain Ta Oy, Ong, Katang, and Yiir, but this is sometimes included together with the Eastern group.

In the area generally the Brou groups are mainly Puah and Charouy. On the plateau they are mainly Charouy. These are not mutually intelligible without prior exposure. The names can be misleading as both are sometimes referred to as types of Makong or So. Linguistically, however, the distinctions are well-defined, for example the word for rice which is /dɔy/ in Puah and /vaʔ/ in Charouy.

Historically, Brou settlement of the plateau was more recent, post-1860, as the language is entirely homogenous, by comparison to the Kri-Mol peoples whose languages vary significantly by river valley, to a degree where they are largely unintelligible across basins. Probably Brou settlers arrived from the south, from Boualapha, Gnommarath and Mahaxay districts of Khammouane, though some say they resided at Vil Amang on the eastern side of the mountain chain opposite Ban Kounè on the upper Nam Pheo. It seems likely that the majority arrived subsequent to the Siamese depopulation raids that began some time after 1826 because the Brou who were transported to Thailand, where they are called So (/throo/) originated in areas other than Nakai. Many came from Boualapha, for example. But other groups who are long residents of Nakai, such as Sek (/threək/) from the upper Nam Noy, were captured and sent to Thailand where they can still be found today in Nakhon Phanom Province. Sek from Na Kadok who fled to avoid the Siamese established the village of Na Vang in the protected area, but once abandoned it was taken over by Brou.

There are no records of early habitation of Kri-Mol or Vieto-Katuic, at least ones that can be positively identified. Where they survive, hunter-gatherers on the mainland speak Austroasiatic languages; Aslian (Samang) in southern Thailand and Malaysia, Pramic (Mlabri) in northern Thailand and Laos, and Kri-Mol as described herein. Higham (2013:36) mentions an archeological site on the coast at Bau Tro just across the annamite chain from Nakai. It was a population of hunter-gatherers dated at 2500-2000 BC, and geographically closest to the present-day location of the Kri-Mol group Sáčh (the same ethnonym as the Tai speaking Sek (cf Chamberlain 1998) who came from a nearby location and who now inhabit the upper reaches of the Nam Noy and Nam Pheo tributaries). There is really no good estimate of time-depth for a hypothetical Proto Vieto-Katuic, though the prehistoric presence of hunter-gatherers in the same location is perhaps indicative. Unfortunately bamboo-based cultures such as the hunter-gatherers of Nakai leave few traces for archeologists to pursue.

That humans were present from early times is attested not far away, in the Nam Kata basin some 12 kilometers southeast of Lak Xao, where a human burial was excavated in a cave at Pha Phen, revealing a complete skeleton radiocarbon dated 6190 BP (Sayavongkhamdy and Souksavatdy 2008). These would most likely be classified as Hoabinhian which DNA studies now inform us were most closely related to the Nigritos of the Andaman Islands (McColl et. al. 2018).

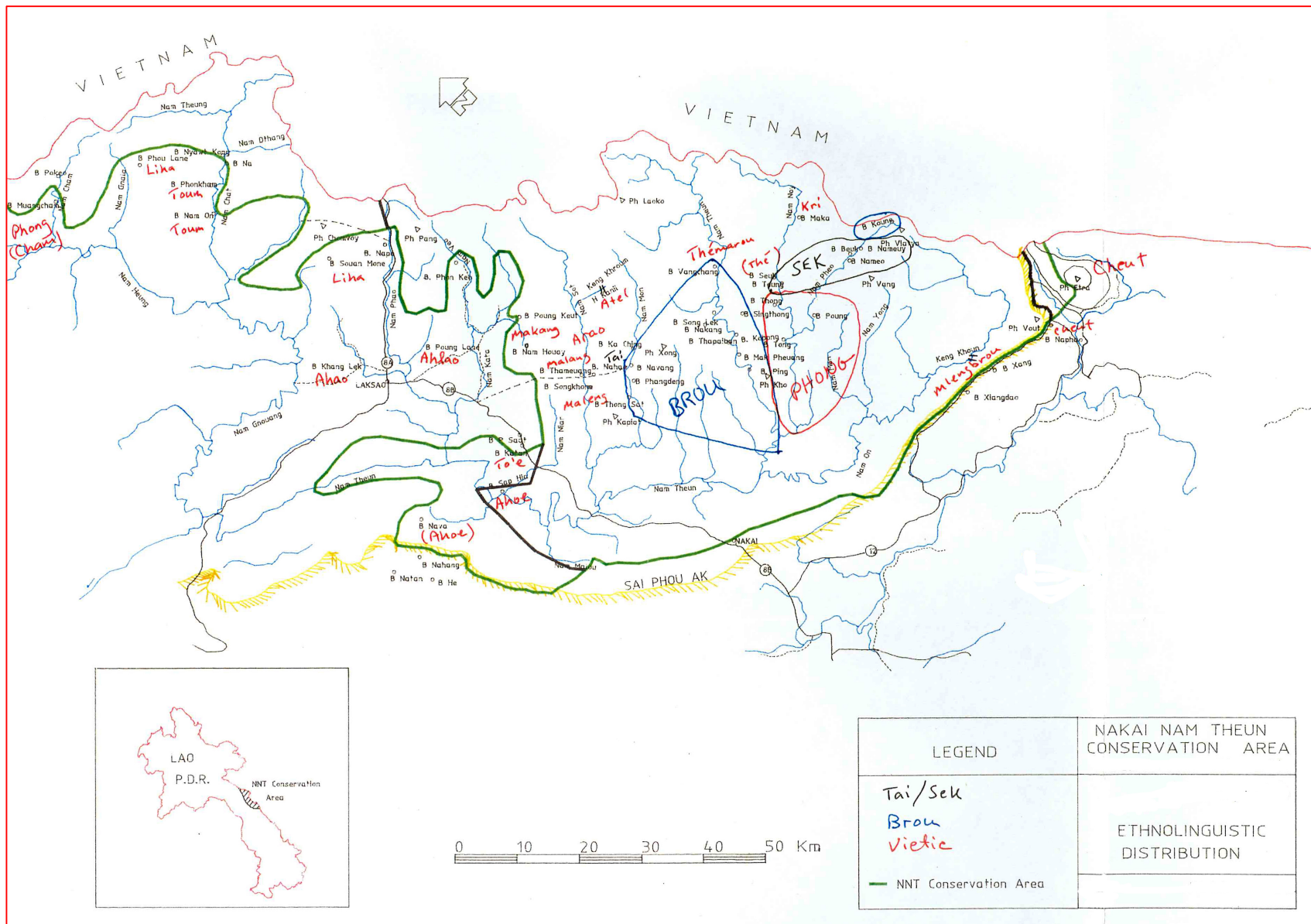


Figure 2 Map of Kri-Mol groups in Laos (from Chamberlain 1997)

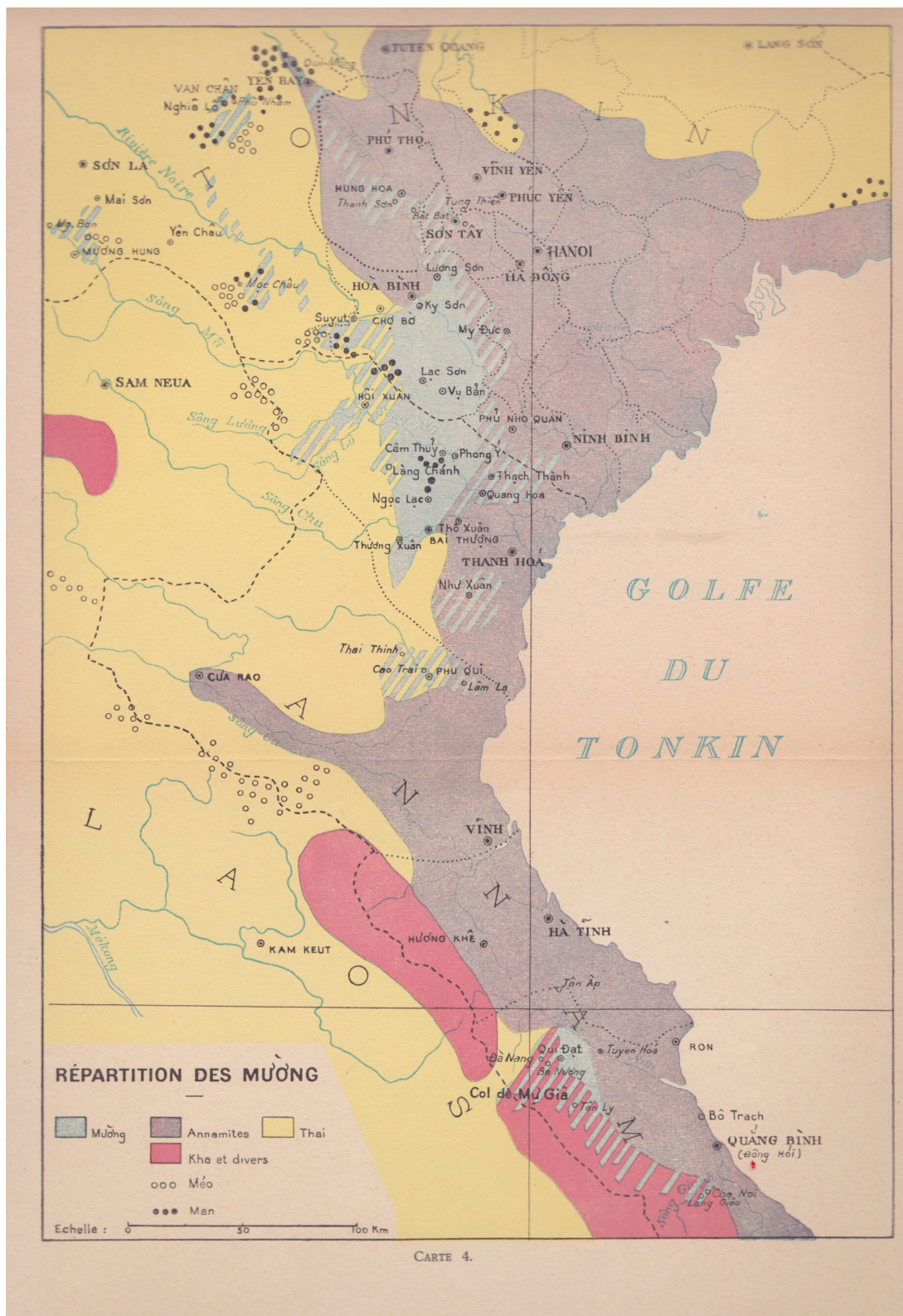


Figure 3 Map of Mường Language Distribution by Cuisinier 1948

Flora and Fauna

Zoogeographically, the Kri-Mol languages are found within the Oriental Region originally delineated by Alfred Russel Wallace. It extends to India and Pakistan in the west, and in the southeast to the Wallace Line (so named by T.H. Huxley who modified the line to exclude most of the Philippines except Palawan); that is, it includes Java, Bali, and Borneo, but not the Celebes, the Lesser Sundas, and Timor. These latter together with the Philippines comprise the domain of *Wallacea*, those islands that fall between the Sunda and Sahul continental shelves and whose fauna represent a mixture of Oriental and Australasian regions (Udvardy 1969). The northern boundary of the Oriental Region with the Palearctic is not so easily defined. MacKinnon suggests that it runs from the Hindu Kush, contains Yunnan and Sichuan, and extends eastward to Formosa. For simplicity though, we consider the Yangtze River to be the northern limit.

Floral regions, for example those mapped by Good (1964), do not completely match the zoogeographic ones, and thus the Sino-Japanese regions dips south of the Tropic of Cancer into northern Laos and Vietnam before heading northeast to Japan, the Ryukyus, Formosa, and Hainan. However, all belong to the region of continental Southeast Asia. Further south, the Malaysian Region encompasses the Philippines, New Guinea, and most of Indonesia and Malaysia.

Oriental faunistic mapping further distinguishes three sub-regions: the Indian with links to the Ethiopian region of Africa, the Indochinese with links to the Palearctic, and the Indo-Malaysian (or Malayo-Indonesian) which has evolved indigenous fauna in a rain forest habitat relatively stable since the Pliocene (MacKinnon 1970, Gressitt 1970, Udvardy 1969). The Indochinese sub-region includes Assam, Burma, Southern China, Thailand (not including the south), Laos, Vietnam, Cambodia, the Ryukyu Islands, Taiwan, and Hainan (Gressitt 1970). All of the Kri-Mol languages are found within this sub-region.

Previous studies carried out by the author on mammals, reptiles and amphibians found two additional constraints on distribution. The first is coastal versus interior, and the second is north-south relative to the Tropic of Cancer. For example, there is a paucity of squirrel species and genera along the coast compared to greater diversity inland, whereas the highly conspicuous salt-water crocodile and the large sea turtles are (were) confined to the coastal areas. The Varanidae (monitor lizards), and many mammal species are found only south of the Tropic. In cases such as these, the linguistic forms used by local speakers to refer to these organisms, when viewed in a comparative frame, become good indicators of historical movements and length of habitation.

As will be seen in the next chapter, local nomenclature does not always correspond to the scientific one. Determining what distinctions are significant is the task of the researcher, and is often an etic-emic matter, that is, where to draw the semantic lines between taxa. Taboos often need to be taken into account. The following groups seem relevant, so far, in terms of primary lexemes.

Common animals in the Kri-Mol realm:

1. Mammals (43)

- a. Elephant
- b. Rhinos
 - i. Javan
 - ii. Sumatran
- c. Cervids
 - i. sambar
 - ii. muntjacs
 - iii. mouse deer
- d. Bovidae
 - i. Gaur
 - ii. Saola
- e. Wild Pig
 - i. Common
 - ii. Yellow
- f. Serow
- g. Porcupines
 - i. Hystrix
 - ii. Artherurus
- h. Dhole
- i. Bears
 - i. Tibetan
 - ii. Malaysian
- j. Tiger (large felids)
- k. Viverrids
 - i. Civets
 - ii. Binturong
 - iii. Marten
- l. Badgers
 - i. Hog Badger
 - ii. Ferret Badger
- m. Otter (s)
 - i. common
 - ii. small clawed
- n. Bats
 - i. Microchiroptera
 - ii. fruit bats

o. Squirrels

- i. Giant
- ii. Common
- iii. small (1)
- iv. small (2)
- v. flying
- vi. large flying

p. Shrews

- i. tree shrew
 - 1. common
 - 2. small

q. Bamboo Rat

- i. large
- ii. small

r. Apes

- i. Macaques
- ii. Langurs
 - 1. red shanked
 - 2. François'
- iii. Lorrises
- iv. Gibbons
 - 1. Lar
 - 2. White-Cheeked

s. Pangolin

2. Birds (21)

3. Reptiles/Amphibians (17)

4. Arthropods (28)

5. Domestic Animals (10)

Of course, the zoological domains differ considerably among themselves. All classes of the phylum Arthropoda are found on every continent in the world, and though individual genera and species differ considerably, the level of differentiation in languages tends to be at the level of orders and families. Birds are frequently migratory, and thus cross huge geographical spans even though nesting areas may be quite localized. Fish on the other hand, confined to an aquatic environment, usually don't cross mountains, but may travel far upstream seasonally to spawn and finding reliable cognates can often be problematical.

Generally speaking, the categories that emerge here are useful, and correspond with what one can see from other branches of Austrorasiatic. Some of the zoological phyla are incomplete in my data, notably gastropod and bivalve molluscs, annelids and many insects.

CHAPTER 2 – KRI-MOL ETHNOBIOLOGY IN HISTORICAL PERSPECTIVE

Introduction

Generally accepted nowadays is the notion that the analysis of ecological systems is not complete without the inclusion of indigenous human perceptions of nature and the symbolic forms by use of which societies understand, investigate, and manipulate their environment. When taken as a whole, these comprise epistemologies, cosmologic structures or views of the world. Through this cosmologic filter, the natural world is classified and behavior towards the environment is directed. The requisite fabric of this filter is language. And the symbolic representation of the environment becomes, to use the common phrase, a “second nature” that is encoded in language. To make explicit the relationship between what is represented and the representation is the first priority in ethnoscientific research.

Humans are by far the most ecologically versatile of all the animals, not because they are superior physically, but because of their ability to manipulate symbols and symbolic systems which define and control interactions with the environment. Agricultural and forest-dwelling societies in Southeast Asia have effectively “managed” their fragile ecosystems for several millennia, but the ways in which human epistemologies and worldviews are structured so as to have achieved this level of existence over such a long period remain largely unintelligible and poorly understood.

Ethnobiology

In the broader view then, biologically diverse ecological systems are comprised not only of exchanges of energy, but also of exchanges of information.¹¹ Ecosystems in which humans function include symbolic linguistic representations of the system which define, control, and delimit the thinking and behavior of humans within their environment. These linguistic representations are systemically structured and might be thought of as *biologies* (in the sense of a subset of epistemology) which differ in predictable ways from language to language and between ethnolinguistic groupings. In fact, we might venture that the codes of language are analogous to the genetic codes of biology, that is, genetic code is to environment as language is to culture; at some point these two systems must communicate.

In the approach taken here, the formal representation of *a biology* is a concept that is equivalent neither to ethnobiology nor to folk biological systematics, although it subsumes both of these ideas. Ethnobiological studies tend to emphasize only utilitarian aspects of vegetal and zoological environments and are weak in classificatory as well as comparative and historical dimensions which underlie meaning. Folk systematics, which frequently is seen as a branch of cognitive anthropology, typically focuses too narrowly on taxonomy, omitting reference to interacting myth and ritual, historical, aesthetic, and economic aspects of classification.

¹¹ This way of framing the relation between energy and information is a compromise to the prevailing discourse based upon a mistaken concept of information and energy. The realm of biology is the realm of semiosis, the misunderstanding of information is a misunderstanding of semiosis.

In order to be of practical value studies must have interdisciplinary flexibility and focus on the interaction of culture and environment, especially those aspects of culture which symbolically represent nature and therefore affect or control environmental conditions. The goal is to describe the biological system as it is represented in the language and culture of a given village or ethnic group. This representation can be seen as comprising three types of information: (I) taxonomic or categorical representation; (II) representations of ethnographic interactions; and (III) eco-systemic or unconscious roles played by (I) and (II) in the natural system.

I Information characterized by linguistic phonemic, morphologic, semantic, and pragmatic description, and logical hierarchical classification. It may include the apparent anomalies found in all cultures where some species or genera do not belong to their obvious group, such as eagles not classed as birds, pythons not classed as snakes, or the above example of turtles classed as fish. Comparative and historical information would also be included here.

II Information that provides explanations of the anomalies described in Type I, and notes the mythological and religious, aesthetic, societal, and economic roles of the various organisms in the taxonomic inventory.

III Information that describes perceived functions of (I) and (II) in the larger system or their probable effects. It may be unconscious and include observations of a higher order as edibility variance, or, it might also address underlying premises about the relationship between man and nature, for example, “nature is plentiful” versus “nature is stingy.” Change and causes of change over time or geographical area also belong to this type.

IV Ideally, for theoretical purposes, there should be a fourth type which would describe the process whereby ecological information is conveyed to human belief systems. This type of information may be similar to that which leads to sematicity or mimicry in biological evolution, but even here the problems have not been resolved, and for the time being this line of inquiry can be only partially addressed.

Folk Biological Systematics

The study of folk biological systematics, whether it is viewed as ethnoscience, ethnolinguistics, cognitive science, or folklore, may consist of three branches: the nomenclature, classification, and identification of living organisms (Berlin 1973). If the analogy to scientific biology were carried one step further, it would also include ways in which humans study their environment, ecological balances, sounds, patterns, or behavior that result in cosmological assumptions. Folk taxonomies and biological cosmologies operate within the parameters of organism-in-environment as well as within organism-as-system, which is to say, where interactions of culture and environment are concerned, discursive fabrications of the human symbolic systems themselves function as organisms in the overall ecology.

A proposal for the description of folk biological taxonomies has been developed by Berlin (1972, 1973) and associates (1973) in which five hierarchically organized levels of classification are recognized as basic:

- (1) Unique Beginner or Kingdom (**UB**)
- (2) Life Form (**LF**)
- (3) Generic (**G**)
- (4) Specific (**S**)
- (5) Varietal (**V**)

The taxa on one level are not necessarily directly dominated by taxa on the next highest level and not all levels must be present in every language. Thus, a given taxon might consist of structures like: **UB** + **LF** + **G**; **UB** + **G**; or **LF** + **S**.

LF and **G** taxa are composed of primary names, names that are monosemic in the lexicon. **S** and **V** taxa, on the other hand, are secondary names, words with more general descriptive meanings (Berlin 1973). In English, *red maple* consists of the Generic taxon *maple* and the Specific term *red*. The Life-form *tree* is optional, and Unique Beginner *plant* is understood.

Occasionally, two Generic taxa are combined to produce a single taxon, for example English *skunk cabbage*. Berlin (1972) notes that for plant names at least, the modifier is frequently an animal name.

Diachronically speaking, some generalizations can be made concerning the direction of semantic changes. The common categorical change is of the type **G** > **LF**, or **LF** becomes **UB**. In some cases the two may become polysemous. The word for tree may become the word for plant (as seem to be the case in Tai where **ton C2* may be either 'plant' or 'tree'), or the term for a kind of tree such as *oak* or *cottonwood* (cf. Berlin 1972) may become the **LF** taxa for 'tree' as they have in several American Indian languages. But while this phenomenon is well attested for botanical names, it is less common in the zoological domain.

Berlin suggests that Generic taxa are fundamental to taxonomies followed chronologically by the addition of **LF** or **S** and **V** and ultimately **UB** in that order. According to him, a language must have acquired both **LF** and **S** taxa before **V** may be added. Although it is assumed by the folk biological taxonomists that the acquisition of taxonomic levels is a by-product of general cultural evolution there is much that has yet to be demonstrated. **S** level taxa are considerably less stable than **LF** taxa, and it is expected that this situation obtains for most language families.¹²

¹² Brown (1984) has examined the Life-form level in some detail, arguing for universal marking conventions whereby **Bird**, **Fish**, and **Snake** are unmarked and **Mammal** and **Wug** marked. Chamberlain (1992) argues against this proposal on the grounds that the "universal Generic core" should be the unmarked category, with **Bird**, **Fish**, and **Snake** as marked, and **Mammal** and **Wug** as the most highly marked. Thus it is assumed here that linguistic evidence is primary and that the marking of taxonomic categories is most efficiently explained by a principle of anthroproximity.

Life Form Development (Bird, Fish, Snake) in Kri-Mol

I – FISH All subgroups ***kaa**, except Mlengbrou which has no LF taxon for fish.

But Mlengbrou has words for kinds of fish, eg. klooh ‘snakehead’, ciəkaŋ ‘catfish’, kəən ‘*paa kuan*’. ʃalooʔ ‘*paa suut*’, klər ‘*paa dɛɛŋ*’.

II – BIRD **PMK *(k-) ceem** (Việt-Mường, Tourn-Phong, Cheut) + Ahoe

Ah: ʔacaaŋ Ahl: ʔcəy (Thaveung)

Thé: ʔuʔ +cogs (Atel-Maleng, Thémrou, Kri-Phong, Mlengbrou)

III – SNAKE **PMK *k-m-sap (also *mar)** (Việt-Mường, Tourn-Phong, Cheut)

Ahoe: luk + cognates (Ahoe-Ahlao)

Ml: kopee + cognates (Atel-Maleng)

Thé: kobuat (Thémrou)

Kri: ʃəyaa + cognates (Kri-Phong, Mlengbrou)

The data here suggest that LF taxa in Nrong-Theun subgroups developed independently of the AA mainstream, implying long periods of isolation. Bird and Snake are particularly noteworthy, with Snake being the obvious last one to be acquired. The cognate or contact form for Thémrou and Jiamao on Hainan (Thémrou: kobuat, Jiamao: buat⁷ ‘snake’) indicates an early time depth for this isolation.

The Atel

The Atel are one of six groups, along with the Thémrou, Mlengbrou, Makang, Atop, and Cheut (*Chít*) classified as ‘nomadic foragers’ or ‘hunters-gatherers.’ At least one more, Ruc, is found on the Vietnamese side of the Annamites living in caves, and I believe Mày belongs here as well. In addition remnants of two other groups are to be found in Khamkeut, Phu’ and Kap Kè, who lived along the Nam Gnouang and were described by Grossin (1933) as “Tong Leuang” that is, hunter-gatherers. Perhaps they belonged to the Ahoe-Ahlao subgroup who lived nearby. Today there are perhaps a hundred families remaining, but their languages have been lost.

These terms have been applied to at least two other Austroasiatic cultures on the Southeast Asian mainland, namely the Mlabri, who live along the Lao-Thai border between the provinces of Nan and Xagnaboury, and the Samang of peninsular Malaysia (Benjamin 1985). On closer examination, however, this classification may prove to be overly generalized, since for the Atel and most probably for the others, forest dependency is characterized by a broader span of relational characteristics than might normally be associated with ‘hunting and gathering’ in the traditional sense.

As a general pattern, these groups inhabit (or used to inhabit) the most remote areas, in their terms, such as: *Din Kanil* (upper Nam Sot), *Atak Rout* (upper Nam Theun), and the area surrounding the *Keng Khoun* waterfall on the middle Nam One. For approximately 10 months out of the year the Atel would move through the forest, making temporary palm leaf shelters for two or three nights at a time. During the rainy season they would return to a fixed location (in the case of the Atel this was one of two possibilities) by a river. Their contacts with the outside world were limited to other Kri-Mol speakers living in nearby villages.

The Thémároú described their movements through the forest as three-year cycles. The group would travel as a whole for some distance and then small family based bands would fan out to predetermined locations where known tuber plants are found. These they would harvest in such a way that the remaining plant would produce even more roots when they would come back the next time. The bands would then rejoin and move on again before repeating the pattern.

For both the Atel and the Mlengbrou, cultivated and domestic foods cannot be mixed with wild food or poison will result. This is a belief similar to that of the Mlabri, a group of forest people in Xagnaboury, whose spirits do not allow them to grow food for their own consumption, although they can hire themselves to other ethnic groups to work in fields providing they do not eat the produce themselves.

Information on these practices is extremely limited, but what little is known is worth making available for future reference and correction.

When in the forest, the band generally stayed together, and gathered and hunted foods are generally consumed immediately, without returning to the shelter. Cooking is done in bamboo tubes, or occasionally in aluminium vessels that are shared within the band. Meat, however, is roasted on open fires rather than boiled.

(1) *natural foraging (uncooked)*: Gathering and consumption without preparation: fruits, insects eaten live, rotten wood, clay.

The following preliminary list of edible fruits were identified:¹³

Table 1 Atel Fruits

Atel	Lao	Family	Genus/Species
plɛɛ	maak	(LF for fruits)	
kǎdaʔ	kuay paa	Musaceae	Musa
plɛɛ ʔaakiin	maak kɔɔ	Euphorbiaceae	Omphalea brateata ?
plɛɛ ʔaakiw	maak kuu		
plɛɛ cǎmɛɛ	maak khaam pɔɔm	Euphorbiaceae	Phyllanthus emblica

¹³ The phonemic transcription is in most cases impressionistic and will need to be revised at a later time. Several of the botanical names (where there is no Lao form available) were suggested by J.Jarvie (p.c.) in his notes from a field trip to Houay Kanil. Otherwise the scientific names are from Vidal (1959).

plɛɛ cārɔɔ	maak khɔɔ	Palmae	Livistona
plɛɛ cɛm cam		Rutaceae	(Citrus)
plɛɛ kārɔɔ?		Rutaceae	(Citrus)
plɛɛ lɔŋ yɔŋ	maak nɔɔt	Cayratia	Passiflora edulis
plɛɛ māca?	ton hɔɔ	Simarubaceae	Tetramyxis pellegrini ?
plɛɛ māyaw	maak ŋiaw		
plɛɛ muan rɛŋ	maak muang paa	Anacardiaceae	Mangifera
plɛɛ pākhuu /pāfuu	maak fay	Euphorbiceae	Baccaurea sapida/oxycarpa
plɛɛ pārɔɔ	maak man paa		
plɛɛ pāfɔɔp	maak kɔɔ	Fagaceae	Castanopsis
plɛɛ praak	maak khii lek nɔɔy		
plɛɛ ʃāphay		Platanaceae	Platanus
plɛɛ ʃaa rek	maak muu	Rutaceae	Citrus digitata
plɛɛ tāɛɛŋ	maak kɔɔ	Fagaceae	Lithocarpus
plɛɛ tāruul	kok pii din		
plɛɛ tāruum	ŋwaa	Moraceae	Ficus
plɛɛ thārɔŋ	maak dua	Moraceae	Ficus
plɛɛ vɛl	maak phɛn		
taalɔɔy	kuay paa	Musaceae	Musa
yɔŋ	khua maak mouay	Gnetaceae	Gnetum

The Atel say they eat no leafy vegetables. In addition to fruits certain kinds of clay are also consumed. Live insects, especially the larvae of Hymenopterids, are eaten, as is, of course, wild honey. (Smoke from the rare cypress *Fokienia hoginsii* [Cupressaceae] / mālɛ / is used by the Atel to chase the bees while honey is obtained.) These are identified as follows:

Table 2 Atel Edible Hymenopterids

Atel	English
laŋ	honey
pātɔɔ	bees (general ?)
haaŋ	cliff bees
tāroon	stump bees
kolɔŋ	forest hornets (nests in trees)
ʔaaŋ	ground hornets (nests in ground)
keen kāsoo	red ants

(2) *pre-hunting (pre-digestive)*: Reliance upon the labor of other animals and/or natural putrefaction. Dependency upon dholes as hunters and some aging (predigesting) of meat. Rotten wood dipped in honey is another example of this type, as would be the gathering of honey as well (overlapping with natural foraging stage above). Honey may

also be combined with water and galinga root to make a fermented alcoholic drink known as

/kʉn laŋ/. Earth freshly excavated by termites is also consumed.

The meat of the dhole kill is roasted on an open fire. Meat is considered edible only up to a period of two days, that is, before maggots begin to appear.

(3) *hunting (cooking)*: (1) dholes provide the example of chasing hog badgers with domestic dogs and sharpened bamboo spears; (2) fish poisoning and bark cloth; (3) foraging for tubers; (4) cooking (meat and vegetal food cannot be cooked together).

The only domestic animals kept by the Atel are dogs. Dogs are a part of the family units and bands, and like the dhole, an integral part of the hunting process. In fact, from the viewpoint of cultural analysis, it is useful to view Atel hunting behavior as an imitation of nature, that is, an imitation of dhole hunting behavior, the canine archetype upon which the Atel depend most consistently.

The Atel do not use crossbows. Their only hunting weapons are sharpened bamboo spears called /baal/ used for hunting hog badgers. With the aid of the dogs, the Atel chase the hog badger into its burrow and dig out the animal which is then killed with the spears. Hog badger flesh is said by other groups to be very strong smelling, but good for the health. It is eaten by some groups, such as the Phoong, with much the same attitude as strong smelling cheese is eaten in the West, with a mixture of revulsion and compulsion. It is also said to produce a strong body odor. (The Phoong do not actively hunt hog badgers, but when they are discovered along stream bed alluvia following the wet season with their heads in the mud searching for worms, they may be easily clubbed.)

Fishing, at least in its essence for the Atel, became intimately linked to bark cloth preparation. The outer bark of *Antiaris toxicaria* [Moraceae] (/tānaoŋ/) was until recently used by the Atel (and in fact all of the Kri-Mol peoples of Annamites) for clothing. After having been cut from the tree in sheets, the bark is soaked in water and pounded. This is done repeatedly until the cloth attains the desired texture. It may then be sewn into clothing using the /ʔatoŋ kǎfɛɛ/ vine as thread. (This is the same vine used in the *mat mii* (tying and dying) Lao silk production process, called *kabeuak* in Lao.) The poison from the sap of the inner bark is used by other Kri-Mol groups for the tips of crossbow arrows (the poison is actually a form of strychnine). The bark cloth, even after it has been processed, retains a degree of toxicity sufficient to repel insects when it is worn.

Women would frequently dye the cloth with an indigo color from dyes made from the leaves of the /buak/ tree, or from another known as /raam/. The cloth could be washed using the /plɛɛ kǎteŋ/ fruit (*Sapindus mukorossi* [Sapindaceae]) or the vine known as /ʔatoŋ māyɔŋ/. These could also be used for washing the body.

During the soaking process the bark also poisons fish, and it may be suggested that fishing, or the utilization of the poisonous qualities of *Antiaris toxicaria*, evolved first. And while towards the end of the bark cloth period the pieces were fashioned into pants

and shirts, the Atel informant claimed that these were rarely worn, a loincloth being the customary article of clothing. They did use, however, large sheets of bark cloth as blankets.

It might be mentioned here that neighboring Kri-Mol groups of other cultural types, became associated with ethnic-specific traits, for example, nets and fishing for the Arao who lived along the Nam Sot as far as the Keng Louang waterfall, and crossbows, baskets, and mats for the Malang slightly further to the northwest. Atel trade was restricted to honey which was exchanged for salt, peppers, and tobacco which the Arao and the Malang had in turn obtained from the Nakai plateau. The Arao and Malang all had rudimentary villages which the Atel would visit periodically. During the colonial period, Honey was also paid to the French in lieu of tax by the Atel via the Arao.

Foraging for tubers, palm piths, bamboo and rattan shoots which are cooked in bamboo tubes forms another vegetal portion of the Atel diet. These cannot be mixed with meat, fish, or honey. Table 3 is a sample of the types of these foods available to the Atel. Note that no leafy vegetables are mentioned and are not consumed.

Table 3 Some Tubers, Piths and Shoots Consumed by the Atel

Atel	Botanical	Comment
ʔaaluuʔ	Caryota ? [Palmae]	palm fruit (taaw)
ʔapaŋ	Calamus [Palmae]	shoots/sprouts
kădɔŋ		eaten to counteract the toxic effect of D.hispida.
kăleeŋ / -c	Dioscorea esculenta ?	tuber
kăsaan	Dioscorea hispida	tuber
kăfook	(type of vine)	roots eaten as staple
kăʃaan	[Palmae]	pithy stalks gathered along stream beds
ʔalii / ʔriʔ	[Palmae] (small pinanga)	shoots
kill tănaap	[Palmae] (big pinanga)	shoots
kɔduk	Bambusa tulda	bamboo shoot
măŋaʔ	Oxytenanthera parvifolia	bamboo shoot (said to have two words for the same species)
păcqaŋ	Oxytenanthera parvifolia	bamboo shoot
pul	Calamus [Palmae]	rattan shoot
raaʔ	Dedrocalamus ?	bamboo shoot
rùm rùm	Gastonia ? [Araliaceae]	eat new shoots/sprouts
tămɔr	Schizotachyum zollingeri	bamboo shoot
tăruul		shoots/sprouts
yɔŋ kăʃeeʔ	Ipomena [Convolvulaceae]	tuber
yɔŋ kriit		tuber

(4) **tool-trapping:** Characterized by trapping and snaring small ground animals, the extent of fish trap technology was not investigated.

The Atel claim to do some trapping, although the degree of this is uncertain. Most words seem to be old Tai/Lao borrowings, perhaps via other Kri-Mol cultures, in which case trapping is a comparatively recent undertaking and implies remaining in one place while traps are monitored. The following types were recorded:

Table 4 Atel Traps and Snares

Atel Name	Lao Name	Type of Trap
kiw	hɛɛw bouang kiw	loop trap for birds
pʌl	?	for muntjaks
pātah	hɛɛw tɔt	loop trap for birds
ʔadùm	hɛɛw katam	trap with big log that falls on prey, esp porcupines
mɛɛ lɔŋ	mɛɛ lɔŋ	bamboo rat trap
sǎɽʔ	ʔaay kɔŋ	trap for squirrels, tree shrews, snakes, etc.

Thus, lacking crossbows, only ground animals are trapped. Strictly arboreal mammals, such as gibbons, and non-ground birds, such as hornbills, are rarely taken.

(5) **short term sedentism / pre-cultivation:** The return to a fixed rainy season location for approximately two months every year.

This was apparently a practice of all nomadic groups and consisted of certain pre-sedentary activities, as: (a) broadcast planting of corn and tubers but without preparation or care of fields, left until the annual (or triannual) return (Mlengbrou); (b) non-consumptive cultivation: tea, tubers, and corn (?) for trade with other groups (Atel). The people of the now apparently empty spiritual territory of Kacheng reportedly had tea fields there, and the Atel informant, Mr. Tuy, still lays claim to his tea fields near the Houay Kanil.

To return to the wild/civilized distinction, the beginnings of a more detailed set of examples could be suggested as follows:

Wild	Civilized
nomadic meat	sedentary vegetables

Most leafy vegetables are associated with cultivation, that is they are either cultivated intentionally in gardens or encouraged to grow along fences or the edges of rice fields.

Classification

From the point of view of zoological classification in Kri-Mol groups, at least three dimensions must be recognized: (1) the folk biological systematics classification; (2) a system of *secret* naming; and (3) the use of *concealing* names.

As might be expected, comparison of folk biological nomenclature between sub-branches reveals considerable variety of systems. All of these have by no means been analyzed, but several generalizations can be made, for example,

- * only the Toum-Phong group has a Unique Beginner taxon;
- * LF taxa for Bird, Fish, and Snake are found in all groups except Mlengbrou which lacks the taxon for Fish;
- * the LF taxon for Bird, while present in all groups, is not used extensively in naming;
- * taxa for Turtle and Frog are frequently used as LF markers;
- * the taxon for Insect found in the South and some of the Southwest groups appears to be cognate with the Northwest UB taxon indicating a possible etymology for this form.

Table 5 illustrates the basic folk systematics features of the zoological systems to the extent they are known.

Table 5 Comparative Kri-Mol Zoological Classification Characteristics

Kri-Mol Grouping	Classification Characteristics
1. Toum, Liha, Phong	-UB for mammals, some insects and birds -LF for Bird, Fish, Snake -'bird' lexeme used only for some birds
2. Ahoe, Ahao, Ahlao	-no UB -LF for Bird, Fish, Snake -'turtle' used as LF -lexeme for 'bird' used only rarely in names
3. Cheut	-no UB noted -LF for Bird, Fish, Snake
4. Atel, Thémarou, Maleng, To'e	-no UB -LF for Bird, Fish, Snake, Turtle, Frog -LF for 'insect' in Maleng, some in To'e -in Atel there are lexemes for 'bird' and 'fish', but not recorded in names -in Thémarou the only LF markers are

	Bird, Fish and Snake
5. Kri, Phoong	-no UB -LF for Bird, Fish, Snake, Insect, Frog, Turtle -'Bird' used throughout Phóng, but only for some species in Kri
6. Mlengbrou	-no UB -LF for Snake, Turtle, Bird -only some bird names use the LF -no LF for Fish -no LF for Insect

In addition, it was discovered that among several of the Type II Kri-Mol groups, a system of secret names exists, at least for some animals. Secret names consist of primary lexemes, that is words that have no other meaning. Their usage is not yet clear in relation to concealing names which are clearly used in the forest when the animals are being hunted, because it is believed that if the animal hears its real name it will run away. Examples of secret names are given below in Table 6. The hunter-gatherers seem not to have secret names. For the Type II cultures they may indicate taboos that have their origin in a fear of the deep forest (suggested by Gérard Diffloth p.c.), yet another indicator of the boundary between the wild and the civilized.

Table 6 Secret Names

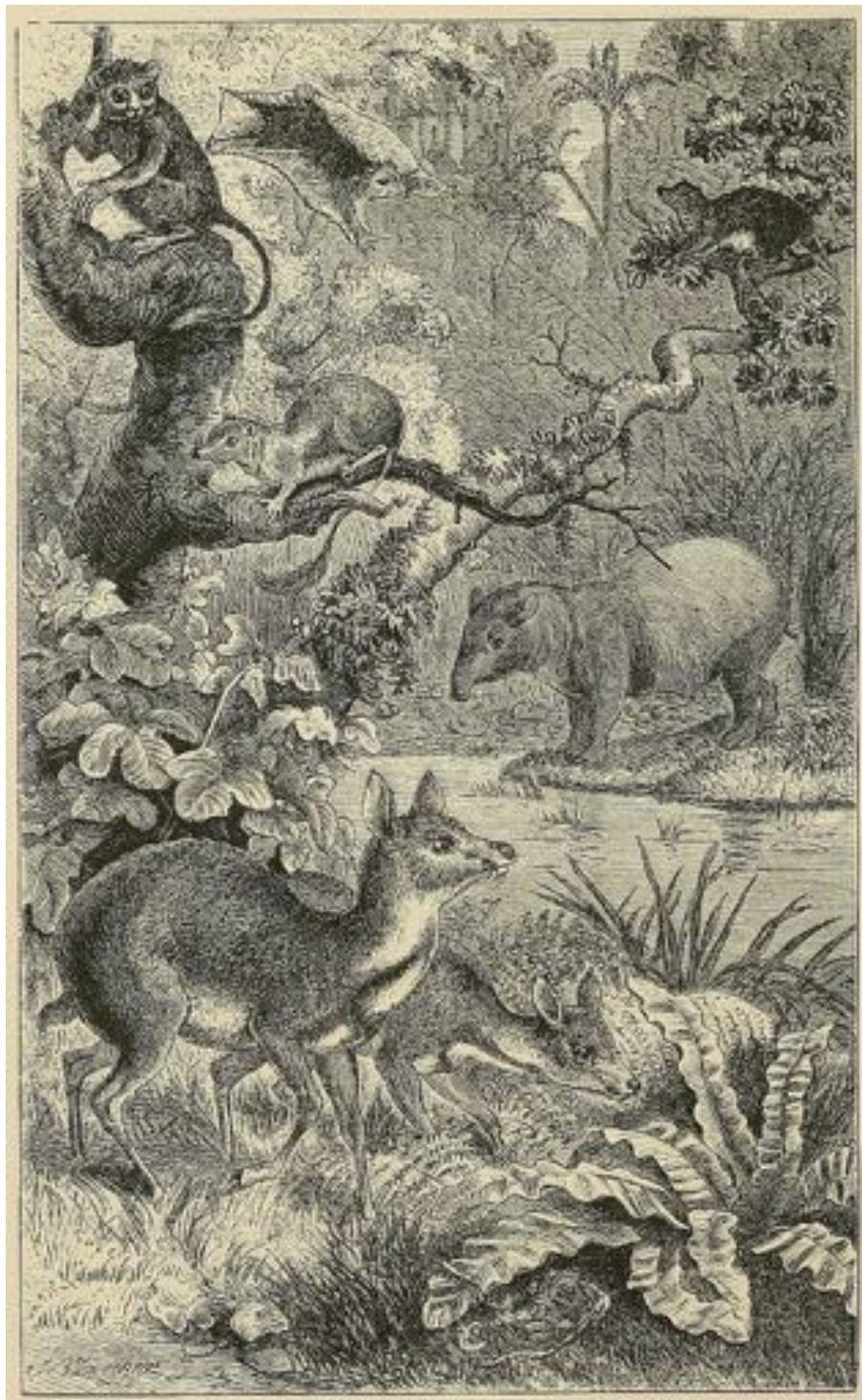
	Name	Secret Name	Animal
Ahoe:	yɔɔ	tāmok	elephant
	măyaaw	pak caŋ	sambar
	kul	pak caŋ	wild pig (has the same secret name as the sambar)
	pɛw	puu ʔɔɔʔ	tiger
Maleng:	yɔɔʔ , yùùù	tāmok	elephant

Concealing names, as has been mentioned, are used in hunting situations in place of the real name in order not to frighten away the animal. These names consist of secondary lexemes, euphemisms that avoid the real name but always have a descriptive or even humorous meaning, as in the examples provided in Table 7:

Table 7 Concealing Names

	Name	Concealing Name	Gloss	Animal
Ahlao:	ʔooŋ	saay saŋ	‘floppy ears’	elephant
		ciŋ paŋ	‘big foot’	elephant
	ʔooʔn	kǎŋ tak	‘red teeth’	bamboo rat
		kǎbool	‘toothless’	pangolin

PART TWO – A KRI-MOL BESTIARY



CHAPTER 3 – KRI-MOL MAMMALS

Phonological Representation

The author regrets the incomplete phonological representations provided here. There was simply not enough time during the brief visits to carry out a comprehensive investigation, so the forms presented are to some degree impressionistic. To complicate matters further, Kri-Mol languages are known for their complex phonation features, distinctions between clear, creaky and breathy voice as well as tone, for example /cɛɛʔ/ 'headlouse' and /vɿɿtʰ/ 'duck'. Obviously, given the rarity and great value of the languages, thorough linguistic analyses should be conducted as soon as possible, preferably by Kri-Mol specialists. Examples are Enfield and Diffloth (2009) for Kri, and Ferlus (1997) for Mlengbrou. Both of these are focused on phonology and are consequently lacking in lexical depth.

Key to Abbreviations of Language Names

Ahoe	Ahoe
Ah	Ahao
Ahl	Ahlao
Atel	AT (1) and (2) different dialects
Cheut	TX Tha Xang and BP Ban Phao
Kr	Kri
Lh	Liha (PL Phou Lane and SM Souan Mone)
MI	Maleng
Mlengbrou	
Mường	Nguyễn Văn Tài (2004); Houa Phan dialect from Nate Badenoch p.c.
P	Phoong (Nam Noy River)
Ph	Phong (Khamkeut)
Rục	Nguyễn, Trần and M. Ferlus; Nguyen Van Loi
T	Toum
TE	To-e (Pakatan)
Thémarou	
Việt	Vietnamese

Unless otherwise indicated Kri-Mol forms are from Chamberlain 1997 or field notes.

Bit names sometimes included for comparison, from Nate Badenoch p.c

The Proto Mon-Khmer (PMK) forms are from a manuscript of Gérard Diffloth, *Etymological Dictionary of Mon-Khmer: Chapter 1 – Fauna*. U. of Chicago 1980.

Elephant **PMK *kyaan**
Elaphas maximus

Việt. voi (note: vôi 'tusk')
 Mường βəj ~ ɣəj ~ vəj

Toum-Phong vɔɔj, vəj

Ahlao-Ahao ʔoon

Ahoe Ahoe: ɣɔɔ
 Atel-Maleng AT: ʔyuuʔ , ɣɣ Ml: ʔyuu TE: ʔyɣɣ
 Thémarou ʔyɣɣ
 Kri-Phoong Kr: ɣɣ P: yuu
 Mlengbrou yuu

Cheut TX: ʔacean BP: ʔacaang (< Brou ?)

For Ahoe and Maleng, there is an additional secret name *tāmok* for elephant, the use of which is not clear. In contrast, there are also concealing names, such as Ahlao *saaj saɲ* 'floppy ears' or *ciŋ paan* 'big foot' referring to elephant, and used specifically while in the forest.



象 ‘elephant’ Xiàng schuessler OCM *s-jaŋʔ / ziaŋ B
Baxter & Sagart *s.[d]aŋʔ

Is this a possible source?

豫 *djo in Karlgren 83e ‘elephant’, ‘slow and deliberate (elephant-like)’

LH *ja^C, OCM *lah Schuessler yù₂₄ ‘large elephant’; yu₂₅ ‘slow and deliberate’ (but doubts Karlgren’s interpretation < ‘elephant-like’)

*laʔ-s Baxter and Sagart ‘go on (inspection) tour’

Palaeoloxodon namadicus
‘straight-tusked elephant’

Found in Shang and Zhou remains
approximately 3000 BP



Rhinoceros PMK *rɛt

Rhinoceros sondaicus (Javan), *Dicerorhinus sumatrensis* (Sumantan)

Việt tê-giác (< Chinese)
Brou ra.mjəjh

Toum-Phong	Ph: tǎkɔŋ	T: kaŋ	Lh: kɔŋ , kɔɔŋ
Ahoe-Ahlao	Ah: cǎkuuʔŋ	Ahl: cǎkuuŋ	
Atel-Maleng	AT: cɔɔm		
Thémarou	cɔɔmʔ / caɔmʔ		
Kri-Phoong	Kr: cikòòŋ	P: caam	
Cheut	Rục (Lợ): kɔnti ³		

There were two species of rhino in this area in the past, the larger Javan rhino with one horn and the smaller Sumatran two-horned. In Lao they are called *hɛt* DL4 and *suu* B4 respectively. The Tai form most used by informants during interviews was the latter. A Toum man noted that the last rhino (*suu*) tracks he saw were in 1967. The Liha believe that rhinos have powerful spirits attached to them and these must be propitiated before they may be hunted. But now there are thought to be no rhinos remaining. It was noted that the *suu* rhinos preferred to eat the leaves of *Thea* and *Broussonetia* trees.

It is plausible that the two main etyma here represent taxa for the two distinct species, as in the case of Kri-Phoong both forms occur in the same subgroup. The Rục form continues to perplex.

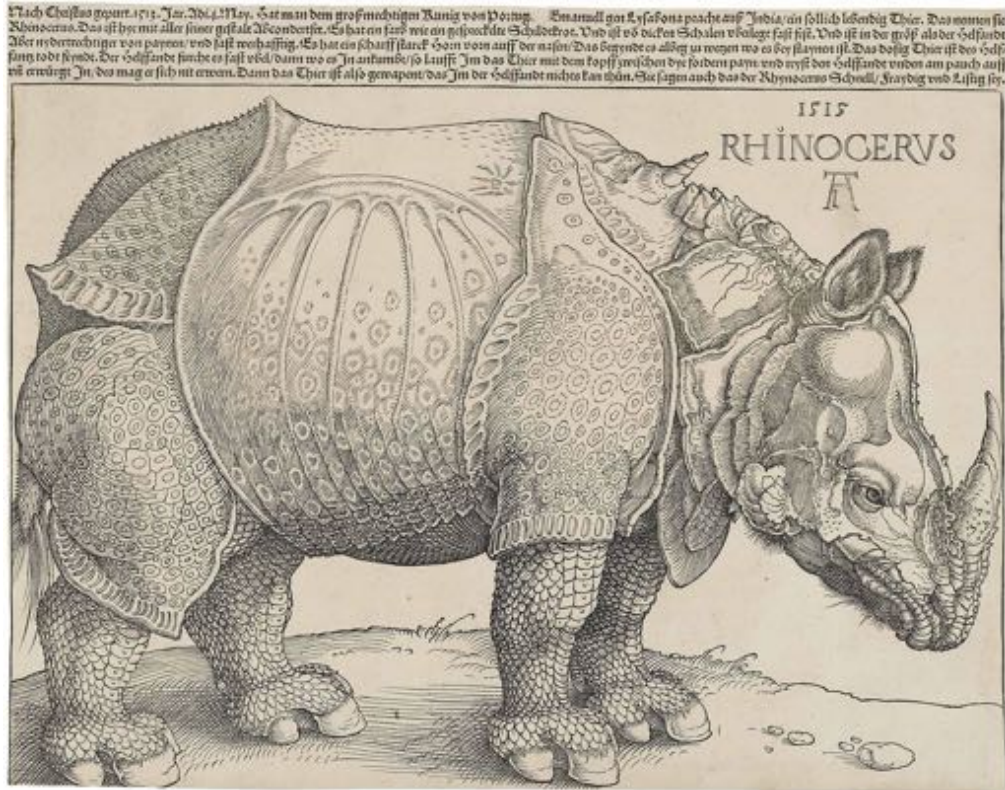
Also worth noting is the similarity to the Tai (Shan, Neua, Ahom, Khamti) languages which all have variants of {s/c u/o ŋ}. This would surely be happenstance except for Palaung /ma zɔŋ/ (Janzen 1991) which could be the source, assuming Tais that moved into the area had no other words for Rhino or for other reasons, borrowed the Palaung word. It would indicate that for at least one of the Rhinos there is an old AA term.



Javan

Sumatran

To complicate matters, the indian rhinoveros, *Rhinoceros unicornis*, a larger animal, was probably found as far east as Burma and Yunnan. Even now it is still extant in parts of Assam. Note that reflexes for PMK *rɛt seem not occur in NMK except for Lamet and Khmu in Laos, so a separate taxon would be expected, cognate with Palaung /maazɔŋ/ mentioned above.



Rhinos in fact lived in China south of the Yangtzi. Bronze figurines of the Sumatran (two-horned) rhino are found since the late Shang dynasty. Some show remarkably realistic features indicating that living models were used. Although both species are said to have inhabited the area, almost all of the figurines are two-horned.



Bronze Sumatran Rhinoceros Ritual Vessel, Late Shang Dynasty, c. 1200 BCE



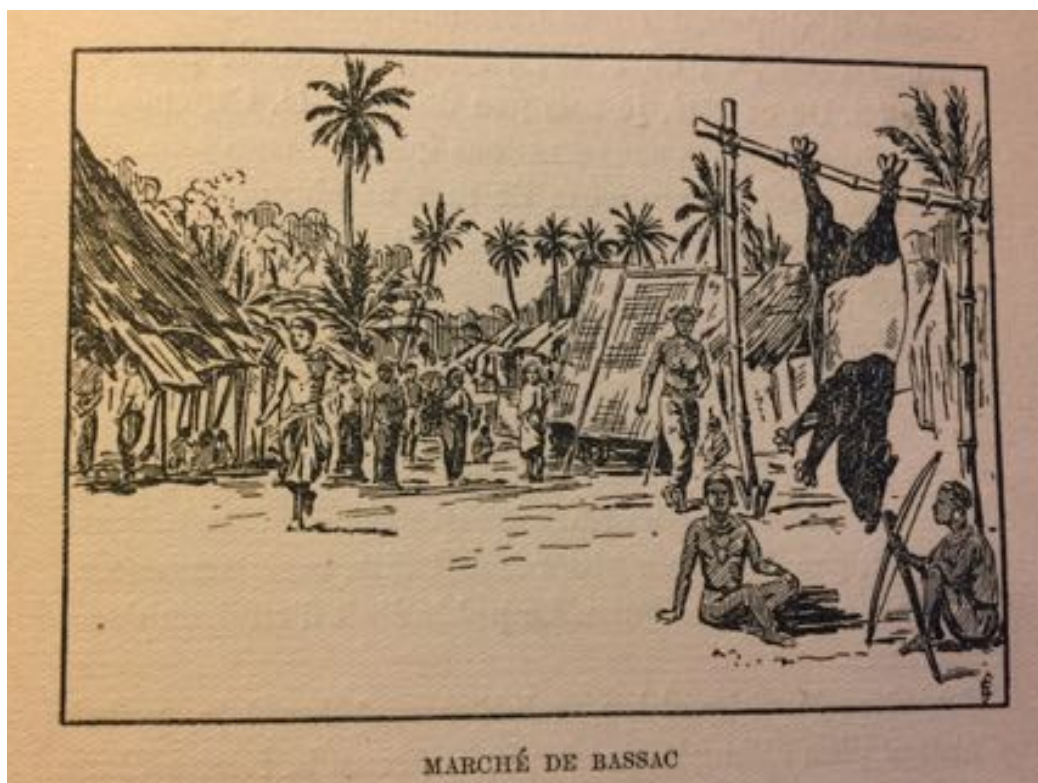
Bronze Sumatran Rhinoceros Wine Vessel, Western Han 206 BCE – 9 CE

Tapir

Tapirus indicus

Viet	con hèo voi
Lao	muu quan

There are no known forms for ‘tapir’ recorded in Kri-Mol languages other than Vietnamese. Its existence in Laos and Vietnam has been questioned though Cheminaud (1939) described a specimen he saw for sale in a market in Champasak in 1902 (drawing as below). Whether the species ever inhabited the Kri-Mol area is not known. Both the Vietnamese and the Lao terms mean simply ‘pig with a trunk.’



Gaur PMK *_m(uə)y [Lao: mɯy]
Bos gaurus

Việt con bò tót

Toum-Phong	Ph: sǎŋuul	T: ŋuul	Lh/PL: klɔw plɔy	Lh/SM: kloɔ phlay
Ahoe-Ahlao	Ahoe: ʃǎŋuul	Ah: sǎŋool	Ahl: ʃǎŋuul	
Atel-Maleng	AT: ʃǎŋoor , sŋoor		MI: ʃǎŋoor	TE: sǎŋool
Thémarou	saŋool			
Kri-Phong	Kr: ʃaŋaor	P: ʃǎŋor		

Cheut: TX: ciəluu BP: ciluu

This seems to be a good solid Proto-Kri-Mol word. Only in Cheut and Liha are they classed as buffaloes, and in Vietnamese as ‘bull.’ This is an animal that prefers evergreen, semi-evergreen and moist deciduous forests.



Sambar
Rusa unicolor

PMK *draay ‘hog deer’

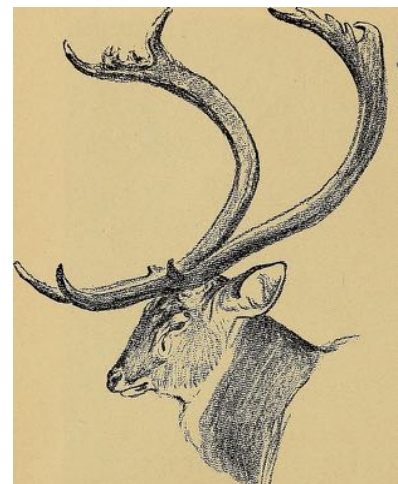
Việt: nai
Greater Hlai: *rə:y? ‘deer’
Proto-Hlai: *C- lə:y ‘muntjac’
Brou: yɔɔt , mǎyɔh

Mường: ɖaaj⁵⁵ (Houa Phanh)

Toum-Phong	Ph: kǎđj̥i	T: daay	Lh/PL: daay	Lh/SM: ɖay
Ahoe-Ahlao	Ahoe: mǎyaaw	Ah: kǎđj̥i	Ahl: kǎđj̥i	
Atel-Maleng	AT(1) kǎđj̥i?	AT (2) kǎɖey	Ml: kǎđj̥i	TE: kǎdii
Thémarou	por			
Kri-Phoong	Kr: kǎđj̥i / -ɖeh		P: kǎđj̥i	
Mlengbrou	kɖeɖ			
Cheut	kǎđj̥i			

Ahoe has a unique form, with no apparent cognates elsewhere, except perhaps Brou in Na Vang *mǎyɔh* (on the Nam Mone river). The Thémarou word may result from confusion with 'barking deer', except the form was provided by two different informants in different locations and at different times. Also, it appears cognate with the Brou forms as noted below.

Another source for the Ahoe taxon could be the Eld's Deer (brow-antlered deer, thamin) which until recently was present in the area. Readily distinguished by its horns, it may have had a unique taxon in Kri-Mol as it does in other languages (below right).



Barking deer, Muntjac *PAA *po:s
Muntiacus sp.

Việt hoẵng, con mang
 Mường vaan⁵³ (Houa Phanh)

Toum-Phong Ph: cəɔŋ T: cəɔŋ Lh/PL: cəɔŋ Lh/SM: cəɔŋ

Ahoe-Ahlao Ahoe: pɔyh Ah: ʔakʌʌy Ahl: ʔakaay

Atel-Maleng AT(1) thrɛɛw AT(2) thəreew Ml: thǎɛɛw TE: pəl
 Thémarou thǎɛɛw

Kri-Phoong Kr: pɔyh , ʔakaʔ P: pɔyh
 Mlengbrou pɔiʔ

Cheut tubaan, tuubaan



As with 'snake' there would seem to be no common generic form for 'muntjac'. At least three species are found in and around the language locations which may be a possible source of the linguistic variation. The 'giant muntjac' is considerably larger than the others and so may indeed have a separate taxon. Ahoe and TE lived together in the same village (Pakatan) for many years so there may be some influence here as well, though the languages are otherwise not mutually intelligible. That the etymon *pɔyh crops up sporadically across four subgroups may indicate that it refers (or referred) to the giant muntjac (given the Thémarou form for sambar), whereas *thǎɛɛw refers to smaller species (given its link to mouse deer in Phoong).

The Brou form is pɔih or pɔyh which could account for the variation as well, though despite the large Brou population in Nakai, there is little apparent language borrowing. Furthermore, the preservation of final -l in Maleng and in Mlengbrou, and an even more archaic final -ɾ in Thémarou would indicate this is most likely not a borrowed form.

Muntiacus muntjak. The Phong-Toum form is peculiar to that subgroup. The Toum recognize two subspecies, a “black” muntjac [tentatively identified as either ***Muntiacus napensis*** or ***Muntiacus feae***] that lives in deep mountain forests near stream sources, and a “red” one that prefers flatter lowland areas. For both the Liha and the Toum, the ‘mouse deer’ ***Tragulus javanicus***, is considered a type of muntjac, with the specific marker /kay/ (cɔɔŋ kay). The latter is a Tai taxon (C tone) used to designate the mouse deer.



(<https://nexusnewsfeed.com/article/climate-ecology/rare-barking-deer-photographed-in-vietnam/>)



1. Giant muntjac ***Muntiacus vuquangensis*** (top)
2. Fea's Muntjac ***Muntiacus feae*** (left)
3. Indian Muntjack ***muntiacus muntjak*** (right)

Mouse Deer and Musk Deer , Chevrotain

Tragulidae

Moschidae

Việt

con cheo, cheo cheo

Brou (?)

cǎkΛΛj (see Ahao, Ahlao ‘muntjak’)

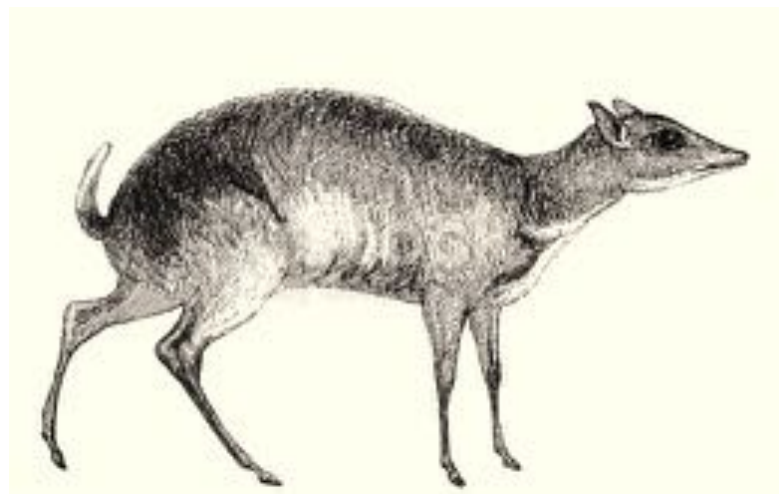
Thémarou

ɲɛɛ ɲɛɛ

Kri-Phoong

Kr: tɛw tɛɛw

P: thǎɛɛw



Mouse Deer



Musk deer

Saola and Annamite Striped Rabbit

Rare Fauna recently discovered: no Kri-Mol words recorded so far

Saola *Pseudoryx nghetinhensis* (from the Tai Mène ‘uprights on the cotton spinning machine’)



Annamite Striped Rabbit, *Nesolagus timminsi*



Wild Pig
Sus scrofa

PMK *cliik ‘pig’

Việt. lợn rừng
Mường lɔj¹ | kuyh³³ lɔpy³¹ (Houa Phanh)
kuj³, kun⁵, ɣɯn³ (domestic pig)

Toum-Phong Ph: kul phlii T: kuul phlii Lh/PL: kuɯl plɔy lh/SM: kun
phlay
Ahoë-Ahlao Ahoë: kul Ah: kul kǎneh Ahl: kul mlii
Atel-Maleng AT (1) skaal AT(2) skǎʔūr Ml: skool TE: skɔol
Thémarou kuul

Kri-Phoong Kr: kur bru? kul baruu
Mlengbrou kul? bru?

Cheut TX: truɯt BP: ɾoot^h

It is interesting to note that I recorded terms for domestic pig in Ahoë and Ahlao as *kuʔl* and *kulʔ* respectively. I would have chalked this up to my untrained ear, except for a similar experience with Atel and Maleng who both provided *kur*, rather than the forms with initial s- found in 'wild pig.' So further investigation is needed. Cheut has a separate taxon for wild pig, and for domestic pig has *kur*. Atel and others languages have *kur* or *kul* for domestic pig, separate from wild pig, albeit derived from the same root. No doubt the practice of raising pigs was adopted quite recently with the cultural shift from hunter-gathering to swidden cultivation, and the addition of the 'forest, wild' qualifier became a recent addition as well. That the wild pig was always considered a separate category is evidenced by the Mường situation noted here.



Note wild-domestic distinctions:

Atel-Maleng (wild)	AT (1): skaal	AT(2): skaʔur	Ml: skool	TE: skɔɔl
(domestic)	AT: kur		Ml: kur	TE: kuul

Cheut (wild)	TX: truyt	BP: root ^h
(domestic)	kuḡ	

Mường (wild)	lɔj ¹ (locations 1-22 Thanh-Hoa and points north)
(domestic)	kuyh ³³ lɔyʔ ³¹ (Houa Phanh)
	kuj ³ , kul ³ , kun ³

Yellow Pig, Heude's Pig, Indochinese Warty Pig

Some groups distinguish a second species of wild pig (*Sus bucculentus*) known as Heude's Pig, the Yellow Pig, or the Indochinese Warty Pig. This species was thought to be extinct, although many villagers say it is alive and well, and in some locations even more numerous than the more common species. In the Mường language it is the common term for 'wild pig', whereas it is the term applied to the Yellow Pig in the south.

Việt	lợn lòi bày 'group of wild pigs' (EFEO wordlist)
	nanh lợn lòi 'boar's tusk' (EFEO wordlist)

Mường	lɔj ¹ (locations 1-22 Thanh-Hoa and points north) ~ kuj kɔ ~ lɛn kɔ
-------	--

Toum-Phong ¹⁴	Ph: lɔy, puŋ T: kuul lauk Lh: lɔy
Atel-Maleng:	AT: cǎlaay

This same word has been widely adopted by Tai groups in the area, many of whom originated from locations further north that abutted on Mường.

AND, note especially the Hlai (Hainan) reconstruction of Nordquest (2007:589),

Proto-Hlai *C-ləc e.g. Lauhut: lac⁷

good evidence for the existence of Hlai on the mainland in Juizhen. It is thought that the original Hlai peopled the island of Hainan from this part of the mainland (Chamberlain 2016). When ancestors of the Mol moved north they must have encountered and interacted with the Li people already living there.

¹⁴ Note Houa Phanh Mường /poŋ⁵⁵ lawʔ³¹/ 'hog badger' which seems to include cognates for both Phong /puŋ/ and Toum /lauk/. Hog badgers names are often prefaced with 'pig' in Tai languages.

Serow **PMK *k(ɛɛ)ɕ**
Capricornis

Việt dương (< Tai)

Mường kɛɛk¹³ (Houa Phanh)

Toum-Phong	Ph: kɛɛ	T: ɲuaŋ	Lh/PL: kɛɛʔ	Lh/SM: ɲuaŋ
Ahoe-Ahlao	Ahoe: kɛh	Ah: kaɛh		
Atel-Maleng	AT: kɛh	Ml: kɛh	TE: kɛh	
Thémarou	keɛh			
Kri-Phong	Kr: kɛh taoy trădoot			
Cheut	keh			

The Vietnamese word is borrowed from Tai, but not via Mường



Porcupine (*Hystrix*)

PMK *jɲkəəs

Việt	nhim , dim			
Mường	nim ³ , (ɲiim ⁵⁵ [Houa Phan])			
Toum-Phong	Ph: kăɲiim	T: yiim	Lh: ɲiim	
Ahoe-Ahlao	Ahoe: yɲi	Ah: yɲi	Ahl: yɲi	
	[NB Pre-Hlai *C-dəy PHI *dəy]			
Atel-Maleng	AT(1): yɲi	AT(2): g ^y ii	Ml: ɲii	TE: ʔyɲi
Thémarou	keʔl			
Kri-Phoong	Kr: ker	P: keer		
Mlengbrou	kɛl			
Cheut	kăɲuɲ			

Porcupine (*Atherurus*)Mường tɔ^vu (Houa Phan)

Toum-Phong	Ph: tɔɔl	Lh: tɔn	[NB Proto-Hlai *tɛ ^h inʔ]	
Ahoe-Ahlao	Ahoe: ntel	Ah: thăloɔ	Ahl: ɲɛk	
Atel-Maleng	AT: ɲɛk	Ml: ɲɛk	TE: ɲɛk	
Thémarou	ɲiək			
Kri-Phoong	Kr: cookɽ ^h	P: skuɽ		
Mlengbrou	cukɽ			
Cheut	tukɽl			

While the Vietnamese and Mường forms are consistent for *Hystrix*, forms for the smaller species are absent from dictionaries. Sometimes the erroneous gloss 'hedgehog' (a palearctic animal) is given. The lexical variation for both species is remarkable given that they are common and well-known.

Hystrix hodgsoni and *Atherurus macrourus*. All languages differentiate two species of porcupine, although some in the Phong-Toum subgroup have adopted a Lao-Tai borrowing for *Atherurus*, possibly because the flesh of this animal is considered medicinal by many of the Tai speakers and it may be a commonly traded species.

There is considerable lexical variation between subgroups as can be seen in this comparative table.

	Phong-Toum	Ahoe-Thavng	Atel-Maleng	Kri-Phoong	Cheut
Hystrix	*ɲ/y [ii] m	*ɣ/ʔy [ii]	*ɣ/ʔy [ii]	*k [ɛ/e] l/r	*k[ǎ] ɲ [w] ɳ
Atherurus	*[n]t [ɔ/e] l	[thǎlɔɔ]	*ɲ [ɛɛ] k	*c/s [o/u] k ɾ/w] t	*[tu] k [ɣ] l

Also, it should be noted that for *Atherurus* in the Ahoe-Thaveung branch, the Ahoe taxon corresponds to the Phong-Toum form, while Ahlao corresponds to Atel-Malang. The Cheut form would appear to correspond to Kri-Phong *Hystrix*.



Hystrix Porcupine



Atherurus Bush-Tailed Porcupine

Dhole, Asiatic Wild Dog PMK *cuəʔ ‘(domestic) dog’

Cuon alpinus

Việt	sói
Mường	cə k'ɔl ³ , cə k'ɔw ³ , cə/ɔ pa , cə ɣɔj ³ , cə ɣɔn ³
Toum-Phong	Ph: cəkɔɔl T: cəɔ klɔl Lh/PL: klɔn Lh/SM: cəkɔn
Ahoe-Ahlao	Ahoe: kəlɔl Ah: cəɔ kəlɔl Ahl: cəɔ klɔl
Atel-Maleng	AT(1): kəlaar AT(2): ʔalɔər Ml: cəɔ klaar TE: kəlɔl
Thémarou	ʃɔy
Kri-Phoong	Kr: klaar, klər P: tɔl
Mlengbrou	cəɔ tɔŋ tɔŋ
Cheut	klon

kəl > kl > ʃ , -ɔl > -ɔw > -ɔj = Việt sói

“Dhole” is the English common name for the Asiatic wild dog *Cuon alpinus* Pallas 1811. The origin of the word is obscure, but may derive from the same origin as Kannarese / *tôla* / ‘wolf’, a Dravidian language of western India.

Dholes have an extensive range, that includes India, China, Siberia, Mainland Southeast Asia and Indonesia south through Java. The Southeast Asian subspecies is *C.a. infuscus*. While related to other wild dogs, such as wolves and foxes, it has been a distinct species for over 3 million years. They make a wide variety of sounds, including clicks and whistles. Dholes are also said to be excellent swimmers who often chase their prey into the water. (Fox 1984)

***Cuon alpinus*.** The dhole is interdicted for the Liha and the Phong, but only partially so for the Toum. The Phong say they possess a myth similar to that of the Liha concerning the origin of the interdiction, but this has not been recorded. The Phong described the dhole as a “maa phane boun,” that is, “a dog who has made merit.”

Interdicted for the Ahao and to some (undefined) extent by the Ahoe. The Ahlao say it is not interdicted but this may be a sort of misdirection.

An old Ahoe man cautioned me that, “when you see a pack of dholes running through the forest don’t be deceived, the one in front is not their leader, it’s the one off to the side.”

Interdicted for Atel, but not for To’e and Maleng, though again this may also be misdirection.

Interdicted for Mlengbrou and Phoong but not for Kri. The Thémarou form / ʃɔy / seems to be the Vietnamese form (sói), which may indicate that the informant was trying to conceal the real name of the dhole from the investigator.

Cuisinier (1948:209) relates that for the Nha Lang, Kri-Mol speakers of Nghê An Province, “c’est le chien sauvage qui est formellement interdit à toute le monde, et plus seulement aux sorciers.”

Diffloth (ms. 1973) notes the same interdiction of the dhole among the Aslian groups of Malaysia:

“is considered a man hunter, because if he barks we die, not edible, does not eat humans, only pulls out their eyes, ear drums and anus to kill them as it does to any other prey, cannot be tamed because he can only live deep inside the forest in cool places and cannot stand ‘human heat’ , comes out once a year”

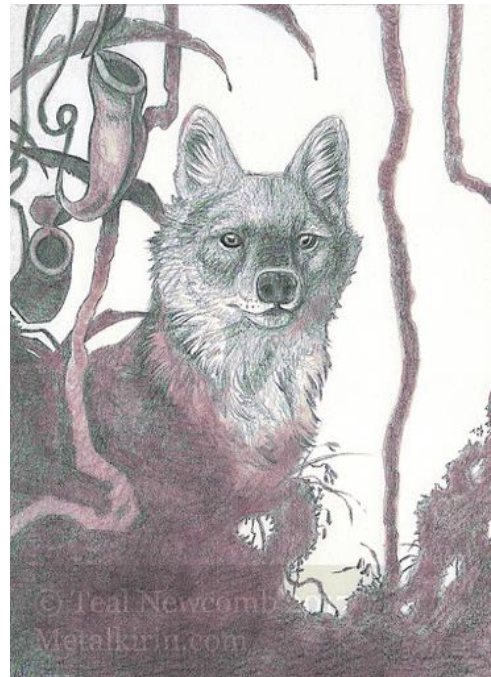
“Also called ‘dog of legends because used to be the domestic dog of people of yore”

“dog of yore”

“Mr. Shaman, because he has extraordinary powers”

“Shaman of the mountains”

(See Appendix for the myth of the dhole and the crow.)



Bears PMK *cg__w ‘bear – both species)

Ursus thibetanus (Photo below on right)

Việt gấu ...

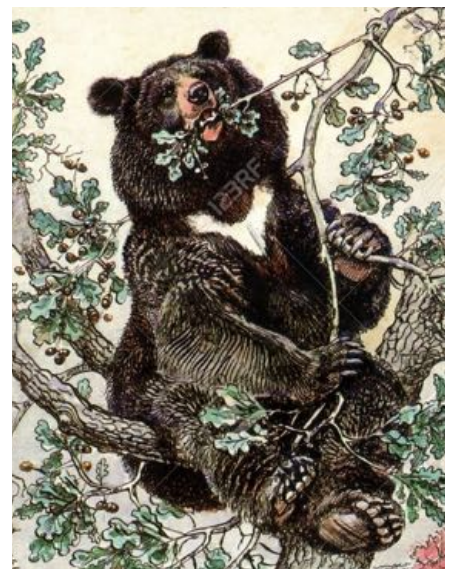
Toum-Phong	Ph: tăkuu maa	T: kəw maã?	Lh/PL: kəw	Lh/SM: kəw
Ahoe-Ahlao	Ahoe: căkuu?	Ah: căkuu	Ahl: căkuu	
Atel-Maleng	AT(1) sǎkuu luʔl	AT(2) rɛɛm	MI: sǎkuu	TE: sǎküü
Thémarou	rɛɛm			
Kri-Phoong	Kr: căkuu	P: skuu		
Mlengbrou	cǎmok			
Cheut	cǎkuu			

Bear (Malasian Sunbear) *Ursus malayanus* (photo below on left)

Toum-Phong	Ph: tăkuu jeeŋ	T: kəw cəw	Lh/PL: tam yəw	LH/SM: yəw
Ahoe-Ahlao	Ahoe: căkuu?	Ah: căkuu	Ahl: fǎduul	
Atel-Maleng	AT: sǎkuu	MI: sǎkuu	TE: sǎküü	
Thémarou	rɛɛm rǎkeɛŋ			
Kri-Phoong	Kr: căkuu	P: skuu		
Mlengbrou	cǎmok			
Cheut	cǎkuu			

Although there are five etyma for bear, the two species are nowadays differentiated by a modifier to a base form, except for Liha which seems to have two distinct generic level forms. There may be ecological reasons for this if the preferred habitats for the two bears are separate. The situation is not unlike the single taxon for python, even though there are two distinct species in the region as a whole.

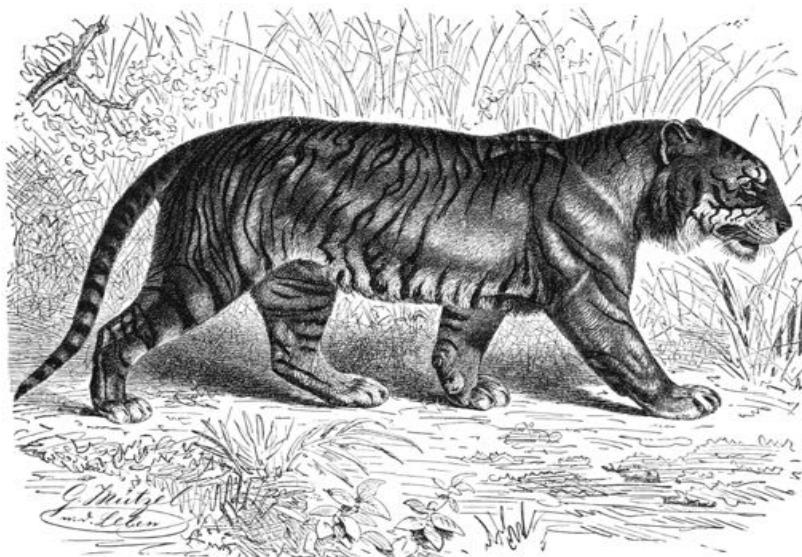
Ursids are interdicted by the Kri and the Mlengbrou.



Tiger, Wild Felidae**PMK *klaaʔ***Panthera tigris*

Việt	hồ̌ , cộp			
Mường	k'al ³ , k'au ³ , hum¹			
Toum-Phong	Ph: khaal	T: khaal	Lh: khaan	
Ahoe-Ahlao	Ahoe: pɛw	Ah: kǎhǎal	Ahl: kǎhǎal	
Atel-Maleng	AT(1): vǎal	AT(2): vǎor	MI: vǎal	TE: jaal
Thémarou	ʃiit pɛ / pae			
Kri-Phoong	Kr: mɛɛw	P: mɛɛw	[*not the same phnology as 'cat']	
Mlengbrou	kokhloʔ			
Cheut	TX: val	BP: tuu haal	Rục (Lợi): kuhal ³	

Tigers are of course subject to a number of interdictions and religious beliefs that affect its linguistic regularity.



Felidae. Most Kri-Mol languages have a single generic term for ‘big cat,’ usually glossed as ‘tiger’ since *Panthera tigris* is commonly the unmarked form. Other cats are distinguished with specific level taxa, as in the following:

Common Name	Phong	Toum	Liha (PL)	Liha (SM)
Felidae	khaal	khaal	khaan	khaan
Clouded leopard - <i>Felis nebulosa</i>	- kiin	- kiin	- kiin	- kiin
Golden cat - <i>Catopuma temminckii</i>		- kaol	- tak thuyuy (?)	

The Liha of Souan Mone relate that a large black cat / tɔw saan / is very dangerous and eats people. The Liha rarely eat tigers because they are said to be sent by the territorial

spirits to punish wrongdoers by killing and eating them. And, because they eat people, the flesh of tigers should not be eaten (i.e. it would be tantamount to cannibalism).

Leopard cats, *Prionailurus bengalensis*, are universally referred to as ‘forest cats’ using the taxon for domestic cat, e.g. Liha / mɛɛw phləy /, Phong / mɛɛw phlii/, etc.

Toum has two other feline taxa which have so far not been identified:

/ taaw dɛɛn / ‘black leopard cat’
/ taaw vaar / ‘regular leopard cat’

The latter form occurs in the taxon /kal vaar/ ‘yellow marten *Martes sp.*’

For Thémamarou there is a three-way generic distinction, and two additional specific taxa:

ʃiit pɛɛ / pɛɛ	‘tiger’
than saa doo	‘leopard’
cǎlɔm	‘clouded leopard’
mɛɛw nlou	‘golden cat’
mɛɛw kaa	‘leopard cat’

Another large feline, the golden cat, *Catipuma temminckii*, was described by some as the most ferocious. Whereas most of the big cats back down and run away when confronted by the humans and their barking dogs, the golden cat will stay and fight.

All Felids strictly interdicted by the Ahao and the Ahoe as a totemic, ancestral, animal. For the Ahao the interdiction is said to be a lineage interdiction of the /caw lɔwɔw/ lineage, and the same applies to the dhole. They have a myth in which a group of Thaveung capture and kill a tiger and all die as a result, therefore the animal is sacred. It is also called “grandfather.”

In Ahoe the *secret* name is /puu ʔɔɔʔ /.

All cats interdicted by the Kri and the Mlengbrou, and at least the larger ones by the Phóng.

Other extant species of felines, the marbled cat *Pardofelis marmorata*, the jungle cat *Felis chaus*, and the fishing cat *Prionailurus viverrinus* were not specifically identified.



Other Felids identified in the Kri-Mol speaking areas:

Leopard *Panthera pardus* (top left)

Clouded leopard *Neofelis nebulosa* (top right)

Golden Cat *Catopuma temminckii* (bottom left)

Leopard Cat *Prionailurus bengalensis* (bottom right)

Civet **PMK *c-m-piik**
Viverridae

Việt cây
 Mường tɔŋ⁵³ (Houa Phanh)
 Brou sa.pɿak

Toum-Phong Ph: kǎmɔŋ T: maong Lh: mɔŋ
 Ahoe-Ahlao Ahoe: taamuɔŋ Ah: tǎmuuŋ Ahl: tǎmuuŋ

Atel-Maleng AT(1) cǎnɛɛk AT(2): cǎnɛɛk Ml: cinɛɛk TE: tǎmuɔŋ
 Thémarou cinɛɛk

Kri-Phoong Kr: cupaak P: ʃǎpɔɔk
 Mlengbrou cupuak

Cheut maŋ

In spite of the large number of civet species residing in the Kri-Mol realm, there seems to be a single taxon, although separate for each subgroup, that refers to civets generically. This might even mark the development of a LF taxon, on a par with bird, fish and snake, albeit a late one. Indeed the taxa for bird and snake were probably later developments as well in this area.

***The Vietnamese confusion between cây and chôn indicates a lack of familiarity with forest environments and faunal terms generally, suggesting that Sino-Vietnamese was a more urban development.



Binturong
Arctictis binturong

PMK *tyuu?

Việt

cây mực, chôn mực (inky civet)

Toum-Phong

T: maon taon kuan

Atel-Maleng
Thémarou
Kri-Phong

AT: tăyuu? Ml: tăyuu
tăyuu
Kr: trăyu? P: tăyuu

The Nrong-Theun languages have good cognates, so we can assume an original Proto-Kri-Mol form.

Classified as a civet in Mol-Toum (rather than a bear as in some parts of Laos).
Interdicted by the Kri.



Hog Badger

Arctonyx collaris

Việt	lũng (= B1 tone, Tai borrowing, but not via Mường)		
Mường	poŋ ⁵⁵ law ³¹ (from Houa Phanh – see discussion for ‘wild pig’)		
Bit	pluur ‘hog badger’ (<i>Arctonyx collaris</i>)		
Toum-Phong	Ph: muɣ	T: kul ɕɔɔ	Lh: maw
Ahoe-Ahlao	Ahoe: maaluul	Ah: mǎluul	Ahl: mǎluul
Atel-Maleng Thémarou	AT: kǎtiʔl kaatiiʔl	MI: kǎtiʔl	TE: kǎtiɿl
Kri-Phoong Mlengbrou	Kr: baalor maaloor	P: bǎluɿl	
Cheut	kǎtuh		

Arctonyx collaris. Apparently not eaten very often by many groups because the flesh is said to be very smelly. But the Toum claim that the meat is good for the health.

The Ahlao (and also the Phong) say there are two kinds of ‘hog badger’, but the second (smaller) one may be the ferret badger.

Hog badgers are one of the main food animals of the Atel and Thémarou. They are chased with the aid of dogs until they and run into their burrows. Then they are dug out and slain with bamboo spears.

A closely related animal is the ferret badger, which is kept separate.



Ferret Badge*Melogale moschata / personata*

Việt chồn bạc má bắc
Mường cây hủ hi

Ahoe-hlao	Ahoe: laa suay	Ahlao: kul khiiʔl
Atel-Maleng	MI: cōō suay	TE: ʔaasuaay
Thémarou	ʔaasōoy	

Kri-Phoong Kr: kafaŋ suum
Mlengbrou tasum



Marten (Yellow-throated)
Martes flavigula

? *(k)sar 'binturong, linseng'

Việt cây lông hoe (??)
 Mường ?

Toum-Phong	Ph: kal kaal	T: kal kaal	Lh/PL: thon thoon	Lh/SM: ɲɛɛ
Ahoe-Ahlao	Ahl: cǎkqal			
Atel-Maleng	AT: skaar	MI: sǎkaal	TE: sǎkqal	
Thémarou	caakaar			
Kri-Phoong	Kr: cǎkaar	P: skaal		
Mlengbrou	cǎkɔɔr?			

The Liha Sop Mone form may refer to 'mongoose'. Otherwise this is a very regular taxon in Kri-Mol. Interestingly, during a visit to a Toum village, a similar marten had been killed by a hunter that morning (Ap 30, 97), but when it was cooked it was said to be smelly and inedible. In this case the marten was an all-yellow species that is quite rare.



Otter(s)
Aonyx and Lutra

PMK *bs__?

Việt rái

Toum-Phong
Ahoe-Ahlao

Ph: see
Ahoe: paasɯʔ

T: sãäyʔ

Lh/PL: paak, dɛɛn

Ah: pǎʃʌʌ, pǎʃaa

Ahl: pǎʃʌʌ

Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou

AT(1): mǎɲɔɔn AT(2): myɯan Ml: mǎɲaaɲ TE: mǎɲɔɔn
mǎɲɯɯn
Kr: mɯyaan keʔ P: mǎɲaaɲ
(Kr: mɯɲɛɲ - another species)
mɯɲaaɲ

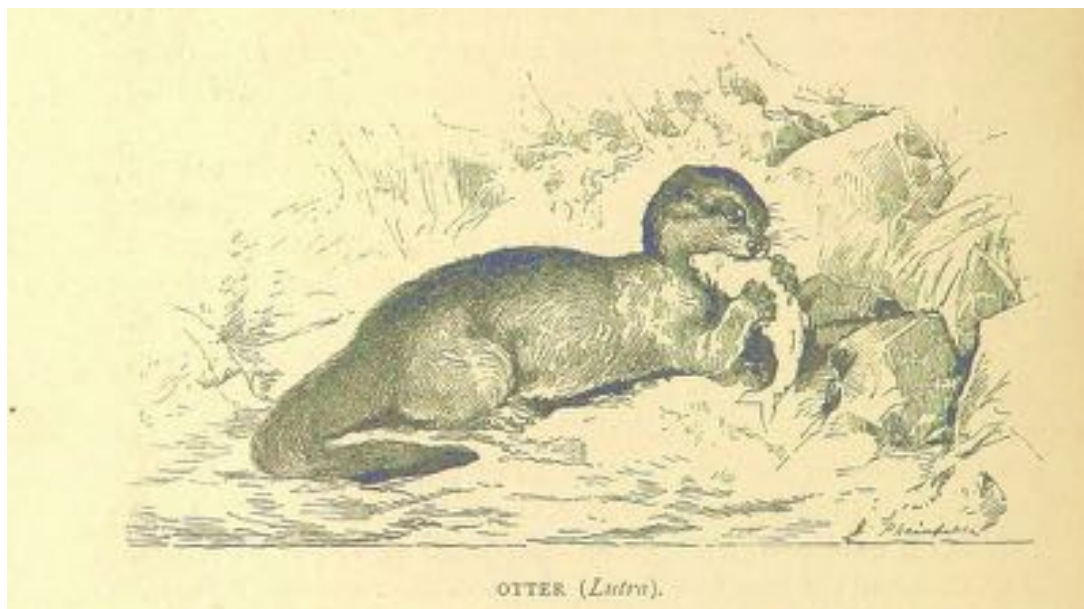
Cheut

TX: pəseɛʔ

BP: pǎʃee

Rục (Lợi): pusê³

Lutrinae. Separate species of otters were distinguished only by the Liha of Phou Lane where the Oriental Small-Clawed Otter *Aonyx cinera* was referred to as /taaw **paak** (said to be the smaller of the two) and /taaw **dɛɛn**/ (larger).



Bat(s)
Chiroptera

Việt dơi

Toum-Phong T: ɲɤk ɲɤk Lh/PL: ɲɤk [NB Proto-Hlai *Curu:k ‘bat’ > yuuk
~ vuuk etc.]

Ahoe-Ahlao Ahoe: ʔaakiw Ah: kew keɐw Ahl: kiw kiiw

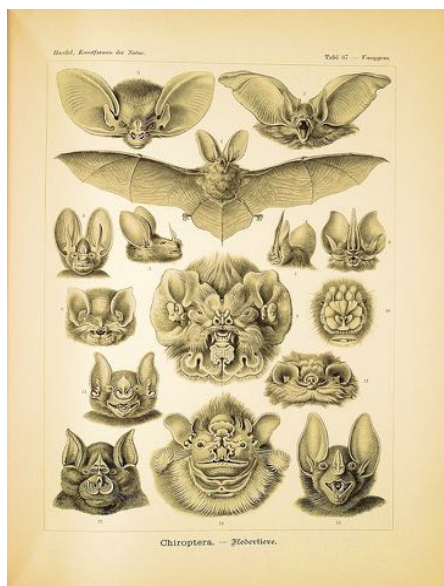
Atel-Maleng AT: spɔtʰ (fruit bat) Ml: sǎpat
Thémarou sǎpat

Kri-Phoong Kr: yayɛŋ
Mlengbrou yuŋ yɛl

Cheut PB: kǎcɛt Rục (Lợi): kachet³

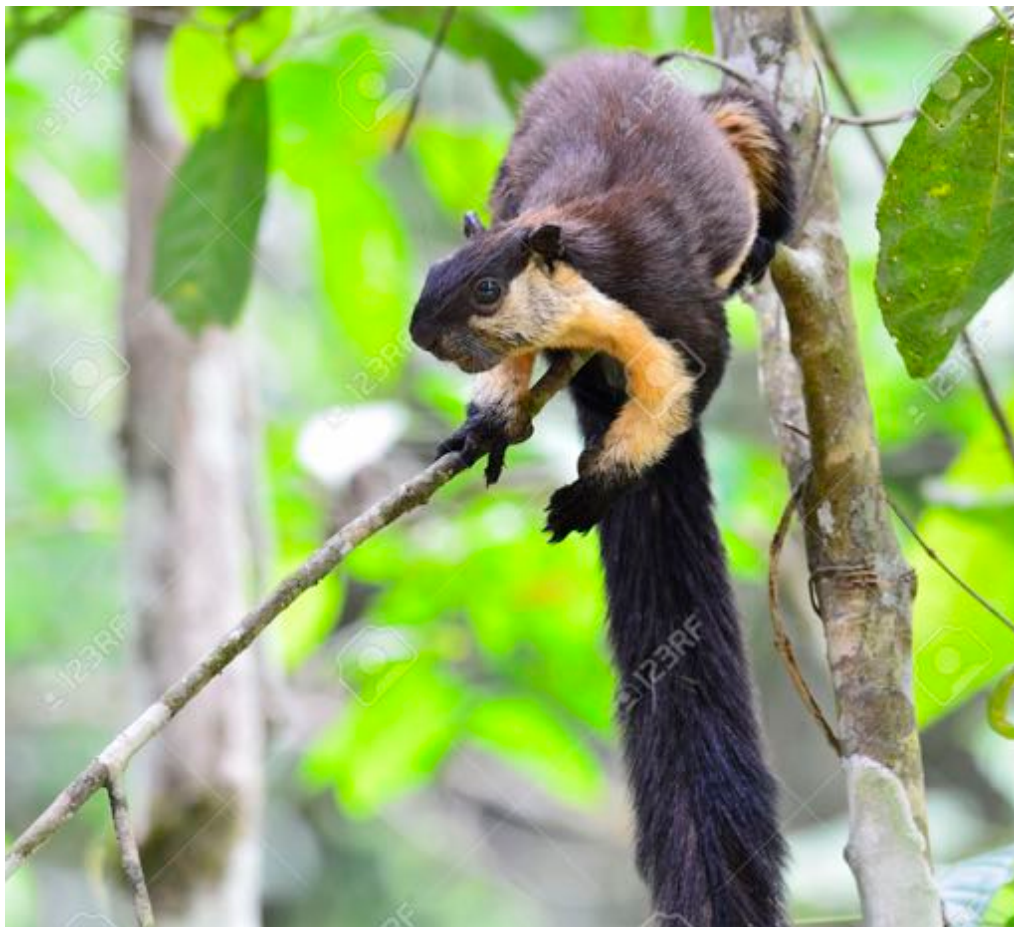
Small Bats

Atel-Maleng AT: kwɛŋ Ml: kurɛŋ TE: kuɾɛ̀ɛŋ
Kri-Phoong Kr: kreŋ P: kureŋ



Giant Squirrel
Ratufa bicolor

Lao	kadaaŋ C3			
Toum-Phong	Ph: kǎŋaaŋ	T: yaŋ	Lh/PL: kǎyǝŋ?	Lh/SM: ɲaŋ
Ahoe-Ahlao Atel-Maleng	Ahoe: kǎfɛw AT: kǎfǝaŋ	Ah: kǎfǝaŋ Ml: kǎsǝŋ	Ahl: kǎfǝan TE: kǎfǝŋ	
Thémarou	kǎfɛw			
Kri-Phoong	Kr: kǎyur	P: kǎsǝŋ		
Mlengbrou	tǎnoŋ			
Cheut	tram			



Squirrel (1) (Lao *kǎhɔ̌k*)
Sciuridae sp.

PMK *pruək

Việt sóc
Mường chuot⁵ , dol dol , tou tou , ton ton

Toum-Phong Ph: phlɔɔk T: phlɔɔk Lh: phlɔɔk

Ahoe-Ahlao Ahoe: kǎcaak Ah: kǎcǎāk Ah!: kǎcaak

Atel-Maleng AT(1): kǎrɣɣm AT(2): khǎrɣɣm Ml: kǎram

Thémarou kăc̣ăḳ

Kri-Phoong Kr: tətərəc | P: kăcaak^h

Mlengbrou hoak

Cheut cimook Rục (Lợi): churmok³

Squirrel (2) (Lao *kǎnáy*)

Toum-Phong T: pal pɛw Lh/PL: kon pɛw Lh/SM: pɛw
 Lh/PL: phlɔk phuang Lh/SM: phlɔk pɔn

Ahoe-Ahlao Ah: kǎcǎak kǎtak Ahl: kǎcaak kǎtak
Atel-Maleng AT: kǎcaak Ml: kǎcaak TE: kǎcaak

Mlengbrou **tămac** nua (?) (cognate with Thémadou below)

Squirrel (3) (Lao *len*) (Tamiops ?)

Toum-Phong	Ph: mɛən	T: mən mɛən	Lh: mən mɛən	
Ahoe-Ahlao	Ah: kǎmɛɛn	Ahl: kən mɛən		
Atel-Maleng	AT(1): mən mɛɛn	AT(2): muʔl	Ml: mǝɛn	TE: mɛən
Thémarou	myc			
Kri-Phoong	Kr: liləp		P: mɛən	
Mlengbrou	tiliŋ			

Flying Squirrels **PMK *sɯl(əə)k**
Hylopetes (small) , *Petaurista* (large)

Việt sóc bay , chồn bay
 Toum-Phong Ph: khlɿŋ T: pɛɛl Lh/PL: baʔan Lh/SM: paen

Ahoe-Ahlao Ahoe: caa loop Ahl: kal yar

Atel-Maleng **AT: ter (sm)**
 AT: səpɣɣʔ Ml: səpɣɣ (Lg)
 Thémarou ʃăpɔɔ
 Kri-Phoong Kr: ʃaapɔʔ P: kăpɔɔ
 Kr: tɛr
 Kr: tɔnaa
 Mlengbrou səpɔʔ

Cheut tăcɯɯl Rục (Lợi): chajur⁴



Tree Shrew(s)

Tupaia belangeri Northern Tree Shrew

Toum-Phong Lh/PL: vɔc vɔɔc Lh/SM: vɔy vɔɔc

Ahoe-Ahlao Ahoe: ʃuan Ah: ʃuən? Ahl: ʃuəŋ

Atel-Maleng AT: kǎʔyɔɔt Ml: kǎyoot
Thémarou kǎyuət
Kri-Phoong Kr: kǎyaat P: kuyɔɔt
 Kr: kǎcaak P: kǎcaak
Mlengbrou kǎyuət
 kǎcaak

The second forms in Kri, Phoong and Mlengbrou are for a smaller species which may be confused with a small squirrel (Squirrel 2 above). Identification from the pictures was difficult and the Lao terms are only a proximate guide. Although there is only one species listed for Laos, the Lao language has two distinct lexemes as well: *kǎtɛɛ* and *kǎcɔɔn*.



Bamboo Rat
Rhizomys

PMK *kmpuuy ‘mole; bamboo rat’

Việt

giúi , dũi

Brou

ku.pj:

Toum-Phong

Ph: kăpuuy

T: ꨀꨀ

Lh/PL: puuy

Lh/SM: puuy

Ahoe-Ahlao

Ahl: ʔɔɔʔn (< Tai)

Kri-Phoong

Kr: cituyʔ

P: tuuy

Mlengbrou

tuy

Cheut

tuy

Could not elicit in Atel-Maleng and Thémarou.

Rhizomys. In Ahlao the *concealing* name is / kăʃaŋ tak / ‘red teeth’.

There is also a smaller species of bamboo rat (the Hoary Bamboo Rat), that seems not to be recognized (or perhaps is the only one occurs in the area). This smaller species is called /tuun/ in Lao, which can also mean ‘mole’. It seems to be an old Chinese loan in Tai, originally ‘hedgehog’ in Chinese north of the Yangtze.

The bamboo rat is an integral part of marriage for the Mlengbrou. The couple must go into the forest together to find a bamboo rat. This becomes the main food offering at the ceremony.



Laotian Rock Rat / Sruirrel-Rat

Laonastes aenigmamus

Although well-known by local villagers in Khammouane and Quang Binh, this animal was not discovered until 1996, and then only technically described in 2005. Local Tai/Lao villagers call it *khanyou*. Since the species is found in Kri-Mol speaking areas, there are probably local names, particularly in Cheut, Ruc and Sach which are mentioned specifically by Vietnamese biologists – though the local names are not provided. There is a discontinuous range and the rock rat is found again in Hin Boun district near the Ahoe areas and perhaps elsewhere.

Biologically this animal is of great interest as it represents what taxonomists refer to as a Lazarus species, thought to belong to the fossil family *Diatomyidae* extinct for 11 million years until its discovery in Laos. It lives in forested limestone karst areas and in appearance indeed resembles a cross between a rat and a squirrel.

Unfortunately I was unaware of the discovery when I was carrying out fieldwork and so possible Kri-Mol names for this fascinating creature are so far unrecorded. I include it here to call attention to its existence for linguists who may be working on these languages in the future.

https://en.wikipedia.org/wiki/Laotian_rock_rat



Rat*Muridae***PMK *kn(iə)? [cf small squirrel' Lao kanay]'**

Việt

chuột

Mường

hre , ʒe , re . he , chuət , (t^hee³³ [Houa Phan])

Toum-Phong

Ph: kǎŋǧ

T: nǧǧ?

Lh: nǧǧ?

Ahoé-Ahlao
Atel-MalengAhoé: ʔeek
AT: ʔeekAh: ʔeek
Ml: ʔiikAhl: ʔiik
TE: ʔeekThémarou
Kri-Phong

lɤk

Kr: lɤk

P: lɤk

Cheut

Rục (Lợi): kunê¹

Macaque	PMK *_wɔk	Brou: tām̐r , tām̐ur
Việt	khi	
Mường	βək , ɣək . bək, k'i ⁴	
Toum-Phong	Ph: wɔk T: vauk Lh/PL: vək Lh/SM: wɔk Lh/SM: duut [NB Li (Stübel) Süd: n̥uc, Weiß: noh, Geshor: nok]	

Ahoe-Ahlao	Ahoe: doo Ah: d̥ɔɔ Ahl: d̥ɔɔ	
Atel-Maleng	AT(1): m̥q̥m AT(2): muam ML: maam TE: maam AT(1): ruʔɛɛɛ TE: khuŋ	
Thémarou	m̥ɔm	
Kri-Phoong	Kr: d̥ɔɔ P: maam	
Mlengbrou	doa	

Cheut (??)	TX: ʔuluup BP: luup Ruc (Lợi): m̐om ⁴ , kumah ¹
	TX: sak = ‘langur’ ?

Macaca sp. Liha (PL) has two other forms: / wɔk daak / ‘water macaque’ and / taaw d̥əʔəŋ / ‘short-tailed macaque’. There are at least four species of macaque in this part of Laos: *M. leonina* (northern pig-tailed), *M. arctoides* (stump-tailed [red face]), *M. fascicularis* (crab-eating [long tail]), and *M. mulatta* (rhesus).

The To’e form / khuŋ / is probably related to /khoon/ in the local languages of Gnommarath and Boualapha which refers to Francois’ (or perhaps the Laotian) Langur, an indication that this primate may inhabit the Corridor area as well, adjacent to the To’e village of Pakatan.



Langur
Cercopithecidae

PMK *swaa?

Viet vọc , vọc

Toum-Phong Lh/PL: puwan , khămook

Ahoe-Ahlao Ahoe: tãnaa Ah: tãnoo Ahl: tãnaa **(Brou: tanoa)**

Atel-Maleng AT(1): ʃãvaʔa AT(2): ʃãvaʔ ML: svaa?
Thémarou ʃvaa
Kri-Phoong Kr: ʃãvaʔ P: ʃvaaʔ

Mlengbrou doa toʔ

Cheut TX: mwam (see Macaque) Rục (Lợi): sak³ ‘black & red monkey’
kung⁴ ‘black monkey’

These forms may refer specifically to the red-shanked or douc langur (in picture and in Lao) *Pygathrix nemaeus*.

Liha (PL) distinguishes two kinds of langurs. The Ahoe-Ahlao forms may be related to the Mlengbrou.

Douc Langur (left)
(Red-Shanked Lanagur)
Pygathrix nemaeus

François' Langur
Trachypithecus francoisi



Gibbon
Hyobates sp.
Nomascus sp.

PMK *ryool , *kuap

Việt

vượn

Mường

zok , βwɿn⁵ , ɣwən⁵ , vɿwən⁵

Toum-Phong
Ahoé-Ahlao
Atel-Maleng
Thémarou

Ph: kǎyoɔk
Ahoé: kayak
AT(1): yaɯk^h
yaɯk

T: yaɯk
Ah: yook
AT(2): yaɯk

Lh/PL: yaɯk

Ahl: yook

Ml: yoɔk

TE: **tǎyɔɔŋ**

Kri-Phoong
Mlengbrou

Kr: kwɔp
kwɔp

P: kwɔp

Cheut

TX: yoɔk

BP: zoɔk / zok

Rục (Lợi): ijok³

Lar Gibbon (left)
Hylobates lar

Southern White-
Cheeked Gibbon
Nomascus siki



Slow Loris

Lorisidae

Việt cu ly gầy

Bengal slow loris *Nycticebus bengalensis*

Sunda loris *Nycticebus coucang*

Pygmy slow loris *Nycticebus pygmaeus*

Mlengbrou lụụ tịj



Unable to elicit a name for this relatively common animal, except in Mlengbrou. There may be a prohibition involved.

Pangolin
Manidae

PMK *b-rn-j__l

Việt
Mường ?

tê tê

Toum-Phong	Ph: kǎbuul	T: khluut	Lh/PL: baon	Lh/SM: khluut^h
Ahoe-Ahlao	Ahoe: kǎbol	Ah: kǎbool	Ahl: kǎbool	
Atel-Maleng	AT(1): kabor	AT(2) bōl	Ml: kǎbaar	TE: kǎbōl
Thémarou	kǎbor			
Kri-Phoong	Kr: kǎrbor	P: kǎbor		
Mlengbrou	kǎboor			
Cheut	TX: mbor	PB: bool	Ruc (Lợi): kumbor ¹	, m-bor ¹

The two species are not lexically differentiated. The form is regular throughout the languages studied here with the exception of Toum and Liha with a separate etymon.



CHAPTER 4 – KRI-MOL BIRDS

Bird
Duck
Hawk, Kite, Eagle
Osprey
Owl
Fish Owl
Dove, Pigeon
Hornbills
Greater
Wreathed
Pied
Rurours-necked
Brown
Green Peafowl, Peacock
Grey Peacock
Pheasants
Drongo
Crow
Quail, Partridge
Button quail
Coucal
Bulbul



Bird (LF)*Aves***PMK *(k-)ceem**Việt
Mườngcon chim
cim^{1,2}Toum-Phong
Ahoe-AhlaoPh: ciim
Ahoe: ʔaciimT: tuu ciim
Ah: ʔaccaŋLh: ciim
Ahl: ʔcoyAtel-Maleng
Thémarou
Kri-Phoong
MlengbrouAT: ʔaa
ʔou?
Kri: ʔoo?
ʔaa?Ml: ʔaa
P: ʔoo

TE: ʔoo

Cheut

TX: ncim

Ruc: icim



Duck **PMK *?adaa?**

Anseriformes: Anatidae: Anas

Việt

vịt

Toum-Phong

Lh: viiit (-daak)

Ahoe-Ahlao

Ahoe: ʔatɤɤ Ahl:ʔatɛɛ

Atel-Maleng

At: viiitth Ml: viiit TE: viiit

Thémarou

viiitth

Kri-Phoong

Kr: viiitth P: viiitth

Mlengbrou

kuap kuap

Cheut

TX: viiit Rục: vịt



Hawk, Kite, Eagle

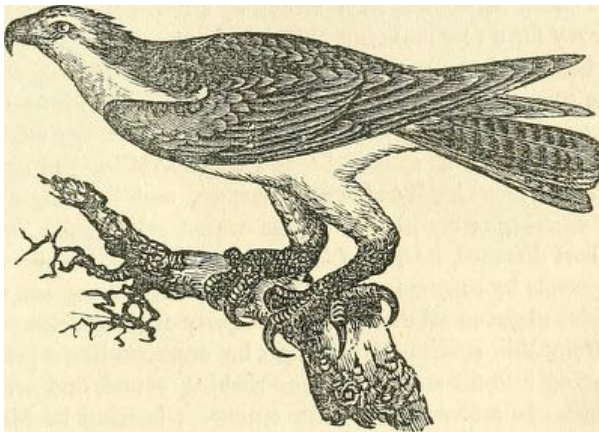
Falconiformes: Accipitridae

Toum-Phong	Ph: t. hɛɛl	T: t. hɛɛl	Lh: t. hɛɛn
Ahoe	Ahoe: hɛl		
Atel-Maleng	AT: hɛʔl	Ml: hɛɛl	TE: hɛɛl

Kri-Phoong	P: ʔ. kǎlaaŋ
Mlengbrou	kǎlaaŋ

Perhaps confusion with Osprey.

There are some 46 species of hawks, eagles and kites (including falcons) in Laos so its difficult to differentiate. Informants seem not to make fine distinctions except for the osprey. And even here identification is not certain.



Osprey **PMK *k(a)laaŋ**
Falconiformes: Accipitridae (Pandion haliaetus L.)

Việt lang
 Mường tráng (GD)

Toum-Liha	Ph: t. klaaŋ	T: t. klaʔaŋ	Lh: t. klaʔaŋ
Ahoe-Ahlao	Ahoe: kaalaan	Thaveung: kalaan 1 (GD)	
Atel-Maleng	AT: kaalaan	Ml: kǎlaan	TE: kǎlaan
Thémarou	kǎl kalaan tǎluuŋ		
Kri-Phoong	Kr: kǎlaan	P: ʔ. vɔɔ	
	k. kǎyɔɔ		
	k. pɔɔy		
	k. kiŋkwer		

Note: The Kri forms are undoubtedly species of haws, kites, eagles and falcons.



Owl

Strigiformes

Việt	con cú [C tone]
PT	*gaw C
Bit	pkɔɔ 'owl; general term for owls'
Phong-Toum	Ph: boo T: baaw Lh: baaw
Ahoe-Ahlao	Ahoe: bɔɔ
Atel-Maleng	AT: bɔʔɔ Ml: bɔɔ TE: bɔʔɔ
Thémarou	păcoo (? not sure of identity)
Kri-Phoong	Kri: pɔɔŋ pɔɔŋ (horned owl) P: kuu (all owl species)
Mlengbrou	ʔ. boo
Cheut	Rục: pó
Note Kri:	ʔ. mịm , ʔ. koo (round-headed owls)

* Thémarou seem to be the same as 'pigeon.' There may be some lexical confusion between doves and owls but I'm not sure why this should be the case as the morphology is so different. The Vietnamese form for dove is *chim bồ câu*. (Perhaps related to the calls??).



Fish Owl

Bubo

Toum-Phong

Atel-Maleng

Thémarou

Kri-Phoong

Lh: thu thii

TE: ʔ. thuu thuu

ʔ. thuu tih

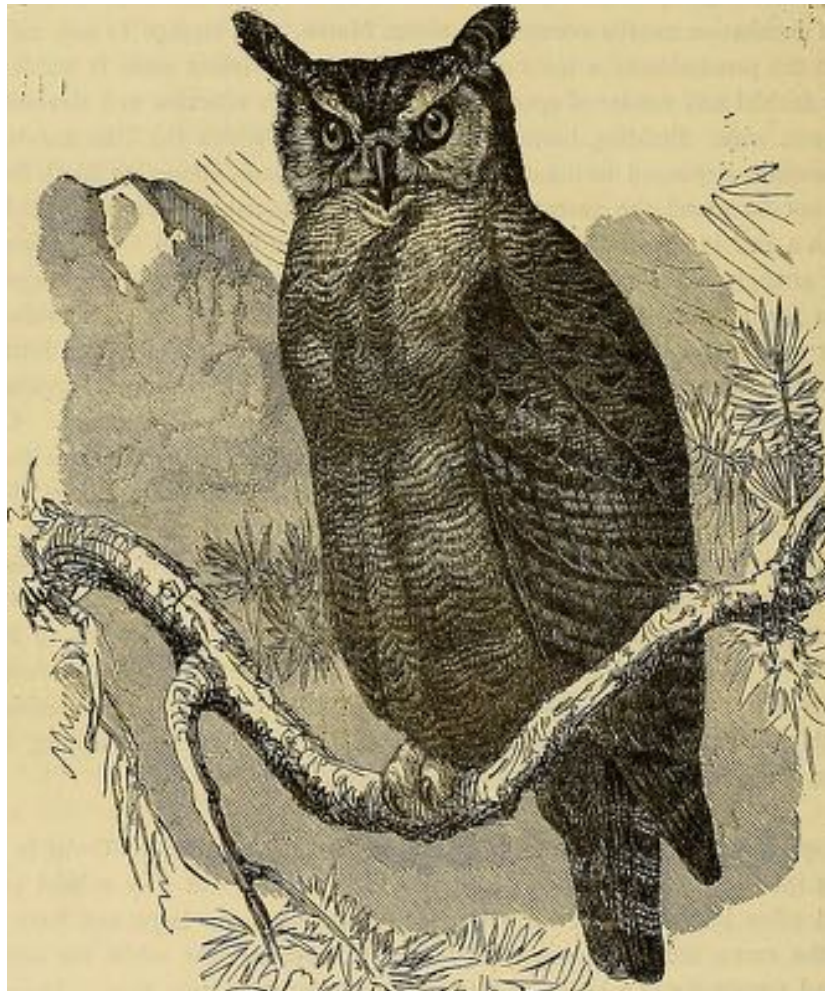
Kri: kǎlaŋ thuu thii

Note: Could be a confusion with 'nightjar' or 'frogmouth'. (??)

Also: Lao = /nok thii B1 thii B1/ and BT 'nightjar' /tuu tuu/.

There may be superstitions attached to this bird. In BT for example, hearing the call is a bad omen, and the onomonopoeic representation.

Note reduplicative or expressive disyllabic form in other AA languages ??



Doves / Pigeon

Columbiformes: Columbidae

Việt chim bồ câu (A)
PT *khr̥aw A

Toum-Phong	Ph: t. cuu cuu (-puŋ)	T: t. kow kow	Lh: kuu kuu (kuu ʔuŋ)
Ahoe-Ahlao	Ahoe: pākūu		
Atel-Maleng	AT: pācoo	ML: pākūu	TE: pākūu
Thémarou	pācoo		
Kri-Phoong	Kri: tākoo	P: tākūu	
Mlengbrou	pikūu		
Cheut	Rục: bò kǎu		



Hornbills (Coraciiformes: Bucerotidae)

The five main species of hornbills for which separate taxa exist in Kri-Mol languages:
Conservation of Hornbills in Thailand:

<https://www.researchgate.net/publication/257602982> Conservation of Hornbills in Thailand

Cf. Sanguansombat, W. 2005. Thailand Red Data: Birds. Office of Natural Resources and Environmental Policy and Planning (ONEP), Bangkok, Thailand.
Conservation of Hornbills in Thailand (PDF Download Available). Available from: <https://www.researchgate.net/publication/257602982> Conservation of Hornbills in Thailand [accessed Sep 13, 2017].



Great Hornbill
(*Buceros bicornis*)



Wreathed Hornbill
(*Rhyticeros undulatus*)



Oriental Pied Hornbill
(*Anthracoceros albirrostris*)



Rufous-necked Hornbill
(*Aceros nipalensis*)



Brown Hornbill
(*Anorrhinus tickelli*)

Greater Hornbill
Buceros bicornis

Proto-AA *truəŋ?

Việt

chim hoàng, chim hồng hoàng (species not specified)

Mường: ??

Bit

ceem truəŋ ‘plain-pouched hornbill’

Toum-Phong
Ahoë-Ahlao
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou

Ph: kuu h̥laaŋ	T: koo ɣaaŋ	Lh/SM: koo ɣaaŋ
Ahoë: ʔaŋ ɭɛŋ	Ah: thiŋ	
AT: tarɔŋ	MI: thrɔŋ	
ʔ. t̥aɽuəŋ		
Kr: ʔ. traŋ / t̥zaŋʔ	P: cɔŋ	
triən		



Wreathed Hornbill
Rhyticeros undulatus



Toum-Phong Ph: t. kuuk T: t. klɤk

—

Ahoe-Ahlao Ahoe: kɛɛŋ (possible error for Pied)

Atel-Maleng AT: koo
 Thémarou koo
 Kri-Phoong Kr: ʔ. koo P: ʔ. kuu



Pied Hornbill **Proto AA *krəŋkiəŋ^o**
Anthraceros albirostris

Atel-Maleng AT: kɛɛŋ kɛɛŋ MI: ʔ. kɛɛŋ

And perhaps, confused with Brown Hornbill:

Lh/SM: ciim nok kɛɛŋ (~ Lao)
 Ah: ʔakɛɛŋ

And Wreathed Hornbill:

Ahoe: kɛɛŋ

Note the Lao taxon is *nok kɛɛŋ* ‘pied hornbill’. This could be an old MK borrowing into Lao and other Tai languages. The bird is only found in the tropics, but is the most common of all the hornbills. It may have been thus the most commonly traded and this must have begun rather early. A fifth century Buddhist monk wrote of them, and Tang sources frequently mention the use of the casques as drinking vessels by local people. In Chinese they were known as *mung dung* or *mung ch’ong* and certain hornbill-shaped war boats were named after them (Schafer 241-2). Though the current range does not include Guangdong and Guangxi, it is probable that originally it was found at least as far north as the Tropic of Cancer.

Bit ceem bɔɔŋ kɛɛŋ ‘**great hornbill**’



Rufous-Necked Hornbill

Aceros nipalensis

Atel-Maleng
Thémarou

AT: ʃtɔk
ʔ. sítɛɛʔl

MI: ʔ. stɔk

Kri-Phoong
Mlengbrou

Kr: ʔ. cǎbɔ
ʔ. cǎbooʔ



Brown Hornbill
Anorrhinus tikelli

Toum-Phong	Ph: t. mləl	T: t. maul	Lh/SM: ciim nok keeng (< Lao)
Ahoe-Ahlao	Ahoe: mləl	Ah: ʔakɛɛŋ, mlææ	
Atel-Maleng	AT: mləl	Ml: mləl	TE: ʔ. mǎləɛl
Thémarou	ʔ. mǎləw		
Kri-Phoong	Kr: ʔ. mləl	P: ʔ. mləl	
Mlengbrou	məl		

The species found in Laos is Austen's Brown Hornbill (*Anorrhinus austeni*). In Lao this hornbill is referred to by the playful name of *maa noy*, that is, 'little dog, puppy.'



Green Pea Fowl, Peacock

Galliformes: Phasianidae (Pavo muticus)

Việt con công
Bit kwəəŋ 'peacock'

Toum-Phong
Ahoē-Ahlao
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou
Cheut

Ph: t. **kăyuu**
AhoēL kaavəŋ
AT: kăvəŋ
?. voon
P: von vaaw
kaa vuŋ
TX: kakoon

T: t. klaon Lh: t. kuan
Ah: kaavəŋ
Ml: kăvəŋ TE: kăvəŋ
Kri: von vaaw ('argus pheasant')
Ruc: kəvon



Grey Pheasant

Phasianidae

Atel-Maleng
Kri-Phong
Bit

AT: kɔŋ kɔɔc (male) koo koor (female)
Kri: kɔŋ kooy?
ceem bɔŋ kɔɔy 'peacock pheasant'

Pheasants

Phasianidae

Việt

chim trĩ

Toum-Phong
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou

Ph: t. klɔɔl T: t. klɔɔl Lh: kloon
AT: kǎluŋ TE: kǎluŋ
ʔ. ʃɛɔŋ ('siamese fireback')
Kri: kǎluŋ P: kǎluŋ
kǎluŋ



Drongos
Dicuridae

Toum-Phong

Ph: ciim viaṇ T: ciim viaṇ (large) Lh: ciim tooy kaa
ciim kok (small)

Ahoe-Ahlao
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou

Ahoe: **ḱḱḱḱḱḱ**
AT: khoy lōy Ml: ḱ. khālōy
pālōy
Kri: khilooy P: ḱ.kālooy
ḱ. ḱaveṇ

There are two main species, one has a longer bifurcated tail and is more outstanding.



Crow
Corvidae

Việt con quạ (C)
Mường ak^{3,5}
Lao too kaa A , nok kaa A

Toum-Phong	Ph: t. ʔaak ʔaak	T: t. ʔaak ʔaak	Lh: t. ʔaak ʔaak
Ahoe-Ahlao	Ahoe: kǎʔaak		
Atel-Maleng	At: ʔaak	Ml: ʔ. ʔaak	
Thémarou	ʔaak ʔaak		
Kri-Phoong	Kr: krǎʔaak	P: ʔ. ʔaak	
Cheut	Rục: ăʔák		



Quail

Coturnix sp.

Việt	chim con cú, chim rể (chim đa đa ‘partridge’)
Lao	nok khoo B1
Toum-Phong	Ph: kǎyaan TL yaan
Ahoe-Ahlao	Ahoe: kǎyaan
Atel-Maleng	TE: kǎyaan (At: kǎyaʔan ‘partridge’)
Thémarou	prooc tɔɔh (prooc = partridge [Lao nok thaa A])
Kri-Phoong	Kr: kɔŋ krɔɔc (kǎyaan ‘partridge’)
Mlengbrou	krǎyaan
Bit	ceem prooc ‘blue-breasted quail’

Quails and partridges (*Phasianidae*) are similar in appearance, and thus difficult to differentiate using photos. Button quails, however are usually readily distinguished.



Button Quail

Turnicidae

Lao

nok khum C1

Toum-Phong
Ahoe-Ahlao
Atel-Maleng
Kri-Phoong
Mlengbrou

Ph: ງູູູ ງູູູ
Ahoe: ງູ ງູູ
At: ງູ TE: ງ. ງູູ
P: ງ. ງູູ
ບ້ວ (cognate with Thémrou ‘partridge’)

Bit

ꨀꨀ ꨀꨀ ‘quail’



Coucal

Cuculiformes: Cuculidae (Centropus sinensis)

Lao nok kot

Toum-Phong T: ʔut ʔuut Lh: ʔut ʔuut (seems to be
confusion with button quail?)

Ahoe-Ahlao Ahoe: puut puut

Atel-Maleng At: pīt pīt Ml: pit piit TE: pīt pīt

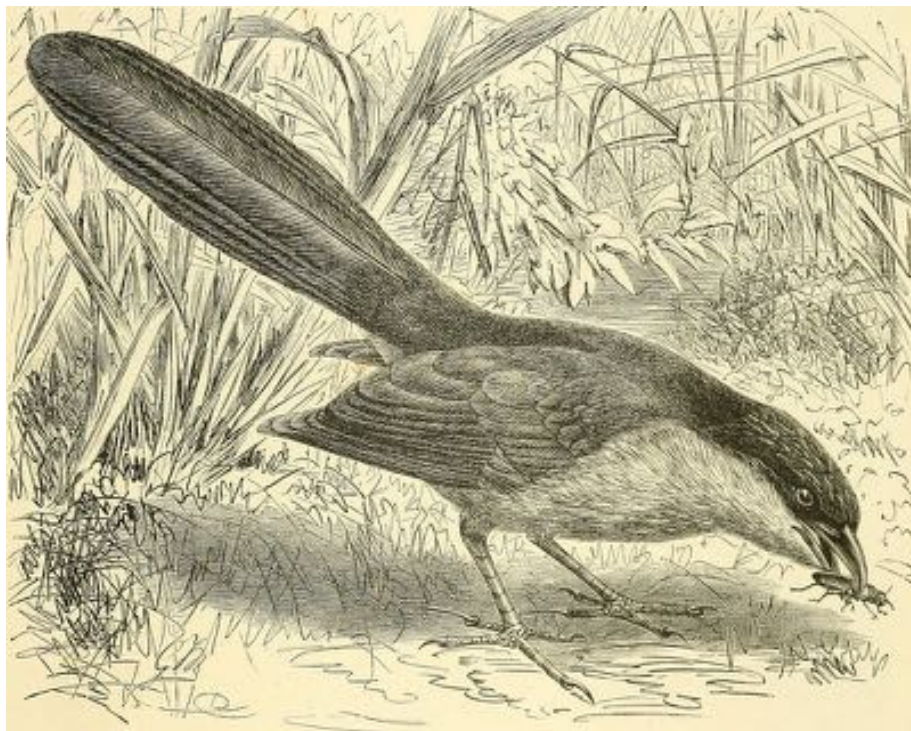
Thémarou pīt pīt

Kri-Phong Kr: pīt pīt

Mlengbrou pīt pīt



Weak fliers. Usually found on or near the ground, hence the confusion with button quail ?? But they are so different that it is hard to imagine how this would happen. Thus for the time being, since both Toum and Liha provide the same taxeme, this this may be considered an unambiguous identification. Note however, Phong /t.puut puut/ 'partridge'.



Bulbul

Pycnonptinae

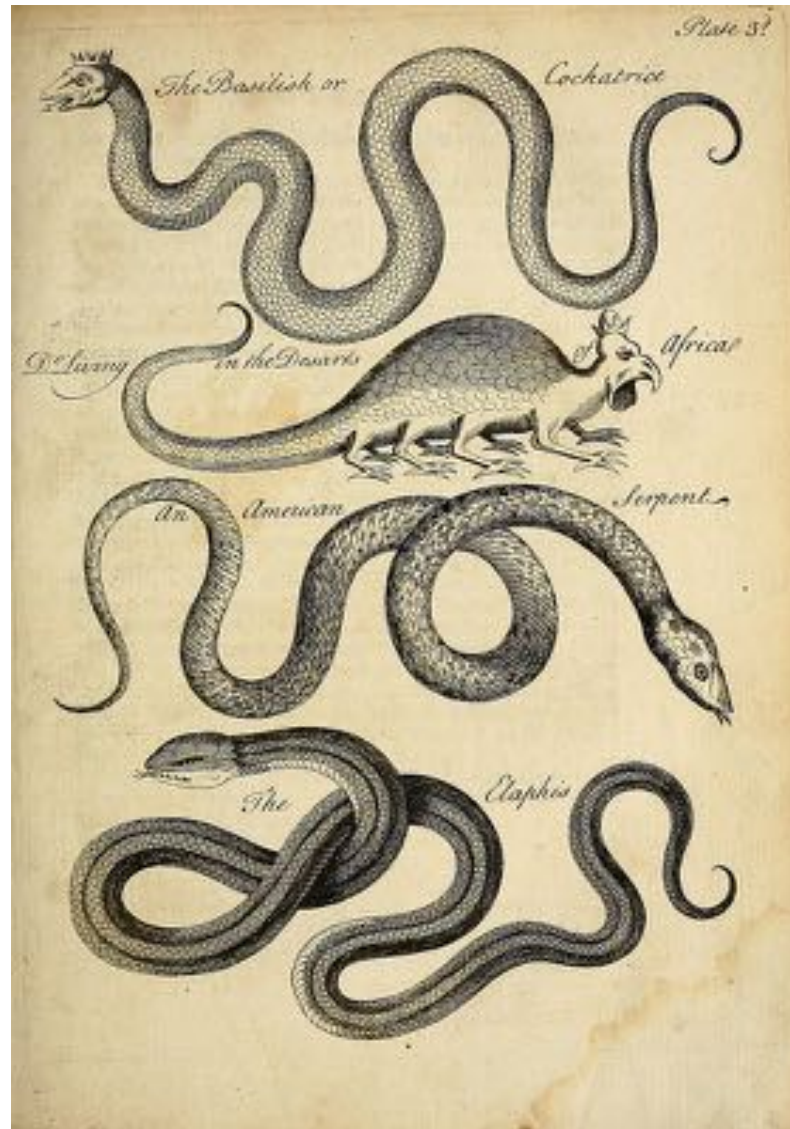
Atel-Maleng
Ahoe-Ahlao
Thémarou
Kri-Phoong
Mlengbrou

At: phrɛɣw Ml: phrɛw
Ahoe: **ʔaciim ʔɔʔ mɔŋ**
ʔ. prɛw
Kr: pirɛɣw P: prɛw
tākɔy mɛw



CHAPTER 5 – KRI-MOL REPTILES AND AMPHIBIANS

Snake
Python
Cobra
Skink
Agamid
Physignathus
Flying lizard - Draco
Wall lizard -
Hemidactylus
Tokay Gekko
Tree monitor
Water monitor
Turtle/tortoise
Testudo impressa
Platysternon
Soft-shelled turtle
Frog
Toad



Snake
Serpentes

PMK *k-m-sap , *mar

Việt
Mường

con rắn
t'ap̃ , sap̃

Toum-Phong

Ph: tuu siŋ T: siʔŋ Lh/PL: tau ʃəŋ Lh/SM: tu ʃʌʔŋ

Ahoe-Ahlao

Ahoe: luk Ah: luk Ahl: luk

Atel-Maleng

AT(1): kopee AT(2) kǎpee Ml: kǎpee TE: kǎpee

Thémarou

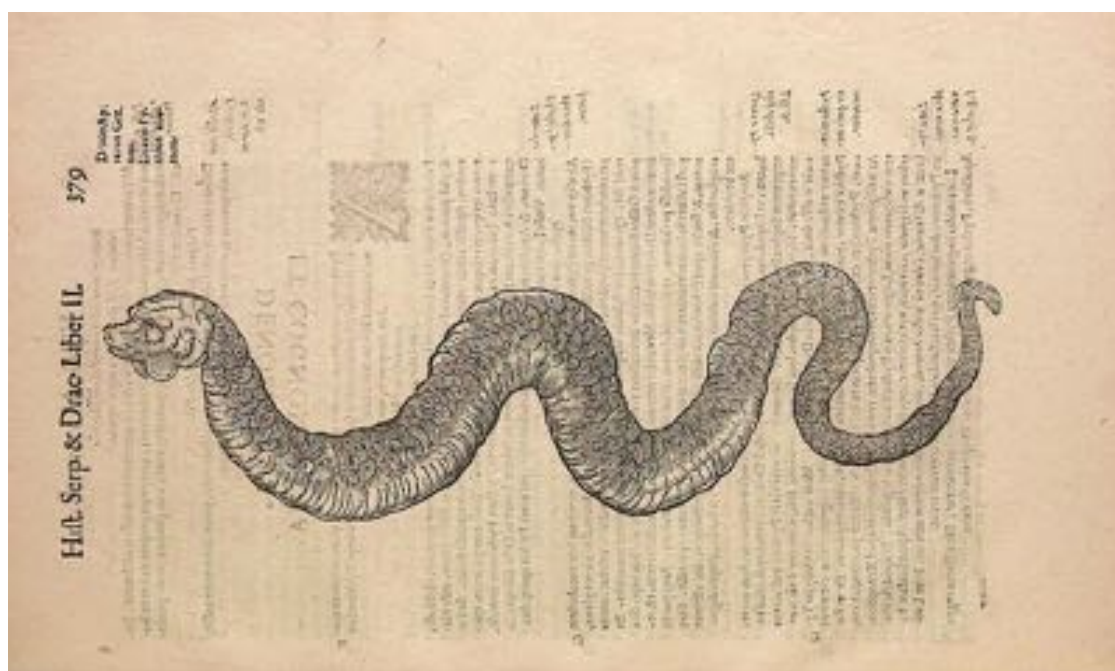
kobuat [NB – Jiamao (Hainan) /ʃuat⁷/ ‘snake’]

Kri-Phoong
Mlengbrou

Kri: ʃǎyaar P: th/ʃǎyaar
tǎyaar

Cheut

TX: pɤsiŋʔ Rục: pǎsiŋ



Python

PMK * t()lan

Việt

trăn

Mường

klan², tlan²

Toum-Phong

Ph: tuu klin

T: tuu klɔn

Lh/PL: tau klan

Lh/SM: tu kloʔn

Ahoe-Ahlao

Ahoe: luk taalen

Ah: luk tălɔn

Ahl: luk tălen

Atel-Maleng

AT(1): k. tălɔn

AT(2): k. tălɔn

MI: k. tălɔn TE: k. tălɔn

Thémarou

k. klan

Kri-Phong

Kri: ʃ. klan

P: ʃ. kălɔn

Mlengbrou

krəw

Cheut:

TX: p. lyɔnʔ

Rục: (kɔn) pəsɨn liəp



Top: *P. reticulatus*

Bottom: *P. molurus*



Cobra

Naja sp.

Việt rắn hổ (B) mang
 Mường hu⁴ zǎm¹, ho mang, hrij hu ...
 Tai haw B

Toum-Phong Ph: tu siŋ huu T: siʔŋ həu Lh/PL: ʃəŋ həu Lh/SM: ʃʌʔŋ haʔu (< Tai?)

Ahoe-Ahlao Ahoe: luk tayaal kuul Ah: luk coŋ ʔaan (< Tai 'O.h.') Ahl: luk coŋ ʔaan

Atel-Maleng AT91): k. ʃǎluum AT(2): k. ʃlum Ml: k. sǎlum TE: k. ʃǎlum
 Thémarou ʃǎluum
 Kri-Phoong Kri: ʃ. cǎlum P: ʃ. ʃǎlum
 Mlengbrou ʃ. cǎlum

Cheut TX: p. byoŋ Ruc: p. joŋ , bojông⁴

Toum-Phong and Vietnamese forms seem to be borrowings from Tai. But there are in fact three etyma involved here, and Mường dialects have all three.

It is difficult to get a clear differentiation between the common cobra and the king cobra, *Ophiophagus hanna*. The Ahao-Aflao forms are borrowed from Tai/Lao 'king cobra.'



Skink
Mabuya sp.

Việt thần lằn

Toum-Phong Ph: t. bul bool T: t. bol bol Lh/PL: t. bon baun LH/SM: t. bun bau?n

Ahoe-Ahlao	Ahoe: kaanaal	Ah: kǎnaal	Ahl: kǎnaar
Atel-Maleng	AT: kǎnaar	Ml: kǎnaal	TE: kǎnaal
Thémarou	kǎnaar		
Kri-Phoong	Kri: tǎlɔɔ P: kǎnaar		
Mlengbrou	tǎloɔ		
Cheut	Rục (Lợi): kanɔal		



Agamid
Calotes sp.

PMK *pŋkuay [cf Kri-Phoong ‘Physignathus’]

Việt

đùng đàng (?)

Toum-Phong
Ahoehlo
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou
Cheut

Ph. t. kǎdǎo T: t. dǎdǎo Lh/PL: t. dǎdǎo Lh/SM: t. tang dǎdǎo
Aho: kaduah Ah: kǎduh Ahl: kǎduh
AT(1): kǎduəh AT(2): thǎreah Ml: kǎduah TE: kǎduəh
taareah
Kri: roŋ rɛ(ɛ)h P: ruŋ rɛɛ
dua roŋ rii?
kurɔt



Physignathus (Water Lizard)
Agamidae

Lao	kathaən
Toum-Phong dɛʔɛ	Ph: kǎtaən T: t. tan taan Lh/LP: t. taŋ taən Lh/SM: t. taən

Ahoe-Ahlao	Ahoe: kǎyaən	Ah: kǎyaən	Ahl: kǎyən
Atel-Maleng	AT(1): kǎyaən	AT(2): kǎyaən	Ml: kǎyaən TE: kǎyɔən
Thémarou	kaayɔən	[NB Proto-Central Hlai * rju:ŋ ‘lizard’]	

Kri-Phoong	Kri: tǎkɔy? P: tǎkooy [cf PMK ‘Calotes’]
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Mlengbrou	kǎtheən
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Cheut	pɔɔʔ
-------	-------------

Probably Lao borrowed /kathaən B/ from AA languages.



Draco (Flying Lizard)

Agamidae

Toum-Phong

Ahoe-Ahlao

Atel-Maleng

Ph: pəm piik (< Tai) T: dɔdɔɔ pɔl

Ah: kǎduh ʔapɛɛŋ

AT: kǎpah naaŋ | Ml: mǎlɛɛp

Lh/SM: tu taan

TE: muu lɛɛp

also: pəm piik (< Tai)

Thémarou

Kri-Phoong

ɲialɛɛt

Kri: ɲalɛɛt

P: ʔilɛɛt



Hemidactylus (wall lizard)
Gekkonidae

Toum-Phong	Ph: paa hlian (< Tai)	Lh/PL: paa huan (< Tai)	Lh/SM: t. paa huan
Ahoe-Ahlao	Ahoe: kikiām (< Lao)	Ah: kǎliŋ ʔaloŋ	
Atel-Maleng	Ml: paa huan (< Tai)		
Kri-Phoong	Kri: krap		
Mlengbrou	kǎkum?	(< Lao/Yooy <i>kikiām</i>)	

All form borrowed from Tai or Lao except Ahao, which looks like an expressive, and Kri -origin unknown.



Tokay Gecko
Gekkonidae

Việt các kè

Most languages do not have a word. Where it is found it is always a form of /kak kɛɛ/ , imitative of the sound of the voice of this lizard. Like *Hemidactylus*, the tokay gekko is limited to areas of human habitation.



Tree Monitor**PMK *trkuət***Varanus bengalensis*

Việt

kỳ đà vân

Toum-Liha

Ph / T / Lh : lɛɛn (< Tai)

Ahoë-Ahlao

Ahoë: tǎkət Ah: tǎkaat Akl: tǎkɔət

Atel-Maleng

AT(1): tǎkaat AT(2): tkɔət Ml: tǎkaat TE: tǎkat

Thémarou

trǎkɔək (< Brou)

Kri-Phoong

Kri: tǎkət^h P: rkɔət

Mlengbrou

tǎkət

Cheut

ʒkət

Absence of the taxon in Thémarou may be due to the deep forest wet evergreen habitat where this species probably does not occur.



Water Monitor
Varanus salvator

PMK *r__?

Việt

kỳ đà

Toum-Phong
Ahoé-Ahlao
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou
Cheut

Ph: lia T: tu **khlak** Lh: hia (< Tai)
Ahoé / Ah / Ahl : hia (< Tai)
AT(1) riə? AT(2) hriə? Ml: ɣia TE: hɣia
dɣia?
Kri: ria? P: ria?
ɣiə?
triɿ? Rục. (Loi): tɔri¹

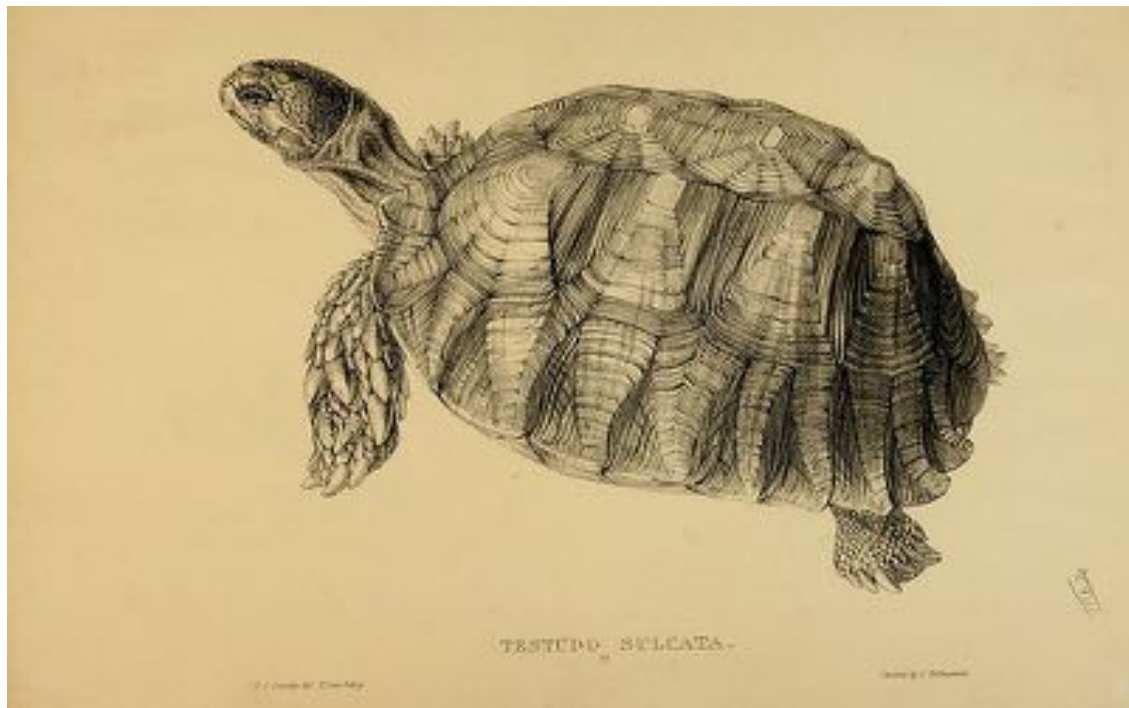
Both monitors show good solid sets of correspondances. But the Vietnamese terms have no relation. Probably (*kỳ*) *đà* derives from the Chinese word for 'alligator' that lives/lived in the Yangtse River.



Turtle / tortoise
Chelonidae

PMK *ruus

Việt	con rúa			
Mường	da ³ hrɔ ¹ , rɔ ¹ , dɔ ¹ , ʒɔ ¹			
Toum-Phong yɔɔ	Ph: ɭɔɔ	T: ɭaaw	Lh/PL: ɭɔɔ	Lh/SM: tu
Ahoe-Ahlao	Ahoe: ɭɔɔ	Ah: haa	Ahl: ɭɔɔ	
Atel-Maleng	AT(1): ɭɔɔ	AT(2): roah	Ml: ɭɔɔ	TE: hrɔɔ
Thémarou	rɔɔ			
Kri-Phoong	Kri: ɭɔɔ	P: ɭɔɔ		
Mlengbrou	raa			
Cheut	TX: ʔarɔɔ	Rục: ărɔ		



Manouria impressa – Impressed Tortoise

Toum-Phong	Ph: - kaaw	T: - kaaw	Lh/PL: - kaaw	Lh/SM: - phlaʔu
Ahoe-Ahlao	Ah: - hoon			
Atel-Maleng	AT: - kǎboon	MI: - kǎboon	TE: - kǎboon	
		- kaaw		
Kri-Phoong	P: - dua (< Tai) , kǎ:w (E&D)			



Platysternon (Big-Headed Turtle)

Toum-Phong	Ph: - puu luu	T: - pəu ləu	Lh/PL: - puuluu	Lh/SM: - pu lau
Thémarou	- dok dok			
Kri-Phoong	Kri: - dok dok	P: - kwii		
Mlengbrou	- dok dok			



Soft-Shell Turtles
Trionychidae

PMK *t(m/r)paaʔ

Việt Mường	con ba-ba taj ⁴ (cognate with Ahoe-Ahlao + TE) , pa ² pa ² , ba ² ba ²		
PT	*faa A		
Toum-Phong	Ph: t. peet	T: t. peet (sm) t. taʔac	Lh/PL: t. peet Lh/SM: t. peeʔt t. lɛɛŋ
Ahoe-Ahlao	Ahoe: - paatii	Ah: - pătayh	Ahl: - pătayh
Atel -Maleng Thémarou Kri-Phong Mlengbrou	AT(1): - puur - phui Kri: - buur - puul	AT(2): - puur P: puul	TE: - pătii

Toum-Phong use the UB classifier, but the rest all use 'turtle'. This is consistent with the Tai languages that are found near the Toum-Phong branch.

That Mường agrees with the Ahoe-Ahlao is interesting.



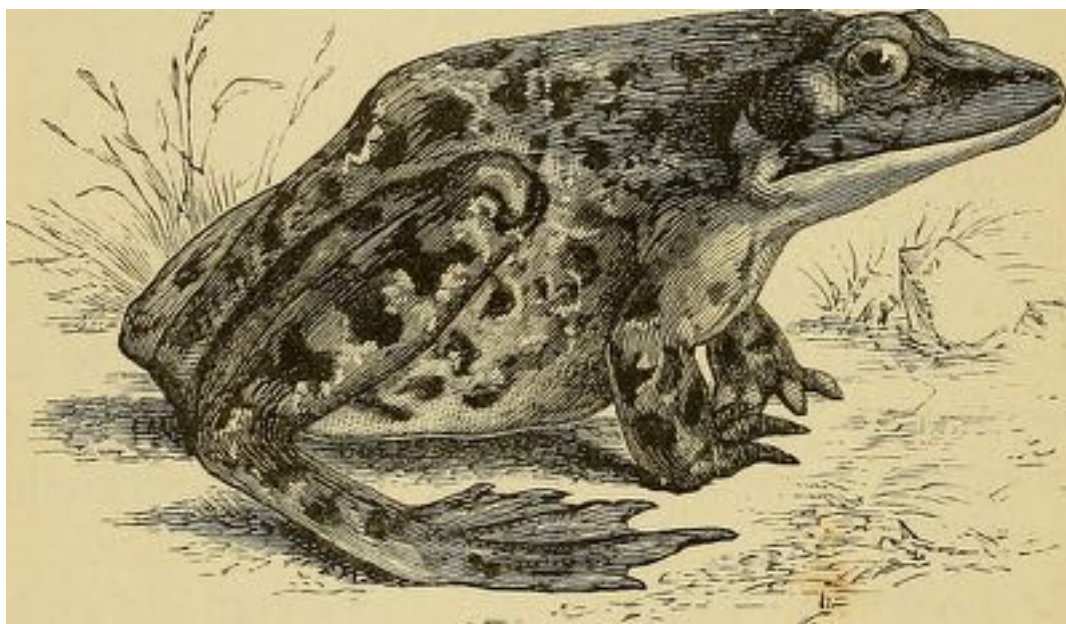
Frog

Ranidae

Việt con ếch, con nhái
Mường ek^{3,5}, ec³, kum¹

Toum-Phong	Ph: t. kɔɔt	T: kaut	Lh/PL: kɔɔt	Lh/SM: tu ʔeek
Ahoe-Ahlao	Ahoe: kǎɣp	Ah: kap, kɤt	Ahl: kuut	
Atel-Maleng	AT(1): koot	AT(2): kuat	Ml: kop, koot	TE: kop, koot
Thémarou	kuut			
Kri-Phoong	Kri: kɔt	P: kɔɔt		
Mlengbrou	kɔɔt			
Cheut	TX: kǎɣp , kuət		Rục: kuàk	Rục (Lợi): kôot ⁴

/kop/ forms are contact words with Tai. The Kri-Mol root seems to be *k--t. But note Ahoe and TX /kǎɣp/. None of the forms except for Liha SM agrees with Vietnamese, and that is probably a borrowing because the village is very close to the Vietnamese border.



Toad
Bufonidae

PMK *_(n)r(--)k

Việt	con cóc
Mường	krak, zak, rak, hak, pɔ kək, bək kək, bəŋ kək, bək kək, rak rak
Toum-Phong Ahoe-Ahlao	Ph: kǎtuu (< Tai) T: ɣək ɣək Lh/PL: ɭək ɭək Lh/SM: tu ɣəɣək Ahoe: ɭək Ah: hak Ahl: ɭək

Atel-Maleng ʔarak Thémarou Kri-Phoong Mlengbrou	AT(1): koot ʔarak kuut ndrək Kri: kət ndrək kən rək	AT(2): kuat ʔrək Ml: ʔarah TE: koot P: kəət ndrək
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Cheut	LX: ʔutɕut Rục (Lợi): kutôot ⁴ , kutuot ⁴
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Interestingly, in the Nrong-Theun groups, toads are classed as frogs. The Cheut form is a distinct unrelated etyma.



CHAPTER 6 – KRI-MOL ARTHROPODS

Body louse
Head louse
Chicken louse
Tick
Spider
Centipede
Rhinoceros Beetle
Grub (large)
Stinkbug
Cicada
Mosquito
Housefly
Maggot
Bee
Honey
Hornet
Wasp
Ant
Antlion
Termite (white ant)
Termite (adult fly)
Butterfly
Firefly
Grasshopper
Praying Mantis
Flea
Crab
Shrimp



Body Louse
Anoplura

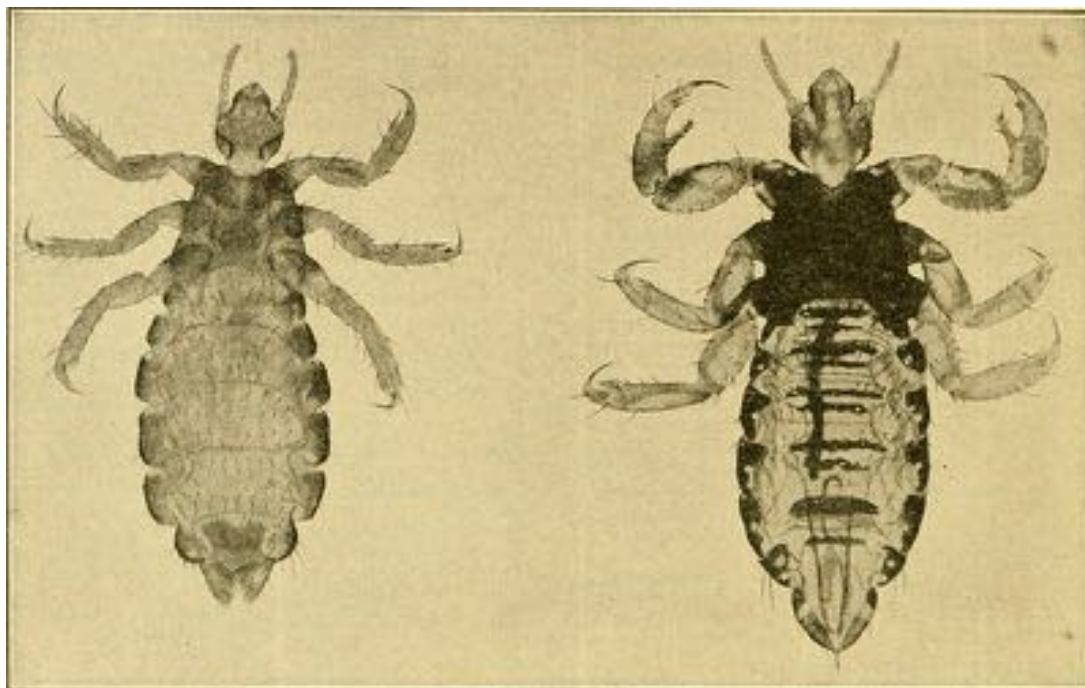
PMK *(c)mr(--)n

Việt
Mường

rận
p'ɛŋ⁵, k'ɛŋ⁵

Toum-Phong
Ahoë-Ahlao
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou

Ph: t. pliŋ	T: pliʔŋ	Lh: tu fileŋ
Ahoë: nliŋ		
AT: mriŋ	Ml: mriŋ	TE: mǎliŋ
mǎreŋ		
Kri: briŋʔ	P: briŋ	
ciʔ (usual reflex for 'head louse' but see below)		



Head Louse
Anoplura

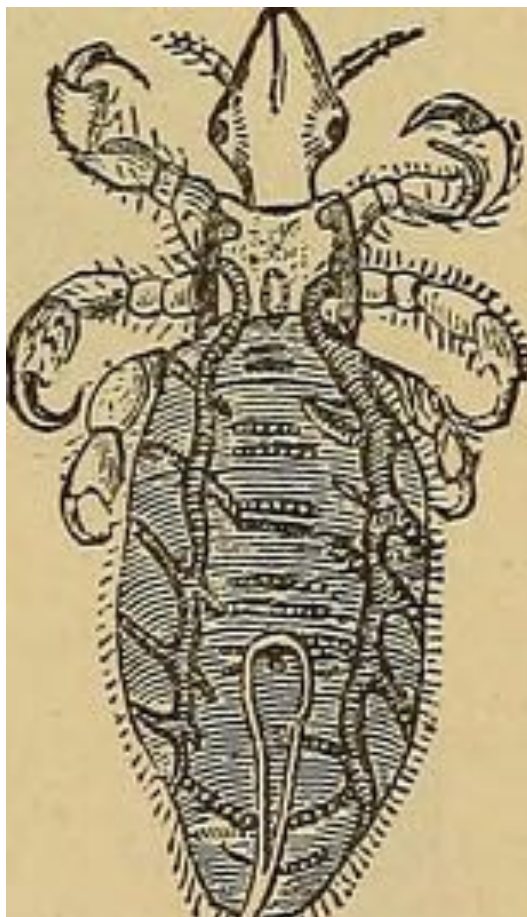
PMK *cee?

Việt
Mường

con chấy
ci³

Toum-Phong
Ahoë-Ahlao
Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou
Cheut

Ph: t. cii?	T: ce?ey	Lh: cΛ?Λy	
Ahoe: kΛΛ?			
AT(1): cii	AT(2) cee?	Ml: cij	TE: cij
cij			
Kri: cij?	P: cii		
ci? kaw kxy			
Rục (Lợi): chi ³			



Chicken Louse, bird mite
Anoplura

PMK *maac

Toum-Phong

Ph: t. maac

T: maac

Lh: mac maac

Ahoe-Ahlao

Ahoe: caapěě

Atel-Maleng

AT: ʃăpěě

MI: spěě

TE: săpěě

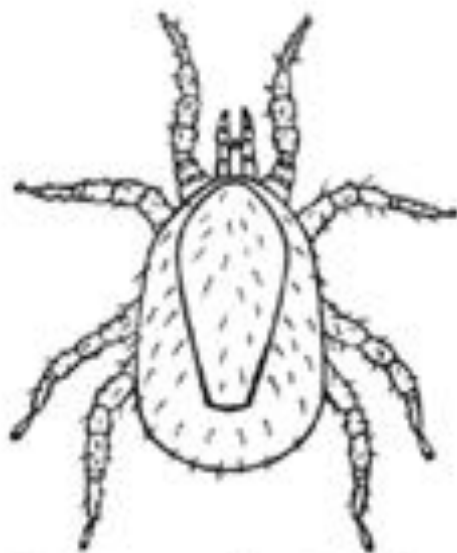
Kri-Phoong

Kri: ʃăpěě

P: ʃpěě

Mlengbrou

tămat kaa ('chicken flea')



Dermanyssus gallinae, Red mite
 (Northern Fowl mite looks similar) 1mm



Menopon gallinae, Common
 fowl louse, 2mm, yellow

Arachnida: Acarina

đánh dấu

Ph: kǎpɛɛt	T: pɛɛt	Lh: kǎpɛ̃ɛt
Ahoe: kǎpɛ̃ɛt		
AT: kǎpɛɛt	Ml: kapɛɛt	TE: kapɛɛt
kǎpɛɛt		
Kri: kǎpɛɛt	P: kǎpɛɛt	
tǎpɛɛt		



Spider**PMK *b__ŋ***Arachnida: Araneae*

Việt

con nhện

Toum-Phong
 Ahoe-Ahlao
 Atel-Maleng
 Thémarou

Ph: nuŋ naaŋ
 Ahoe: ciŋ kuu?
 AT: ɲiŋ
 tuu koo

T: nuŋ naaŋ

Lh: ɲuŋ ɲaaŋ

Ml: ɲiŋ

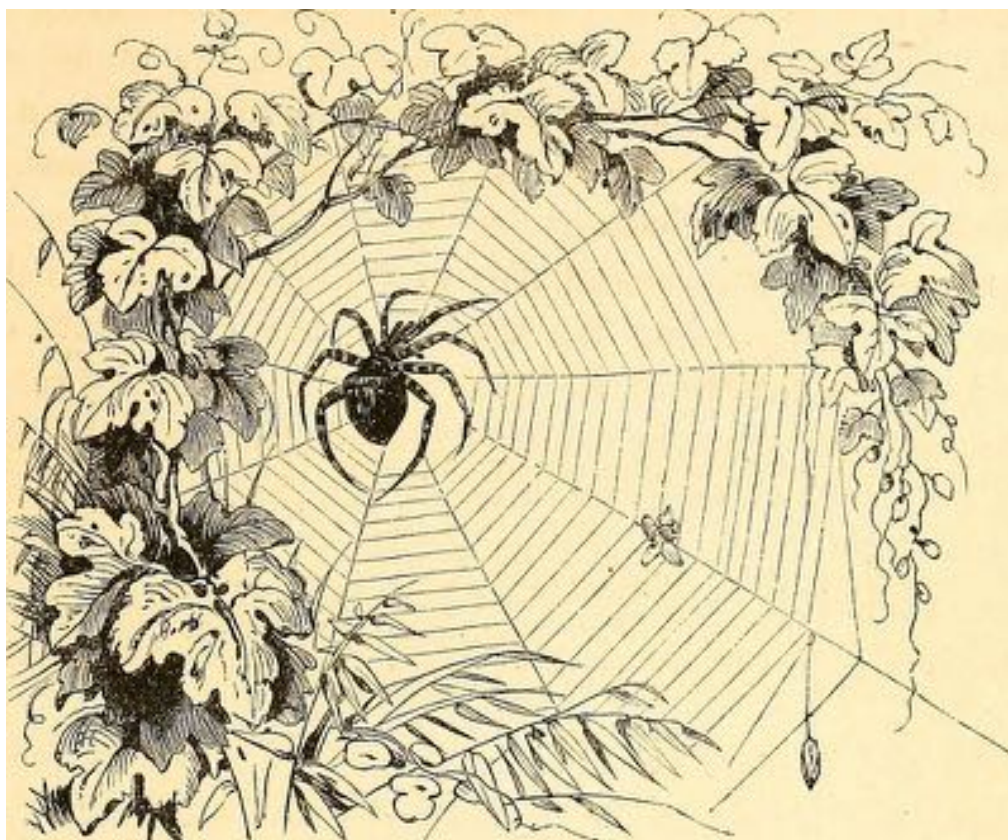
TE: kiŋ kuu

Kri-Phong
 Mlengbrou

Kri: kuŋ
 kuŋ

P: kuŋ

Forms with /koo/ may refer to large jungle spiders, that is, a separate taxon.



Centipede
Chilopoda

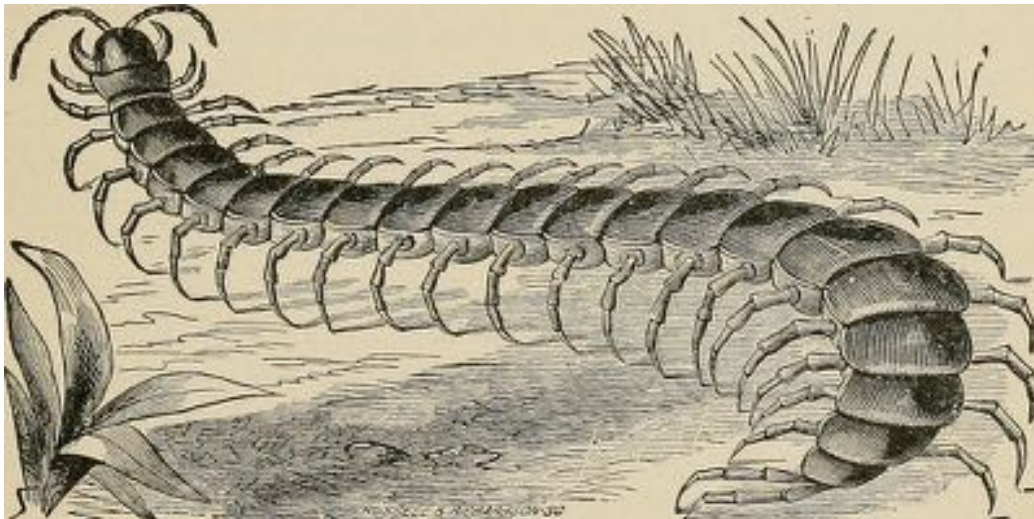
EMK *klʔeep

Việt
Mường

con rết
thet³, set³

Toum-Phong
Ahoe-Ahlao
Atel-Maleng
Thémarou
Kri-Phong
Mlengbrou
Cheut

Ph: t. lip siip	T: lip siip	Lh: liip siip
Ahoe: kǎŋiip		
AT: kǎŋiip	Ml: kǎsiip	TE: kǎŋeep
Kri: tuu kǎŋiip	P: kǎŋiip	
krǎŋiip		
Rục (Lợi): kasip ³		



Rhinoceros Beetle / Stag Beetle ?

Coleoptera

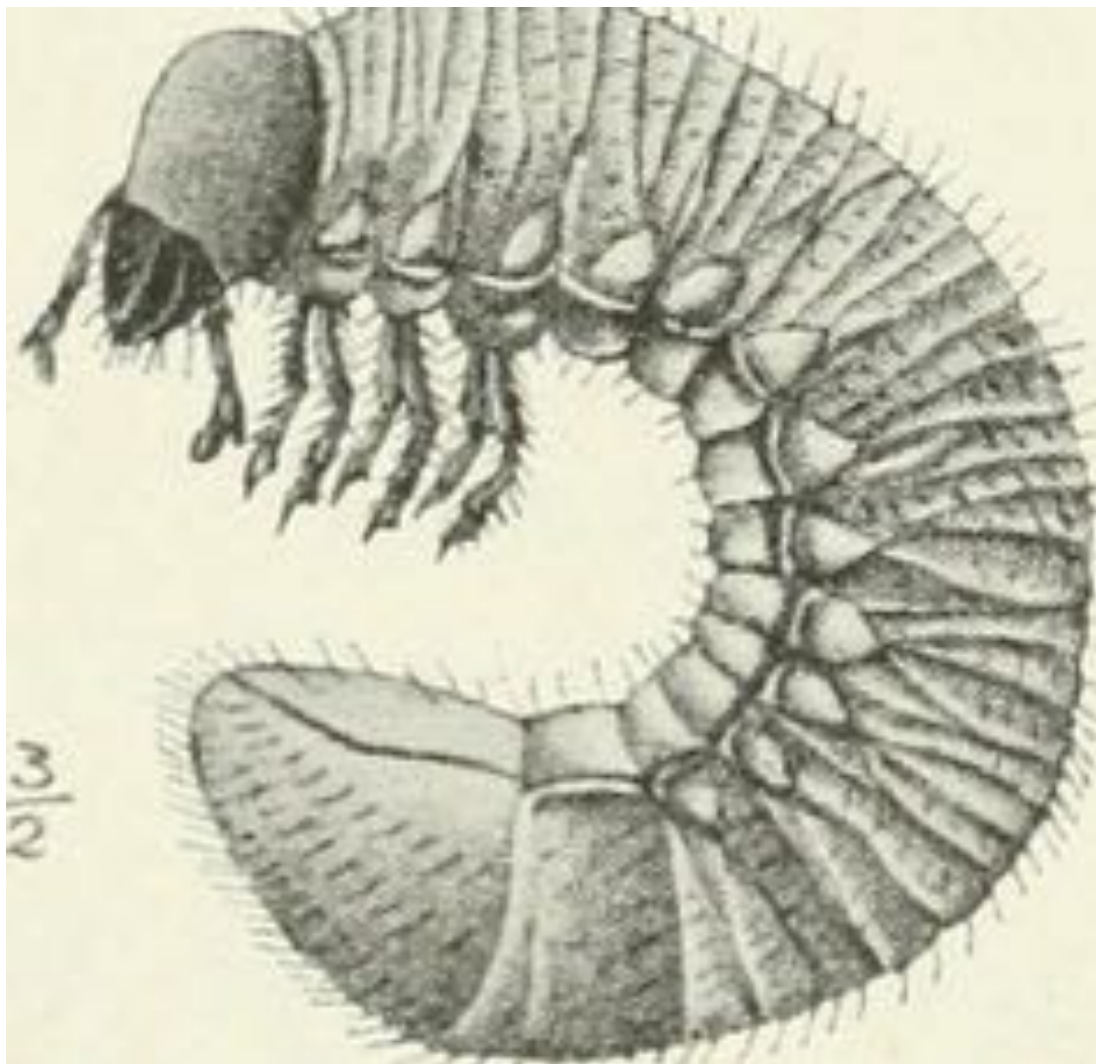
Viet giống bộ hiệu (?)
Muong ??

Toum-Phong	Ph: kupɛɛ	T: bac ɲɛɛʔ	Lh: kɔn kɔŋ
Ahoe-Ahlao	Ahoe: kaavuuŋ		
Atel-Maleng	AT: ɲiiʔ	Ml: ɲɛɛ	TE: tuu khɔm
Thémarou	tuu ɲiiʔ		
Kri-Phoong	Kri: kǎtɔɔy	P: t. vuuŋ	
Mlengbrou	kǎvuul		



Grub (large) **PMK * kmuar**
Coleoptera (larvae of Rhinoceros Beetle)

Toum-Phong	Ph: kămut	T: mauc	Lh: vɔɔn
Ahoe-Ahlao	Ahoe: mpot		
Atel-Maleng	At: kăpoot	Ml: kăpoot	
Kri-Phoong	P: t. cuun		
Mlengbrou	kuren		



Stink Bug

Hemiptera: Pentatomidae

Toum-Phong
Ahoe-Ahlao
Atel-Maleng
Thémarou
Kri-Phong
Mlengbrou
Cheut

Ph: **buk baan**

Ahoe: ɟɛŋ

AT: pǎɟɛt ɟɛŋ

Ml: sɛŋ

pǎɟɛt ɟɛŋ

Kri: t. sɛŋ

tuu ɟɛŋ

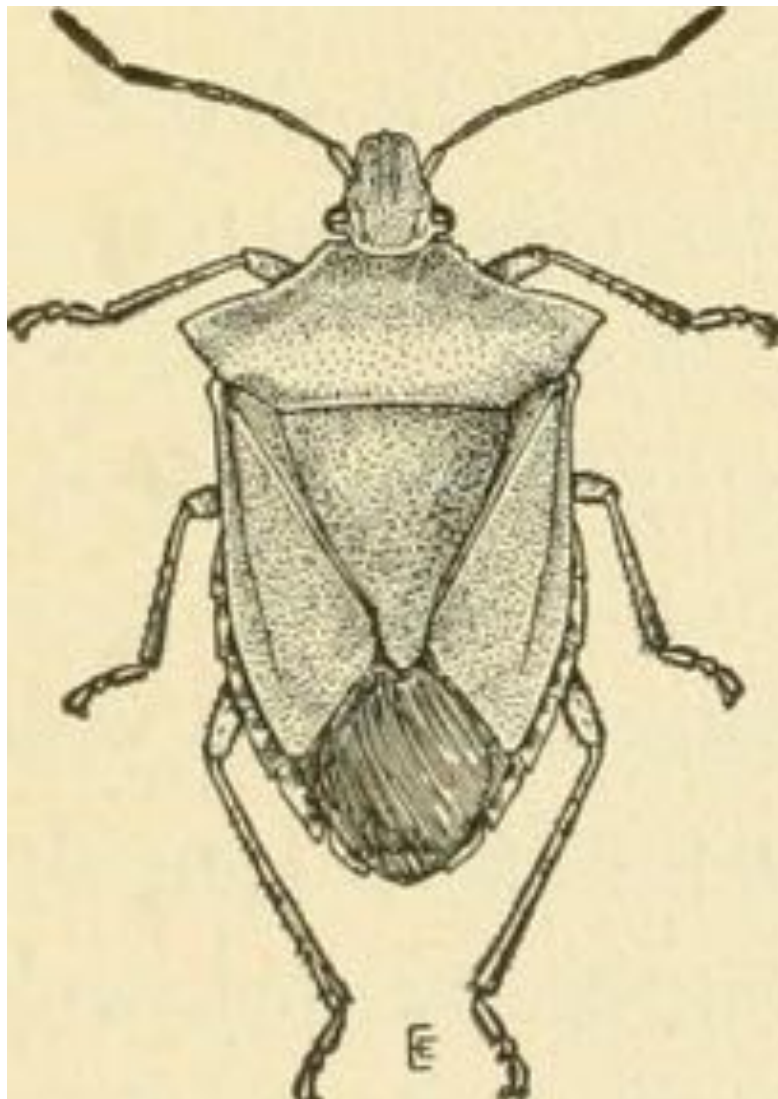
raɟɛŋ

T: kɛŋ sɛŋ

Lh: sɛŋ sɛŋ

TE: tuu ɟɛŋ

P: ɟɛŋ



Cicada

Homoptera: Cicadidae

Việt	con ve sầu		
Toum-Phong	Ph: cak can (< Tai)		
Ahoe-Ahlao	Ahoe: cak can (< Tai)		
Atel-Maleng	AT: cak can (< Tai)	Ml: taat	TE: taat
Thémarou	tɔt		
Kri-Phong	Kri: taat	P: taat tǎraŋ	
Mlengbrou	tɔt		
Cheut	Be ¹ Be ¹		

It is curious that northern subgroups use the Tai word, while the others have good cognates. Phoong on the Nam Noy recognize many varieties (as do no doubt the others) even using their various voices to calculate the time of year.



Mosquito
Diptera: Cucilidae

PMK *muəs

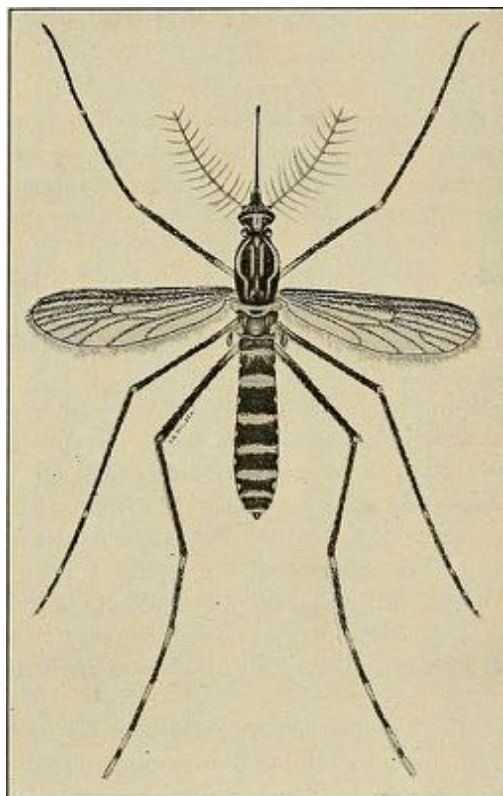
Việt muỗi
Mường mɔj⁵, ma¹ kɤ⁵, pɔ³, mɔj⁵ mɔj⁵, mɔn⁵

Toum-Phong Ph: ɲooŋ T: paɹw Lh: ɲooŋ

Ahoe-Ahlao Ahoe: cǎvuuŋ
Atel-Maleng At: ʃǎvuuŋ Ml: svuuŋ TE: ʃǎvuuŋ
Thémarou ʃɪvuuŋ
Kri-Phoong Kri: cuɹəvuuŋ P: ʃvuuŋ

Mlengbrou mɔy

Cheut TX: keep Rục: kếp



Housefly*Diptera: Muscidae***PMK *ruəy**

Việt

ruôi

Mường

hruaj , ʒuaj , ruaj , huaj , ruaj-ruaj

Toum-Phong

Ph: t. ɭəy

T: t. ɭəoy

Lh: tu ɣəy

Ahoé-Ahlao (black)

Ahoé: məyh

(green)

mǎɭəɳ

Atel-Maleng

(black)

At(1): mǎɣɣy

At(2): mərəuy

Ml: --

(green)

mǎɭəɳ

mǎɭəɳ

Thémarou

mǎɣəy

Kri-Phoong

(black)

Kri: mǎɣɣy

P: mǎɣəy

(green)

mɭəɳ

Mlengbrou

murɔy [murɔy carɣɣw = green)

Cheut

TX: mɭəɳ

Ruc: murɔy

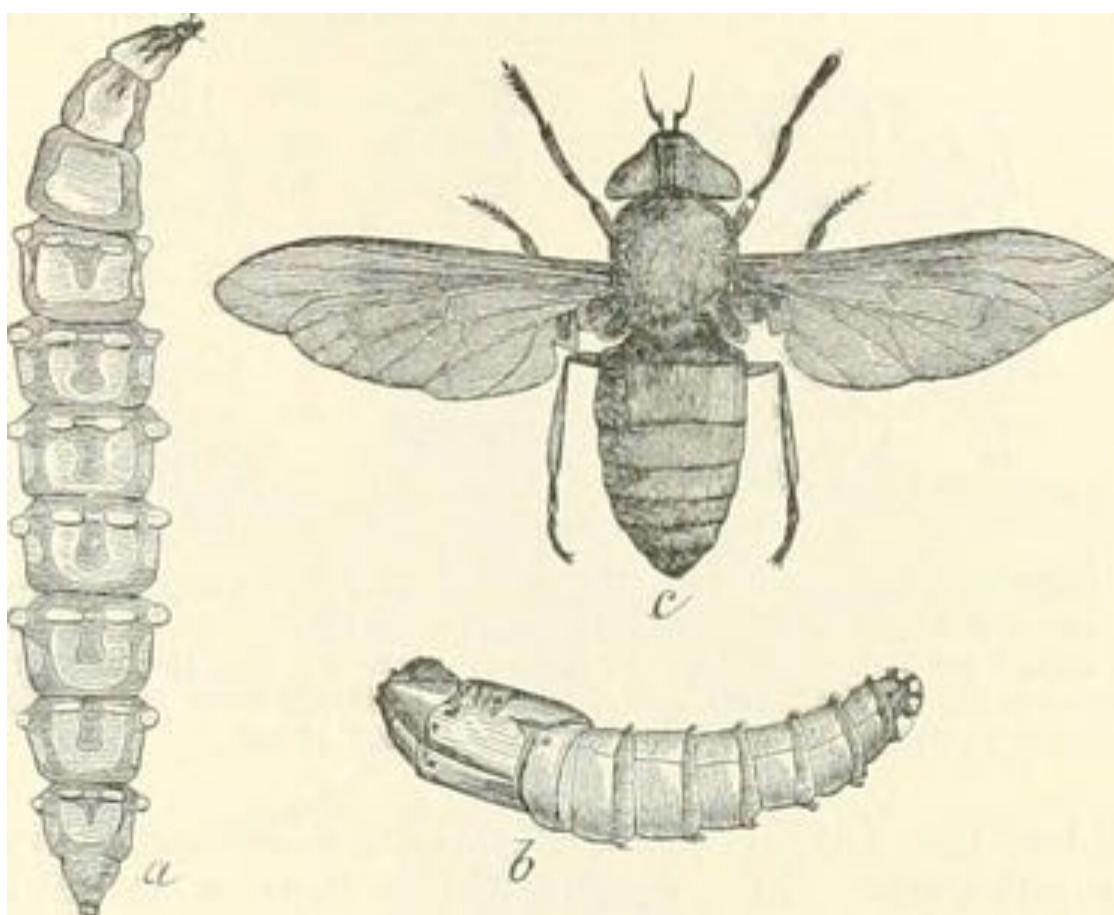


Maggot

Việt sâu non (last syll < Tai - A1)

Toum-Phong T: kɛɛl Lh: ɕɔɔy

Atel-Maleng	At: tɛh	Ml: tɛh	TE: tɛh
Thémarou	teɹ		
Mlengbrou	teɹ?		



Gadfly, horsefly
Diptera: Tabanidae

PMK *jɔɔp

Toum-Phong

Ph: kǎmuul

T: taup (ʔgnatʔ)

Lh: tɔɔp

Ahoe-Ahlao
 Atel-Maleng
 Thémarou
 Kri-Phong
 Mlengbrou

Ahoe: taamuul
 AT: tǎmuur
 tǎmuur
 Kri: t. muul
 tǎmɯɯr

Ml: tǎmɯɯr TE: tuu mɯɯl

P: tǎmuur



Bee
Hymenoptera

Viet. Muong	con ong ၁၅		
Toum-Phong	Ph: ဂ၁၁၅	T: ဂ၁၁၅	Lh: ဂ၁၅
Ahoe-Ahlao	Ahoe: kua?		
Atel-Maleng: Thémarou Kri-Phoong Mlengbrou	AT: pǎtaa pǎtṵ Kri: paa tṵ pǎtṵ	MI: pǎtaa P: pǎtaa	TE: pǎtaa
Cheut	Ruc: kwi ²		



Honey

Viet mật ong
Muong mỷc , mec . mic

Toum –Phong Ph: daak mik T: mec ມັກ Lh: məc ມັກ

Ahoe-Ahlao Ahoe: laaη kua?
Atel-Maleng AT: laη Ml: daak laη
Thémarou dak laη
Kri-Phoong Kri: laη paa tɔɔ
Mlengbrou laη krɛɛt (honey of the small bee)
Cheut Ruc: lôong⁴ kwi²



Hornet (nests in ground) PMK *ꠘꠞꠞ
Hymenoptera

Toum-Phong	Ph: cǎꠞaan T: ꠞꠞꠞ ceph , ꠞꠞꠞ kɔɔc
Ahoe-Ahlao	Ahoe: ꠞaan , thǎlee (in stumps) , tuum (in trees)
Atel-Maleng (in trees)	At: ꠞaan Ml: ꠞan TE: ꠞan At: kolꠞꠞ Ml: kǎꠞaan , kal
Thémarou (in trees)	kɔɔl kii kɔɔl ꠞǎꠞꠞ
Kri-Phoong (other types)	Kri: ciꠞ P: kaal kaꠞan , ꠞꠞm , tirii , lɔk cɔɔ
Mlengbrou	tiiꠞ
Cheut	Ruc: kɔn hɔn



Wasp
Hymenoptera

Việt ong vò vè

Toum-Phong
Ahoe-Ahlao

Ph: kǎtuul
Ahoe: tool

T: ʔoŋtuul

Lh: ʔoŋ tuun

Atel-Maleng
Thémarou
Kri-Phoong
Mlengbrou

AT: ʃǎʔoor
ʃǎʔuul
Kri: ʃaaʔoor
ʃǎʔoor

Ml: səʔuul

TE: ʃǎʔool

P: ʃuʔuul

Cheut

Rục: vovv



Ant
Hymenoptera

Viet	kiến		
Muong	kiən ^{3,5}		
Toum-Phong	Ph: kɛɣn	T: kaən	Lh: kɛn?
Ahoe-Ahlao	Ahoe: kiin		
Atel-Maleng	AT(1): kɛʔn	AT(2): kiən?	TE: kɛɛʔn
Thémarou	kian?		
Kri-Phoong	Kri: t. kaɲaər	P: t. kǎɲal	
Mlengbrou	tǎmiir		
Cheut	TX: kiəm	Rục: kêem ⁴	



Antlion

Myrmeleontidae

Ahoe-Ahlao	Ahoe: caaveeʔl
Atel-Maleng	TE: ciaveel

Kri-Phong	P: kaakum
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Mlengbrou	tuu travæel
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The antlion plays an interesting role in many Austroasiatic groups. I do not know the full extent of the range of this practice, but it is certainly widespread. Young girls grasp the antlion and allow it to sink the pincers into their nipples in order to make them more attractive.

The “antlion” is actually the larval form of what are sometimes called “antlion lacewings.”



Termite (white ant)*Isoptera*

Việt

mỏi

Mường

mol³ , mou³

Toum-Phong

Ph: kāmool

T: mɔl mɔl

Lh: mon maʔun

Ahoë-Ahlao

Ahoë: kāmɔl

Atel-Maleng

AT: kāmoor

Ml: kāmoor

TE: kāmooʔl

Thémarou

kāmoor

Kri-Phoong

Kri: kumuur

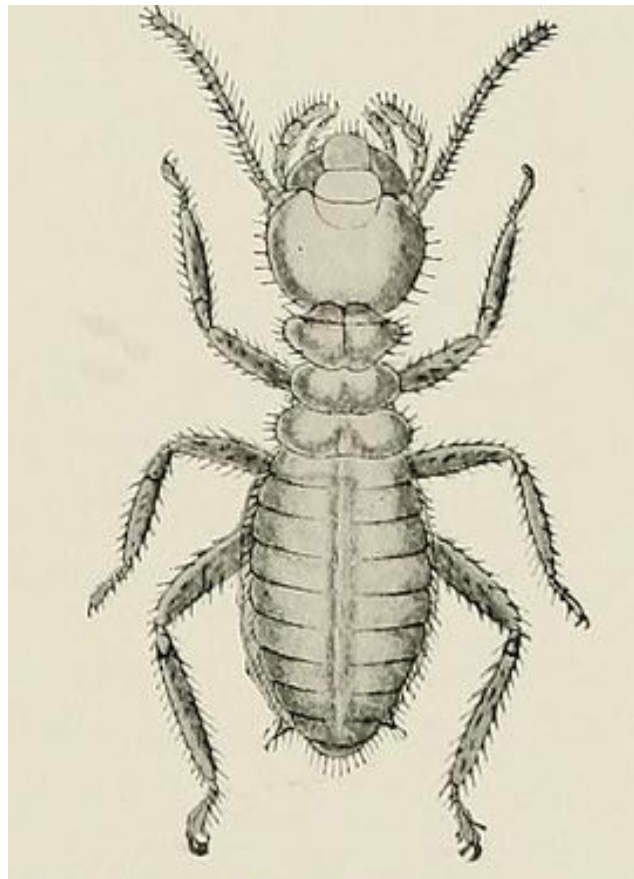
P: kāmūul

Mlengbrou

kumuur

Cheut

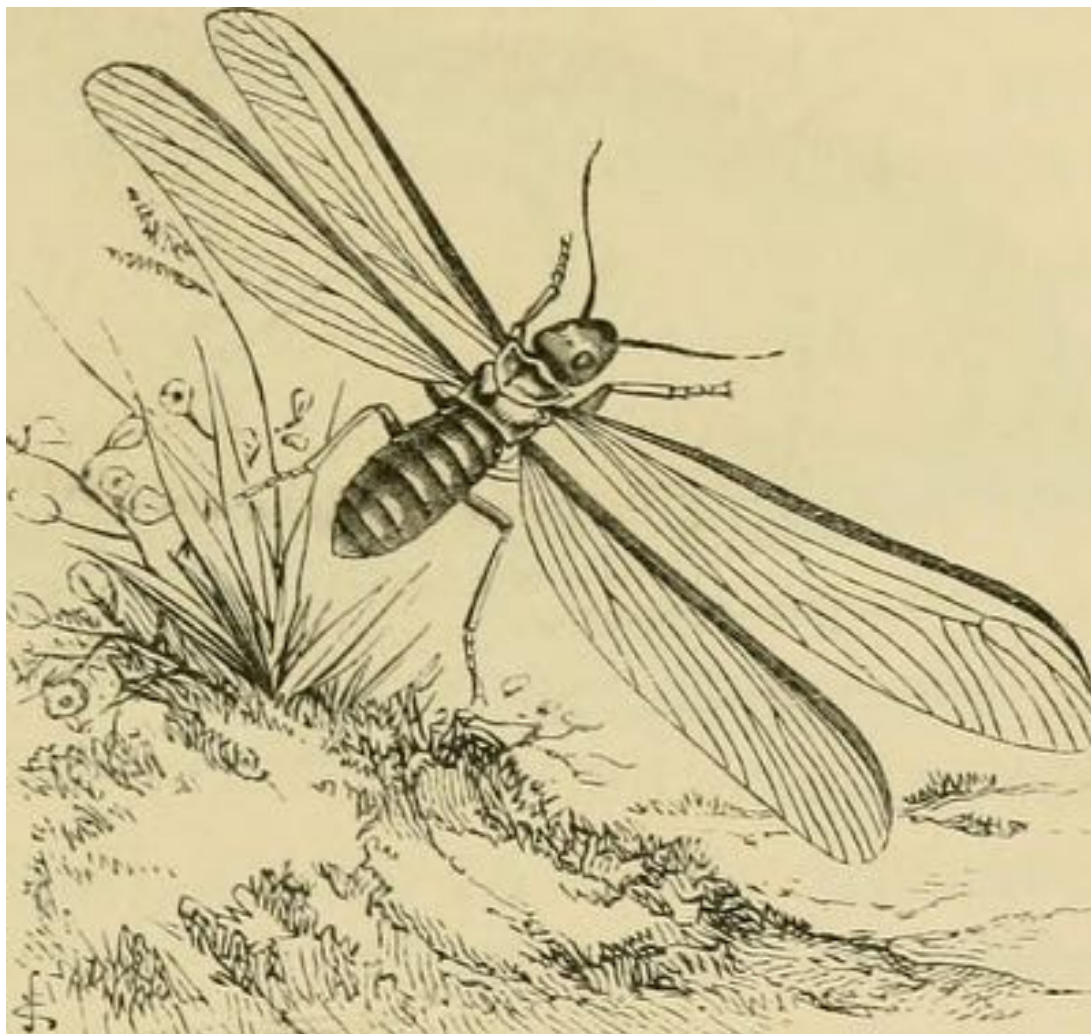
Rục: kumɯl



Termite (adult fly)
Isoptera

Toum-Phong Ph: քթբբ T: քթբալ Lh: tu pauw pauw

Ahoe-Ahlao	Ahoe: мәһуә		
Atel-Maleng	At: мәйөө	Ml: мәйөө	TE: мәйөө
Thémarou	păyuuә		
Kri-Phoong	Kri: priyöö	P: păyöö	
Mlengbrou	prəyooһ		



Butterfly
Lepidoptera

Viet	buróm		
Muong	ṗaəm ³ , ṗaəm ³ ṗaəm ³ , bwaəm ³ bwaəm ³ , bɤ ¹ bɤ ¹		
Toum-Phong	Ph: pam paam	T: pam paam	Lh: bom buap

Ahoe-Ahlao	Ahoe: peṗ pɔɔt		
Atel-Maleng	AT(1): pɤt pɔṗ	AT(2): pɤt pwaṗ	Ml: pɤt pɔɔṗ TE: pit pɔɔṗ
Themarou	pɔṗ pɤt		
Kri-Phoong	Kri: kãpɔṗ pùt	P: puṗ pɤt	
Mlengbrou	talaṗ pɤt pwaṗ		

Cheut	TX: loṗ pɤṗ	Ruc: lɔang ² pɔang ⁴ , lãṗ pwaṗ
	Mây: luaṗ pwaṗ	Sách: pwaṗ pwaṗ

“Arem” lɛp lɛ?



Firefly
Lampyridae

Viet	đom-đóm	
Muong	tom tɛ , tom dɛ , dum dɛ , tɤp tɛ	
Toum-Phong	Ph: dii doom T: taum taum	Lh: dak di daʔum

Ahor-Ahlao	Ahoe: seŋ haŋ hoŋ
Atel-Maleng	AT: seŋ tãũm Ml: seŋ taam

Themarou	toŋ tay
Kri-Phoong	Kri: tuŋ tɛh P: tuŋ tɛɛ

Mlengbrou	tuu caɣw
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Cheut	PS: loŋ tɛʔ Rục: putông ¹
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Grasshopper

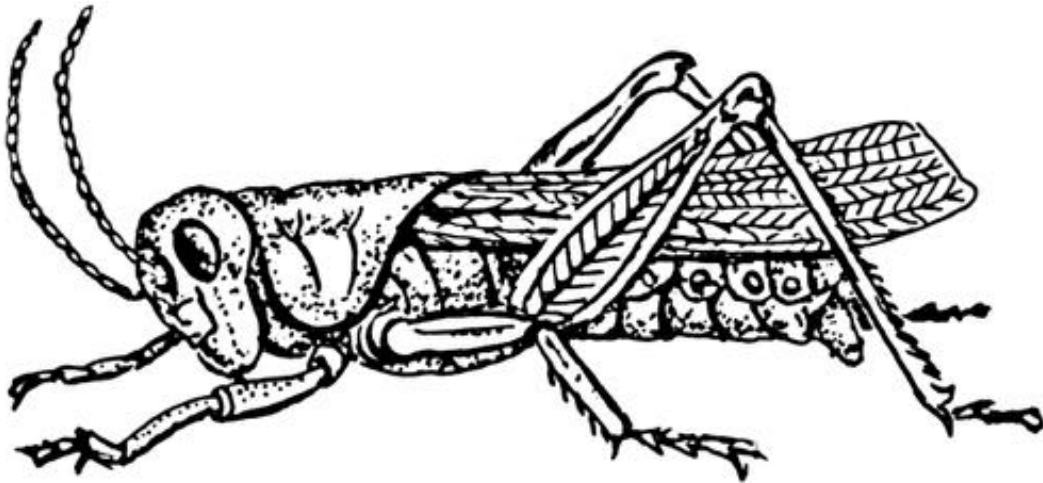
Orthoptera: Acrididae

Việt châu-chấu
Mường co^{3/5} co^{3/5}, co¹ co³, co³ lo^{3/5}, co³

Toum-Phong T: bok baay Lh: bok baay

Ahoe-Ahlao	Ahoe: ɲɤh			
Atel-Maleng	At(1): ɲaɾ	At(2): ɲɔɪf	Ml: ɲaɑɾ / -h	TE: ɲɔyh
Thémarou	ɲɔyh			
Kri-Phoong	Kri: ɲɔyh	P: ɲaay		
Mlengbrou	ɲɔy?			

Cheut TX: cou? Ruc: cú cú



Praying Mantis

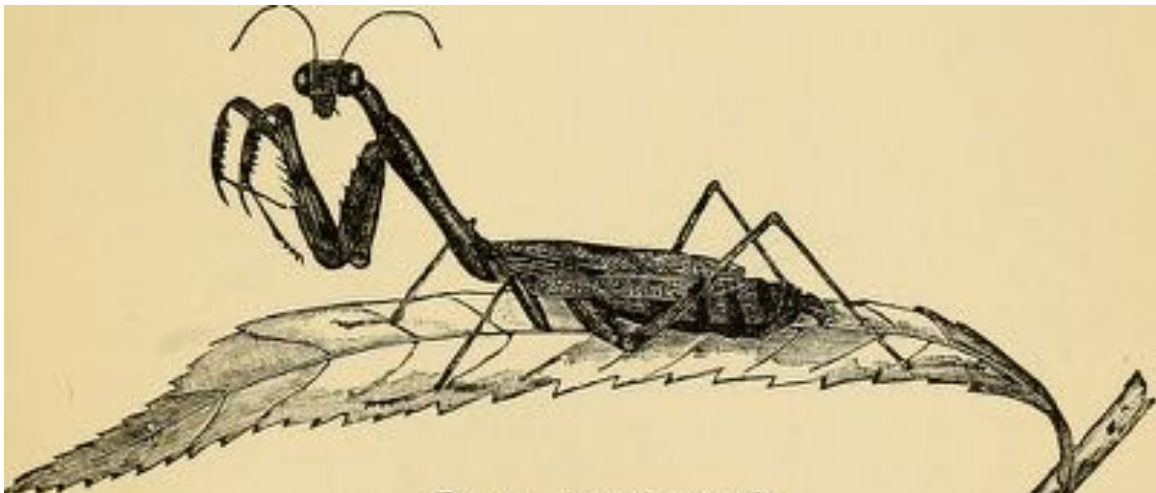
Dictyoptera: Mantidae

Việt con bọ ngựa
Mường ɣwɛn⁵ ɣɔ¹, vɛn⁵ vɔ¹, ɲuə⁵ tɬɿ¹ (Nguồn)

Toum-Phong Ph: kat kɔɔŋ T: kat kɔɔŋ Lh: kat kɔŋ

Atel-Phong At: kɔy kooy Ml: kɔy kɔɔy TE: tuu kɔɔy kɔɔy
Thémarou kuuy kuuy
Kri-Phoong Kri: toŋ koŋ (<Brou?) P: t. con kămooc
Mlengbrou kuŋ klɔy pam

Cheut Rục (Lợi): thaj



Flea

Siphonaptera

Việt Mường	bọ chét ta ² ma ² , da ¹ ma ¹		
Toum-Phong	Ph: cœt	T: cœgt	Lh: ket
Ahoe-Ahlao	Ahoe: tămek		
Atel-Maleng	AT: tămac	MI: tămac	TE: tămac
Thémarou	tămat		
Kri-Phong	Kri: tămat	P: mat	
Mlengbrou	tămat cœ		
Cheut	chame ¹		



Crab (land)**PMK *ktaam***Arthropoda: Crustacea*

Việt

sam

Toum-Phong
Ahoe-AhlaoPh: ɭaap
Ahoe: sɛɛp

T: ɭaap

Lh: yaap

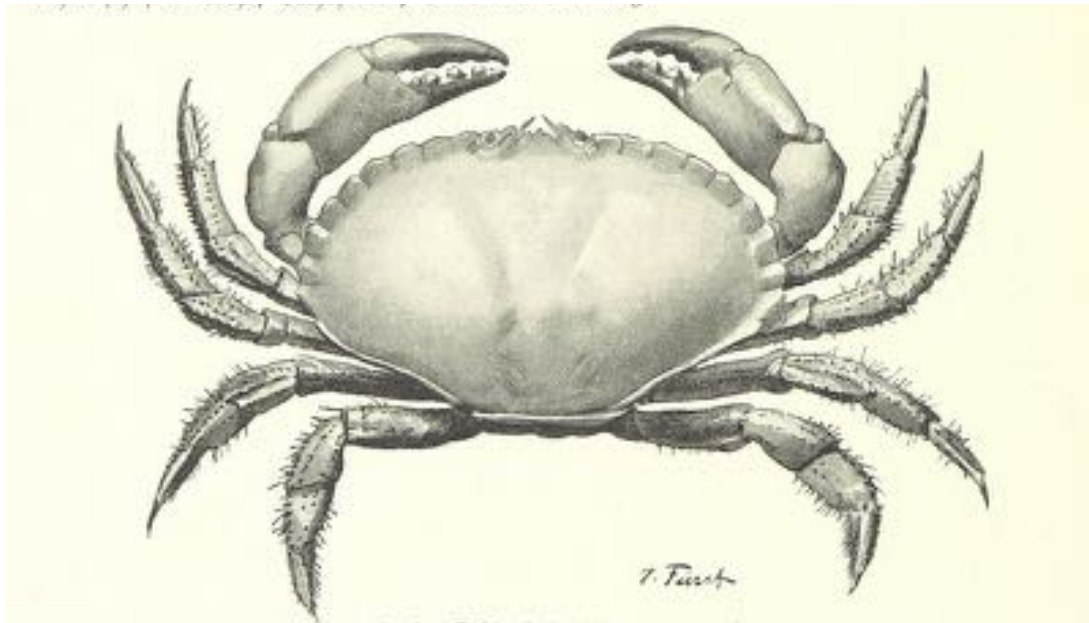
Atel-Maleng
ThémarouAT: kăpee
kăpɿi

Ml: kăpii

TE: kăpɿi

Kri-Phong
Mlengbrou
CheutKri: kataam
kătaam , raap
Ruc: katəm

P: kătaam



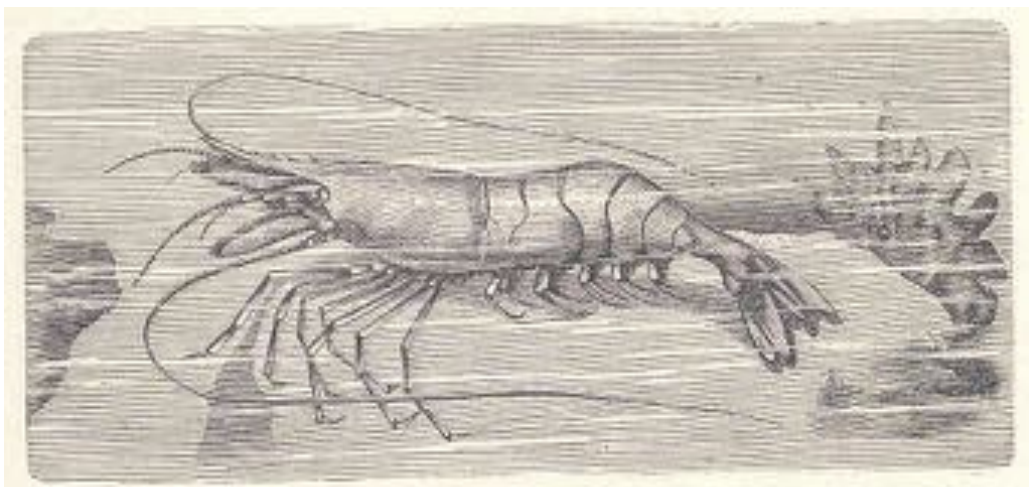
Shrimp
Crustacea

Viet tôm
Muong t'om , som

Toum-Phong	Ph: kaa kuŋ		
Ahoe-Ahlao	Ahoe: koo		
Atel-Maleng	AT: koo	MI: kaa	TE: koo

Kri-Phoong:	Kri: ʃom	P: t. ʃom
Mlengbrou	ʃoom	

Cheut Rục: achọng , ăcuàn



CHAPTER 7 – KRI-MOL DOMESTIC ANIMALS

	PHONG	TOUM	LIHA (SM)	AHOE	AHLAO	CHEUT
A. Buffalo	kluu ㄟ	klou ㄟ	klaw	khwaay		kiluu ㄟ
B. Ox	ɲuə ㄟ	paaw ㄟ	pɔɔ	ɲuə		pɔɔ ㄟ
C. Horse	maa ㄟ	maa ㄟ	ɲuə ㄟ	maa		ɲɲɲ?
D. Pig	kuul ㄟ	kuul ㄟ	kuun	kuʔl ㄟ	kuʔ	kuɣ
E. Goat	bee ㄟ	beɛ ㄟ		bee		
F. Chicken	kaa ㄟ	kaa ㄟ	kaa ㄟ	kaa ㄟ	kāāh	rkaa ㄟ
G. Fish	kaa ㄟ	kaa ㄟ		kaa ㄟ	kāā? ㄟ	ʔakaa? ㄟ
H. Duck	viit ㄟ	viit ^h ㄟ	viit	ʔatɲɲ ㄟ	ʔateɛ	viit
I. Dog	cɔɔ ㄟ	cɔɔ ㄟ	cɔɔ ㄟ	cɔɔ ㄟ		ʔacɔɔ?
J. Cat	meew ㄟ	meew ㄟ	mew ㄟ	meew ㄟ		

	ATEL	MALENG	TO'E	THÉMAROU	KRI	PHONG	MLÉNGBROU
Buffalo	ciloo ㄟ	cāluu ㄟ	cāloo ㄟ	ciluu ㄟ	ciloo	ʃāloo ㄟ	cāloo ㄟ
Ox	ɲuə	ɲuə		bɔɔ ㄟ	pɔɔ	pɔɔ ㄟ	ɲuə
Horse	māɲuəu? ㄟ	māɲɲɲ ㄟ	mɲɲ ㄟ	(no word)	māɲɲɲ	māɲɲɲ ㄟ	māɲɲɲ ㄟ
Pig	kur	kur	kuul	kur/l	kuʔ	kuur	kuʔ
Goat		bee			bee	bee ㄟ	bee
Chicken	kaa ㄟ	kaa ㄟ	kaa ㄟ	kaa ㄟ	kaa ㄟ	kaa ㄟ	kaa ㄟ
Fish	ʔakāā?	ʔakāā ㄟ	ʔakaa ㄟ	ʔkaa ㄟ	ʔakaa ㄟ	ʔakāā ㄟ	(no word)
Duck	viit ㄟ	viit ㄟ	viit	viit ^h	viit ^h	viit	kuap kuap
Dog	cāā?	cɔɔ ㄟ		cɔɔ ㄟ	cɔɔ?	cɔɔ ㄟ	cɔ? ㄟ
Cat	meew ㄟ	meew ㄟ		meew ㄟ	meew ㄟ	meew ㄟ	mew ㄟ

Source: Chamberlain 1997

PART THREE – IN THE END ...



Thémarou Family at Ban Vang Chang on the upper Nam Theun 1996
(Photo by author)

CHAPTER 8 – CONCLUSIONS: WHAT IT ALL MEANS

The Proto-Kri-Molic People and Their Homeland – Faunal Evidence

On the surface our Bestiary is about faunal lexicon and language, and historical linguistics, and phylogenetic classification. But it is also about the deeper issue of considering the boundary between the wild and the civilized. In the domain of historiography it offers an alternative to histories and reconstructions that are intent upon “civilizing the past,” to use Bas Terwiel’s elegant expression.

The foremost question to be posed is: what inferences can be made from examination of the faunal lexicon, especially concerning food, religion, history, epistemology as well as linguistic subgrouping? To a large degree these are, and should be, inseparable. Acknowledging the primacy of linguistics is paramount, as insights offered by this discipline provide the frame into which history and anthropology can be placed.

The (sedentary) Liha myth cited here and discussed in the appendix, testifies to the transformation (domestication) of the dhole and the crow into the dog and the chicken. It is a myth told from the point of view of sedentists. For the Atel and other hunter-gatherers, the dog is the only domesticated animal, and the chicken remains wild. There is a clear linguistic differentiation between the etyma for ‘dhole’ /kāl̥aːr , ʔal̥ɔːr/ and for ‘dog’ /cɔːʔ/. There is also a clear distinction between wild and domestic pigs, with /skaal/ or /sk̥aʔur/ ‘wild pig’ and /kur/ ‘domestic pig,’ but interestingly in this case they both derive from the same root. The domestic form has to be considered as a later borrowing from other sedentary Kri-Mol groups.

Many factors intervene when discussing lexical clues to prehistory and ancient culture. Nevertheless, there are some principles that apply, such as that which might be referred to as the **bedbug principle**: *if there are no beds, there will be no term for bedbug*. If there are no walls, there is no term for wall lizard. And so on, no agriculture implies no terms for rice paddy, seedling, straw, irrigation ditch, paddy bund, plow, harrow, transplant, husk, pound, thresh, mortar and pestle. No iron, no rust. These are of course elementary logical common sense types of inference.

An examination of ethnozoological taxonomy in Proto-Kri-Mol reveals several important gaps where taxa for organisms closely associated with sedentary human settlements are absent unless as a form borrowed from a non-Kri-Mol language or another Kri-Mol language of a different cultural type, and thus cannot be reconstructed in the proto language. Consistently lacking are native taxa for synanthropic or commensal species such as:

House (wall) lizard (*Hemidactylus*)
sparrow
common mynah – blackbird - starling
house wood termite (Vietnamese borrowed from Tai)
silkworm
sandfly (small triangular-shaped fly common in kitchens and bathrooms)
cockroach
bedbug

a second kind of chicken louse or mite (the kind that also lives on horses)
gall midge
mole cricket

The last two are associated with rice farming. Given that these species exist at the proto level in language families of similar time depth such as Tai, their absence here would imply that the original Proto-Kri-Mol people were hunter-gatherers with no agriculture, no permanent houses and no villages. Note that even a cave shelter such as used by the Rục, is merely a place to return to periodically as opposed to a permanent home. Interestingly, there seems to be no parallel for cave dwelling on the Lao side of the Cordillera. But the idea of returning to a fixed location after cycles of foraging was described in some detail by the Atel, the Thémárou, and the Mlengbrou.

All of the hunter-gatherer people feel a strong desire for return to their spiritual territories when they are relocated. A Mlengbrou man whom we found living in a Brou village along Route 12 below the Ak Escarpment, said he needed to return to the Nam One area every three days or he would become ill, about a one-day walk. This particular individual committed suicide with a grenade about a year after we had met with him in 1997. Only 12 speakers of the language remained as of 2004. The original population in the 1940s was described as consisting of two groups, one of 15 families and the other of 10.

The Thémárou who were resettled from Keng Parang (*Atak Ruut*) to the outskirts of the Katuic Brou village of Vang Chang on the upper Nam Theun, just outside their own territory, eventually established an alternative settlement to the northeast, about a six-hour walk over a mountain, in their original homeland, where they began to grow corn, providing an economic excuse for them to reside most of the time in their own spiritual territory. Thémárou people prefer to eat corn rather than rice, though their original dietary staple consisted of wild tubers which no doubt continues to be a supplement to corn. The main source of protein was hog badger meat. This population has remained stable at about 43 since we first met with them in 1996.

The Atel, Makang, and Atop of the upper Nam Sot and Houay Kanil streams were relocated in three places: to the Arao-Malang village of Tha Meuang in the old territory of Tanout; to the outskirts of the Sek village of Na Kadok; and to the edge of Na Thone, a Tai Thène village perhaps twenty kilometers east of Na Kadok, this latter is located about eight kilometers from their original resettlement location of Pong Keut inside the Nakai-Nam Theun Protected Area. As they all remained close to the protected conservation area near their original homelands, they were also able to return frequently to the forest, and many families had spread out along the Nam Sot, also to grow corn and avoid living in a village.

Following on from this, it is necessary to speculate on the proximate geographical locations of the Kri-Mol peoples at the time Chinese colonists arrived beginning in the Han Dynasty (206 BCE-220 CE). Clinging to the coastal areas, the Chinese established commanderies at the mouths of major rivers including the Red (Jiaozhi), the Mã/Chu (Jiuzhen), the Cǎ (Huai Huan), the Cǔa Sót (Jiude) and the Gianh (Jihnan). So far as can be known, based on the principle of relative dialect diversity as an indicator of time

depth and Urheimat, the Kri-Mol groups had two primary distributional characteristics, inland and southerly. This original habitat can further be specified according to faunal names which relate well to evergreen and wet evergreen forests. Witness, for example, the especially rich set of cognates for the five major species of hornbills. Of the ten Kri-Mol sub-groupings distinguished here, eight are located in or near the lush forests of the Annamites.

Linguistically, there is a band extending from south to north along the eastern slopes of the Cordillera, not including the coast. Here we find Cheut, Rục, Mày, Mã Liềng, and Sách, as well as Nguồn. This would account for the close relationships of the more northerly Tourn-Phong with Cheut, as well as that between Mường to the north and Nguồn to the far south. Modern Vietnamese (or Sino-Vietnamese) was probably born of the Sinicized creolization of the ancestors of these latter two subgroups, Mol and Nguồn, beginning perhaps in the commanderies at the Gianh, the Cả, and the Mã in ways that are not fully understood, in part because the dialectology of Vietnamese itself has not been thoroughly studied.¹⁵ But preliminary work such as that by Alves (2002), Hoàng (1989), and Shimizu Masaaki (2016), strongly indicates greater diversity within Central and North-Central Vietnamese dialects, coinciding historically with the gradual movements north culminating in attacks on Hanoi and the establishing of Đại Cồ Việt, the Vietnamese nation, in the 10th century.

Based on the faunal evidence it can be suggested with some confidence that Proto-Kri-Mol peoples were hunter-gatherers inhabiting the hinterland forests of the Annamites in present-day north-central Laos and Vietnam, specifically in the vicinity of the present day provinces of Nghệ An, Hà Tĩnh, and Quang Bình but with greater diversity on the Lao side in Borikhamxay, and Khammouane. The languages of the Nakai Plateau in Laos are especially archaic, and it is here that the hunter-gatherer cultural type is most prevalent.

The main divisions of Kri-Mol also have their greatest diversity here. The division referred to as Việt-Mường begins in the far south with Nguồn (actually a displaced dialect of Mường), in the vicinity of the Mu Gia pass, on both sides of the Lao-Việt border. Mường proper begins in northern Nghệ An and includes Thanh Hoá and Hoà-Bình with a slight spillover into Houa Phan province in Laos. Vietnamese is in reality Sino-Vietnamese (there is no non-Sino variety), originally a coastal creole, with huge numbers of Sinitic loanwords (seventy percent of the lexicon according to Phan, 2010) though with Austroasiatic core vocabulary. The next most closely related subgroups are Cheut (Cheut, Rục, Sách, Mày, Mã Liềng) also in the south adjacent to Nguồn, and Tourn-Phong (Liha, Phong, Tourn) further to the north in Khamkeut District in Laos, and Hà Tĩnh and southern Nghệ An in Vietnam. The remaining five subgroups, Ahoe-Ahlao, Atel-Maleng, Thémaraou, Kri-Phoong, and Mlengbrou are all found on the Nakai Plateau and adjacent river basins slightly to the north. These five groups are more conservative in their phonology and retain a number of faunal terms not found elsewhere in Austroasiatic, a kind of Formosa for the Kri-Mol Branch of Austroasiatic, isolated biophysically by the Ak Escarpment rather than by the South China Sea.

¹⁵ See however, Hoàng (1989), Kondo (2012) and Shimizu (2016) which well support the homogeneity of the northern dialects.

As can be seen in the following table, the majority of cognate clusters center around the Nakai Plateau and the areas immediately adjacent to the north and northwest (Ahoe-Ahlao) where access to the plateau is a more gradual slope. In some cases the taxa from these areas seem to be transitional between the plateau and points further north.

Table 8 Main cognate areas for Mammals

	Coast	North		Nakai Plateau and Adjacent							South
	Vietnamese	Mường	Toum-Phong	Ahao-Ahlao	Ahoe	Atel-Maleng	Thémarou	Kri	Phong	Mlengbrou	Cheut
elephant	1	1	1	3	2	2	2	2	2	2	4
rhino	1	-	2	2	2	3	3	2	3	-	4
gaur	1	-	2/3	2	2	2	2	2	2	2	4
sambar	1	1	1	1	2	1	3	1	1	1	1
muntjac	1	-	2	4	3	5/3	5	3/6	3	3	1
wild pig	1	2	3	3	3	3	3	3	3	3	4
serow	1	2	2	2	2	2	2	2	2	-	2
Hystrix	1	1	1	2	2	2	3	3	3	3	4
Atherurus		1	1	2/3	1	3	3	4	4	4	5
dhole	1	1	1	1	1	1	1	1	1	1	1
bear <i>t.</i>	1	1	1	1	1	1/2	2	1	1	3	1
bear <i>m.</i>	-	-	1/2	1/3	1	1	4	1	1	1	1
tiger	1/2	3/4	3	3	4	3	3	4	4	5	3
civet	1	-	2	2	2	3	3	4	4	4	2
binturong	1	-	2	3	3	3	3	3	3	-	-
Hog badger	1	-	2/3	4	4	5	5	4	4	4	7
Ferret badger	1	2	-	4	3	3	3	5	-	5	-
marten	--	-	1	1	1	1	1	1	1	1	-
otter	1	-	1/2	1	1	3	3	3	3	3	1
Bat, lg	1	-	2	3	3	4	4	5	5	5	6
Bat. Sm	-	-	-	-	-	1	1	1	1	-	-
Giant squirrel	-	-	1	3	2	3	2	4	3	5	6
Squirrel (1)	1	2/3	1	4	4	5		1	4	1	6
Squirrel (2)	-	-	1	2	2	2	-	-	-	3	-
Squirrel (3)	-	-	1	1	1	1	2	3	1	3	-
Petaurista	-	-	1/2	4	3	5	5	5	5	5	6
tree shrew	-	-	1	2	2	3	3	3	3	3	-
bamboo rat	1	-	1/2	1	1	1	1	1	1	1	1
Rat	1	1/2	2	3	3	3	4	4	4	-	2
macaque	1	2/1	2	3	3	4	4	3	4	3	5/4
Langur	-	-	1/2	3	3	4	4	4	4	3	5/6
Gibbon	1	1/2	2	2	2	2	2	4	4	4	2
pangolin	1	-	2/3	2	2	2	2	2	2	2	2

Table 9 Main cognate areas for Arthropods

	Coast	North		Nakai Plateau and Adjacent							South
	Vietnamese	Mường	Toum-Phong	Ahao-Ahlao	Ahoe	Atel-Maleng	Thémarou	Kri	Phoong	Mlengbrou	Cheut
Body louse	1	2	2	2	2	2	2	2	2	2	3
Head louse	1	1	1	1	1	1	1	1	1	1	1
Chicken louse	-	-	1	2	2	2	2	2	2	1	-
tick	-	-	1	1	1	1	1	1	1	1	-
centipede	1	1	2	2	2	2	2	2	2	2	2
large grub	-	-	1	1	1	1	-	3	--	4	
Stink bug	-	-	1/2	2	2	2	2	2	2	2	2
cicada	1	-	2	2	3	3	3	3	3	3	1
mosquito	1	1	2	3	3	3	3	3	3	1	4
housefly	1	1	1	1	1	1	1	1	1	1	1
maggot	1	-	2/3	-	4	4	4	4	4	4	-
gadfly	-	-	1/2	1	1	1	1	1	1	1	-
wasp	1	-	2		2	3	3	3	3	3	1
termite	1	-	1	1	1	1	1	1	1	1	1
Termite fly	-	-	1	-	2	2	2	2	2	2	-
grasshopper	1	1	2	3	3	3	3	3	3	3	1
Praying mantis	1	-	2	-	-	3	3	3	3	3	(3)
flea	1	-	1	-	2	2	2	2	2	2	3
crab	1	-	2	-	2	3	3	1	1	1/2	1

The Wild and the Civilized

Much ado had been made of the purported relationship between Vietnamese language and the Đông Sơn bronze age culture. Linguists such as Alves (2014, 2016) list the “civilized” vocabulary of Sino-Vietnamese, words such as ‘roof tile’ or ‘harrow’ and many others. Of course this is not Proto-Kri-Molic lexicon, but rather layers of Chinese that were much later creolized with Kri-Mol, at different time periods from what were, no doubt, differing Chinese dialects. Even a cognate for ‘harrow’ in Rục is cited, as if the hunting and gathering cave-dwellers of Quang Binh had cultivated lowland wet-rice fields. In fact, so far as I can see, if the Sinitic lexicon is subtracted and only the native vocabulary considered, these Dongsonian temptations disappear. There can be no bedbugs where there are no beds. (And ‘bed’ in Vietnamese is a Chinese word as well, there is no Proto-Kri-Mol bed.)

An additional factor is commonly ignored: it would be hard to prove that the so-called Early Sino-Vietnamese words were not filtered through Tai before being acquired by Vietnamese. Most if not all of the Early Sino-Vietnamese vocabulary are found in Proto-Tai and Proto-Kam-Tai as these peoples had indisputedly longer and closer

relationships with Old Chinese. I have elsewhere (Chamberlain 2016) addressed the Kra-Dai presence in the Red River basin as has the historian Catherine Churchman in her brilliant work *The people Between the Rivers*, referring to the territory between the Pearl and the Red Rivers (2016).

More complete dialectology of Vietnamese, especially lexicon, needs to be carried out. We know from historical sources, that Đại Cồ Việt was established in the 10th century in Jiaozhi by attacks from the south (cf Keith Taylor 1983), not from local uprisings in the Red River basin. But we know few details regarding the interactions of the various Chinese groups and the local Kri-Mol populations at each of the commanderies. Good detailed dialectology of Vietnamese in the central and north-central regions may help to unravel at least some of this.

In fact no one has carried out a complete reconstruction of Proto-Kri-Mol, and when such is mentioned, it almost always refers to Proto Việt-Mường + Cheut and perhaps including Toum-Phong. That is, the left branch of Kri-Mol on the tree employed here. It should be remembered that our classification is based upon faunal lexicon, rather than a more traditional comparative phonology though preliminary examination seems to support this as well. But until such information is available, I would maintain that faunal lexicon is something very close to human life and livelihood in and around the forest, and thus of great comparative value; at the pinnacle of a hierarchy of semantic domains if you will.

With respect to this, I have shown elsewhere (1977) that animals outrank plants in the biotic realm, and this seems to be universal. I alluded then (49) to Rorschak tests carried out by Huzioka (1962) in northern Thailand where some 60.5 percent of the responses identified the abstract shapes as animals or animal body parts, compared to 11.6 percent for plants. The remainder were associated with humans or religious objects. It was found (in Tai languages and in English) that whereas many dozens of plants are named after animals, almost no animals are named after plants except in the most unusual or artificial scientific contexts.

There also seems to be a kind of inferiority complex (for lack of a better term) built into Vietnamese and Chinese interlanguage pragmatics that must be traceable back to the time when ethnic Chinese dominated the Kri-Mol peoples in various localities or interacted with them in various asymmetrical or feudal ways. For an analogous situation we need look no further than the inferiority found in English vis-à-vis French, where we observe in English that lexicon associated with “high” culture is usually French in origin (see Pyle 1976). We also see this same process at work between Vietnamese and Mường, where the autonym *mɔl* / *mɔu* of the Mường became the pejorative term *mọi*, and as Đại-Việt moved south was applied to all of the non-Vietnamese peoples encountered, considered uncultured by the Sinicized Vietnamese.

Domestication

With respect to the propaedeutic of André Haudricourt (1977) who noted the juxtaposition of domestication relationships in Europe where humans are nourished by goats and cows, and Asia where dogs and pigs are nourished by human faeces, two sets of circumstances are apparent. (1) the dog is unquestionably the earliest domesticated

animal as attested in the Liha myth of the dog and the crow, and the special place accorded the dhole in other AA cultures. Most AA languages distinguish ‘[domestic] dog’ and ‘[wild] dhole.’ (2) the pig in Kri-Mol seems caught-in-the-act of becoming domesticated with distinct domestic and wild terms derived from the same root in Atel-Maleng, and including Mường and Cheut where separate etyma for wild pig have developed.

Atel-Maleng (wild) (domestic)	AT (1): skaal AT(2): skəʔur AT: kur	Ml: skool Ml: kur	TE: skɔɔl TE: kuul
Cheut (wild) (domestic)	TX: trɯɯt kur	BP: ɿroot ^h	
Mường (wild) (domestic)	lɔj ¹ (locations 1-22 Thanh-Hoá and points north) kuyh ³³ lɔpy ³¹ (Houa Phanh) kuj ³ , kul ³ , kun ³		

In the case of Atel-Maleng, we see the origin of the domestic ‘pig’ in the form of the phonologically more archaic ‘wild pig.’ The form for domestic pig then seems to have simplified to a form that is quite similar throughout the rest of the branch. Cheut and Mường, both of which have separate etyma for ‘wild pig’ then acquired the derived form.

Mường may have another interpretation, and this involves a second species, Heute’s Pig or Yellow Pig, which seems to occur only to the south of the Cá basin. It has a separate taxon in Atel-Maleng and Toum-Phong, and in Mường territory (where the species is not known to occur), has become the main word for ‘wild pig,’ further evidence of a south to north movement of Kri-Molic. Even Vietnamese has retained this form as a doublet with *lợn* in certain contexts:

Việt	lợn lòi bầy ‘group of wild pigs’ (EFEO wordlist) nanh lợn lòi ‘boar’s tusk’ (EFEO wordlist) ¹⁶
Mường	lɔj ¹ (locations 1-22) ~ kuj kɔ ~ lɔn kɔ
Toum-Phong	Ph: lɔɔy, pɯŋ T: kuul lauk Lh: lɔɔy [NB pɯŋ ⁵⁵ law ³¹ (Mường Houa Phanh) ‘hog badger’]
Atel-Maleng:	AT: cǎlaɣy

As already mentioned, this same word has been widely adopted by Tai groups in the area, many of whom originated from locations further north that abutted on Mường.

And then, the Li or Hlai (Hainan) reconstruction of Nordquest (2007:589) is especially noteworthy,

¹⁶ Words for ‘tusk’ in Vietnamese are borrowed from Tai, nanh < nɛɛŋ A1 ‘boar tusk’, ngà < ŋaa A2 ‘elephant tusk.’

Proto-Hlai *C-ləc e.g. Lauhut: lac⁷ ‘wild pig’

The finale palatal stop of Hlai corresponding to the palatal glide of Kri-Mol, good evidence for the existence of Hlai on the mainland, a factor rarely taken into account in the study of the early history of Vietnam (cf. Chamberlain 2016).

This may be a clue to the dating of the arrival of Mùòng in Juizhen (vicinity of Thanh Hoá). Li broke away from the Kra-Dai mainstream prior to the introduction of iron during Zhou around the 6th c. BCE, prior to the Qin and Han invasions of the south as Hlai does not show the widespread infusion of Old Chinese loans found in Kam-Tai (Ostapirat 2008), and must have arrived on the island before the arrival of Be-Tais in the south. If Hlai took with them the ‘wild pig’ lexeme, it would have been borrowed from Kri-Mol sometime between 600 and 221 BCE.

The widespread term for ‘crossbow’ (PT *hnaa C) that may have spread around the same time, likewise does not occur in Hlai. In fact the crossbow is not used by the Hlai peoples on Hainan (cf Stübel 1937), nor by the hunter-gatherers of the Nakai plateau. All Hlai used the long-bow, and the Nakai hunter-gatherers used no bow at all.¹⁷

Other potential Hainan contact forms include:

‘snake’ Thémárou: kobuat Jiamao: buat⁷

‘sambar’ Ph: kǎḍj: AT kǎḍj:ʔ Greater Hlai: *rə:yʔ ‘deer’

‘porcupine H.’ Ahoe: yj: Ah: yj: AT(2): gʷi: Ml: yi: TE: ʔyǐ:
Pre-Hlai *C-dəy Proto-Hlai *dəy ‘porcupine’

‘porcupine A.’ Ph: tɔ:l Lh: tɔn Proto-Hlai *təʰinʔ ‘porcupine’

‘bat’ T: ɲɤk ɲɤ:k Lh/PL: ɲɤk Proto-Hlai *Curu:k ‘bat’ (> ɣuuk ~ vuuk etc.)

‘frog’ Ahoe and Cheut: kəɭɤp Jiamao la:p⁸ ‘toad’

‘water lizard (*Physignathus*)’ AT: kǎyaon Proto-Central Hlai *rju:ŋ ‘lizard’

? ‘macaque’ Ph: vɔ:k T: vauk Lh/SM: vɔ:k, du:t
Ahoe: doo Ah: ḍɔ: Ahl: ḍɔ: Li (Stübel) Süd: nɤc, Weiß: noh, Geshor: nok]
(OR ‘langur’ Ahoe: tǎnaa Ah: tǎnɔ Ahl: tǎnaa) ?

Norquest also notes ‘butterfly’ Jiamao: ɓaŋ⁵ ɓua¹, Pre-Jiamao *ɓəŋ^x ɓa:ŋ which he suggests may be related to Proto-Austronesian *qari-baŋbaŋ. However note Kri-Mol forms such as:

AT: ɲɤt ɲuaŋ Thémárou: ɲon ɲɤt Cheut: loŋ ɲaŋ Sáčh: ɲuaŋ ɲuaŋ

¹⁷ Futher south, below the Ak Escarpment, among the Cheut of Boualapha, the crossbow is much in evidence.

Probably though, ‘butterfly’ is not the best word for comparative phonological purposes as it tends to be subject to expressive and reduplicative forces in many languages. English *butterfly* and its playful twin *flutterby* is a good example. Jiamao, also known as [thaay], is highly divergent and some linguists such as Thurgood and Norquest consider that it belongs to a separate unknown linguistic stock. Debate on the issue exists however, and Ostapirat (2008) considers it to be a language that split off early from the Hlai mainstream.

Another wild-domestic pair exists with ‘gaur’ the wild bovine. All of the Nrong-Theun languages plus Toum and Phong consistently have some form of *S-ŋo:l/r. But Cheut has simply ‘buffalo’ *cihuu* or *ciəluu*, and Vietnamese has *bò tót* ‘bull.’ Liha (PL and SM) have *kław play* and *kloo phlay* ‘buffalo+forest.’ That is, in these latter cases the animal has been named from the point of view of the “civilized” (non-forest) side of the paradigm.

Other aspects of the wild-civilized dichotomy can be found in the analysis of the Liha myth in the Appendix below.

Our bestiary remains decidedly incomplete. In fact it barely scratches the surface when discussing the natural history of the animals named from the perspectives of the various peoples. Much of the data collected has not been included since positive identification is a constant problem in the field, or the fact that some names were collected only from a single language. One must necessarily rely upon photographs and field guides. The taxa for species included here are mostly reliable, but many items were not collected because of time constraints. Fish, annelids, and many arthropods are missing. But as can be seen from the present work, I hope, zoonymy (so-named by Gérard Diffloth), is a richly rewarding field and can contribute much to the disciplines of history, prehistory, anthropology, philology, and folklore, in addition to historical linguistics, all benefitting from the comparative method. I sincerely hope that scholars of future generations will not find it beneath them to occupy their time, as Aelian says in the epigraph, “with foxes and lizards and beetles and snakes and lions,” for such time, I predict, will not be wasted.

APPENDIX 1 – THE CIVILIZATIONAL NARRATIVE¹⁸



The Liha Myth of the Dhole and the Crow

Most people died, but there was one old man who had lived 300 years and still had not died. So they [the ones who died] went up to the Mphloey [the chief heavenly spirit] and complained that they were always dying whereas there was an old man who had lived 300 years and was still alive.

So he [the Mphloey] sent three children down to enquire after the old man. They went and found him fishing.

“Hey, old man, have you ever seen stones float upwards?”

“Ohhhh..., you youngsters, I am more than 100 years old and still haven’t seen this.”

“Are you the one who is 300 years old?”

“Yes, that’s me.”

“Then, come with us.”

“I must take my dog and chicken home first.”

“[No] we go now.”

“What will my dog and chicken do?”

“Then you tell us what to do.”

¹⁸ Adapted from Chamberlain (2003).

“Alright then, no one must destroy my dog and chicken. Whoever shoots and hits [the dog and chicken] will get impetigo; whoever shoots and misses will have their flesh rot. Do not shoot them, do not hit them. Let them go.”

“Then now you come with us.”

So they took him away. He did not return home. For this reason the dhole and the crow cannot be killed or eaten.

The old man’s admonition is given in the form of a rhyme using the Phou Thay language: / *niŋ thuuk leew pen hit , niŋ phit leew pen puay*. In an earlier recitation by the same informant, the leg was specified:

*if you shoot, shoot the leg,
if you hit, may you get impetigo,
if you miss, may your flesh rot.*

An Interpretation – Wild and Civilized

This is a complex myth, but is at least partially comprehensible through comparisons with other Kri-Mol practices and beliefs. Indeed it provides a metonym for the analysis of the Kri-Mol situation as it exists on several divergent planes, and is therefore a useful beginning for our examination of the ethnography of Nakai and associated areas.

Since the Kri-Mol peoples appear to have been living in a relatively undisturbed fashion for more than 2,000 years (judging from the linguistic time-depth that separates these languages from modern Vietnamese), investigation of their languages and cultures is of the highest priority. They are, in fact, the key to systemic understanding of the whole network of inter-ethnic and ethnobiological relationships that have evolved over this period. Furthermore, without the diachronic vantage point offered by the diverse array of Kri-Mol groups that are still extant, this understanding would be largely inaccessible.

Thus, in order to understand the myth, it is necessary to jump from the sedentary lowland village-oriented Liha of Khamkeut, to the nomadic hunters and gatherers of the upper reaches of the rivers descending from the Annamite chain in Nakai. Within the confines of the recently established conservation area five such groups remain: *Atop* of the upper Nam Sot; *Atel* of the upper Houay Kanil and Nam Mone; *Makang* of the lower Houay Kanil; *Thémarou* of the upper Nam Theun; and the *Mlengbrou* of the Nam One (The remaining two groups are Rục in Vietnam and Cheut in Boualapha. The gap between Liha and these other branches of Kri-Mol, although relatively short in geographical distance, represents a span of at least 1,000 years in time and possibly more.

As an example, the Atel rely to a considerable degree on the meat of sambars and muntjacs killed by dholes. If they come upon the meat within two days the flesh remains edible, longer than that it rots and becomes infested with maggots. The crow frequently guides the Atel to the kills, either by their loud calls or when they are seen

with morsels of meat in their beaks. Because of this close relationship, dholes and crows are never killed or eaten by the Atel.

Among the Mlengbrou the situation is similar. (It may even extend to bears and tigers which are interdicted animals for them as well.) They say that the dholes may be followed by the strong odor which they exude and when a kill is discovered and the dholes have been chased away, a front leg of the dead animal is cut off and given back to the dholes.

The Thémarou also participate in the dhole relationship, but apparently not to the same extent as the Atel. (Their familiarity with the dhole, however, is evidenced by the fact that two varieties, ‘yellow’ and ‘black’, are distinguished.) The preferred meat for this group, they say, is hog badger.

As may be seen in the forms for the three interdicted animals provided below, linguistic variation, indicative of a considerable time depth, separates Liha and the remaining groups of nomadic foragers in the Nakai-Nam Theun protected area:

	Liha	Atel	Thémarou	Mlengbrou
dhole	cǎklɔɔn	kǎlbɔɔr	ʃɔyʔ	cɔɔ tɔŋ tɔŋ
bear	kəw , yəw	sǎkɯɯ	rɯm	cǎmok
tiger	khaan	vǎal	ʃiit	koklɔɔʔ

Thus it is to be concluded that the dhole/crow interdiction is a very ancient one that underlies the cultures of all the Kri-Mol groups in Laos and is also present among the *Nha Lang* (the Kri-Mol groups of Nghê An Province in Vietnam) according to Cuisinier (1948:209). Diffloth notes a similar interdiction among the Semai in Malaysia.

The dog and the chicken may be interpreted as domesticated counterparts of the dhole and the crow. Thus the *wild versus domestic* theme emerges quite starkly. But the sense of the transformation remains unclear.

Why is the old man a keeper of the domestic side of the paradigm? And where does the heavenly spirit tradition come from (called / mɤlɯɯ/ in Liha, and translated by the narrator as /thɛn A1/, a Tai-type figure). In fact, there is a three-way distinction involved here, ordinary humans, the *Mphloey* (heavenly spirit), and the old man.

From an alimentary point of view, dholes in fact consume the flesh of the live dying animal (which humans cannot do) and in the killing and putrification, convert the flesh to a raw or partially digested (fermented) state, prior to the point where the human comes upon the kill and fire is used to cook the meat. The dhole is the converter of life into death and then from death into life, comparable to the heavenly spirit (a god of the sedentists). Because of this they cannot be killed and eaten.

Note here that Lévi-Strauss (1964) in his well-known treatise *The Raw and the Cooked*, seems not to have considered the “pre-raw” status of the live animal as opposed to its

dead but uncooked ("raw") flesh. I am indebted to Charles Pyle (*On the Duplicity of Language*) for the following analysis from American culture which sheds light upon our interpretation of the myth:

"Raw "does not mean "natural" but rather, precisely, "uncooked." The raw state is a situation that is calculated from the point of view of the cooked, and projected back from the finished state to the prior state. So although the raw is chronologically prior to the cooked in any particular situation, the raw state is conceptually subsequent to the cooked state. And, of course, "uncooked" does not mean the same thing as "natural." ... So in sum, the raw/cooked distinction is subsequent to the living/dead distinction. First is the living state, then the dead state, and the raw/cooked distinction is a distinction within the category of the dead.

For the Atel and the Mlengbrou the dhole is the medium through which this whole process is enacted. The dhole transforms first the living into the dead, and second the dead into the raw. He is the intermediary between life and death, and he is thus sacred, and his flesh is taboo. The crow, as the messenger between dhole and human, announces the death of the deer and hence is also sacred. Through the conversion of the natural into the raw, they themselves become domesticated.

But furthermore, the dhole and the crow as agents of interdiction, implement the function of the father, that is, the Old Man. As in Freud, we see him clearly here in the myth as the uncastrated (i.e. he never dies) father of the primal horde (the people who die, who are castrated), who is murdered through a pact among the brothers (the three children sent by the Mphloey) to establish the law, the interdiction (the pronouncing of the injunction by the Old Man in the myth), which is none other than the taboo against incest. The Old Man is murdered (castrated) in the name of civilization or in order for the Liha to become civilized. [The stones are perhaps the testicles of the Old Man, and their floating is an unnatural (civilized) act.]

And as further proof, the Liha have a prohibition against eating the flesh of animals killed by other animals, that is, they have forbidden (repressed) the very act which made the dhole and the crow sacred in the first place. This is the ultimate denial, the denial that gives birth to civilization. It is the Liha equivalent of Pyle's example just cited, the prohibition against knowing, which is in fact the pretense of ignorance. There is also a specific prohibition against the use of wild animals in sacrifices.

For the Liha, another distinction between the dog and chicken on the one hand and the dhole and crow on the other, is that the former may be sacrificed and eaten, whereas the latter, as this myth explains, cannot. Furthermore, in their essence, all sacrifices are human sacrifices, and human sacrifice (castration) is a substitute for (re-enactment of) symbolization, a sacrifice for civilization. Lacan (67) writes, "It is in the Name-of-the-Father that we must recognize the support of the symbolic function which, from the dawn of history, has identified his person with the figure of the law." Thus, all sacrifices are substitutions, sacrifices of the real for what is not real. The myth of the dhole and the crow is in principle fact a prohibition against the sacrifice of the real, or, in this case, the substitution of the real by the imaginary. "Thou shalt not kill the dog and call it a

dhole," or, "Thou shalt not abandon the real (the wild) for the symbolic (the domesticated)." And the penalty for doing this is death, as in the Atel belief that the result of mixing wild food with domestic/cultivated food is a lethal poison. From an alimentary point of view, the essence of civilization is sedentism, and the essence of sedentism is domestication, and the essence of domestication is sacrifice, that is to say, symbolization.

In the first recitation of the myth, the curse placed on the animals involves the leg. A possible interpretation of this might go as follows: The leg is the means of nomadism, to be shot in the leg would be to effect sedentism. Thus, impetigo (the itch) results from sedentism, especially the fleas and lice associated with dogs and chickens. Putrified flesh, on the other hand, is associated with the kills of the dhole, the meat that becomes gamey before the crow shows the way to the nomads. In this form, however, it may be equated with cooking, being fermented and partially pre-digested. The foreleg of the dead animal is also the offering made by the Mlengbrou back to the dhole.

The result of the sacrifice (of the dhole and the crow via the substitution of the dog and the chicken) is the village (civilization), as opposed to nature (wilderness). So according to this myth, which is performed in its own enigmatic (wild) language, the wilderness is good, nurturant, where food is already partially digested (fermented), and preferable to the village (the place of itching and impetigo).

Pyle (*Natural Logic*) concludes:

The natural means of sustaining the brute force of life entails the death and consumption of other living beings, which we then call sustenance. The death of the other sustains the life of the killer and eater, and thus establishes a hierarchy of death and priority in terms of sustenance within the realm of brute being which is an iconic enactment of the mastery of death and, if not of birth, at least of the sustenance of life. Death and food become the medium in which power and control are most primitively expressed. (173)

The human-dhole relationship as it has existed among the Kri-Mol peoples might be classed as pre-hunting, that is, killing via the dhole. Hunting proper, when it does occur, may be defined as imitative of the dhole with the aid of the dog. Indeed, according to some authorities, the dholes themselves are described as foragers (Venkataraman, et.al. 1995).

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