CHAPTER 3

Animal nomenclature in Jinghpaw*

Keita Kurabe

[要旨/ABSTRACT]
ジンポー語は、シナ・チベット語族チベット・ビルマ語派に属する言語であり、北ビルマ、北東インド、西南中国などに国境を越えて分布する。本稿では、ジンポー語の動物名を音韻、形態、意味、言語接触の観点から分析し、動物名について先行研究で報告される地域性と普遍性がこの言語にも観察されることを報告する。音韻的には、鳥類の名称に擬音語が多用される。いくつかの動物名は音韻的弱化により語源が不透明になりつつある。形態的には、複合と接辞付加が動物語形成の主要な手段である。複合による動物名は N-N または N-V の語構成を示す。動物接頭辞は祖語にさかのぼる古形を示す。意味的に、外見および生息地に基づく命名が高い生産性を示す。分類学上の界を越える命名法も観察される。言語接触により、シャン語、ビルマ語、漢語由来の動物名がジンポー語にもたらされた。

1. Introduction

Jinghpaw is a Tibeto-Burman (TB) language of the Sino-Tibetan language family spoken throughout the Indo-Burma-China borderlands. It is one of the languages spoken by the Kachin people, one of the major ethnic minority groups of Burma, who are linguistically diverse people speaking several mutually unintelligible Tibeto-Burman languages, including Jinghpaw, Zaiwa, Lhaovo, Lacid, Ngochang, Rawang, etc. In this world of multiple languages, Jinghpaw serves as a lingua franca. Although their situation has been changing, in general the Kachin are highlanders occupying hills and mountains where they practice slash and burn agriculture in contrast to the Shan, their neighbors who are lowlanders occupying river valleys where they practice rice cultivation in irrigated fields (Leach 1954: 1).

This paper, as a preliminary step in the studies of the bestiary of northern Burma and adjacent areas of China and India, explores Jinghpaw animal nomenclature in terms of phonology (§ 2), morphology (§ 3), semantics (§ 4), and language contact (§ 5), with an appendix providing a list of about 350 animal names in the language. Jinghpaw animal nomenclature is of interest by illustrating areal and universal issues of animal names (zoonyms) described by Matisoff (2011) for English, Chinese, Lahu, Thai, Japanese, and other languages. The data presented in this paper were collected from Hanson (1906) and Maran (1978) as well as from my own fieldwork in northern Burma.

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2. Phonology

2.1 Onomatopoeias

Onomatopoetic or mimetic names are often found for those animals that make the sound. The Jinghpaw word for cat, for example, is *ʔnyaw,* which apparently has its source in the sound cats make, as with other neighboring languages (e.g., Chinese *māo* and Thai *mɛɛw*). The Tokay gecko *taw téʔ* is also so named in Jinghpaw because of the sound it makes, as in many other languages of Southeast Asia.

(1) Names for the Tokay gecko

Jinghpaw	taw téʔ	Sino-Tibetan
Burmese	tauʔ tê	Sino-Tibetan
Thai	túk kɛɛ	Tai-Kadai
Shan	tɔk^{5} tɛ^{5}	Tai-Kadai
Khmer	tək kae	Austroasiatic
Vietnamese	tắc kè	Austroasiatic
Indonesian	tokék	Austronesian

Matisoff (2011: 665) observes that this sort of naming is especially common in bird and insect names rather than mammal names in Lahu and other languages, providing names for species of cicada in Japanese, such as *minmin-zemi* '*Oncotympana maculaticollis*,' *chitchi-zemi* '*Cicadetta radiator*,' *niinii-zemi* '*Platypleura kaempferi*,' *tsukutsuku-booshi* '*Meimuna opalifera*' (also see Badenoch in this volume). This also holds for Jinghpaw bird names. The word for crow, for example, is *ʔù kha,* where the first element expresses 'bird' and the second has its origin in the sound made by crows. Another word for crow is *kəkha* which involves reduplication of the calling of crows, where the first syllable is deaspirated due to a widespread phonological process of deaspiration in the language (Kurabe 2018). The bird *sumpyi ʔù* 'a species of bird, lit. flute bird' is also named in relation to the sound. Other Jinghpaw bird names of onomatopoeic origin include:[1]

(2) Onomatopoeic bird names

a. khrù dù	'oriental turtle dove'
b. dù̀ dù dì dì	'a species of owl'
c. té té ~ té té dù	'red-wattled lapwing'
d. kətík kədà dà	'Chinese francolin'
e. púk dun ~ kúk dun	'cuckoo'
f. bùk gəluy	'a species of nighthawk'[2]
g. ʔù gum	'mountain imperial pigeon whose sound is *um um ngum ngum*'
h. ʔù ɕìp	'a species of bird whose sound is *ship ship ship*'
i. ʔù ték	'a species of bird whose sound is *tek tek tek*'

2.2 Phonological reduction

A great number of animal names in the world's languages must of necessity be

[1] The bird sound indicated is taken from Njai (undated).

[2] So named because of the the sound it makes (Maran 1978).

polymorphemic due to the capacity of human memory (Matisoff 2011). One of the major strategies of animal name formation in Jinghpaw and neighboring languages, as discussed in 3.2, is compounding (e.g., *paŋlay-khrùdù* 'seagull, lit. sea dove,' *ʔù-ɛəro* 'brown shrike, lit. tiger bird,' *yú-səmyít* 'shrew mouse, lit. needle rat'). A once-transparent compound, however, can become semantically opaque through morphosemantic change, as in *dandelion* from French *dent de lion* 'lion's tooth' (ibid., p.673).

Similar morphosemantic opacification is also found throughout Jinghpaw animal nomenclature due to the fact that Jinghpaw compounds are susceptible to phonological reduction. One of the two major reduction processes in compounding is disyllabization, where light syllables of polysyllabic words are deleted when the resulting structure is phonologically longer than disyllabic (Hanson 1906, Dai and Wu 1995: 128-30). This process makes the resulting compound disyllabic (e.g., *ləgo-leŋ* 'lit. foot-wheel' > *go-leŋ* 'bicycle,' *pəloŋ-lətáʔ* 'lit. shirt-hand' > *lòŋ-táʔ* 'sleeves'). This deletion process is related to the fact that almost all monomorphemic words in Jinghpaw are monosyllabic or disyllabic, and words longer than disyllabic are extremely rare. Animal name roots whose light syllables usually drop in compounding include: *ləpu* 'snake,' *məguy* 'elephant,' *ɛəro* 'tiger,' *khətô* 'bulbul,' *ləgàt* 'bee,' etc. Consider:

(3) Disyllabization

a. ləpu-mùt	>	pu-mùt	'ribbon snake, lit. snake-dark'
b. ləpu-tsìt	>	pu-tsìt	'green snake, lit. snake-green'
c. məguy-là	>	gùy-là	'male elephant, lit. elephant-male'
d. məguy-lám	>	gùy-lám	'feral elephant, lit. elephant-wander'
e. ɛəro(ŋ)-tèŋ	>	ròŋ-tèŋ	'leopard, lit. tiger-spotted'
f. ɛəro(ŋ)-mùt	>	ròŋ-caŋ	'clouded tiger, lit. tiger-dark'
g. khətô-tsìt	>	tò-tsìt	'Finch-billed bulbul, lit. bulbul-green'
h. khətô-ràw	>	tò-ràw	'white-headed bulbul, lit. bulbul-together'
i. ləgàt-yúp	>	gàt-yúp	'nocturnal species of bee, lit. bee-sleep'
j. ləgàt-may	>	gàt-may	'small kind of bee with no poison sting, lit. bee-good'

Another reduction process often observed in compounding is sesquisyllabization, where the first syllable of a fully disyllabic word is reduced to a light syllable due to the predominance of the iambic pattern of Jinghpaw prosody (e.g., *gìnsúp* > *gəsúp* 'play,' *ɛiŋnyèn* > *ɛənyèn* 'lizard,' *nìŋwà* > *ǹwà* 'axe'). When applied to a disyllabic compound, as discussed by Matisoff (1989:163-4) for other TB languages, the process of sesquisyllabization obscures the etymology of the compound. To illustrate this, consider the compound *lùy-dùy* (lit. juicy-sweet) 'orange,' which is often reduced to *lədùy* in colloquial speech. This process, together with the "disyllabization" illustrated above further obscures the etymology of given compounds. Consider the word *bərèn* 'dragon,' derived from *ləpu-rèn* (lit. snake-long), *wəna* 'holes in axe,' derived from *nìŋwa-na* (lit. axe-ear), and *khədún* 'threshold,' derived from *ciŋkha-dún* (lit. door-surface).

(4) Derivation of *bərèn* ‘dragon,’ *wəna* ‘holes in axe,’ and *khədún* ‘threshold’

Underlying	ləpu-rèn	nìŋwa-na	ciŋkha-dún
Disyllabization	pu-rèn	wa-na	kha-dún
Sesquisyllabization	pərèn	wəna	khədún
Lenition	bərèn	---	---
Surface	bərèn	wəna	khədún

Animal-related words involving these processes include:

(5) Disyllabization + Sesquisyllabization

a. ləpu-nuy	>	pənuy	‘boa, lit. snake-soft’
b. ləpu-mùt	>	pəmùt	‘ribbon snake, lit. snake-dark’
c. ləpu-nen	>	pənen	‘mucus secreted by a snake, lit. snake-?’
d. dùmsi-brùm	>	səbrùm	‘porcupine spine, lit. porcupine-spine’
e. dùmsi-jàp	>	səjàp	‘porcupine odor, lit. porcupine-pungent’

3. Morphology

3.1 Affixation

The Proto-Tibeto-Burman (PTB) animal prefix *s-, which is ultimately connected to the PTB etymon *sya ‘animal, flesh, body’ (Benedict 1972: 106-8, Matisoff 2003: 102), is widely attested across modern TB languages.[3] The prefix is reflected by various forms in modern languages, as in Lushai *sa-khi* ‘barking deer,’ Nung *səwi* ‘bear,’ Miri *si-be* ‘monkey,’ Chokri Naga *ti*^{3}*ɕi*^{44} ‘dog,’ and WT *sbrul* ‘snake’ (Matisoff 2003: 97-8, 102).

The prefix appears in a number of words in Jinghpaw fauna lexicon, where the prefix is reflected by *ɕə-*, *jə-*, and *cə-*, conditioned by a deaspiration rule (see Kurabe 2018). The zoonym *ɕəro(ŋ)* ‘tiger,’ for example, illustrates the prefix although it is no longer analyzable for modern speakers. Only a comparison with related languages, such as Written Burmese (WB) *kroṅ* ‘cat’ and PTB *s/k-roŋ ‘cat, wildcat’ reveals its etymology. The zoonym *ɕəram* ‘otter,’ a widespread root in TB (see Matisoff 2010 for ‘otter’ in TB and Mon-Khmer), also involves the animal prefix. The following animal names illustrate Jinghpaw zoonyms with the prefix.

(6) Reflexes of PTB *s-

a. Mammals
ɕəro(ŋ) ‘tiger,’ *ɕəram* ‘otter,’*ɕəru* ‘mole,’ *ɕərá* ‘gibbon,’ *səwoy* ‘pangolin,’ *sənaŋ* ‘wild boar,’ *səgû* ‘sheep,’ *jəkhyi* ~ *cəkhyi* ‘barking deer,’ *jəkhyon* ~ *cəkhyon* ‘wolf,’ *cəkhây* ‘giant squirrel,’ etc.

b. Arthropods
cəkhân ‘crab,’ *ɕəkrát* ‘body louse,’ *ɕəlíp* ‘cockroach,’ *ɕəkrép* ‘bedbug,’ etc.

3.2 Compounding

Compounding, as noted in 2.2 above, is one of the most productive morphological process of animal name formation in Jinghpaw and neighboring

[3] PTB etyma are cited from Matisoff (2003).

languages. Examples from Matisoff (2011) include: Chinese 松鼠 *sōŋ-shǔ* 'squirrel, lit. pine rat,' 熊猫 *xióng-māo* 'giant panda, lit. bear cat,' 猫头鹰 *māo-tóu-yīng* 'owl, lit. cat-headed eagle'; Lahu *ɣì-phî* 'otter, lit. water dog,' *ɔ́-qā=ŋâʔ* 'mynah, lit. buffalo bird, ' and *mɔ̀ʔ-yìʔ* 'clouded tiger, lit. monkey leopard.'

Jinghpaw compounds can be classified in terms of their internal structure. Only the major word classes, nouns and verbs, are productively involved in compounding. All the logically possible combinations of nouns and verbs (i.e., N-N, N-V, V-N, V-V) are attested (e.g., *cíŋnâm-pràt* 'freckles, lit. sesame-mole' *jùm-dùy* 'sugar, lit. salt-sweet' *lùʔ-khàʔ* 'drinking water, lit. drink-water,' *ce-nà* 'understand, lit. know-hear'). Observed compound zoonyms always have the structure N-N or N-V. Compounding resulting in animal names always yield nouns. Examples:

(7) N-N

a. múʔ-cəkhán	thunder-crab	'water scorpion'
b. ńsín-gəlaŋ	darkness-eagle	'nighthawk'
c. dùmbàw-ɛ̀ùʔ	rhinoceros-frog	'a large species of frog'
d. khàʔ-ǹgùy	water-dog	'mole-cricket'
e. ɛ̀ùʔ-cìt	frog-rash	'toad'

(8) N-V

a. ʔù-tók	bird-chisel	'woodpecker'
b. gàt-yúp	bee-sleep	'a nocturnal species of bee, lit. sleeping bee'
c. ɛ̀ùʔ-gòk	frog-roar	'a species of frog'
d. pu-tsìt	snake-green	'arboreal green snake'
e. gùy-wúŋ	dog-bushy	'shaggy-haired Chinese dog'

There are also many compounds consisting of three roots in Jinghpaw. The vast majority of them exhibits the structure [[N-V]-N] (e.g., *ləmù-dèp-tsiŋ* 'a kind of fast-growing grass that grows during the rainy season, lit. sky-reach-grass'). Some examples from our limited data are given below. Their structures are [[N-V]-N], as in (9a) to (9c), or [N-[N-V]], as in (9d).

(9) Compounds consisting of three roots

a. nìŋwáʔ-phay-ʔù	ax-carry-bird	'pelican'
b. ŋa-rem-ʔù	cattle-tend-bird	'black-collared starling'
c. wàʔ-phay-gəlaŋ	pig-carry-eagle	'large eagle'
d. ŋá-zàybrù-thù	fish-sand-dig	'small silversides sucker of the family Atherinidae'

Compound zoonyms are usually endocentric, where the head-noun is a hypernym, and the modifier gives a specific meaning to the head. In terms of the output categories, N-V zoonyms are always left-headed, as illustrated by (8) above. The compound *ùʔ-tók* 'woodpecker' thus expresses a kind of bird. On the other hand, N-N zoonyms are either right-headed or left-headed. Compare:

(10) *Modifier-Head*

a. jà-ŋá	gold-fish	‘goldfish’
b. khòŋraŋ-ʔù	hornbill-bird	‘great hornbill’
c. paŋlay-khrùdù	sea-dove	‘seagull’
d. lay-gənù	silk-worm	‘silkworm’
e. saŋ́phó-gùy	ship-dog	‘any kind of long-haired foreign dog’

(11) *Head-Modifier*

a. ŋá-ɕəro	fish-tiger	‘goonch’
b. ʔù-ɕəro	bird-tiger	‘brown shrike’
c. yú-səmyít	rat-needle	‘shrew mouse’
d. ŋá-kháŋdà	fish-gar	‘gar fish’
e. ʔù-lənuŋ	bird-grackle	‘grackle’

A species that has a simple name in one language may have a compound name in another. For example, while English *land leech* and *water leech* are hyponyms of *leech,* TB languages tend to have separate simple words for them with no hypernym, derived from PTB *k-r-p^{w}at ‘land leech’ and *m-li:t ‘water leech’ (Matisoff 2011: 657). Burmese thus has a distinction between *cuʔ* ‘land leech’ and *hmyɔ́* ‘water leech.’ Jinghpaw, however, appears to have lost the distinction, having a hypernym *wòt* ‘leech.’ The English distinction between *pig* and *boar* is lexically encoded using a compound in Jinghpaw (i.e., *wàʔ* ‘pig’ and *wàʔ-dù* ‘boar’). English *cat* and *wild cat,* on the other hand, are treated independently in Jinghpaw, as in *ʔnyaw* ‘cat’ and *khan* ‘wild cat.’

4. Semantics

4.1 Locational/habitational

This type of zoonyms is based on the preferred habitats of animals. English examples from Matisoff (2011: 661-2) include: *tree shrew, mountain lion, river rat, sea horse,* etc. This category is semantically very productive in Jinghpaw animal nomenclature. The frog *kəwá-ɕùʔ* ‘a species of frog, lit. bamboo frog’ is so called because it is often found in bamboo, and the bird *ŋa-rem-ʔù* ‘black-collared starling, lit. bird that looks after cattle’ because it is often found on the backs of cattle. Other examples include:

(12) Locational/habitational

a. nam-ʔù	forest-bird	‘jungle fowl’
b. khàʔ-ʔù	water-bird	‘little egret’
c. paŋlay-khrùdù	sea-dove	‘seagull’
d. paŋlay-khaypyék	sea-duck	‘penguin’
e. ńsín-gəlaŋ	darkness-eagle	‘nighthawk’
f. wàʔ-khəluy	pig-flea	‘flea’
g. gùy-tsíʔ	dog-louse	‘louse’
h. gá-gùy	land-dog	‘fox, racoon dog’
i. khàʔ-ɕəlíp	water-cockroach	‘giant water bug’
j. ńtâ dìŋsiŋ	house-lizard	‘house lizard’

4.2 Appearance

Color, shape, and size are often employed to characterize animal and plant nomenclature. Matisoff (2011: 662-4) provides English examples such as *bluefin tuna, red-vented bulbul, eggplant,* etc. This semantic category is also very productive in Jinghpaw animal nomenclature. The snake *pu-mùt* 'ribbon snake, lit. green snake' is so called in terms of its color, the bird *khrù-jì* 'red turtle dove, lit. small dove' in terms of its size, and *ɛəgan-mətî* 'a small species of mushroom, the cap of which is star-shaped, lit. star mushroom' in terms of its shape. Other relevant animal names include:

(13) Appearance of one of its features

a. woy-khyeŋ	monkey-red	'red-tipped pig-tailed monkey'
b. tò-tsìt	bulbul-green	'Finch-billed bulbul'
c. ŋá-caŋ	fish-black	'snakehead'
d. pu-tsìt	snake-green	'arboreal green snake'
e. gùmphrò-ŋá	silver-fish	'white goldfish'
f.ròŋ-tèŋ	tiger-spotted	'leopard'
g. ròŋ-bà	tiger-big	'largest kind of tiger'
h. laŋ-ji	eagle-small	'Pariah Kite'

Animal names may also be characterized by the appearance of features of other objects resembling or associated with the animal. English examples from Matisoff (2011: 662-4) include: *banana slug, crowfoot grass, hog-nosed badger, kidney bean, blood orange, swordfish, bracket-tailed drongo,* etc. Jinghpaw zoonyms exemplifying this category include:

(14) Appearance of features of other objects

a. dùmbàw-ɛùʔ	rhinoceros-frog	'a large species of frog'
b. yú-səmyít	rat-needle	'shrew mouse, lit. needle rat'
c. ŋá-ɛəro	fish-tiger	'goonch, lit. tiger fish'
d. ʔù-ɛəro	bird-tiger	'brown shrike, lit. tiger bird'
e. woy-ɛəro	monkey-tiger	'probably clouded leopard'
f. múʔ-ʔù	thunder-bird	'hoopoe'

4.3 Intra- and inter-kingdom associations

Animal or plant names are sometimes modified by other animal or plant names. Matisoff (2011: 668-71) classifies this kind of intra- and inter-kingdom associations into the following four subtypes, where *florafloric* and *faunafloric* types are plant names (phytonyms) and *faunafaunic* and *florafaunic* are zoonyms. The *faunafloric* and *faunafaunic* are semantically more productive than *florafloric* and *florafaunic* in general.

(15) Intra- and inter-kingdom associations

Types	Modifier	Head	Examples
florafloric	plant	plant	ginger lily, lemon grass, rose-apple
faunafloric	animal	plant	tiger lily, crab grass, butterfly pea
faunafaunic	animal	animal	zebra fish, crab beetle, mouse deer

florafaunic plant animal fruit bat, banana slug, chestnut bunting

Our data illustrating *faunafloric, faunafaunic* and *florafloric* compounds in Jinghpaw are given below:

(16) Intra- and inter-kingdom associations in Jinghpaw

Faunafaunic	dùmbàw-ɛùʔ	rhinoceros-frog	'a large species of frog'
Faunafaunic	wàʔ-khəluy	pig-flea	'flea'
Faunafaunic	ŋá-ɛəro	fish-tiger	'goonch'
Faunafaunic	ʔù-ɛəro	bird-tiger	'brown shrike'
Faunafaunic	ʔù-məguy	bird-elephant	'turkey'
faunafloric	woy-ɛəmyen	monkey-Entada	'a species of small Entada'
faunafloric	yú-kumgyin	rat-cucumber	'a species of small cucumber'
faunafloric	yú-na-məkhrát	rat-ear-fungus	'a small black fungus'
faunafloric	cəkhyi-mətî	deer-mushroom	'a species of mushroom'
faunafloric	khədòn-làp	cricket-leaf	'a small kind of betel leaf'
faunafloric	ɛəro-məjáp	tiger-chili	'a very hot species of chili'
faunafloric	wàʔ-myìʔ-phún	pig-eye-tree	'a species of tree'
faunafloric	bərèn-bo-sì	dragon-head-fruit	'dragon fruit'
faunafloric	bərèn-jòʔban-sì	dragon-cockscomb-fruit	'dragon fruit'
faunafloric	jòʔbàn-pan	cockscomb-flower	'a red species of flower'
faunafloric	kədûkhá-kan-phún	squirrel-belly-tree	'a kind of tree'
faunafloric	ŋa-khyí-mətî	buffalo-shit-mushroom	'black-colored mushroom which grows only in buffalo manure'
Florafloric	məkók-mətî	apple-mushroom	'a species of mushroom'

4.4 Metaphorical compounds

Compound zoonyms and phytonyms are sometimes semantically exocentric with no heads. Some English examples from Matisoff (2011: 666-7) include: *walking stick* 'stick like insect,' *toadstool* 'poisonous mushroom,' *elephant's foot* 'kind of yam with clusters of tubers aboveground,' *sea horse* 'kind of fish resembling a horse.' The Jinghpaw plant name *tsáp-ləphàn* 'a species of fungoid, lit. bear paw,' for example, is so called because of its resemblance to the paw of a bear. Jinghpaw compounds illustrating this category are given in (17).

(17) Metaphorical compounds involving fauna and flora names

a. sùmbuy-ruŋ	sumbwi.plant-horn	'a species of beetle'
b. woy-bo	monkey-head	'a species of giant fern'
c. tsáp-ləphàn	bear-paw	'a species of fungoid'
d. nyaw-lədî	cat-nose	'a species of puffball mushroom'
e. ɛùʔ-ǹbá	frog-blanket	'wet moss'
f. khàʔ-ǹgùy	water-dog	'mole-cricket'

g. gùy-là-gəjoŋ	dog-male-surprised	'a species of thorny thistle'
h. wàʔdù-dàŋ	boar-defeat	'an extremely prickly kind of yam'
i. woy-myìʔ-nòn	monkey-eye-feed.fire	'small black fly or gnat supposed to cause sore eyes'

4.5 Polysemy

The word for deer in Jinghpaw is *ɛàn,* which is polysemous between 'deer' and 'flesh, meat.' Another word for deer is *ɛàt,* also polysemous between 'deer' and 'rice, food' derived from *ɛá* 'to eat' plus a nominalizing suffix *-t.* This kind of polysemy is by no means unnatural in the Southeast Asian (SEA) areal context, as Matisoff (1978 :138) puts it: "For most modern Western languages it does make sense to have two separate items for animal and meat/flesh. In the hunting cultures of backwoods SEA, these two concepts are often expressed by exactly the same word (e.g., Lahu šā 'animal; meat, flesh;' Jinghpaw shàn 'flesh; deer; large game animal, as used for food')." The Lahu and Jinghpaw forms themselves have their sources in the PTB etymon *sya-n 'flesh, meat, game animal.' Burmese also illustrates the semantic relationship between animal, deer and flesh (e.g., *θá* 'flesh, meat,' *θágauɴ* 'game animal,' *shaʔθá* 'barking deer,' *θămìɴ* 'reindeer').

4.6 Inter-lingual semantic shift

Reflexes of the same etymon may refer to different objects due to inter-lingual semantic shift (e.g., Matisoff 1978). The Jinghpaw numeral *khun* 'twenty,' for example, can be related to WB *akun* 'all,' both of which have their diachronic source in PTB *m-kul with an original meaning like "such a large number that one has to use all the fingers and toes to count up to it" (Matisoff 2003: 278-9). A few examples of inter-lingual semantic shift between Jinghpaw and Burmese involving animals are given below:

(18) Inter-lingual semantic shift

Jinghpaw	Written Burmese	PTB
ɛəro(ŋ) 'tiger'	kroṅ 'cat'	*s/k-roŋ 'cat, wildcat'
ləpu 'snake'	pui^{3} 'insect, worm'	*bəw 'insect, vermin, bug, snake'
yún 'rat'	yun 'rabbit'	*b-yəw-n 'rat, rabbit, hare'
ɛəkrép 'bedbug'	khrip 'lac'	*s-krep 'bug, ant, insect (lac)'

5. Language contact

The Jinghpaw-speaking region in northern Burma is a site of intensive contact where cultural and language contact among intra- and extra-TB speakers has been a long-standing phenomenon. The intra-TB contact is represented by the Kachin people who speak several minority TB languages. Jinghpaw speakers have also had a long symbiotic relationship with the Tai-speaking Shan people, from whom they have borrowed a number of lexical items. Burmese and Chinese are two dominant languages in the Jinghpaw-speaking region today. Their influence on Jinghpaw, however, is diachronically quite limited (Kurabe 2016, 2017). Jinghpaw animal names are no exception. The word for 'animal' itself is a loan from Shan (e.g., *dùsàt* < Shan *to^{1}s^{h}at^{4}*). Other loan zoonyms include:

(19) Zoonyms of Shan origin

a. bəlúk	catfish	< paa^{1}luk^{4} (lit. fish-hole)
b. bəleŋ	red catfish	< baa^{1}lɛŋ^{1} (lit. fish-red)
c. byìŋ	water leech	< piŋ^{1}
d. taw	turtle	< taw^{2}
e. shellfish	khoy	< hɔj^{1}
f. pyék	duck	< pet^{4}
g. stork	gon	< kɔn^{2}
h. kaynam	dipper	< kaj^{2}nam^{5} (lit. bird-water)
i. braŋtáy	hare	< paaŋ^{1}taaj^{4}
j. jàŋduy	tuskless elephant	< tsaaŋ^{5}tuj^{4}
k. màgàm	black horse	< maa^{5}kam^{2} (lit. horse-black)
l. lày-gənù	silkworm	< laaj^{3} ‘silk’
m. myeŋ-séŋ	green beetle’	< mɛŋ^{4}sʰɛŋ^{1} (lit. insect-precious stone)
n. myeŋ-khám	golden beetle’	< mɛŋ^{4}kʰam^{4} (lit. insect-gold)

(20) Zoonyms of Burmese origin

a. ŋəcoŋ	long-headed catfish	< ŋǎjáuɴ
b. ŋəmyín	short-heaed catfish	< ŋămyíɴ
c. ŋəmán	shark	< ŋămáɴ
d. golaʔúk	camel	< kălăʔuʔ (ult. from Pali)
e. welaʔŋá	whale	< wèlâŋá (ult. from English)

(21) Zoonyms of Chinese origin

a. yaŋ	mountain goat	< yáŋ
b. lòzè	mule	< luózi
c. khàŋɕan	mud eel	< huángshàn

The animal lexicon of Jinghpaw also has foreign elements widely found throughout East and Southeast Asian languages. For example, the word for horse *gùmrà* and for elephant *jàŋ* (e.g., *jàŋduy* ‘tuskless elephant’) are known as areal words found throughout the region. The etymon of Jinghpaw *gəlaŋ* ‘eagle’ is PTB *glaŋ, which is known as an old loan into TB and Chinese from Mon-Khmer (Benedict 1972: 72, Matisoff 2003: 263). The word for wild dog is of special interest in that it probably illustrates a contact connection between Sino-Tibetan and Indo-European. Matisoff (2010: 584-7) shows that the English word *jackal* is ultimately from Sanskrit, being only found in Indo-Aryan. This suggests that it is a loanword from non-IE source. He proposes that its etymology is a PTB root *s-k-ywal ‘wild dog, jackal, dhole, wolf,’ which is reflected in Jinghpaw as *jəkhyon ~ cəkhyon* ‘wolf, wild dog.’

Jinghpaw animal names sometimes show parallel word-for-word structure with other neighboring languages. These are possibly examples of calques, where one language borrowed words from another by literal translation. One example comes from the word for turkey, where neighboring languages regardless of language families show a parallel structure consisting of ‘fowl’ and ‘elephant,’ as given below. It is so called because of its trunk-like beak-wattle (Matisoff 2011: 670).

(22) Possible calques

Languages	Forms	Structure	Meanings	Groups
Jinghpaw	ʔù-maguy	fowl-elephant	turkey	Tibeto-Burman
Burmese	cɛʔ-shìɴ	fowl-elephant	turkey	Tibeto-Burman
Lahu	hɔ-ŋâʔ	elephant-fowl	turkey	Tibeto-Burman
Shan	kaj^{2}-tsaaŋ^{5}	fowl-elephant	turkey	Tai-Kadai
Mon	caiŋ-coiŋ	fowl-elephant	turkey	Mon-Khmer

6. Summary

This paper explored the Jinghpaw animal nomenclature in terms of phonology, morphology, semantics, and language contact. This paper showed that the rich lexicon of Jinghpaw zoonyms illustrates areal and universal features of animal nomenclatures discussed by Matisoff (2011). In terms of phonology, onomatopoeia contributes to bird name formation, and phonological reduction often leads to morphosemantic opacification of animal names. Affixation and compounding are the two morphological processes that create a number of words in the animal lexicon of Jinghpaw, as with other TB and neighboring languages. Locational and appearance categories, as with other languages, are semantically very productive in Jinghpaw. Intra- and inter-kingdom associations are also attested in Jinghpaw animal nomenclature. Language contact, especially with Shan, brings additional animal names into the language, contributing to the rich animal lexicon of Jinghpaw.

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Appendix

The following list provides Jinghpaw animal names classified based on the STEDT Animal Questionnaire: I. General; II. Transportation/Work Animals; III. Food/Clothing Animals; IV. Canines and Felines (domestic and wild); V. Deer; VI. Bear; VII. Monkeys; VIII. Rodents/Lagomorphs; IX. Pachyderms; X. Other Mammals; XI. Reptiles and Amphibians; XII. Birds; XIII. Fish; XIV. Molluscs (Bivalves, Gastropods) & Marine Arthropods; XV. Insects, Arachnids, Worms, Pests.[4] The Jinghpaw data are taken from Hanson (1906), Maran (1978), and my fieldnotes. The list provides both orthographic and phonemic forms. The English translation is based on Hanson (1906) and Maran (1978).

I. General

dusat /dùsàt/	animal, beast
ala /ʔəlà/	male animal
ayi /ʔəyì/	female animal

II. Transportation/Work Animals

dumsu /dùmsu/	cow
gawla-uk /golaʔúk/	camel
gumra /gùmrà/	horse
hkyi ma /khyì mà/	riding pony
lawze /lòzè/	mule, pack mule
lawgung /lòguŋ/	donkey
nga /ŋa/	cattle
nga tang /ŋa taŋ/	ox, pack-bullock
hpaw lam /phòʔ lám/	wild buffalo, *Bubalus bubalis*
wuloi /wuloy/	buffalo

III. Food/Clothing Animals

bainam /bàynam/	goat
sagu /ɛagû/	sheep
wa /wàʔ/	pig
wa du /wàʔdù/	wild boar
yang /yaŋ/	wild mountain goat

IV. Canines and Felines

chyahkawn /cəkhyon/	fox, wolf, dhole, wild dog
ga gwi /gá gùy/	fox, raccoon dog
gwi /gùy/	dog
hkan /khan/	wild cat
hkanghkyi /khàŋkhyì/	lion
mai dum /mày dum/	a species of bob-cat
nyau /ʔnyaw/	cat
rawng chyang /ròŋ caŋ/	black leopard
rawng gawk /ròŋ gòk/	cheetah

[4] http://stedt.berkeley.edu/work/questionnaires/02animals.txt

rawng mut /ròŋ mùt/	a species of tawny colored tiger
rawng teng /ròŋ tèŋ/	leopard, *Panthera pardus*
sanghpaw gwi /sáŋphó gùy/	any kind of long-haired foreign dog, esp. the sheep dog because the first ones were brought by foreigners on ships
sha lawm /ɕá lòm/	a species of wild cat

V. Deer

chyahkyi /cəkhyi/	barking deer, *Cervus muntjac*
hkyi dut /khyì dút/	porcine deer, *Hyelaphus Porcinus*
mai lu /mày lu/	Rusa deer
shan /ɕàn/	deer, large game used for food
shan krang /ɕàn kraŋ/	sambar, hart, *Cervus aristotelis*
shan nga /ɕàn ŋa/	red deer, a relative of the *Cervus elaphus*
shat /ɕàt/	deer
zau nyi /zàwnyì/	brown-antlered Rusa deer

VI. Bear

tsap /tsáp/	bear
tsap di /tsáp dí/	Himalayan bear, *Ursus thibetanus*
tsap ru /tsàp ru/ tuŋ/)	a kind of large black bear (also called tsap tung /tsàp

VII. Monkeys

la gang /làʔ gàŋ/	lar gibbon, *Hylobates lar*
n-grau /ǹgràw/	hoolock gibbon, *Hylobates hoolock*
sangang /səŋaŋ/	slow-loris or lemur, *Nycticebus cinereus*
sara /sərá/	gibbon (also called shara /ɕərá/)
woi /woy/	monkey
woi hkyeng /woy khyeŋ/	red-tipped pig-tailed monkey
woi lup /woy lùp/ alone	large male monkey, mainly terrestrial, usually found
woi sharaw /woy ɕəro/	possibly clouded leopard
woi shin /woy ɕín/	a species of langur

VIII. Rodents/Lagomorphs

brangtai /braŋtáy/	rabbit, hare
chyahkai /cəkhây/	giant squirrel, *Ratufa bicolor*
du /dú/	brush-tailed porcupine, *Atherurus macrourus*
dumsi /dùmsi/	porcupine, *Hystrix cristata*
jahkai /jəkhây/	giant squirrel, about the size of a housecat
kadu hka /kədûkhá/	tree squirrel
magan /məgan/	a species of grand rat
nbu rawn /ńbû ron/	shrew mole, *Uropsilus soricipes*
ndaw la /ǹdòʔ làʔ/	a big kind of squirrel
salaw /səló/	flying squirrel
sharu /ɕəru/	bamboo rat (also called ru /ru/)

shinglap /ɛìŋlàp/	a species of ground rat
yu /yú/	rat, mouse (also called *yun* /yún/)
yu byi /yùbyì/	flying squirrel
yu hkrawn /yú khron/	a species of bamboo rat
yu jung /yù juŋ/	shrew-mouse
yu samyit /yú səmyìt/	a species of shrew
yu shinglap /yú ɛìŋlàp/	a species of mouse resembling the harvest mouse

IX. Pachyderms

dumbau /dùmbàw/	rhinoceros
dun /dun/	a small species of rhinoceros
jangdwi /jàŋduy/	tuskless male elephant
magwi /məguy/	elephant
manang /mənaŋ/	mammoth (from legend)

X. Other Mammals

malat /məlàt/	palm civet, *Paradoxurus*
patsip /pətsíp/	bat
sawoi /səwoy/	pangolin
sinlen /sìnlen/	Indian mongoose, *Herpestes edwardsii*
sharam /ɛəram/	otter
wela nga /welá? ŋá/	whale

XI. Reptiles and Amphibians

dumbau shu /dùmbàw ɛù?/	a species of frog
kadu kang /kədú kaŋ/	land lizard
kawa shu /kəwá ɛù?/	a species of frog found often in bamboo
hka lapu /khà? ləpu/	water snake
hkangse /kháŋsé/	water monitor, *Varanus salvator*
hkindu /khindù/	a kind of lizard
la nyan /là? nyàn/	newt
lapu /ləpu/	snake, serpent
manaw /mənò?/	tadpole (also called *naw byin bau* /nò? byin bàw/)
nhkau /ɲkhaw/	a kind of water snake
nji joi /ɲji joy/	a small arboreal snake
nnyeng /ńnyêŋ/	flying lizard, *Draco fimbriatus*
nsang sawn /nsaŋ sòn/	a species of skink
nta dingsing /ńtâ dìŋsiŋ/	house-lizard
pu hkala /pu khəlá?/	a species of coral snake
pu mawp /pu mòp/	a species of swamp snake
pu mut /pu mùt/	ribbon snake
pu nwi /pu nuy/	reticulate python
pu pyen /pu pyen/	cobra
pu sai /pu sáy/	a species of water snake
pu htum /pu thúm/	Russel viper
pu tsit /pu tsìt/	arboreal green snake
hpaw hput /phó?phút/	a species of monitor, the so-called Chinese crocodile

	lizard
shawang /ɕəwáŋ/	a kind of striped snake
shingnyen /ɕiŋnyèn/	tree lizard, chameleon
shu /ɕùʔ/	frog
shu chyit /ɕùʔ cìt/	toad
shu gawk /ɕùʔ gòk/	a species of frog
shu gri /ɕùʔ gri/	a species of frog
shu gyeng /ɕùʔ gyeŋ/	a species of frog
shu kawng /ɕùʔ koŋ/	a very noisy variety of frog
shu nu /ɕùʔ nú/	bull-frog
shu ran /ɕùʔ rán/	a long kind of land frog
shu ri /ɕùʔ ríʔ/	a variety of loud-croaking frog
shu tek /ɕùʔ ték/	a variety of marsh frog
singgu /sìŋgu/	a species of water lizard
tau te /taw téʔ/	tokay gecko
tau bren /taw brèn/	terrapin or marsh-tortoise
tau kawk /taw kók/	turtle

XII. Birds

buk galwi /bùk gəluy/	a species of nighthawk that makes the sound indicated
chyabren /cəbrên/	white-browed fantail, *Rhipidura aureola burmanica*
chyingngau /ciŋŋàw/	great barbet, *Megalaima virens*
chyingpring pri /ciŋpriŋ prìʔ/	a variety of the fly-catcher bird
du du /dù dù/	a species of owl (also called *du du di di* /dù dù dì dì/)
gai nam /gáy nam/	water ousel, *Cinclus cinclus*
galang /gəlaŋ/	any bird of prey, eagle, kite, or hawk eagle
gaw gam /gò gam/	large kind of hornbill
gaw hka /gòʔ khá/	oriental pied hornbill, *Anthrococeros coronatus leucogaster*
gawng karu /gòŋ kəru/	ndian blue-throated barbet, *Megalaima asiatica*
je yang lang ji /jèyaŋ làŋjì/	European Kestrel, *Falco tinnunculus*
jingling /jìŋlíŋ/	a species of honeysucker
kahkru /kəkhru/	any species commonly known as doves
katik kada da /kətík kədà dà/	Chinese francolin, *Francolinus pintadeanus*
kumba ja la /kumba ja là/	Burmese shrike, *Lanius collurioides*
kumba u ju /kumba ʔù jù/	white-crested laughing thrush, *Garrulax leucolophus*
hka la /kha là/	raven
hka u /khàʔ ʔù/	little egret, Egretta garzetta
hkaike /khayke/	parrot
hkaipyek /khaypyék/	duck
hkaka la /khəka làʔ/	oriental magpie, *Pica pica sericea*
hkam hkam /kham kham/	a species of night bird
hkataw /khətô/	bulbul
hkawngrang u /khoŋràŋ ʔù/	great hornbill
hkru jeng /khrù jeŋ/	ring dove
hkru ji /khrù jì/	ring dove or red turtle dove
hkru mut /khrù mùt/	speckled wood pigeon, *Columba hodgsonii*

hkru tai /khrù tay/	purple wood pigeon, *Columba punicea*
hkru tsit /khrù tsìt/	orange-breasted green pigeon, *Treron bicincta*
hkru wa /khrù wàʔ/	emerald dove, *Chalcophaps indica*
hkru du /khrù dù/	Rufous turtle dove, *Streptopelia orientalis*
lang ji /làŋ jì/	Pariah Kite, *Milvus migrans govinda*
langa /ləŋáʔ/	a species of nighthawk (also called *lanya* /ləŋyà/)
lanung /ləŋuŋ/	greater racket-tailed drongo *Dicrurus paradiseus*
lanung u sin /ləŋuŋ ʔù sin/	grackle, *Gracula religiosa*
lanyawng /ləŋyoŋ/	myna bird (also called *lanyu* /ləŋyu/)
lawen /ləwen/	green magpie
mali tau /məlìʔ taw/	greater adjutant stork, *Leptoptilos dubius*
mu u /múʔ ʔù/	hoopoe
nam u /nàm ʔù/	wild birds of the jungle
nsin galang /ńsín gəlaŋ/	nighthawk
nga rem u /ŋa rem ʔù/	lack-collared starling, *Sturnus nigricollis*
nhkam /nkham/	a kind of nighthawk
nhkreng hkrek /nkhreŋ khrèk/	red-billed blue magpie, *Kitta erythrorhyncha*
ningwa hpai u /nìŋwa phay ʔù/	pelican
nsin galang /ńsín gəlaŋ/	nighthawk
panglai hkaipyek /paŋlay khaypyék/	penguin
panglai hkrudu /paŋlay khrùdù/	seagull
pi lan /pí làn/	swallow
prang u gam /praŋ ʔù gam/	rain quail, *Coturnix coromandelica*
puk dun /púk dun/	cuckoo (also called kuk dun /kúk dun/)
shakrai /ɕəkray/	Indian blue-throated barbet, *Megalaima asiatica*
shangma /ɕaŋma/	goose (also called *hkyengma* /khyeŋma/)
shingta la /ɕìŋtà láʔ/	scarlet-backed flowerpecker, *Dicaeum cruentatum*
singwang /siŋwaŋ/	white-rumped munia, *Lonchura striata*
singkri /sìŋkrì/	black drongo, *Dicrurus macrocercus*
sinli /sìnlí/	tree pipit
sinwa /sìnwá/	sacred greater racket-tailed drongo
sinwoi yit /sinwoy yìt/	scarlet minivet, *Pericrocotus flammeus elegans*
taw mung /tò muŋ/	red-whiskered bulbul, *Pycnonotus jocosus*
taw rau /tò ràw/	Bingham's bulbul
taw roi /tò roy/	a species of bulbul
taw sam /tò sam/	black bulbul
taw tsit /tò tsìt/	Finch-billed bulbul
te te du /té té dù/	red-wattled lapwing, *Vanellus indicus* (also called te te /tè tè/)
htingra kaisek /thìŋrá kaysék/	hummingbird
u /ʔù/	bird, fowl, chicken
u byit /ʔù byìt/	white rumped munia, *Lonchura striata*

u dut /ʔù dút/	rain quail
u gam /ʔù gam/	painted quail, *Coturnix chinensis*
u gan /ʔù gan/	jangle fowl, *Gallus gallus spadiceus*
u gaw /ʔù gòʔ/	horn-bill, *Buceros bicornis*
u graw /ʔù gró/	Lady Amherst pheasant, *Chrysolophus amherstiae*
u gum /ʔù gun/	mountain imperial pigeon, *Ducula badia*
u ju /ʔù ju/	white-crested laughingthrush, *Garrulax leucolophus*
u kawp /ʔù kòp/	little egret, *Egretta garzetta*
u kraw /ʔù kró/	golden pheasant, *Chrysolophus pictus*
u hka /ʔù kha/	crow
u hkai /ʔù kháy/	chick
u hkrang /ʔù khraŋ/	brown hill warbler, *Prinia polychroa*
u hkri /ʔù khrìʔ/	Reeve's pheasant
u hkring /ʔù khriŋ/	small parrot, *Psittacus crythacus*
u hkru /ʔù khrù/	dove
u hku /ʔù khùʔ/	old hen
u hku /ʔù khú/	screech-owl, *Strix flammea*
u la /ʔù là/	cock
u magwi /ʔù məguy/	turkey
u mut /ʔù mùt/	a species of snipe
u preng /ʔù préŋ/	quail, *Coturnix coromandelica*
u ra /ʔù rá/	pigeon
u ri /ʔù rìʔ/	Kalij pheasant
u sha galang /ʔù ɕá gəlaŋ/	fowl-eating hawk
u sharaw /ʔù ɕəro/	brown shrike, *Lanius cristatus cristatus*
u tawk /ʔù tók/	wood pecker
u tawng /ʔù toŋ/	green peafowl, Pavo muticus
u tsa /ʔù tsa/	sparrow
u tswi /ʔù tsúy/	cinnamon sparrow, *Passer rutilans intensior*
u tu /ʔù túʔ/	nightjar
u yen /ʔù yen/	green magpie, *Kitta chinensis*
u yung /ʔù yuŋ/	a species of nighthawk

XIII. Fish

ba lai /bà lay/	spotted sunfish
ba lam /bà làm/	Siamese catfish
ba lawn /bà lon/	banded snakehead, *Ophiocephalus Striatus*
ba nang /bà náŋ/	bulbous fish
ba tep /bà tép/	a small, thin, white fish
baleng /bəleŋ/	a species of catfish, *Saccobranchus*
baluk /bəlúk/	torpedo catfish, *Clarias magur*
gumhpraw nga /gùmphrò ŋá/	white goldfish, *Carassius auratus*
hkangda /kháŋdà/	gar fish
hkangshan /khàŋɕan/	mud eel
hkaram /khəram/	a species of catfish or bullhead
ja nga /jà ŋá/	goldfish, *Carassius auratus*
nga /ŋá/	fish

nga chyang /ŋá caŋ/	snakehead
nga chyawng /ŋá coŋ/	long-headed catfish
nga myin /ŋá myín/	short-headed catfish
nga sharaw /ŋá ɕəro/	goonch, *Bagarius bagarius*
nga shari /ŋá ɕərí?/	Chinese high-fin banded shark, *Myxocyprinus asiaticus*
nga una /ŋá ʔùnà/	catfish with poison stingers on its ventral fins
nga utsang /ŋá ʔùtsaŋ/	a species of landlocked mountain salmon
nga zaibru htu /ŋá zàybrù thù/	small silversides sucker of the family, *Atherinidae*
shala lap /ɕəlà láp/	minnow
shayu /ɕəyù/	a tropical species of fish, *Mastacembelus*
sinlai /sìnlày/	a species of trout found in fast mountain streams that have a sedimentary rock bed
ubat /ʔùbàt/	a species of large fish of the suborder
ukyik /ʔùkyìk/	a species of catfish
uhpai /ʔùphay/	a species of silvery, sucker-like fish
uhpyin /ʔùphyin/	a species of fish that has a round, thin, and flat body form
uhtang /ʔùthàŋ/	a species of trout
urat /ʔùràt/	black-headed *systomus*

XIII. Molluscs (Bivalves, Gastropods) & Marine Arthropods

chyahkan /ɕəkhân/	fresh-water crab
katsu /kətsû/	prawn, crayfish
hkapawp /khəpòp/	freshwater gastropod
hkinru rawng /khinrù ròŋ/	spiral snail
hkoi /khoy/	mollusk, univalvular shellfish
lapawp /ləpòp/	land snail

XV. Insects, Arachnids, Worms, Pests

atsawm kanu /ʔətsàm gənù/	a kind of caterpillar
byet /byèt/	maggots, grubs, larvae (also called byet su /byètsù/)
chyahkrau /cəkhrâw/	tailor ant
chyinghkra /ciŋkhrá/	kind of worm that is especially destructive to yams
dinggram /dìŋgram/	a species of spiny crab
dinggung /dìŋguŋ/	religious name for a spider supposed to be always resting in its web
dingsang /diŋsaŋ/	a species of bee
du htek /dùʔ thék/	click beetle
dung /duŋ/	worm or larva
gat but /gàt bút/	young bees, bee larvae
gat chyang /gàt caŋ/	large black kind of bee
gat jan /gàt jàn/	hornet, wasp, yellow-jacket
gat kung /gàt kuŋ/	large, aggressive, brown species of undomesticated social bee
gat lung /gàt luŋ/	young bees, bee larvae

gat mai /gàt may/	a small kind of bee resembling the sand fly and having no poison sting
gat nen /gàt nen/	domesticated bees
gat hpawp /gàt phòp/	a small kind of social bee
gat sha /gàt ɕà/	bee larvae
gat shang /gàt ɕaŋ/	large social bee that builds its extraordinarily large colony in underground caves and jagged rock formations
gat ting /gàt tiŋ/	a kind of wasp that makes a capsule-like covering of clay for its larvae
gat tsit /gàt tsìt/	yellow hornet
gat tung /gàt tuŋ/	larvae of the bee, as found in the comb,
gat yup /gàt ʔyúp/	nocturnal species of bee
gaw nyeng /go nyeŋ/	cicada, tree locust (also called *nneng* /nneŋ/)
gindigram /gìndìgram/	spider (also called *ndigram* /ǹdìgràm/)
ginji chya /gìnji cáʔ/	black tree-ant
git na tang /gìt nà taŋ/	large black ant with a fairly painful poison sting
gungai ba /gùmgay bá/	large black biting ant
janghkam /jìŋkhàm/	a species of large horsefly
ji bum /jìʔ bùm/	a species of horsefly
ji grawng /jìʔ groŋ/	mosquito
ji nu /jìʔ nù/	housefly
kabun /gəbun/	winged white ant
kadawn /kədon/	field cricket, *Gryllus assimilis*
kahkun /kəkhun/	white ant
kajin jai /kəjin jay/	earthworm
kaju gai /gəjû gay/	white intestinal parasite worm
kanu /gənù/	germs, grubs, minute worms, parasites
kindu nan /kindu nan/	large black beetle
kinhti htan /kínthíʔ than/	firefly
kugyin /kugyin/	black ant
kumgu shakoi	millipede
hka dingsen /khàʔ dìŋsén/	dragonfly
hka ngwi /khàʔ ǹgùy/	mole-cricket
hka shalip /khàʔ ɕəlíp/	giant water bug
hkakrit /khəkrít/	grasshopper, *Tettigonia cantans*
hkalwi /khəluy/	flea
hkin-yang /khin.yaŋ/	general, collective name for beetles
hkinchyi /khincì/	scarab beetle, *Scarabaeus sacer*
hkra /khra/	any species of cicada
hkra hkai /khra kháy/	young form of cicada
hkyingma /khyiŋmá/	stink-bug (also called *chyingma* /ciŋmá/)
lagat /ləgàt/	bee
lai kanu /lay gənù/	silkworm
lajin rin /ləjin rin/	earth-worm
latung /lətuŋ/	borer insect, either mature or larvae
magra /məgrà/	tick

maji ja /məjì jà/	ladybird beetle
manu /mənu/	worms in a sore or in the intestines
manut /mənùt/	moth
masun /məsun/	biting midge, or no-see-um
mu chyahkan /múʔ cəkhán/	grey water scorpion (Nepa cinerea)
myeng hkam /myeŋkhám/	golden beetle
myeng seng /myeŋséŋ/	green beetle
myi gup /myìʔ gùp/	a kind of stinging insect, somewhat larger than the sand-fly
myi htan tu /myìʔ than tù/	firefly
n-gaw gawk /ńgô gók/	scorpion
n-gawn ba /ǹgon bà/	a kind of extremely large cricket
n-gu shakau kanu /ngu ɕəkaw gənù/	millipede
nbung /ǹbuŋ/	termites and other wood-boring insects
ndang ma ba /ǹdaŋ mà bàʔ/	a large butterfly or moth that is dark in colour with an eye-shaped spot on each wing
ndu nan /ndu nan/	large black ant that bites
nhpram /ǹphram/	glow-worm
nkang kawt /nkaŋ kòt/	mantis
palam la /pəlâm láʔ/	butterfly
rum nai /rùmnày/	cicada
shakrat /ɕəkrát/	body louse
shakrep /ɕəkrép/	bedbug
shalip /ɕəlíp/	cockroach
shingchyen /ɕiŋcèn/	a green, hairy caterpillar
shingchyut /ɕiŋcút/	a smooth caterpillar of the day-flying
shingtai /ɕiŋtay/	worm, caterpillar of any kind
sumbra /súmbráʔ/	caterpillar that has long poisonous hair
sumbwi rung /sùmbuy-ruŋ/	a species of beetle
tsa hkri /tsáʔ khri/	a species of caterpillar
tsi /tsíʔ/	head louse
tung /tuŋ/	borer
htu ga /thuga/	mythological name for a spider
u hka dawng /ʔu kha dóŋ/	croton bug
utung /ʔutuŋ/	worm supposed to attack the teeth, causing cavities and decay
wa ndu yan /wáʔ ńdû yan/	centipede
wang kang /waŋ kaŋ/	mantis
wawt /wòt/	leech
wawt bying /wòt byìŋ/	horse-leech
wawt yam /wòt yam/	land leech