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The Phonology, Morphology, and Semantics of Burmese Zoonyms

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CHAPTER 3

The Phonology, Morphology, and Semantics of
Burmese Zoonyms*

Keita KURABE

[ABSTRACT]

Animal nomenclature is an area of Tibeto-Burman linguistics that is not often studied. The aim of this paper is to explore the Burmese fauna lexicon in terms of phonology, morphology, and semantics by building on more than 500 animal names in the language. Some animal names are susceptible to phonological reduction that leads to their morphosemantic opacification. Compounding, as with neighboring languages, is the most productive morphological processes underpinning the large number of Burmese faunal terms. Simplex animal names, by contrast, tend to express basic level categories. Very productive semantic categories in Burmese animal names are “locational/habitational” (e.g., “mountain quail”) and “appearance” (e.g., “pinecone-shaped fish”). The rich array of Burmese animal names showcases the intra- and inter-kingdom association, where animal or plant names are modified by other animal or plant names (e.g., “eagle snake”, “leaf bug”, “sparrow flower”, etc.). Burmese also has rich examples of metaphorical animal names, as illustrated by the example of “sea bread”, which expresses ‘starfish’.

1. Introduction

The animal name or “zoonym” is an area in Tibeto-Burman linguistics that is not often studied. Building upon data from English, Chinese, Lahu, Thai, Japanese, and other languages, Matisoff (2011) investigated areal and universal issues of animal and plant nomenclature. Kurabe (2019) explored animal nomenclature in Jinghpaw, a Tibeto-Burman language spoken in northern Burma and adjacent areas of China and India. His study showed that the Jinghpaw fauna lexicon exhibits a number of productive categories in neighboring languages at the phonological, morphological, and semantic levels, many of which were identified by Matisoff (2011). Badenoch (2019) investigated the word formation process in animal nomenclature in Sida, a Loloish language of Tibeto-Burman that is spoken in Laos and Vietnam, and found that reduplication in the language provides an expressive layer of meaning for animals.

In spite of the existing research, there are few linguistic studies that investigate the animal lexicon in Burmese, another Tibeto-Burman language that is primarily spoken in Burma and adjacent areas. Although in-depth studies of

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Burmese faunal lexicon have not been conducted, Ohno's (2000) Burmese dictionary, which provides a wide range of data on Burmese animal and plant names, contributed greatly to studies in Burmese fauna and flora nomenclature. As a preliminary step in the studies of Burmese bestiary, the aim of this paper is to explore Burmese animal nomenclature in terms of their phonology (§2), morphology (§3), and semantics (§4) based on more than 500 Burmese animal names collected from Ohno (2000), as well as the author's fieldwork. The present paper shows that Burmese animal nomenclature has productive categories in common with its neighboring languages. The general term for 'animal' in Burmese (i.e., **tāreiʔshàn**) is of Pali origin (i.e., **tīracchāna**). Animals living in the forest are also commonly referred to as **tó-ǎá** "forest beast/meat" or **tó-gàun** "forest creature". In what follows, we will specifically focus on native animal names in contrast to loan animal names such as **kānûkāmà** 'oyster' (borrowed from Mon), **sāmāyì** 'yak', **θàràkà** 'hill myna', and **θàndà** 'coral' (all borrowed from Pali).

2. Phonology

Mimetic names are often used for animals to reflect the specific sound that they make. These are generally more common for names of birds or insects, than mammals (Matisoff 2011: 665, Kurabe 2019: 76, Badenoch 2019: 52–3). Although this sort of naming does not appear to be very common in Burmese, some possible examples include:

(1) Possible mimetics

- | | | |
|---------------|-----------------|-----------------------|
| a. tauʔtê | 'tokay gecko' | |
| b. ʔouʔó-hŋɛʔ | 'Asian koel' | (lit. mimetics?-bird) |
| c. chí-ʔâ | 'rook' | (lit. crow-mimetics?) |
| d. khwé-ʔâ | 'golden jackal' | (lit. dog-mimetics?) |

The vast majority of monomorphemic words in Burmese are monosyllables or disyllables. In accordance with Burmese prosody, many disyllables have an iambic or "sesquisyllabic" structure (Matisoff 1973b), which consists of a heavy (major) syllable preceded by a light (minor) syllable with reduced phonemic possibilities. Due to this situation, the first syllable of a fully disyllabic word is sometimes reduced to a light syllable (e.g., **θínjàn** > **ǎjàn** 'water festival'). When applied to a disyllabic compound, this reduction process obscures the etymology of the compound. Matisoff (1989: 163–4), for example, associates the etymology of the now meaningless **pǎ-** found in the Burmese word **pǎyweʔ** 'ant' with the word **pó** 'bug, insect' in Burmese whose etymology is now obscured by the process of this "sesquisyllabization". Other similar examples include:

(2) Sesquisyllabization

- | | | | | |
|-------------|------------------|---|----------|----------------------|
| a. bǎ-dù | 'carpenter bee' | < | pyá-tù | (lit. bee-resemble) |
| b. cǎ-θiʔ | 'leopard' | < | cá-θiʔ | (lit. tiger-leopard) |
| c. phǎ-byàn | 'tree frog' | < | phá-byàn | (lit. frog-fly) |
| d. phǎ-ʔáin | 'verrucose frog' | < | phá-ʔáin | (lit. frog-?) |
| e. ŋǎ-shìn | 'swordfish' | < | ŋá-shìn | (lit. fish-elephant) |
| f. ŋǎ-nwá | 'boxfish' | < | ŋá-nwá | (lit. fish-cow) |

g. ṅǎ-byá	‘flounder’	<	ṅá-pyá	(lit. fish-flat)
h. ṅǎ-kaʔ	‘shark sucker’	<	ṅá-kaʔ	(lit. fish-attached)

3. Morphology

3.1 Simplex zoonyms

Cross-linguistic studies have shown that terms for basic level categories (e.g., *cat*) tend to be more simple and/or original than terms for superordinate (e.g., *animal*) or subordinate level categories (e.g., *Siamese cat*), which tend to be more complex and/or are derived from other domains by means of semantic extension (Berlin, Breedlove, and Raven 1973, Croft and Cruse 2004: 82–7, etc.). Many simplex (monomorphemic) zoonyms in Burmese cannot be segmented into smaller morphemes, and they come from terms for basic level categories. The following examples illustrate Burmese simplex zoonyms:

(3) Simplex zoonyms

a. khwé	‘dog’	j. myauʔ	‘monkey’
b. càUN	‘cat’	k. cɛʔ	‘fowl’
c. nwá	‘cow’	l. bé	‘duck’
d. cwé	‘buffalo’	m. sà	‘sparrow’
e. wɛʔ	‘pig’	n. mwè	‘snake’
f. cwɛʔ	‘rat’	o. phá	‘frog’
g. yòUN	‘rabbit’	p. ṅá	‘fish’
h. myIN	‘horse’	q. leiʔ	‘turtle’
i. shIN	‘elephant’	r. pó	‘bug’

3.2 Compound zoonyms

Similarly to neighboring languages of East and Mainland Southeast Asia, compounding is one of the most productive morphological processes in Burmese. Examples from neighboring languages include Chinese **sōṅ-shǔ** ‘squirrel’, which literally means “pine rat”; Lahu **mǎʔ-yiʔ** ‘clouded tiger’, which literally means “monkey leopard”; and Jinghpaw **múʔ-ʔù** ‘hoopoe’, which literally means “thunder bird” (Matisoff 2011, Kurabe 2019). As there are no “adjectives” in Burmese, only nouns and verbs are productively involved in compounding animal name formations. All of the logically possible combinations of nouns and verbs are attested in Burmese zoonyms, where N-N is the most common in contrast to V-N and V-V that are highly uncommon.

(4) Compound zoonyms

a. N-N	bé-yiʔ	duck-silver pheasant	‘pintail’
b. N-V	bǎ-dù	bee-resemble	‘carpenter bee’
c. V-N	ɛiʔkhó-gàUN	worship-bug	‘praying mantis’
d. V-V	byàN-hlwá	fly-hurdle over	‘swallow’

Most examples of compound zoonyms are endocentric, consisting of the head-noun that is a hypernym and the modifier that gives a specific meaning to the head. In terms of output categories, when they are endocentric, N-V zoonyms are always left-headed and V-N zoonyms are always right-headed. In general, verbs in

the N-V zoonym are intransitive, whereas those in the V-N zoonym are transitive. Examples include:

- (5) N-V
- | | | |
|---------------|----------------------------|--------------------|
| a. ɲǎ-kaʔ | fish-attached | ‘shark sucker’ |
| b. chǎ-byàN | termite-fly | ‘winged ant’ |
| c. mwè-hauʔ | snake-roar | ‘cobra’ |
| d. ɲǎ-lú | fish-roll | ‘stone roller’ |
| e. cwè-nɛʔ | cowrie-black | ‘chocolate cowrie’ |
| f. bǎzùN-lóUN | prawn-round | ‘freshwater crab’ |
| g. ɲǎ-byá | fish-flat | ‘flounder’ |
| h. ɲǎzìN-yáIN | long whiskers catfish-wild | ‘Gangetic mystus’ |
- (6) V-N
- | | | |
|----------------|-------------|-------------------|
| a. sá-bá | eat-frog | ‘Indian bullfrog’ |
| b. khouʔ-ɲǎmáN | chop-shark | ‘sawfish’ |
| c. ɛiʔkhó-gàUN | worship-bug | ‘praying mantis’ |

In contrast, N-N zoonyms are either right-headed or left-headed. For example, compare head-final animal names in (7) with head-initial animal names in (8) for reference.

- (7) Modifier-Head
- | | | |
|---------------|------------------------|---------------|
| a. ʔaʔ-bǎzín | needle-dragonfly | ‘damselfly’ |
| b. cauʔ-bǎzùN | stone-prawn | ‘lobster’ |
| c. càUN-wùN | cat-bear ¹ | ‘red panda’ |
| d. shaʔ-pó | sambar-bug | ‘stag beetle’ |
| e. θàNDà-mwè | coral-snake | ‘coral snake’ |
| f. ɛwè-ɲá | gold-fish ² | ‘goldfish’ |
- (8) Head-Modifier
- | | | |
|--------------|---------------|----------------------------|
| a. cwɛʔ-souʔ | rat-brush | ‘hedgehog’ |
| b. ɲǎ-nwá | fish-cow | ‘black-spotted boxfish’ |
| c. mwè-bǎdá | snake-mercury | ‘sunbeam snake’ |
| d. buʔ-kǎlá | bulbul-India | ‘white-faced jay’ |
| e. cé-θàNDà | parrot-coral | ‘vernal hanging parrot’ |
| f. ɲǎ-ɛwè | fish-gold | ‘dagger-tooth pike conger’ |

Note that there are some modifiers that recurrently follow the head, such as **mín** ‘king’, **cá ~ já** ‘tiger’, **bǎlú** ‘ogre’, and **tǎɲǎ** ‘fisherman’.³ Examples include:

¹ This seems to be a calque on the Chinese 熊猫 (lit. bear-cat) ‘red panda’ (James A. Matisoff, p.c., May 2020).

² The Lahu word means “red fish”; thus, “gold-fish” is not a universal formation (James A. Matisoff, p.c., May 2020).

³ **cá ~ já** ‘tiger’ has a derived meaning of ‘variegated, striped, checkered or pied’ (Myanmar Language Commission ed. 2008: 27). Relevant examples in (9) are possibly

(9) Head-Modifier

a. cá-mín	tiger-king	‘Asian golden cat’
b. càun-mín	cat-king	‘Asian golden cat’
c. dáun-mín	peacock-king	‘great argus’
d. yiʔ-mín	silver pheasant-king	‘Hume’s pheasant’
e. châ-mín	termite-king	‘queen ant’
f. mwèhauʔ-băyìn	cobra-monarch	‘king cobra’
g. ŋá-băyìn	fish-monarch	‘dolphinsfish’
h. myín-já	horse-tiger	‘zebra’
i. bé-já	duck-tiger	‘Eurasian teal’
j. hŋeʔ-cá	bird-tiger	‘Eurasian magpie’
k. zăyeʔ-cá	myna-tiger	‘pied myna’
l. théin-já	shikra-tiger	‘pied harrier’
m. θiʔtauʔ-cá	woodpecker-tiger	‘Indian pygmy woodpecker’
n. bázùn-já	prawn-tiger	‘a species of spotted prawn’
o. chìn-já	mosquito-tiger	‘yellow fever mosquito’
p. khwé-bălú	dog-ogre	‘bulldog’
q. hŋeʔ-bălú	bird-ogre	‘Burmese shrike’
r. ŋámán-bălú	shark-ogre	‘ray’
s. càun-tǎŋà	cat-fisherman	‘jungle cat’
t. myauʔ-tǎŋà	monkey-fisherman	‘crab-eating macaque’
u. ŋá-tǎŋà	fish-fisherman	‘splendid ponyfish’

Burmese also has some headless compound zoonyms. For example, Indian nightjar **myè-wuʔ** (earth-crouch) can be interpreted as “the one that crouches on the earth”. More examples include:

(10) Headless

a. pányi-zouʔ	nectar-suck	‘purple sunbird’
b. hnouʔθi-dò	beak-short	‘Pacific golden plover’
c. càbeʔ-nín	lotus leaf-step on	‘bronze-winged jacana’
d. khăyû-zouʔ	shellfish-suck	‘Asian openbill’
e. ʔămyí-hnă-khwâ	tail-two-fork	‘silverfish’
f. dăbeiʔ-lwè	alms bowl-carry	‘oriental magpie-robin’

Animal names consisting of two nouns, as noted above, are very common in Burmese faunal lexicon. The following (11) are additional examples, where examples (11a) to (11e) illustrate head-final compounds, and (11f) to (11n) illustrate head-initial compounds; (11o) and (11p) are indeterminate examples. More examples can be found in Section 4.

(11) N-N

a. gǎbà-leiʔ	world-turtle	‘sea turtle’
b. yòun-ðămìn	rabbit-deer	‘greater mouse-deer’

c. khăyû-pe?cî	shellfish-slug	‘snail’
d. cau?-pó	stone-bug	‘chiton’
e. di-bó	seawater-bug	‘acorn barnacle’
f. càun-năđà	cat-spice	‘civet’
g. θi?-càun	leopard-cat	‘clouded leopard’
h. êin-ηăpó	squirrel-clumsy man	‘flying squirrel’
i. lei?-sùn	turtle-kite	‘hawksbill sea turtle’
j. líN-wε?	eagle-pig	‘black-crowned night heron’
k. byáin-ηán	egret-wild goose	‘great egret’
l. phu?-ηín	monitor lizard-rash	‘clouded monitor’
m. mwè-θùdò	snake-upright man	‘many-banded krait’
n. ηá-wùn	fish-bear	‘whale’
o. khăyû-gănán	shellfish-crab	‘spider conch’
p. phu?-mîjáun	monitor lizard-crocodile	‘monitor crocodile’

Burmese also exhibits compound zoonyms consisting of more than two roots, as illustrated by the five-morpheme animal name **mwè-đá-myá-?ă-phâ** (lit. snake-son-PL-NMLZ-father) ‘*Elaphe melanurus*’, which literally means “the father of all snake sons”. More common are those that consist of three roots. Some of the attested patterns include:

(12) Compound zoonyms consisting of three roots

a. N-N-N	cwé-chí-bó	buffalo-shit-bug	‘ <i>Copris ochus</i> ’
b. N-V-N	cwé-càun-byáin	buffalo-tend-egret	‘cattle egret’
c. N-N-V	càun-myí-gau?	cat-tail-bent	‘Asian palm civet’
d. N-V-V	myau?-hlwé-jò	monkey-swing-pass	‘lar gibbon’
e. V-N-N	làun-mí-bó	burn-fire-bug	‘rice hispa’
f. V-V-N	khau?-cà-ηε?	peck-search-bird	‘woodpecker’

Compound zoonyms consisting of more than two nominal roots, as with other compound nouns, can usually be decomposed into a binary-branching structure. For example, **cwé-chí-bó** ‘*Copris ochus*’, which is given in (12a), has an internal structure [[N-N]-N]. Furthermore, **ye-na?-θămí** (lit. water-spirit-girl) ‘scorpionfish’ can be analyzed as [N-[N-N]]. More examples of animal names consisting of more than two nominal roots are provided below. Examples (13a) to (13c) illustrate [[N-N]-N], whereas examples (13d) to (13i) illustrate [N-[N-N]].

(13) Zoonyms consisting of more than two nouns

a. cáin-gáun-mwè	grasshopper-head-snake	‘Indian wolf snake’
b. thínyúđí-bòun-ηá	pinecone-shape-fish	‘pineapplefish’
c. ?èkăyi?-kèinnăyà-ηá	emperor-Kinnara ⁴ -fish	‘marine angelfish’
d. ηă-khwé-cà	fish-dog-tongue	‘sole’
e. khăyû-shìN-hnămáun	shellfish-elephant-trunk	‘Gould’s razor shell’
f. ηε?-mín-đá	bird-king-son	‘ashy minivet’

⁴ A mythological bird with a human head and torso (Myanmar Language Commission ed. 2008: 20).

g. càun-wùn-bai?	cat-bear-belly	‘Malay palm civet’
h. pó-mwé-zou?	bug-hair-brush	‘yellow hairy caterpillar’
i. cau?-ṅǎ-wé?	stone-fish-pig	‘crimson snapper’

When verbal roots are involved, compound zoonyms with more than two roots typically exhibit the structure N-V-N or N-N-V. Animal names having the structure N-V-N are very productive. They are usually endocentric right-headed compounds that have the internal structure [[N-V]-N], where the element N-V modifies the noun that follows it.⁵ For example, **cwé-cáun-byáin** (12b) ‘cattle egret’ literally means “buffalo-tending egret”. In many cases, the first noun is the patient of the following verb. More examples include:

(14) N-V-N

a. pìn-bya?-pó	tree-cut-bug	‘lawn armyworm’
b. θi?-phau?-pó	tree-dig-bug	‘bark beetle’
c. hnàn-phyá?-pó	ear of rice-cut-bug	‘rice armyworm’
d. zǎbáywé?-lei?-pó	paddy leaf-roll-bug	‘lava of Acentropinae’
e. pyá-zá-pó	aphid-eat-bug	‘ladybug’
f. mōunṅé?-thó-bó	dough-stab-bug	‘red flour beetle’
g. ?ǎsí-phau?-pó	seed-dig-bug	‘maize weevil’
h. thǎṅé?-khó-gàun	palm sugar-steal-bug	‘a species of large black ant’
i. θi?-tau?-hṅé?	tree-peck-bird	‘woodpecker’
j. myí-hṅáun-hṅé?	tail-rock-bird	‘white wagtail’
k. bǎzín-dó-hṅé?	dragonfly-poke-bird	‘blue-and-white flycatcher’
l. cwémýi-zwé-hṅé?	buffalo tail-pull-bird	‘racket-tailed drongo’
m. wá-yáun-hṅé?	bamboo-sell-bird	‘necklaced laughingthrush’
n. khwé-khò-yi?	dog-call-silver pheasant	‘Eurasian stone-curlew’
o. shìn-bi?-mwè	elephant-throw-snake	‘red-tailed pipe snake’
p. myé?sí-pà-cwè	eye-contain-cowrie	‘ocellate cowrie’

In other cases, the first noun may be interpreted as the instrument (15a-b), the spatio-temporal location (15c-g), or the reciprocal (15h). Additional examples:

(15) N-V-N

a. dá-gou?-kàun	sword-chop-bug	‘praying mantis’
b. myí-hṅa?-pógàun	tail-pinch-bug	‘earwig’
c. myè-lú-hṅé?	earth-roll-bird	‘dusky thrush’
d. myè-éó-mwè	earth-slide-snake	‘a species of grass snake’
e. yè-kú-gàun	water-swim-bug	‘water strider’
f. yè-kú-gǎnán	water-swim-crab	‘swimming crab’
g. ṅá-téshò-hṅé?	night-sing-bird	‘nightingale’
h. mwè-dù-pou?θin	snake-resemble-lizard	‘Burmese glass lizard’
i. yè-jò-mwè	water-fresh-snake	‘water snake’
j. yè-jì-ṅá	water-clear-fish	‘sardine’

⁵ This category is also very productive in Lahu; for example, ‘post office’ is “letter-send-house” (James A. Matisoff, p.c., May 2020).

k. nè-lóuN-ŋá	sun-round-fish	‘sunfish’
l. ?ù-cau?-pó	intestine-walk-bug	‘rice stem borer’

Animal names consisting of N-N-V are also very productive morphologically in Burmese fauna lexicon. Many of them, as shown in (16), have the structure [N-[N-V]], where N and N-V have the whole-part relationship, as illustrated by the greater yellow nape, **θi?tau?hŋe?-gou?-wà** (woodpecker-nape-yellow), which can be translated as a “woodpecker whose nape is yellow”. For more examples, see (27) and (28) below.

(16) N-N-V

a. càuN-myí-gau?	cat-tail-bent	‘Asian palm civet’
b. bu?-phìN-nì	bulbul-hip-red	‘red-vented bulbul’
c. bé-gáuN-zéiN	duck-head-green	‘mallard’
d. myíhNâuŋ-gáuN-wà	white wagtail-head-yellow	‘grey wagtail’
e. mǐjáuN-gáuN-dò	crocodile-head-short	‘mugger crocodile’
f. kǐN-chì-myá	centipede-leg-many	‘centipede’
g. kǐN-myí-gau?	scorpion-tail-bent	‘scorpion’
h. kǐNmâ-lɛ?-mé	scorpion-hand-black	‘a species of scorpion’
i. bǎzǐN-yìN-gwé	dragonfly-chest-broken	‘cicada’
j. ŋǎ-gáuN-bwâ	fish-head-swell	‘catla’
k. ŋǎ-shàn-hlá	fish-hair-beautiful	‘whipfin silver-biddy’
l. ŋǎmáN-gáuN-yáin	shark-head-wild	‘Ganges shark’
m. ŋǎkhóuNmâ-myí-nì	olive barb-tail-red	‘a species of Barbus’
n. pó-dàuN-mà	bug-wing-hard	‘beetle’

Another common pattern is the N-N-V compound where the first N is the head noun and N-V specifies its characteristics. In many cases, the second noun is the patient of the following verb. For example, the swordfish, **ŋǎmáN-dǎ-lwè** (shark-sword-carry), literally expresses “the shark that carries a sword”. More examples include:

(17) N-N-V

a. zǎye?-chí-zá	myna-shit-eat	‘pied myna’
b. ŋǎ-dǎ-lwè	fish-sword-carry	‘a species of catfish’
c. ŋǎ-mó-hmyò	fish-sky-look up	‘stonefish’
d. ŋǎ-θǎlé-dó	fish-sand-peck	‘weatherfish’
e. ŋǎ-kúN-hŋa?	fish-betel-pinch	‘Indo-Pacific tarpon’
f. ŋǎ-zábá-sá	fish-paddy-eat	‘Sciaena russelli’
g. khǎyû-θi?pìN-dɛ?	shellfish-tree-climb	‘Mitrella martensi’
h. khǎyû-cau?-phau?	shellfish-stone-dig	‘Lithodomus obesus’

Other random examples are given in (18). The Dorab wolf-herring is so called because of its long sword-like shape; silverfish is so called because of its forked tail; and Ambassis malua is so called presumably because of its bad taste (so much so that even cats do not eat it).

(18) N-N-V

a. ṅǎ-dǎ-èè	fish-sword-long	‘Dorab wolf-herring’
b. ʔǎmyí-hnǎ-khwâ	tail-two-fork	‘silverfish’
c. ṅǎ-càUN-mǎsá	fish-cat-not eat	‘Ambassis malua’
d. líN-myí-swé	eagle-tail-pull	‘black drongo’
e. chí-bó-dó	shit-bug-poke	‘scarab beetle’
f. yauʔphâ-khwé-khò	brother.in.law-dog-call	‘Indian cuckoo’
g. ṅǎ-mwè-dó	fish-snake-poke	‘zig-zag eel’
h. ṅǎ-lɛʔ-thòUN	fish-hand-numbed	‘blackspotted numbfish’
i. hɲɛʔ-ewè-wà	bird-gold-yellow	‘black-naped oriole’
j. tódá-dǎbeiʔ-lwè	villager-alms bowl-carry	‘white-rumped shama’

Burmese, as with many other neighboring languages (e.g., Badenoch 2019), showcases “elaborate expressions” or quadri-morphemic compounds, whereby “either the first and third or the second and fourth [morphemes] are identical” (Matisoff 1973a: 81–6). A few examples of elaborate animal-related expressions in Burmese are as follows:

(19) Elaborate expressions

a. yè-bó-yè-hmwá	water-bug-water-mite	‘aquatic insects’
b. ṅá-ðé-ṅá-hmwá	fish-small-fish-mite	‘small fish’
c. pó-gàUN-hmwá-gàUN	bug-creature-mite-bug	‘bugs’
d. phá-dǎbáIN-ṅá-dǎbáIN	frog-half-fish-half ⁶	‘tadpole’
e. khwé-dù-wɛʔ-tù	dog-resemble-pig-resemble	‘hog badger’
f. bé-dù-phyàn-dù	duck-resemble-otter-resemble	‘platypus’

4. Semantics

4.1 Locational/habitational

Animal names that are based on their preferred habitats (e.g., *tree shrew*, *river rat*, *field mouse*) are very common across the world’s languages (Matisoff 2011: 661–2, Kurabe 2019: 80, Hayashi 2019: 115–6). This category is semantically very productive in Burmese animal nomenclature. For example, **lɛ-cwɛʔ** (lit. paddy-rat) ‘vole’ is so called because of its habitat. Other examples include:

(20) Locational/habitational

a. ʔèIN-zà	house-sparrow	‘house sparrow’
b. thàndà-ṅá	coral-fish	‘three-spot angelfish’
c. θiʔpIN-mwè	tree-snake	‘slender worm snake’
d. ʔóUN-gǎnÁN	coconut-crab	‘coconut crab’
e. lè-khǎyû	paddy-shellfish	‘pond snail’
f. lè-bǎzUN-lóUN	paddy-prawn-round	‘freshwater crab’
g. jǎ-bó	floor-bug	‘bedbug’
h. sàʔouʔ-pó	book-bug	‘silverfish’
i. myauʔʔû-bó	yam-bug	‘sweet potato weevil’

⁶ This word formation resembles the Chinese expressions 半人半鱼 “lit. half-human, half-fish” and 半人半獸 “lit. half-human, half-beast” (James A. Matisoff, p.c., May 2020).

j. hnàn-gàun	ear of rice-bug	‘rice grasshopper’
k. khwé-hlé	dog-flea	‘flea’
l. nau?-chí-bó	cow-shit-bug	‘chafer’
m. gòbìdou?-lei?pyà	cabbage-butterfly	‘small cabbage white’

In particular, common animal names in this category are those characterized by their land- or water-related habitats. These zoonyms are typically characterized by modifiers such as **myè** ‘earth’, **tó** ‘forest/wild’, **tàun** ‘mountain’, **kóun** ‘land’, **yè** ‘water’, and **pinlè** ‘sea’. The elongated tortoise, for example, is called either **tó-lei?** “forest turtle”, **tàun-lei?** “mountain turtle”, or **kóun-lei?** “land turtle”. The desert locust **Óégàndàyá-cáingàun** (lit. desert-locust) is so called because it lives in the desert. More examples include:

(21) Land-related habitat

a. myè-cwɛ?	earth-rat	‘Dsinezumi shrew’
b. myè-gwé	earth-dog	‘fox’
c. myè-ŋóun	earth-quail	‘hooded pitta’
d. myè-byá	earth-bee	‘scoliid wasp’
e. tó-nwá	forest-cow	‘banteng’
f. tó-jwé	forest-buffalo	‘water buffalo’
g. tó-shei?	forest-goat	‘Sumatran serow’
h. tó-myín	forest-horse	‘Sumatran serow’
i. tó-wɛ?	forest-pig	‘boar’
j. tó-jàun	forest-cat	‘jungle cat’
k. tó-gwé	forest-dog	‘dhole’
l. tó-cɛ?	forest-fowl	‘red junglefowl’
m. tó-cí	forest-crow	‘large-billed crow’
n. tó-bé	forest-duck	‘white-winged duck’
o. tó-ŋán	forest-wild goose	‘bar-headed goose’
p. tó-zà	forest-sparrow	‘tricolored munia’
q. tó-chìn	forest-mosquito	‘gnat’
r. tàun-shei?	mountain-goat	‘Burmese goral’
s. tàun-ŋóun	mountain-quail	‘Indian pitta’
t. tàun-dáunhɛ?	mountain-peacock	‘great eared nightjar’
u. thé-phá	sand-frog	‘Breviceps’
v. thé-mwè	sand-snake	‘a small species of snake’

(22) Water-related habitat

a. yè-bé	water-duck	‘grebe’
b. yè-cɛ?	water-fowl	‘common moorhen’
c. yè-ŋóun	water-quail	‘ruddy-breasted crane’
d. yè-pou?θìn	water-lizard	‘newt’
e. yè-jò-mwè	water-fresh-snake	‘water snake’
f. yè-myín	water-horse	‘seahorse’
g. yè-θāmin	water-deer	‘backswimmer’
h. yè-wɛ?	water-pig	‘dugong’
i. yè-cwɛ?	water-rat	‘cuttlefish’

j. yè-gù	water-worm	‘jellyfish’
k. yè-bāzín	water-dragonfly	‘water dragonfly’
l. yè-pāyi?	water-cricket	‘diving beetle’
m. yè-gín	water-scorpion	‘horseshoe crab’
n. yè-nǎgá	water-dragon	‘seahorse’
o. yè-nǎyá	water-Naya ⁷	‘Syngnathidae’
p. pìnlè-phyàn	sea-otter	‘seal’
q. pìnlè-myín	sea-horse	‘seahorse’
r. pìnlè-phyù	sea-porcupine	‘sea urchin’
s. pìnlè-pe?cî	sea-slug	‘sea slug’
t. pìnlè-khù	sea-worm	‘jellyfish’
u. pìnlè-hmô	sea-leech	‘sea cucumber’
v. pìnlè-byànhlwá	sea-swallow	‘Mascarene swiftlet’
w. myi?-mwè	river-snake	‘river snake’

4.2 Appearance

Animal names based on the appearance of other objects that resemble, or are associated with, the animal (e.g., *banana slug*, *hog-nosed badger*, *fox-face rabbit fish*) are also very common cross-linguistically (Matisoff 2011: 662–4, Kurabe 2019: 81). This category is also semantically very productive in Burmese animal names, as illustrated by the fish name **ṇātau?-tù** (lit. Putitor mahseer-resemble) ‘humpback grouper’, which literally means “the fish that resembles Putitor mahseer”. Also, the snake **cáin-gáun-mwè** (lit. grasshopper-head-snake) ‘Indian wolf snake’ is so called based on the fact that its head resembles a grasshopper. Other examples include:

(23) Appearance of features of other objects

a. ?ǎywe?-pó	leaf-bug	‘lawn armyworm’
b. chìnǎē-lèzànmwé-ṇá	lion-mané-fish	‘Luna lionfish’
c. thínýúǎí-bòun-ṇá	pinecone-shape-fish	‘pineapplefish’
d. bāzùn-já	prawn-tiger	‘a species of spotted prawn’
e. chìn-já	mosquito-tiger	‘yellow fever mosquito’
f. khwé-bǎlú	dog-ogre	‘bulldog’
g. ṇǎ-khù	fish-caterpillar	‘walking catfish’
h. ?a?-hnou?θí-ṇǎbyàn	needle-beak-flying fish	‘garfish’
i. cá-le?θé	tiger-claw	‘giant clam’
j. ṇǎ-khwé-èà	fish-dog-tongue	‘sole’
k. ṇǎ-shìn-nǎywe?	fish-elephant-ear	‘teira batfish’
l. khǎyû-?ózi	shellfish-drum	‘ <i>Melania variabilis</i> ’
m. khǎyû-khǎmau?	shellfish-bamboo hat	‘ <i>Cellana testudinaria</i> ’
n. khǎyû-shìn-hnǎmáun	shellfish-elephant-trunk	‘Gould’s razor shell’
o. léǎèdò-ṇá	bowman-fish	‘archerfish’

⁷ *Naya* refers to a mythological divine beast that is often found in sculptures, and is believed to be the mother of the flying horse.

Animals are also often characterized by their color, shape, and size (e.g., *bluefin tuna*). This semantic category is also very productive in Burmese animal nomenclature. The butterfly **lei?pyà-byù** (lit. butterfly-white) ‘Pieridae’ and the fish **hnou?θi-dǎ-báin-bya?-ṅá** (lit. beak-one-part-cut-fish) ‘Japanese halfbeak’ illustrate this category. Other examples include:

(24) Color

a. cwε?-phyù	rat-white	‘house mouse’
b. sà-byù	sparrow-white	‘Indian paradise flycatcher’
c. khǎyû-byù	shellfish-white	‘Polinices mammilla’
d. cǎθi?-nε?	leopard-black	‘black leopard’
e. θi?tau?-nε?	woodpecker-black	‘black woodpecker’
f. sà-mé	sparrow-black	‘Black-naped Monarch’
g. cwè-nε?	cowrie-black	‘chocolate cowrie’
h. ε̂n-nì	squirrel-red	‘red-bellied tree squirrel’
i. sà-nì	sparrow-red	‘scaly-breasted munia’
j. hṅε?-εwè-wà	bird-gold-yellow	‘black-naped oriole’
k. sà-wà	sparrow-yellow	‘plain-backed sparrow’
l. lei?pyà-wà	butterfly-yellow	‘grass yellow’
m. hṅε?-séin	bird-green	‘golden-fronted leafbird’
n. jó-zéin	turtle dove-green	‘Asian emerald dove’
o. mwè-zéin	snake-green	‘bamboo snake’
p. hṅε?tò-pyà	black drongo-blue	‘red-billed blue magpie’
q. myau?-jò	monkey-brown	‘tarsiers’
r. pou?θiN-jò	agama lizard-brown	‘a species of agama lizard’
s. khǎyû-jò	shellfish-brown	‘Mediterranean mussel’
t. phu?-mwé	monitor lizard-dull	‘Varanus monitor’

(25) Shape and size

a. ?ûbyáin-jí	egret-large	‘great egret’
b. báun-jí	abalone-large	‘commercial top shell’
c. bǎzín-jí	dragonfly-large	‘cicada’
d. θi?tau?hṅε?-pû	woodpecker-short	‘pygmy woodpecker’
e. hnou?θi-dò	beak-short	‘Pacific golden plover’
f. hṅε?-lε?mâ	bird-thumb	‘hill prinia’
g. ṅǎ-bù-dín	fish-swell-tight	‘blowfish’
h. ṅǎ-lédâun	fish-square	‘Osteobrama cotio’
i. bǎzùn-lóun	prawn-round	‘freshwater crab’
j. khǎyû-gwε?	shellfish-bent	‘Cyclostoma aurantiacum’
k. khǎyû-khóun	shellfish-arched	‘clam’
l. bǎzín-lé	dragonfly-DIM	‘damselfly’
m. pó-zau?thó	bug-upside-down	‘mosquito larva’

(26) Color and shape/size

a. ε̂n-nì-gǎlé	squirrel-red-DIM	‘Finlayson’s squirrel’
b. bé-byà-gǎlé	duck-blue-DIM	‘garganey’
c. jó-nì-dò	turtle dove-red-short	‘red turtle dove’

d. ṅǎ-mé-lóun fish-black-round ‘skipjack tuna’

Burmese, as noted in Section 3.2, contains many animal names that have the structure [N-[N-V]], where N and N-V have the whole-part relationship. The vast majority of these animal names are characterized by their color, shape, and size. This is illustrated by **myauʔ-myɛʔkwín-byù** (lit. monkey-orbit-white) ‘spectacled langur’, which literally means “monkey whose eye orbit is white”; **hɛʔtò-myí-èè** (lit. black drongo-tail-long) ‘greater racket-tailed drongo’, which literally means “black drongo whose tail is long”; **dābeiʔlwè-yìnʔouʔ-nì** (lit. oriental magpie-robin-chest-red) ‘Siberian rubythroat’, which literally means “oriental magpie-robin whose chest is red”; and **wáyáunhɛʔ-gáun-byù** (lit. greater necklaced laughingthrush-head-white) ‘white-crested laughingthrush’, which literally expresses “greater necklaced laughingthrush whose head is white”. Aside from the examples given in (16) above, the following examples also illustrate this category:

(27) Color

a. cwɛʔ-wún-byù	rat-belly-white	‘house mouse’
b. myauʔ-lèbaʔ-phyù	monkey-around.neck-white	‘pileated gibbon’
c. sùn-gáun-byù	kite-head-white	‘brahminy kite’
d. zǎyɛʔ-gáun-byù	myna-head-white	‘grey-headed myna’
e. zǎyɛʔ-gáun-mé	myna-head-black	‘brahminy myna’
f. zǎyɛʔ-lè-nɛʔ	myna-neck-black	‘black-collared starling’
g. bèinʔnín-gáun-mé	kingfisher-head-black	‘blue-eared kingfisher’
h. lǎdâ-theiʔ-nì	vulture-top-red	‘red-headed vulture’
i. tózà-gáun-mé	tricolored munia-head-black	‘tricolored munia’
j. pányìzouʔ-có-wà	purple sunbird-back-yellow	‘olive-backed sunbird’
k. gǎnán-báun-nì	crab-?-red	‘fiddler crab’
l. ṅǎmán-tàun-mé	shark-fin-black	‘blacktip reef shark’
m. ṅǎwɛʔ-pá-nì	Japanese lates-cheek-red	‘bluestripe snapper’

(28) Shape and size

a. myauʔ-myí-èè	monkey-tail-long	‘capped langur’
b. mwèbà-myí-èè	mongoose-tail-long	‘mink’
c. mwèbà-myí-dò	mongoose-tail-short	‘weasel’
d. jó-lè-byauʔ	turtle dove-neck-lost	‘spotted dove’
e. phá-bàun-zín	frog-thigh-straight	‘dark-spotted frog’
f. mwèzéin-myí-èè	bamboo snake-tail-short	‘a species of snake’
g. mǐjáun-gáun-èè	crocodile-head-long	‘gharial’
h. ṅǎ-gáun-jí	fish-head-large	‘Indian mackerel’
i. ṅǎ-wún-pù	fish-belly-swell	‘Chacunda gizzard shad’
j. ṅǎ-phìn-bû	fish-buttock-short	‘Cabdio morar’
k. ṅǎ-yìn-góun	fish-chest-bent	‘flatmouth sea catfish’
l. ṅǎ-myí-dàun	fish-tail-stand	‘mottled eel’
m. ṅǎ-myɛʔshàn-jè	fish-eyeball-wide	‘Chinese herring’
n. khǎyû-pìn-lèin	shellfish-hip-twist	‘Turritella terebra’
o. khǎyû-pìn-peíʔ	shellfish-hip-closed	‘a species of shellfish’

4.3 Geographical origin

Exotic species (e.g., *Burmese shrike*, *Malay tapir*, etc.) are sometimes named in relation to their geographical origin (Matisoff 2011: 664). Although this semantic category is found in some animal names, it appears to be more common in phytonyms in Burmese.

(29) Zoonyms based on geographical origin

a. tǎyouʔ-wún-bé	Chinese-spot-billed duck	‘mandarin duck’
b. shaʔ-kǎlá	sambar-India	‘blue bull’
c. cé-kǎlá	parrot-India	‘grey-headed parakeet’
d. hŋɛʔ-kǎlá	bird-India	‘black-necked stork’
e. dáun-kǎlá	peacock-India	‘grey peacock-pheasant’
f. buʔ-kǎlá	bulbul-India	‘white-faced jay’

(30) Phytonyms based on geographical origin

a. tǎyouʔ-pé	Chinese-bean	‘broad bean’
b. tǎyouʔ-nǎnnǎn	Chinese-coriander	‘celery’
c. tǎyouʔ-cɛʔθúnmeiʔ	Chinese-leek	‘Chinese chive’
d. tǎyouʔ-hnínǒí	Chinese-lychee	‘loquat’
e. tǎyouʔ-hnínzì	Chinese-rose	‘ <i>Nerium indicum</i> ’
f. kǎlá-bé	Indian-bean	‘chickpea’
g. kǎlá-zǎbá	Indian-rice plant	‘wheat’
h. gòràkhá-ǒí	Gurkha-fruit	‘mirliton squash’
i. bílá-hínúnwè	British-amaranth	‘spinach’

4.4 Intra- and inter-kingdom associations

Animal or plant names are sometimes modified by other animal or plant names (Matisoff 2011, Kurabe 2019: 81–2, Hayashi 2019: 115–6). This kind of intra- and inter-kingdom associations can be classified into the following four subtypes (adapted from Matisoff 2011: 668–71).

(31) Intra- and inter-kingdom associations

Types	Modifier	Head	English 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

Burmese, as illustrated below, also exhibits all types of the intra- and inter-kingdom associations. Among these categories, florafloric and florafaunic compounds are relatively rare in our limited data, which is consistent with Matisoff’s (2011: 669, 671) findings of other languages.

(32) Intra- and inter-kingdom associations in Burmese

a. florafloric	ʔóun-ŋǎpyó	coconut-banana	‘traveler’s palm’
b. florafloric	pán-ǒí	flower-fruit	‘apple’

c. faunafloric	sàǵǎlé-báN	sparrow-flower	‘rocket larkspur’
d. faunafloric	shei?-nàN	goat-coriander	‘Phoebe lanceolata’
e. faunafaunic	lín-mwè	eagle-snake	‘whip snake’
f. faunafaunic	shìN-bó	elephant-bug	‘beetle’
g. florafaunic	?aywè?-pó	leaf-bug	‘Asiatic rice borer’
h. florafaunic	?ùbáN-hŋɛ?	Shorea farinosa-bird	‘Oriental darter’

Below are more data that showcase the intra- and inter-kingdom associations in Burmese. Faunafloric compounds in (33-34) illustrate animal-related Burmese phytonyms. Many of these plant names, as illustrated by (33), are head-final, where plant names are modified by preceding animal names. The bean **khwélé-bé** (lit. puppy-bean) ‘*Mucuna pruriens*’ thus expresses a kind of bean, not a kind of puppy. Burmese also illustrates some head-initial faunafloric compounds, as in (34), where plant names are modified by following animal names, as illustrated by another bean **pé-bázùn** (lit. bean-prawn) ‘lablab bean’.

(33) Head-final faunafloric compounds

a. wɛ?-ɛò	pig- <i>Sterculia urens</i>	‘ <i>Sterculia colorata</i> ’
b. càUN-báN	cat-flower	‘ <i>Vitex trifolia</i> ’
c. cá-nǎnwín	tiger-turmeric	‘wild turmeric’
d. mwèbà-bìN	mongoose-tree	‘ <i>Ophiorrhiza communis</i> ’
e. myau?-?ù	monkey-bulb	‘purple yam’
f. myau?-nwè	monkey-creeper	‘ <i>Dioscorea glabra</i> ’
g. shìN-khǎyáN	elephant-eggplant	‘ <i>Solanum ferox</i> ’
h. shìN-khǎyáNjìN	elephant-tomato	‘tree tomato’
i. shìN-gáUN-kǎlábé	elephant-head-chickpea	‘a species of chickpea’
j. nòUN-myɛ?	quail-grass	‘ <i>Chrysopogon aciculatus</i> ’
k. dáUN-zǎbá	peacock-rice plant	‘ <i>Oryza meyeriana</i> ’
l. cɛ?-pàUN-ǎí	fowl-thigh-fruit	‘ <i>Urceola esculenta</i> ’
m. cɛ?mau?-pán	cockscorb-flower	‘plumed cockscorb’
n. byáIN-chi-myɛ?	egret-leg-grass	‘ <i>Paspalum sanguinale</i> ’
o. mǐjáUN-nwè	crocodile-creeper	‘ <i>Derris scandens</i> ’
p. bǎda?-myɛ?	butterfly lizard-grass	‘ <i>Arundinella birmanica</i> ’

(34) Head-initial florafaunic compounds

a. pé-já	bean-tiger	‘lima bean’
b. pé-bázùn	bean-prawn	‘lablab bean’
c. pé-lei?pyà	bean-butterfly	‘ <i>Pisum sativum</i> ’
d. bau?-khwé	<i>Physalis minima</i> -dog	‘ <i>Abutilon asiaticum</i> ’

Faunafaunic compounds, where animal names are modified by other animal names, are also quite common in the Burmese fauna lexicon. As with faunafloric compounds, Burmese faunafaunic compounds can be both head-final (35) and head-initial (36-37). Compare, for example, the difference between the head-final **wùN-càUN** (lit. bear-cat) ‘bearcat’ and the head-initial **càUN-myíN** (lit. cat-horse) ‘large Indian civet’. More examples include:

(35) Head-final faunafaunic compounds

a. yòUN-ǎmìN	rabbit-deer	‘greater mouse-deer’
b. wɛʔ-cân	pig-rhinoceros	‘Sumatran rhinoceros’
c. θiʔ-kālǎʔouʔ	leopard-camel	‘giraffe’
d. khwé-wùN	dog-bear	‘raccoon’
e. càUN-wùN	cat-bear	‘red panda’
f. cwé-wùN	buffalo-bear	‘sun bear’
g. θiʔ-wùN	leopard-bear	‘sloth bear’
h. myíN-wùN	horse-bear	‘Asian black bear’
i. lù-wùN	human-bear	‘orangutan’
j. líN-éiN	eagle-squirrel	‘Formosan squirrel’
k. jó-θéiN	turtle dove-shikra	‘white-eyed buzzard’
l. dáUN-zùN	peacock-kite	‘Eurasian marsh harrier’
m. swê-hɲɛʔ	tree shrew-bird	‘white-throated babbler’
n. bǎdù-hɲɛʔ	carpenter bee-bird	‘red-bearded bee-eater’
o. líN-mwè	eagle-snake	‘oriental rat snake’
p. pìNlèhmò-ŋá	sea anemone-fish	‘clownfish’
q. yèŋàn-kèiNnǎyà-ŋá	seawater-Kinnara-fish	‘pearl-spot chromis’
r. pīŋgù-gǎnán	spider-crab	‘spider crab’
s. cá-jwè	tiger-cowrie	‘tiger cowrie’
t. mwèbwé-khǎyû	viper-shellfish	‘geographer cone’
u. shaʔ-pó	sambar-bug	‘stag beetle’
v. khwéhlé-pyá	flea-bee	‘a small species of bee’
w. myíN-hnàngàUN	horse-locust	‘praying mantis’
x. θèMíN-cáiŋgàUN	death God-locust	‘booklice’

Head-initial faunafaunic compounds are also very common in the Burmese fauna lexicon, as illustrated by bird names such as:

(36) Head-initial faunafaunic compounds

a. hɲɛʔ-cá	bird-tiger	‘Eurasian magpie’
b. hɲɛʔ-nwá	bird-cow	‘green imperial pigeon’
c. hɲɛʔ-bǎlú	bird-ogre	‘Burmese shrike’
d. hɲɛʔ-míNǎ	bird-prince	‘ashy minivet’
e. hɲɛʔ-θǎkhó	bird-thief	‘blue rock thrush’
f. hɲɛʔ-kālǎʔouʔ	bird-camel	‘ostrich’
g. cɛʔ-shìN	fowl-elephant ⁸	‘turkey’
h. bé-já	duck-tiger	‘Eurasian teal’
i. zǎyɛʔ-cá	myna-tiger	‘pied myna’
j. θiʔtauʔ-cá	woodpecker-tiger	‘Indian pygmy woodpecker’
k. sà-phóUNjí	sparrow-monk	‘Asian golden weaver’
l. líN-yòUN	eagle-rabbit	‘crested serpent eagle’

⁸ This word formation for turkey is not uncommon in neighboring languages (regardless of their language families), found in Lahu, Jinghpaw, Shan, Mon (Kurabe 2019). It is so called because of its trunk-like beak-wattle (Matisoff 2011: 670).

and many more animal names such as:

(37) Head-initial faunafaunic compounds

a. myÍN-já	horse-tiger	‘zebra’
b. khwé-bǎlú	dog-ogre	‘bulldog’
c. cwɛʔ-gǎdó	rat-musk deer	‘musk shrew’
d. càUN-gǎdó	cat-musk deer	‘small Indian civet’
e. càUN-bá	cat-frog	‘weasel’
f. càUN-nǎgá	cat-dragon	‘African palm civet’
g. phyàN-gǎdó	otter-musk deer	‘beaver’
h. leiʔ-khwé	turtle-dog	‘loggerhead sea turtle’
i. leiʔ-sùN	turtle-kite	‘hawkbill sea turtle’
j. mwè-bwé	snake-ringworm	‘viper’
k. bǎzùn-já	prawn-tiger	‘a species of spotted prawn’
l. kÍN-bǎzùn	scorpion-prawn	‘a species of scorpion’
m. nǎ-nwá	fish-cow	‘black-spotted boxfish’
n. nǎ-myÍN	fish-horse	‘spotted danio’
o. nǎ-shìN	fish-elephant	‘swordfish’
p. nǎ-phyàN	fish-otter	‘shuttles hopfish’
q. nǎ-jígáN	fish-crow	‘redfin scad’
r. nǎ-gǎlóUN	fish-Garuda	‘monkfish’
s. nǎ-dǎshè	fish-ghost	‘a species of Cyclocheilichthys’
t. nǎ-bǎzùn	fish-prawn	‘silver moonyfish’
u. nǎ-pouʔθìN	fish-lizard	‘smelt-whiting’
v. nǎ-leiʔpyà	fish-butterfly	‘oriental butterflyfish’
w. nǎmáN-jwé	shark-buffalo	‘winghead shark’
x. nǎmáN-myègwé	shark-fox	‘common thresher’
y. chìn-já	mosquito-tiger	‘yellow fever mosquito’
z. pó-nǎgá	bug-dragon	‘tobacco cutworm’

As previously mentioned, florafaunic compounds, where animal names modified by plant names are relatively rare in our limited data. For example:

(38) Florafaunic compounds

a. ʔúbáN-hŋɛʔ	<i>Shorea farinosa</i> -bird	‘Oriental darter’
b. ʔaywɛʔ-pó	leaf-bug	‘Asiatic rice borer’
c. gǎzúnʔú-bó	sweet potato-bug	‘sweet potato weevil’
d. gǎbìdouʔ-leiʔpjà	cabbage-butterfly	‘cabbage butterfly’
e. nǎ-péinné-zî	fish-jackfruit-seed	‘a species of anchovy’
f. nǎ-yúzǎnâ	fish-Murraya paniculata	‘a species of butterflyfish’

4.5 Metaphorical

Some zoonyms and phytonyms (e.g., *walking stick*, *toadstool*, *foxglove*, etc.) may be semantically exocentric (Matisoff 2011: 666–7, Kurabe 2019: 82–3, Hayashi

2019: 115–6). Burmese exhibits a rich array of metaphorical animal and plant names, including:⁹

(39) Metaphorical zoonyms

a. cá-lɛʔθé	tiger-claw	‘giant clam’
b. cwé-bǎlú	buffalo-ogre	‘spider conch’
c. ʔápyò-nò	maiden-breast	‘Cellana testudinaria’
d. ɲá-thí	fish-umbrella	‘jellyfish’
e. ɲǎ-phàngwɛʔ	fish-glass	‘jellyfish’
f. yè-gù	water-worm	‘jellyfish’
g. yè-cwɛʔ	water-rat	‘cuttlefish’
h. yè-θámìn	water-deer	‘backswimmer’
i. yè-wɛʔ	water-pig	‘dugong’
j. yè-lɛʔwá	water-palm	‘starfish’
k. yè-θǎyé	water-ghost	‘octopus’
l. yè-jàun	water-cat	‘rare-spined murex’
m. yè-myín	water-horse	‘seahorse’
n. yè-nǎgá	water-dragon	‘seahorse’
o. yè-nǎyá	water-naya	‘Syngnathidae’
p. yè-ðùmá	water-she	‘dugong, mermaid’
q. yè-naʔ-θǎmí	water-spirit-girl	‘scorpionfish’
r. pìnlè-bán	sea-flower	‘sea anemone’
s. pìnlè-hmò	sea-mushroom	‘sea anemone’
t. pìnlè-zóun	sea-witch	‘sea firefly’
u. pìnlè-phyù	sea-porcupine	‘sea urchin’
v. pìnlè-pàunmòun	sea-bread	‘starfish’
w. pìnlè-pɛʔcí	sea-slug	‘sea slug’
x. pìnlè-hmô	sea-leech	‘sea cucumber’

Burmese also exhibits metaphorical plant names involving animal names. Examples include:

(40) Metaphorical phytonyms

a. cwɛʔ-myí	rat-tail	‘Typhonium divaricatum’
b. càun-myí	cat-tail	‘Setaria glauca’
c. myauʔ-myí	monkey-tail	‘Chrysopogon aciculatus’
d. hɲɛʔtò-myí	black drongo-tail	‘Axonopus compressus’
e. khwé-myí-nì	dog-tail-red	‘Setaria lutescens’
f. cí-hnouʔ	crow-beak	‘Aerides odorata’
g. cɛʔ-yó	fowl-bone	‘Vitex pubescens’
h. byáin-chidauʔ	egret-leg	‘Tamarix dioica’
i. byáin-chi-byù	egret-leg-white	‘Gnaphalium leteo-alubun’
j. sùn-lɛʔθé	kite-claw	‘Caesalpinia digyna’

⁹ Another possibility for (39d) and (39e) is that ‘jellyfish’ is regarded as a kind of fish in Burmese. If this is the case, these examples should be head-initial endocentric compounds (Atsuhiko Kato, p.c., June 2020).

k. myauʔ-lɛʔwá	monkey-palm	‘Heptapleurum venulosum’
l. tauʔtê-lɛʔwá	tokay gecko-fist	‘Coldenia procumbens’
m. dáun-mauʔ	peacock-cockscomb	‘Adiantum caudatum’
n. cwé-gáun	buffalo-head	‘Trapa bispinosa’
o. shìN-hnǎmàun	elephant-nose	‘Indian heliotrope’
p. zòji-mouʔsheiʔ	hermit-beard	‘Nardostachys jatamansi’
q. càun-byù	cat-white	‘Ehretia laevis’
r. bǎzín-ṅò	dragonfly-brown	‘Vitex peduncularis’
s. myauʔ-hlègá	monkey-ladder	‘Bauhinia scandens’
t. càun-ḍwé	cat-blood	‘Murraya koenigii’
u. cɛʔmâ-ṅouʔ	hen-flock	‘Ardisia humilis’
v. shù-jǎbó	thorn-bedbug	‘knicker nut’

5. Conclusions

This paper explored the Burmese faunal lexicon in terms of its phonology, morphology, and semantics. Phonological reduction based on the prosody sometimes leads to morphosemantic opacification of animal names. A myriad of Burmese zoonyms are created by means of compounding, which is one of the most productive morphological processes in the language. When two roots are involved, particularly common forms are N-N and N-V. Zoonyms consisting of more than two roots are also very common. Patterns consisting of N-N-N, N-V-N, and N-N-V are frequently attested (where N and N-V tends to exhibit the whole-part relationship in the N-N-V compound). Furthermore, very productive semantic categories exploited in Burmese faunal lexicon include “locational/habitational” and “appearance”, as illustrated by “paddy shellfish” for ‘pond snail’ and “elephant-eared fish” for ‘teira batfish’. Intra- and inter-kingdom associations, where animal or plant names are modified by other animal or plant names, are also well attested in the rich array of Burmese fauna and flora nomenclature (e.g., “eagle snake”, “leaf bug”, “sparrow flower”, “coconut banana”, etc.). Metaphorical animal names are also widely found in the language, as illustrated by the example of “sea bread” for ‘starfish’ and “sea-porcupine” for ‘sea urchin’.

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