

## CHAPTER 2

### The Ethnopoetics of Sida Animal Names

Nathan Badenoch

#### [ABSTRACT]

It has been observed that in fauna terminology there exists an inverse relationship between the size of an animal and then length of its name. This phenomenon seems to hold in the Tibeto-Burman language Sida, spoken in Laos and Vietnam. Examination of word-formation processes operating in the Sida fauna lexicon shows that there are both descriptive and depictive modes, which reflect a deeper system of cultural intimacy related to perceived ‘closeness’ to human life. Analysis of the polysyllabic, less transparent names within the Sida system of fauna nomenclature, uncovers an aesthetic that values parallelism, euphony and semantic play. This ethnopoetic approach to fauna nomenclature provides insights into the rich detail of the lexicon, enabling an interpretation of Sida worldviews based on the interface of sound, structure and meaning.

“It really seems sometimes as if the smaller the animal the longer its name”.

Anonymous, “A Blind Marsupial”, *The Saturday Review of Politics, Literature, Science, and Art*. No. 1, Vol. 74, October 15, 1892.

While a few fauna terms are often included in basic wordlists, in-depth research into the names for animals in Southeast Asian languages is less common. There has been a growing interest in the recreation of historical cultural systems based on broad comparison of a few common artefacts or cultural institutions, and domestic animals have received some attention in these endeavors<sup>1</sup>. When investigating the depth of speakers’ knowledge of the forests, fallows and rivers, the researcher faces the challenge of dealing with not only a sizeable amount of data, but with managing the naming systems for animals of different varieties, which may be classified in ways that do not match western science. Methodologically, there is a large difference between collecting words for domesticated animals and wild animals, but Chamberlain (this volume, 2019, 2018) has shown in recent publications how a deep fauna lexicon can shine light on regional historical processes.

Fauna and flora terms are also an important part of the synchronic description of languages, especially languages spoken in rural areas, as they provide a first entry to understanding livelihood systems, cultural frameworks and worldviews. Notable

---

<sup>1</sup> See, for example or Bradley (2017) for work within Sino-Tibetan and Alves (2015) for an example of the cross-phylum comparative endeavors that utilize data on domesticated animals.

exceptions to the lack of attention to plants and animals are the *English-Lahu Lexicon* (Matisoff 2006) and the *Dictionary of Kammu Yuan Language and Culture* (Svantesson et al 2014). Shortly after starting fieldwork on Sida, a Tibeto-Burman language of the Loloish branch spoken by approximately 3,900 people in Laos and Vietnam (Badenoch and Hayashi 2017), it became clear that the naming conventions employed by speakers of this language warranted attention. Sida words typically consist of one or two syllables, but most animal names are much more complex. The farther one moves away from the domesticated animals and familiar wild animals, the more complex the names become. In his work on animal and plant names in the areal and universal contexts, Matisoff (2011) strongly supports the observation of Anonymous (1892) above about the inverse correlation between body size and name length. Data from the Sida language presents the same situation.

The longest animal name I have recorded in Sida is an eight-syllable word for the Siam Slender Stickbug (Phasmotodea); **thù-tchù=thy-ly=la-nó=thy-ly**, literally “one-joint-breaks-fingers-break.” Laughing and gesturing with both hands, my main informant explained how a stick insect looks like the skinny joints and bones on a finger not aligned in the expected way. As such, the name is partly indexical, yet as a whole diagrammatic in its reference to type of live body that has some similarities but is different from our own. This name consists of a pair of four-element constructions; each construction is a noun-verb collocation, making no direct reference to any particular life-form. The overall syllable pattern for this type of Sida animal name is ABCB. In this case, the B element **thy-ly** itself is a reduplicated structure consisting of **thy** ‘break’ and **ly**, a semantically empty syllable (DUP) formed with an /l/ onset and assimilated rhyme. In this structure we have a case of three-level embedded parallelism (Figure 1).

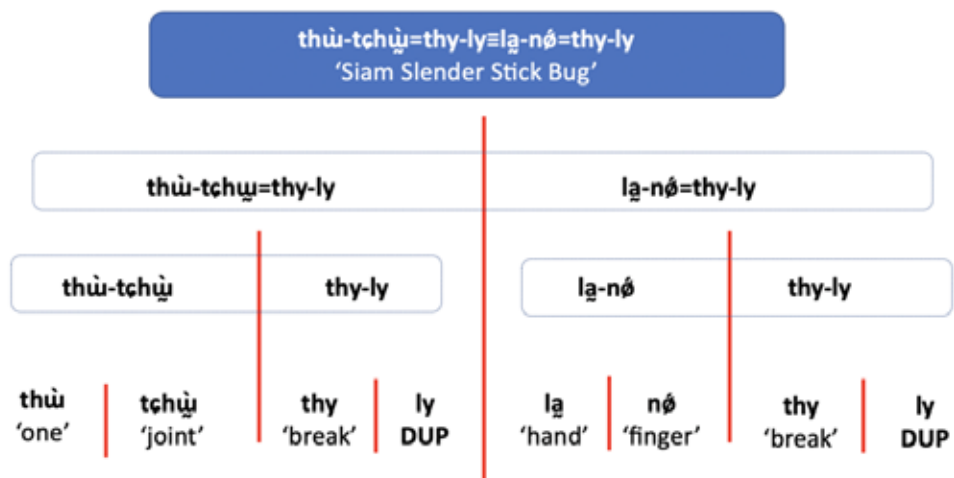


Figure 1: Parallelism of 'stick bug'

To make the parallelism<sup>2</sup> more poetic, the last syllable of the left side and the first syllable of the right side are alliterations of /l/, enhancing the euphony of the collocation. It is these characteristics parallelism, rhythm, segmental sequence and variation that make the longer animal names interesting to our understanding of the Sida word-formation mechanisms that allow speakers to identify, describe and organize those animals in their shared ecosystem. Understood in this way, the animal names also provide an interface with the cognitive ecosystems in which humans interact with other forms of life.

If all language is at least partially poetic (Friedrich 1986), how is it that we find a name like **thù-tehù=thy-ly≡la-nó=thy-ly** together with **ɣ** ‘chicken’ in the same faunal lexicon? I do not dispute the possibility that there are poetic elements of **ɣ** and the compounded words it may appear in, but I do argue that there *is* something profound and complex in the poetics of the stick bug. In this paper I present a preliminary analysis of Sida nomenclatural strategies in the fauna lexicon, unpacking the word formation processes introduced briefly above. I depart in my approach from previous work, which has focused on the syntax and semantics of word-formation processes involved in naming, often concerned with identifying typological universals. I focus instead on what I propose is an “expressive” element in Sida animal names, particularly the lengthy names for small creatures. Expressives, also known as ideophones, have long been marginal in linguistics, because they contradict the principle of arbitrariness of sound-meaning and ignore the rules of prosaic grammar. Moreover, problems presented by difficulties in eliciting and glossing expressives, combined with perceptions that expressives are not real words, have contributed to the lack of treatment in descriptive linguistics (Dingemanse 2012).

The study of expressives has been greatly influenced by the work of Gérard Diffloth, who proposed that this class of words comprises an alternative mode of language, in opposition to the prosaic (Diffloth 1972). His pioneering Southeast Asia-based work on the expressives of Bahnar and Surin Khmer focused on systems of sound symbolism, morphology and semantics. However, as the study of expressives has gradually grown and more data have come to light, it has become more difficult to define expressives cross-linguistically as a word class, given the rich diversity of form and function found in the expressives of the world’s languages. Dingemanse (2012) has proposed that ideophones are “marked words that depict sensory perception”, often utilizing reduplication and segment manipulation. While the idea of markedness and sensory perception had been discussed widely in the literature, the notion of “depiction” is an important contribution; as iconic signs, ideophones are words that show rather than tell.

---

<sup>2</sup> In this paper I use the standard practice of marking morpheme boundaries with /-/, and show levels of embedded semantic relationships using /=/ and /≡/. This is done in order to indicate the parallelism used in these complex animal names. In the example, the highest level of parallelism is shown with /≡/, the next lower level with /=/ and finally the lowest level of morphemic parallelism, that is the first process of word formation through collocation of monosyllabic morphemes, with /-/, as shown in the example.

In recent work on expressives in the South Asian linguistic area, I and others have argued that the pragmatic-semantic affect of expressives includes propositions about morality (Badenoch, Purti and Choksi, forthcoming) and reference to social types (Choksi, m.s.). I place emphasis here on the aesthetic models that are created through reduplication, which have an important sound element. Through this lens, I hope to uncover some of the motivation behind the word formation processes speakers have used to create these long names. I argue that the “expressivity” is reflective of a feeling of intimacy towards animals, particularly birds and insects, that are generally considered to be farther from humans than mammals (Chamberlain 1977). In this analysis I move beyond semantics and abstract patterns of word formation to explore expressivity and play as productive forces in the language. Thus, in the analysis that follows, I use the term “expressive” to refer to a poetic aesthetic that incorporates these elements of depictive word play through grammatical processes.

### 1. The Sida: Language, livelihoods and ecology

The Sida are also known in the literature as Sila, which they consider to be derogatory, but among themselves use the autonym **wà-ɲ̀**; Sida people are **wà-ɲ̀ à-mà** and the Sida language is **wà-ɲ̀ sù-tò** or **wà-ɲ̀ à-khjò**. Sida is a Southern Loloish language within the Lolo-Burmese branch of Tibeto-Burman. The language is most similar to the Bi-Ka languages, which form a subgroup under Southern Loloish, together with several other languages spoken in Laos, Vietnam and Yunnan (Bradley 2002). Badenoch and Hayashi (2017) have presented an introduction to the basic phonology of Sida<sup>3</sup>. The data presented in this paper were collected in the same village, Nam Di, Luang Namtha Province, with the same informants who worked with us on the phonology project. The Sida of Luang Namtha mostly live in two adjacent villages. The study village, Nam Di, is a primarily Lanten village (Kim Mun, Hmong-Mien) where approximately ten Sida households live, speaking Sida, Kim Mun and Lao in daily life. The main Sida village is located 1 hour walk up the mountain, where Sida is the sole daily language of every household, although most people are fluent in the local variety of Lao. Older people are conversant in Southwestern Mandarin. The two settlements have close kinship relations and interact on a daily basis. There is contact with the Sida of Phongsaly province as migration to Luang Namtha has steadily increased over the past 10-years.

The Sida are an upland group that traditionally depends upon rotational swidden agriculture and collection of forest products for their livelihoods. Sida rely on hunting and fishing, as well, as important sources of food. Together with upland rice and maize cultivation, the forests are coming under increasing productive pressure, and recently many Sida have followed the local trend of planting rubber trees to sell latex on the Chinese market. Making full use of the range of plants and animals found across the

---

<sup>3</sup> Sida unaspirated plosive stops do not contrast for voicing, but are phonetically realized as voiced. The three tones of Sida are high 55 /á/, mid 33 /a/ and low 31 /à/.

forest-fallow mosaic, their knowledge of the ecological surroundings and the forms of life with which they share them, is massive.

The Sida language has no general term for ‘animal,’ but speakers commonly refer to animals living in the forest as **tchó-jà=teà-tʃ=à-jɛ** ‘the things that people eat and drink’. This is an interesting practice, because it is common for groups that rely on hunting to have complex systems of linguistic avoidance for animals that are eaten. Within this conceptual framework, the animal world is divided into two subgroups **khj-jà=è-ŋɛ-ma** ‘birds and small animals’ and **pi-khjà=ŋɔ-tɔ** ‘crabs and fish’. My Sida informants explain that these categories comprise the life forms that are ‘close to human life’, excluding others such as insects and reptiles. As the general term given states, this sense of proximity is seemingly based on the necessity of eating. However, I have observed that Sida speakers seem to feel a certain intimacy that extends to the parts of the animal world that are more distant from their economic livelihoods; this intimacy is encoded in the names for these animals. Other non-linguistic information supports this idea. For example, insects are often protagonists in Sida folk stories, as well as indicators of ecological and climatic conditions. Sida speakers recognize that they all share space in the domesticated and wild worlds. Livestock are referred to with the term **khui-nuu-teà-jà**, which my informants could not parse. Included in this category are all animals that are fed and can be caught at will around the house area. Bradley reconstructs a general term for ‘animal’ in Proto-Loloish, \*zay/zaw/zan<sup>2</sup>, but all animals are counted with the same classifier **mó**.

Data were obtained through elicitation with photographs, questionnaires and group discussions about animals living in the surrounding forests, including their behavior and uses, using Lao and Sida as contact languages. We also made walking trips in areas around the village and in through forests on the way to their swidden fields. All together 225 animal names were collected, and these are presented in Appendix 1. I transcribed and reviewed animal names together with the main consultant Ca Po (**teà-pɔ**, male, 51 years of age)<sup>4</sup>, who provided parsing and interpretation of the names to the extent possible. Working with him produced much insight, although gaps remain. He had difficulty providing meanings for certain morphemes, suggesting that in some cases the meaning has been lost. This type of exercise is not easy or natural for informants, and requires sustained effort and close collaboration.

## 2. Monomorphemic names: Etymological transparency

Very few fauna terms in Sida are monomorphemic.<sup>5</sup> These are generally names of common animals and have solid etymologies in the Loloish branch of Tibeto-Burman. Reconstructions by Bradley (1979) are given in the original notation.

---

<sup>4</sup> His children Goly (**kó-lí**, female, 24 years of age) and Ca Ho (**teà-hɔ**, male, 32 years of age) have also provided much patient instruction and assistance.

<sup>5</sup> While the general trend is towards longer animal names, several bisyllabic animal names are most frequently heard in a reduced form, creating atypical rhymes (the circumflex represents a 53 tone, found only in a few grammatical forms, the result of contraction): **ũj** ‘cricket sp.’ < /ú-

|             |                     |  |
|-------------|---------------------|--|
| <b>ó</b>    | ‘long-tailed civet’ | *C-wi <sup>2</sup> ‘palm civet’        |
| <b>tehé</b> | ‘deer’              | *kye <sup>1</sup> ‘barking deer’       |
| <b>wè</b>   | ‘pig’               | *wak <sup>L</sup> ‘pig’                |
| <b>mjà</b>  | ‘horse’             | *mraŋ <sup>2</sup> ‘horse’             |
| <b>ɛ</b>    | ‘chicken’           | *k-rak <sup>H</sup> ‘chicken’          |
| <b>hé</b>   | ‘head louse’        | *xan <sup>1</sup> ‘louse’ <sup>6</sup> |

There is small group of animals whose basic names take only the general nominalizing prefixes **è-** or **à-**. The main elements of these names have solid Loloish etymologies.

|             |              |                              |
|-------------|--------------|------------------------------|
| <b>è-ló</b> | ‘slow loris’ | *C-loŋ <sup>1</sup> ‘loris’  |
| <b>è-há</b> | ‘otter’      | *ʃ-/ʔp-yam ‘otter’           |
| <b>à-á</b>  | ‘bear’       | *k-d-wam <sup>1</sup> ‘bear’ |
| <b>à-wá</b> | ‘dhole’      | *k-wan <sup>1</sup> ‘dhole’  |

### 3. Compounding: Transparency and Opacity in Collocations

Dimorphemic animal names are made of elements combined in a range of ways. Matisoff (2011) suggests that “[t]he degree of bonding between the elements of a collocation is of diachronic interest, since it is relevant to the problem of whether the collocation remains semantically transparent or becomes opaque” (657). In general, it seems that animal names composed of two collocated elements tend to be more transparent, although problems of interpretation at the sub-lexical level remain. One approach is to classify collocations by syntactic structure. A common collocation places a head noun with an adjective, expanding to the right.

|                |                |                      |
|----------------|----------------|----------------------|
| <b>mjà-ɲý</b>  | ‘macaque’      | ‘macaque-green’      |
| <b>tehy-jà</b> | ‘barking deer’ | ‘barking deer-small’ |
| <b>ú-ɲý</b>    | ‘green snake’  | ‘snake-green’        |
| <b>ú-ma</b>    | ‘civet, large’ | ‘civet-big’          |
| <b>hé-phjú</b> | ‘body louse’   | ‘louse-white’        |

A general term can be combined with a noun attribute. Several Sida animal names are collocations of similar animal terms.

---

*ɿ*/ and **jəm** ‘mosquito’ < /jɔ-ɲ/. Contraction can reduce a four-element name to two, as in **pûi-nâi** ‘long-legged bush katydid’ from the full form **pû-ɿ-ná-ɿ**. Ca Po recognized the full form, but insisted on the reduced form when I reproduced them.

<sup>6</sup> In-depth analysis of insect names follows, but it is interesting to note that with a rich insect lexicon, the Sida do not have a word for ‘bed bug’, which in Southeast Asian languages is usually a table etymon.

|                |                       |   |
|----------------|-----------------------|---|
| <b>phà-pu</b>  | ‘toad’                | *k-ʔ-pa <sup>2</sup> ‘frog’ + ʔ-brut <sup>H</sup> ‘toad’    |
| <b>mó-pu</b>   | ‘cow’                 | *ʔ-myɑŋ <sup>1</sup> ‘cattle’ + *ŋya <sup>2</sup> ‘buffalo’ |
| <b>ú-ló</b>    | ‘snake’               | *m-rwe <sup>1</sup> ‘snake’ + *laŋ <sup>1</sup> ‘snake’     |
| <b>mjə-khó</b> | ‘crab-eating macaque’ | *myok <sup>L</sup> ‘monkey’ + *ʔ-ko <sup>2/1</sup> ‘rhesus’ |

Despite the preceding statement about the generally high level of transparency in two-syllable collocations, a few words remain etymologically opaque to me. Further fieldwork or comparative work may fill in these gaps.

|                 |                 |                                     |
|-----------------|-----------------|-------------------------------------|
| <b>ju-wa</b>    | ‘elephant’      | *ʔ-ya ‘elephant’ + ?                |
| <b>la-ma</b>    | ‘tiger’         | *k-la <sup>2</sup> ‘tiger’ + ?      |
| <b>ó-jỳ</b>     | ‘binturong’     | *C-wi <sup>2</sup> ‘palm civet’ + ? |
| <b>ŋə-tɾ</b>    | ‘fish, general’ | *ŋa <sup>2</sup> ‘fish’ + ?         |
| <b>teo-phjè</b> | ‘hawk’          | *(k)-dzwan <sup>1</sup> ‘hawk’ + ?  |
| <b>phà-nɿ</b>   | ‘frog’          | *k-ʔ-pa <sup>2</sup> ‘frog-?’       |
| <b>khù-sy</b>   | ‘ferret badger’ | *kwe <sup>2</sup> ‘dog-?’           |
| <b>wè-sy</b>    | ‘hog badger’    | *wak <sup>L</sup> ‘pig-?’           |

In other cases, the second syllable is the known element.

|                |            |                                   |
|----------------|------------|-----------------------------------|
| <b>mó-khù</b>  | ‘dog’      | ? + *kre <sup>2</sup> ‘dog’       |
| <b>pò-nɿ</b>   | ‘buffalo’  | ? + *nwa <sup>2</sup> ‘cattle’    |
| <b>tho-khù</b> | ‘pangolin’ | ? + *krap <sup>H</sup> ‘pangolin’ |

This group of words covers animals that are well-known and commonly encountered in traditional Sida village life. Comparative work will no doubt reveal much. For example, the proto-Karenic reconstruction (STEDT 7242) for ‘buffalo’ is **p/b-na<sup>B</sup>**, likely accounts for the **pò** element that is unattested in the Loloish branch. For ‘hawk’, the second element **phjè** is a recent reflex of the older **phlè**, which is attested also in Paza (NB field notes; see also Badenoch and Hayashi 2017 on \*l > j in Sida). STEDT gives Luchun Hani **dze<sup>33</sup> phja<sup>33</sup>** ‘sparrow hawk’, associating **phja<sup>33</sup>** with PTB **\*b(y/r)a BIRD / BEE**. From the diachronic Sida point of view, this is difficult as the reflex of PTB BEE is **pjà**, as discussed further below. In any case, systematic exploration of the possible etymology for these opaque lexemes is beyond the scope of this paper.

A few etyma are opaque in both elements. The general term for ‘monkey’ is **hy-px**, while ‘gaur’ is **hà-pə**. None of these element is known synchronically in Sida. These data suggest the need for a qualification to the general statement that “simple” bimorphemic collocations are transparent, at least from the synchronic point of view.

There is a small group of animal names that are borrowed from Chinese.

|                 |                  |
|-----------------|------------------|
| <b>pjeu</b>     | ‘leopard’ 豹      |
| <b>hò-jé</b>    | ‘eel’ 河蛇         |
| <b>kou-fù</b>   | ‘dog-bear’ 狗熊    |
| <b>teu-fù</b>   | ‘pig-bear’ 猪熊    |
| <b>té-mà-fù</b> | ‘horse-bear’ 大马熊 |

At this level of analysis, the synchronic transparency of fauna collocations is mixed, but forms are mostly unmarked, in that they can be explained with basic word formation processes of the type discussed by Matisoff (2011). More complex Sida word formation processes are discussed below.

### 3.1 Life Form Markers

Returning to the more transparent processes of word formation, we find what are known as Life Forms, which is part of a hierarchy Brent Berlin discusses in his 1992 work *Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies* and further discussed by Chamberlain (1977) for Tai languages. A Life Form is an etymon denoting a general group of animals that are perceived to be closely related. In Tai languages, they are marked by distinct classifiers derived from a general noun. In the case of Sida, which lacks a diverse range of noun classifiers, these are bound forms that are combined with other terms to create names for specific taxa. There are five main Life Form markers in the Sida fauna lexicon, and all have well-established Tibeto-Burman etymologies. Here I give Bradley’s Proto-Loloish reconstructions.

|            |                      |                               |
|------------|----------------------|-------------------------------|
| <b>ɔ</b>   | small forest mammals | *s-ro <sup>3</sup> ‘squirrel’ |
| <b>ú</b>   | snakes and similar   | *m-rwe <sup>1</sup> ‘snake’   |
| <b>pì</b>  | insects              | *bi <sup>2</sup> ‘insect’     |
| <b>pjà</b> | bees                 | *bya <sup>2</sup> ‘bee’       |
| <b>ηò</b>  | fish                 | *ŋa <sup>2</sup> ‘fish’       |

Interestingly, there is no life-form for ‘bird’ in Sida bird names, as would be expected, although the Proto-Loloish form \*s-ŋyak<sup>H</sup> is reflected in the **-ŋe-ma** element of the general term for birds and small animals introduced above.

#### 3.1.1 Small Forest Mammals: ɔ-

The ɔ Life Form Marker, from the PTB word for ‘rat’ has come to include rats and other rodent-like animals that live in the forest. Information on the second element is given, where possible.



|        |                       |                                 |
|--------|-----------------------|---------------------------------|
| ɔ-phè  | ‘bamboo rat’          | *pi <sup>2</sup> ‘bamboo rat’   |
| ɔ-phú  | ‘porcupine’           | *ʔ-plu <sup>2</sup> ‘porcupine’ |
| ɔ-tchè | ‘rat, mouse’          | *(k)-rwak <sup>H</sup> ‘rat’    |
| ɔ-tchý | ‘squirrel’            |                                 |
| ɔ-ló   | ‘rat sp., large ears’ |                                 |
| ɔ-kjì  | ‘tree shrew’          |                                 |
| ɔ-sɛ   | ‘giant squirrel’      |                                 |

Others are descriptive:

|        |                      |                         |
|--------|----------------------|-------------------------|
| ɔ-tchò | ‘long-nose squirrel’ | <b>tchò</b> ‘to pierce’ |
| ɔ-ny   | ‘Irrawaddy squirrel’ | <b>ny</b> ‘green’       |
| ɔ-pá   | ‘flying lemur’       | <b>pá</b> ‘to fly’      |

These animals are known well, and commonly hunted by Sida.

### 3.1.2 Snakes(-like): \*ú

The ‘snake’ Life Form Marker **ú** is found in the general term ‘snake’ **ú-ló** and specific varieties, as well as in insects perceived to be snake-like. The descriptive and derivate attributes are discussed below. As mentioned, above **ú-ló** itself is a collocation of two etyma meaning ‘snake’.

|                   |                       |                           |
|-------------------|-----------------------|---------------------------|
| <b>ú-ló</b>       | ‘snake’               |                           |
| <b>ú-ny</b>       | ‘green snake’         | <b>ny</b> ‘green’         |
| <b>su-tè=ú-ló</b> | ‘Oriental whip snake’ | <b>su-tè</b> ‘tree-climb’ |
| <b>u-ló=ki-pà</b> | ‘king cobra’          | <b>ki-pà</b> ‘scale’      |
| <b>u-ló-ló-ma</b> | ‘python’              |                           |
| <b>u-ló-ló-nɛ</b> | ‘cobra’               |                           |

The formation of ‘python’ and ‘cobra’ are discussed separately below. Other non-snake **ú**-type animals include leeches, centipedes and the like.

|               |   |                    |
|---------------|---|--------------------|
| <b>ú-khjó</b> | ‘house centipede’                                   | <b>khjó</b> ‘fast’ |
| <b>ú-tché</b> | ‘centipede’   |                    |
| <b>ú-kè</b>   | ‘water leech, in streams,<br>goes up bovine’s nose’ |                    |

Sida speakers mark the difference between the bovine leech **ú-kè**, for which they use the **ú** ‘snake’ element with the general **kè** ‘leech’ (\*k-rwat<sup>L</sup> ‘leech’), and the other more common forms that use general **kè** term as the first element in collocations, possibly because of the size of the animal.

|                |   |
|----------------|---|
| <b>kɛ̌-pa</b>  | ‘water leech, found in paddy’                             |
| <b>kɛ̌-tho</b> | ‘land leech’  |
| <b>kɛ̌-ny̌</b> | ‘green leech, lives in trees, can get into people’s eyes’ |

The form **kɛ̌** does not occur as a free standing word, but since its use is limited it should probably not be considered a Life Form.

### 3.1.3 Bees: **pjà**

In the past Sida were avid collectors of honey, and they have significant knowledge about bee habitat, behavior and classification. They recall that not only did they collect honey for local consumption and trade, but it was also one of the taxes collected by the Chinese and Lue authorities.

|                |  |
|----------------|--|
| <b>pjà-tú</b>  | ‘hornet’                                   |
| <b>pjà-xú</b>  | ‘common nocturnal hornet, yellow in color’ |
| <b>pjà-mǔ</b> | ‘bee sp., makes hive in ground’            |
| <b>pjà-tɛ̌</b> | ‘bee sp., small, makes flat hive’          |
| <b>pjà-hɛ̌</b> | ‘bee sp., small, Lao: <i>mim</i> ’         |

### 3.1.4 Insects: **pì**

The Life Form Marker **pì** ‘insect’ (with **pò** and **pù** variants) is found as the first element in the name of many insects. As will be discussed below, most insect names are polymorphemic. The forms given below are just the most common, generalized terms for animals frequently encountered.

|                |                           |                            |
|----------------|---------------------------|----------------------------|
| <b>pì-jɔ̌</b>  | ‘ant’                     | *p-rwak <sup>H</sup> ‘ant’ |
| <b>pì-khja</b> | ‘crab’                    | *kya <sup>3</sup> ‘crab’   |
| <b>pì-teù</b>  | ‘beetle larvae, in trees’ |                            |
| <b>pì-tě</b>  | ‘cicada’                  |                            |

The term used to refer to Lue people is **pì-tchɛ̌**, often in a pejorative sense.

### 3.1.5 Fish: **ɲɔ̌**

The Life Form **ɲɔ̌**, like **ú**, combines with descriptive term to provide a general term **ɲɔ̌-tɣ** encompassing all fish. While the **tɣ** element is synchronically opaque, it could be related to the Proto-Karenic (STEDT #73320) form \*da<sup>2D</sup> FISH. If this is true, it is

another case of collocation with a lexeme of similar meaning. Examples of Sida fish include:

|                |                      |                     |
|----------------|----------------------|---------------------|
| <b>ηḍ-nḡ</b>   | ‘black shark minnow’ | <b>nḡ</b> ‘black’   |
| <b>ηḍ-ḡ</b>    | ‘puffer fish’        | <b>ḡ</b> ‘egg’      |
| <b>ηḍ-tḥ</b>   | ‘red catfish’        |                     |
| <b>ηḍ=ú-ló</b> | ‘tire-track eel’     | <b>ú-ló</b> ‘snake’ |

It is interesting that the **tx** element does appear in **tx-nx** ‘stone loach’ (fish?-red).

### 3.2 Complex Collocations: Left- and Right-Expansion

Collocations of a more complex type, some of which have been introduced above without explanation, provide more insight into Sida animal nomenclature. Semantic expansion can take place to both the right and the left of the head noun. For example in the case of fish, we find both **ηḍ-tx=ls-jḥ** ‘stone loach sp.’ (fish=rock-stick.to), the head noun collocated with a predicate phrase to the right, and **phè-tchi=ηḍ-tx** ‘fish sp.’ (leaf-float=fish), where the modifier is on the left. Because Sida is an SOV language, one would expect to see left-side expansion more prevalent, and that is the case.

In left side expansion, the head noun can be collocated with nouns related to the habitat, behavior or characteristic of the animal:

|                      |                      |   |
|----------------------|----------------------|---|
| <b>wà-pó=ḡ-phè</b>   | ‘large bamboo rat’   | <b>wà-pó</b> ‘bamboo-tree’, <b>ḡ-phè</b> ‘bamboo rat’       |
| <b>mjó-pó=ḡ-phè</b>  | ‘small bamboo rat’   | <b>mjó-pó</b> ‘tall-tree’ <b>ḡ-phè</b> ‘bamboo rat’         |
| <b>o-xú=pi-teà</b>   | ‘shield bug sp.’     | <b>o-xú</b> ‘rice-yellow’, <b>pi-teà</b> ‘cicada’           |
| <b>mi-sḡ=kjí-kjí</b> | ‘cockroach’          | <b>mi-sḡ</b> ‘hearth’, <b>kjí-kjí</b> ‘cockroach’           |
| <b>pe-nè=pḥ-lu</b>   | ‘archduke butterfly’ | <b>pe-nè</b> ‘Pana’ <sup>7</sup> , <b>pḥ-lu</b> ‘butterfly’ |

Predicate modifiers to the left of the head noun describe characteristic actions:

|                         |                       |  |
|-------------------------|-----------------------|--|
| <b>su-tḡ=ú-ló</b>       | ‘Oriental whip snake’ | <b>su</b> ‘tree’, <b>tḡ</b> ‘ascend’, <b>ú-ló</b> ‘snake’                |
| <b>tò-pú=pḡ-ḥ=pḥ-lu</b> | ‘bat moth’            | <b>tò-pú</b> ‘tail’, <b>pḡ-ḥ</b> ‘carry-bring’, <b>pḥ-lu</b> ‘butterfly’ |

<sup>7</sup> The meaning of this example is not entirely clear, but the Pana are an extremely small ethnic group (see Badenoch 2010) that speak a closely related language up the road near the Chinese border.

Right-side expansions, are more limited.

|                       |                          |   |
|-----------------------|--------------------------|---|
| <b>ú-ló=kì-pà</b>     | ‘snake sp.’ <sup>8</sup> | <b>ú-ló</b> ‘snake’, <b>kì-pà</b> ‘scale’                         |
| <b>pà-wà=thò-hlǎi</b> | ‘large bat’              | <b>pà-wà</b> ‘bat’, <b>thò-hlǎi</b><br>‘bottle gourd’             |
| <b>pò-lǔ=khò-thò</b>  | ‘black butterfly’        | <b>pò-lǔ</b> ‘butterfly’, <b>khò-thò</b><br>(vibrations of wings) |
| <b>teí-lò=teí-teí</b> | ‘cricket sp.’            | <b>teí-lò</b> ‘cricket’, <b>teí-teí</b><br>mimetic of call        |

The ‘black butterfly’ right half **khò-thò** is a mimetic word. Interestingly, this name was recorded as **khò-thò**, **khù-thù** and **khò-thò** demonstrating that variation in the speaker’s phonetic realization the mimesis. We can note that these expansion patterns tend to produce four-syllable constructions, which are rhythmically pleasing to the Sida linguistic aesthetic. This is discussed more below.

### 3.3 -ma: Indeterminacy of ‘insect’

Many insect names include the morpheme **-ma**. One would be justified in suggesting that **-ma** is a bound general morpheme for insects. I have heard the term **sù-teú è-ma** ‘tree insects’ as a general term, but this is likely a calque of a Lao term. There are a few simple collocations formed with **-ma** such as **pú-ma** ‘stag beetle’. More commonly, it forms part of a complex collocation in the form of **è-ma**. In some cases this full form completes a four-syllable construction.

|                     |                        |  |
|---------------------|------------------------|--|
| <b>í-tehǎ=è-ma</b>  | ‘water strider, small’ | <b>í-tehǎ</b> ‘water’                            |
| <b>phjà-pǎ=è-ma</b> | ‘centipede sp.’        | <b>phjà</b> ‘sole of foot’, <b>pǎ</b><br>‘crack’ |

In other cases, **è-ma** is joined with a four-syllable construction to create an unbalanced parallel form in which **è-ma** receives equal semantic weight but lacks two syllables.

|                              |                          |   |
|------------------------------|--------------------------|---|
| <b>kǎ-sù=thǎ-lǎ=è-ma</b>     | ‘jewel beetle’           | <b>kǎ-sù</b> ‘rice-seed’, <b>thǎ</b><br>‘flick’         |
| <b>wǎ=é-hlǎ=jò-la=è-ma</b>   | ‘insect sp.’             | <b>wǎ=é-hlǎ</b> ‘pig-shit’, <b>jò-la</b><br>‘roll-push’ |
| <b>tehó-tehǎ=mjǎ-nǎ=è-ma</b> | ‘striped blister beetle’ | <b>tehó-tehǎ</b> ‘stingy’, <b>mjǎ-nǎ</b><br>‘eye-red’   |

<sup>8</sup> Lao ພູ ການປ້ອງ

While the meaning ‘insect’ seems clear, the meaning is not always clear. In Sida, **-ma** can have the meaning ‘large’ and ‘female’ in addition to the insect reference. This morpheme is understood synchronically as coming from either **è-ma** ‘mother’ or **jù-ma** ‘large’. The putative original meaning ‘mother’ is present in the general form for female animals **è-ma**. The male animal is denoted with the **è-phà**, as distinct from the normal word for ‘father’ **è-pù**. If we take all of the **-ma** forms discussed above as variations on the “mothermorph” (Matisoff 1992), it is interesting to note that the male form **-phà** is not found as a morpheme used in word-formation in animal names. That may be because, since **-ma** is so common in animal names, that some animals have special forms for the female, such as **wè-ú** ‘sow’ (**wè** ‘pig, boar’). Moreover, a group of wild boars in the forest is called **wè-ú=è-teù** ‘a group of wild sows’, even if the group is mixed female and male members, indicating a certain level of female default in Sida perception of the animal world.

In Southeast Asia, the word ‘mother’ is often involved in word creation, and plays a wide range of roles. For Lahu, another Loloish language spoken in Laos, Thailand, Myanmar and Yunnan, China, Matisoff (1992) describes **-ma** (and variants) as a ‘human female or female derivative suffix,’ augmentative ‘mother’, digital compound, feminine agentive nominalizer, or a noun formative bulk provider resulting from grammaticalization or semantic bleaching that leads ultimately to loss of meaning. This final usage can be divided into four types to provide extra syllables to a word, is further divided into four types. While Matisoff’s analysis is not limited to fauna, it provides insights into the interpretation of the Sida **-ma** found in animal terms. In the first, Lahu **-ma** is affixed to noun-roots in order for them to occur as free words; examples include **pê-ma** ‘honeybee’, **pí-ma** ‘housefly’ and **hí-kô?-ma** ‘civet’. The second usage is as an augmentative, denoting ‘large or main’. Third, is as a deverbalizing morpheme meaning ‘thing’ that does what is indicated by a verb. This last usage has **-ma** after morphemes referring to colors, animal and plant names, and some other nouns, such as **gû-phi-ma** ‘mountain imperial pigeon’, where **phi** means ‘grey’. Matisoff also states that a general Lahu morpheme meaning generally ‘bug; critter’ has been derived from **šē-ma**, which originally meant ‘female proprietary spirit’ (Matisoff 1992:329).

The ‘large’ sense of Sida **-ma** is more limited, but important in the production of parallel constructions, in cases where the largeness is a defining trait of the animal. For example, **u-ló-ló-ma** ‘python’ include the ‘large’ sense that would be expected for the name of that snake. Occurrence of **-jà** ‘small’, which is derived from the word ‘child’ and completes the mother-child dichotomy, is even more limited. In fact, **-jà** seems to be more of a diminutive than a descriptor, for example in **khi-jà**, the general term for ‘bird’. This is also the second element of the general word **tchó-jà** ‘people’. In line with the principle of “smaller body, longer name” it would make sense to have a ‘large’ designation but not ‘small’. It should be noted that while **-ma** is not merely providing “phonological bulk” in Sida names, it does play an important role in forming four-syllable constructions with reduplication, discussed in Section 4 below.

### 3.4 Insects and Metaphor

Some names use metaphor, without any reference to a general animal type. These are generally insects, as far as the current data indicates. These group typologically with the Siamese stick insect name introduced at the start. Simple metaphor drawing on observations of the animal's behavior is found.

|                              |           |  |
|------------------------------|-----------|--|
| <b>é-hli=nè-teh̃-né-teh̃</b> | ‘katydid’ | <b>é-hli</b> ‘shit, <b>nè-teh̃</b> ‘sniff-pinch’ |
|------------------------------|-----------|--|

Other forms have more complex cultural context.

|                       |                    |   |
|-----------------------|--------------------|---|
| <b>kì-teh̃=mò-phé</b> | ‘Garrulax’         | <b>mò-phé</b> ‘ritual practitioner’         |
| <b>mo-sú=ò-khja</b>   | ‘giant water bug’  | <b>mo-sú</b> ‘ghost’, <b>ò-khja</b> ‘comb’  |
| <b>wè-ma=tò-sù</b>    | ‘dragonfly larvae’ | <b>wè-ma</b> ‘sow’, <b>tò-sù</b> ‘buttocks’ |

Without reference to any type of animal at all, these names rely on speaker's shared cultural frameworks. They make use of four-syllable parallelism, reduplication and demonstrate an element of play in their meanings. Stories are often associated with the animal that explain the name. Further study of Sida fauna nomenclature would include ethnographic analysis of animals in oral literature.

## 4. Reduplication and Expressiveness

The processes of word formation at work in the Sida fauna lexicon presented above are relatively transparent, and the preceding analysis of the syntax and semantics of the lexicon sheds light on the cognitive systems used to elaborate difference and similarity in the natural world. This analysis helps explain some of the longer names that are found. But there is another linguistic force at play here needed to explain some of the less transparent lexical material: an expressive mode of word formation based on morphological processes using reduplication and segment alternation to produce longer names. This aesthetic is a poetic one motivated by sound patterns. I argue that instead of sound symbolism, as would normally follow in a discussion of expressives or ideophones, rather, there is patterning of style (King 2015) in word play that manipulates phonemes and syllables to produce expressive affect. In the following section I discuss the formal processes observed, and then offer an interpretation of this motivation.

### 4.1 Mimetics and naming

Onomatopoeic or mimetic names for animals are a very basic strategy for naming, and can be very old. For example, the Sida word for ‘cat’ **mí-mí** is derived from an etymon reconstructed for Proto-Loloish as \*mi<sup>1</sup>, realized in Sida in reduplicated form. Names motivated by mimetics are more common for birds, as well as some insects and others with distinctive calls. Birds provide the clearest examples.

|               |                        |
|---------------|------------------------|
| <b>kù</b>     | ‘dove’                 |
| <b>pù</b>     | ‘owl’                  |
| <b>khó-lò</b> | ‘green-billed Malkoha’ |

The word for ‘dove’ may be a very old term, as Bradley reconstructs Proto Loloish \*k-m-gu<sup>2</sup> ‘dove’ suggesting that the call of this bird motivated its name throughout history. Broadly speaking, these are general terms that can undergo word formation processes introduced above, seen in the names of small birds with a cry of *teù-í-teù*, together with color terms.

|                        |                   |                    |
|------------------------|-------------------|--------------------|
| <b>teù-í-teù=nɣ-lɣ</b> | ‘scarlet minivet’ | <b>è-nɣ</b> ‘red’  |
| <b>teù-í-teù=xú-lú</b> | ‘yellow oriole’   | <b>è-xú</b> ‘gold’ |

Reduplication is used to reflect perceptions of the salient features of the call.

|                      |                   |
|----------------------|-------------------|
| <b>kji-kji-kɣ-kɣ</b> | ‘Eurasian hoopoe’ |
|----------------------|-------------------|

Segment alternation can help encode auditory differences in calls, within related varieties, also using reduplication.

|                   |                        |
|-------------------|------------------------|
| <b>teɔ̃-teɔ̃ɛ</b> | ‘bulbul, general’      |
| <b>ɲɔ̃-ɲɔ̃ɛ</b>   | ‘full-throated bulbul’ |

These can collocate as well, for example **kì-xú=teɔ̃-teɔ̃ɛ** ‘bulbul sp.’. The mimetic names introduce the diphthong /ɔ̃ɛ/, which is typologically marked, into the phonology. The phoneme is further supported by the insect **ʃí-ʃí-ʃɔ̃ɛ** ‘cicada sp.’<sup>9</sup> The bird known as **ɣ-má** calls *tɔ̃ɛ-tɔ̃ɛ-tɔ̃ɛ* which further confirms an iconic representation in that diphthong. The vocalic inventory includes /ɛɛ/ from **kò-kɔ̃ɛ** ‘large gecko’, another mimetically motivated name.

#### 4.2 Expressive Reduplication Patterns and Polymorphemic Names

In contrast to the mimetically-motivated animal names of the previous section, there are naming practices that achieve a certain special expressive affect through a broader range of morphological creativity. For example, some bird names may employ a combination of mimetics and rhymed reduplication.

|                 |                |
|-----------------|----------------|
| <b>su-ɲú-lú</b> | ‘large barbet’ |
| <b>pò-to-lò</b> | ‘small barbet’ |

<sup>9</sup> We also find **teí-lɔ̃ɛ-í-lɔ̃ɛ=pò-lú** ‘moth sp.’, with a slightly different vowel. The sound motivation for a particular vowel is not clear in the moth name.

In each of these examples, the first two elements have matching vowels and consonant alternation, and are further elaborated with a final syllable beginning with /l/ followed by the previous vowel. It is difficult to say in this case whether the /l/ is purely mimetic. It may be simply a phonetic expansion used to enhance the representation of the bird's call. However, the /l/-reduplication pattern is a part of Sida morphology generally, and as we shall see, is an essential part of animal naming.

That there is some ambiguity in the above examples is not problematic, as /l/-reduplication links prosaic and expressive morphological processes in the language. The simplest forms of reduplication are found in a default /l/ used as an intensifier with stative verbs. For example, from the adjective **è-nɣ** 'red', a stative verb **è-nɣ-nɣ** 'to be red' is derived by reduplicating the content element. The reduplicated element has an /l/ onset and assimilated rhyme, producing **è-nɣ-lɣ** 'to be (intensified) red'. The same system of emphasis is reported by Hayashi for Jino, a Loloish language spoken in Yunnan province of China, **a<sup>33</sup>-ŋɣ<sup>55</sup>-lɣ<sup>55</sup>** 'quite red' (Hayashi 2009: 96). The concept of 'intensification' should be used with care, as it can refer to numerous different semantic or pragmatic distinctions. I argue here that the intensification contains an aesthetic factor that becomes important for naming processes.

The intensified version is found as the descriptive element of collocations with **pò-lɿ** 'butterfly'. Despite the many types of butterflies found in Sida daily life, Sida speakers remain distinctly uninterested in butterflies. Sida does differentiate several types, but only along general color terms, which are found in the /l/-intensifier form. Names that incorporate color terms suggest that this is a descriptive mode of word formation, in contrast to the depictive, less intimate mode that will be introduced below.

|                        |                     |                           |
|------------------------|---------------------|---------------------------|
| <b>pò-lɿ=è-nɣ-lɿ</b>   | 'black butterfly'   | <b>è-nɣ</b> 'black'       |
| <b>pò-lɿ=è-pjɔ̀-lɿ</b> | 'striped butterfly' | <b>è-pjɔ̀</b> 'patterned' |
| <b>pò-lɿ=è-xú-lú</b>   | 'yellow butterfly'  | <b>è-xú</b> 'gold'        |
| <b>pò-lɿ=è-phjú-lú</b> | 'white butterfly'   | <b>è-phjú</b> 'white'     |

These are the least lexicalized, as they could be taken as basic descriptive phrases. Cross-morphemic alliteration contributes to more lexicalized forms that do not contain the **è-** element.

|                    |                    |                            |
|--------------------|--------------------|----------------------------|
| <b>phà-pjɔ̀-lɿ</b> | 'Asian grass frog' | <b>è-pjɔ̀</b> 'patterned'  |
| <b>jó-lé-lé</b>    | 'skink'            | <b>è-lé</b> 'smooth'       |
| <b>pjà-pu-lɿ</b>   | 'blue-banded bee'  | <b>è-pu</b> 'short, squat' |

There are examples of a possible noun-noun collocation taking the same morphology. For example, **pì-tí-lí** 'beetle larvae, in ground' was explained to me as consisting of **pì** insect Life Form with **tí** < Chinese *di* 地 'earth' and the reduplicated /l/-intensifier element. Similarly, **pì-tɣ-lɣ** 'worm, long' is reportedly derived from the Sida word **tɣ**, the second element in **ŋɔ̀-tɣ** 'fish', because they are used for fishing. Neither of these expansion syllables should be considered independent words, as they do not



occur alone in normal speech. However, they do seem to be available in the productive lexical space of Sida speakers, mobilized for this marked word creation function. Thus, while the veracity of these folk etymologies is hard to confirm, they do indicate that Sida speakers recognize this morphology as a way of creating animal names<sup>10</sup>.

The examples given above have a three-syllable structure. Other animal terms deriving specific taxa from the more general terms use a four-syllable pattern derived from more complex processes of collocation and reduplication. First is the ABBC pattern; here, AB is a collocation of elements for the general term, with B reduplicated and followed by another descriptor C. The following forms are derived from the general term for snake **ú-ló**, introduced above.<sup>11</sup>

|                   |          |                   |
|-------------------|----------|-------------------|
| <b>u-ló-ló-ma</b> | ‘python’ | <b>ma</b> ‘large’ |
| <b>u-ló-ló-nɛ</b> | ‘cobra’  | <b>nɛ</b> ‘black’ |

Other examples include

|                       |                         |                      |
|-----------------------|-------------------------|----------------------|
| <b>nø-pjý-pjý-khɛ</b> | ‘grasshopper’           | <b>khɛ</b> ‘hard’    |
| <b>phà-jò-jò-phú</b>  | ‘large grey civet’      | <b>phú</b> ‘grey’    |
| <b>phà-jò-jò-nɛ</b>   | ‘fragrant civet’        | <b>nɛ</b> ‘fragrant’ |
| <b>pjà-tú-tú-pjɛ</b>  | ‘lesser banded hornet’  | <b>pjɛ</b> ‘stripe’  |
| <b>pjà-tú-tú-ma</b>   | ‘Asian giant hornet’    | <b>ma</b> ‘large’    |
| <b>pjà-ka-ka-nɔ</b>   | ‘north-Siam tiger wasp’ | <b>nɔ</b> ‘red’      |

The descriptors are semantically straightforward, but it is the rhythm of the four-syllable construction and the repeated syllable gives these names a special symmetric effect. These are also combined with the **è-ma** element as well, as in **mì-kjì-kjì-nɔ=è-ma** ‘firefly’, derived from **mì-kjì** ‘star’ and **nɔ** ‘forest’.

This pattern of reduplication is also used for nominalization, for example **su-teú-teú-ma** ‘large tree’, derived from the word **su-teú** ‘tree’. Here, the **-ma** element indicates ‘large’. The nuance is a more refined, poetic nominal construction compared to the more straight forward noun-adjective construction **su-teú jù-ma** (tree-large). Similarly, varieties of maize **lò-pó** are distinguished using the same process: **lò-pó-pó-tehì** ‘maize planted in opium fallow’ and **lò-pó-pó-ɲo** ‘maize with soft kernels’.

To understand what is happening in the animal names, however, it is useful to consider the reduplication used to derive statives introduced above. Through the same reduplication, nouns can be verbalized. For example,

<sup>10</sup> Some plant names are formed in similar manner, such as **hɔ-lú-lú** ‘mint’ and **nà-lò-lò** ‘sesame’.

<sup>11</sup> The tone change is related to the reduplication patterns. Tone alternations seem to be frequent in these word formation mechanisms, with some individual variation, but I do not explore this matter in depth in this paper.

|                           |                   |                  |
|---------------------------|-------------------|------------------|
| <b>mì-khỳ</b> ‘smoke’     | <b>mì-khỳ-khỳ</b> | ‘to be smoky’    |
| <b>mì-pjà</b> ‘landslide’ | <b>mì-pjà-pjà</b> | ‘to erode’       |
| <b>à-hló</b> ‘hole’       | <b>à-hló-hló</b>  | ‘to bore a hole’ |
| <b>mɣ-ɣ</b> ‘rain’        | <b>mɣ-ɣ-ɣ</b>     | ‘to rain’        |
| <b>à-wɛ</b> ‘flower’      | <b>à-wɛ-wɛ</b>    | ‘to blossom’     |
| <b>lɑ-thu</b> ‘fist’      | <b>lɑ-thu-thu</b> | ‘to make a fist’ |

Based on this, it could be argued that **u-ló-ló-ma** ‘python’ is derived by a process of verbalizing the noun **ú-ló** ‘snake’ and then re-nominalizing it with the addition of an attribute. The expressive effect then comes from the sound element of reduplication, the rhythm of the four-syllable construction, and something more subtle that involves an extra step of animation through the interim verbalization-nominalization process.

Another four-syllable pattern of reduplication is found in ABCB-type names. Here again, the initial AB is the base word, but C and B seem to demonstrate some typological variation. Several examples are discussed individually. In the first examples, the /l/-intensifier appears as a filler for C, with the B element containing the descriptive material. Both are insects with the **pì** and **pò** elements.

|                        |                             |                             |
|------------------------|-----------------------------|-----------------------------|
| <b>pi-sɛ-lɛ-sɛ</b>     | ‘insect sp., painful bite’  | <b>sɛ</b> ‘stinging’        |
| <b>pø-khù-lú-khù</b>   | ‘larvae of longhorn beetle’ | <b>khù</b> ‘curved, curled’ |
| <b>pø-khjò-ló-khjò</b> | ‘slug’                      |                             |

In interesting member of this pattern group is **pjà-ku-lú-kù** ‘cockschafer’, which has the **pjà** ‘bee’ Life Form Marker, with **ku** ‘to burrow’. The insect is a type of scarab, not a bee at all, and my informants found this to be entertaining. This third syllable /l/ intensifier is another way of achieving the preferred parallel structure with a filler syllable that creates a euphonic relationship among the elements. The reduplicated four-element word can be used as a leftward-expanding descriptor for a general form, here **pì-jɔ** ‘ant’ and **pò-lu** ‘butterfly’.

|                                      |            |                                      |
|--------------------------------------|------------|--------------------------------------|
| <b>phɛ-tɛɣ-lɣ-tɛɣ</b> = <b>pì-jɔ</b> | ‘sour ant’ | <b>phɛ</b> ‘leaf’, <b>tɛɣ</b> ‘sour’ |
|--------------------------------------|------------|--------------------------------------|

In the words below, there is no full reduplication, but the insertion of the /l/ syllable provides a rhyme to the middle two elements of an ABCD pattern, followed by **-ma**.

|                     |                       |  |
|---------------------|-----------------------|--|
| <b>há-thà-là-ma</b> | ‘earwig (Dermaptera)’ | <b>há</b> ‘iron’, <b>thà</b> ‘pinch’   |
| <b>jó-pá-lá-ma</b>  | ‘lizard’              | <b>jó</b> ‘lizard’, <b>pá</b> ‘to fly’ |

In contrast to the first set of ABCB examples, the /l/ syllable of these examples assimilates the tone of the preceding syllable, while the previous group have a high tone

that contrasts with the preceding low tone, perhaps as prosodic characteristics of the specific patterns.

Another ABCB example lacks any reference to a general form, with purely metaphorical semantics (and sharing the mid-low-high-low pattern).

|                    |                     |   |
|--------------------|---------------------|---|
| <b>mi-pò-pá-pò</b> | ‘red centipede sp.’ | <b>mì-pò</b> ‘fire carried in bamboo section’, <b>pá</b> ‘to fly’ |
|--------------------|---------------------|---|

Other examples follow the same form, but their semantics remain opaque:

|                    |                            |
|--------------------|----------------------------|
| <b>tchó-o-pè-o</b> | ‘grackle’                  |
| <b>pú-ì-ná-ì</b>   | ‘long-legged bush katydid’ |

In an ABAC-pattern reduplication, AB is the base collocation and C is a descriptor.

|                        |                             |  |
|------------------------|-----------------------------|--|
| <b>pjà-teù-pjà-ma</b>  | ‘giant carpenter bee’       | <b>ma</b> ‘large’                            |
| <b>teó-phjè-teó-xú</b> | ‘hawk sp., golden’          | <b>xú</b> ‘gold’                             |
| <b>teó-khù-teó-nɛ</b>  | ‘hawk sp., black’           | <b>nɛ</b> ‘black’                            |
| <b>pɛ-jò-pɛ-tɔ</b>     | ‘alligator, <i>ngueak</i> ’ | <b>pɛ</b> ‘dragon’, <b>pɛ-tɔ</b> ‘alligator’ |

In other cases, the C element is a filler without any meaning, as far as my informants could tell me.

|                      |                     |   |
|----------------------|---------------------|---|
| <b>mò-khɛ-mò-khá</b> | ‘lac insect’        | <b>khɛ</b> ‘hard’, <b>khá</b> is filler |
| <b>teò-xú-teò-pɛ</b> | ‘common paper wasp’ | <b>xú</b> ‘gold’, <b>pɛ</b> is filler   |

My informant explained that these C elements had no specific meaning of their own, and stressed that they are there only to hold the four-element patterns. Further lexicographic work may reveal possible etymologies that are not immediately apparent to the contemporary native speaker.

In a less common pattern, AABC, the first element is reduplicated, the third element is the /l/-intensifier and the final element is a descriptor:

|                        |                              |   |
|------------------------|------------------------------|---|
| <b>kjò-kjò-ló-m̀</b>   | ‘harvestman, daddy longlegs’ | <b>kjò</b> ‘to stretch up’, <b>m̀</b> ‘house fly’ |
| <b>phuu-phuu-lú-ma</b> | ‘edible large black spider’  |   |

Several other examples demonstrate /l/ syllable expansion in the D element of an ABCD pattern.

|                         |                          |   |
|-------------------------|--------------------------|---|
| <b>teè-teè=nó-kó-ló</b> | ‘beetle sp. (Carabidae)’ | <b>teè-teè</b> ‘straight’, <b>nó-kó-ló</b> ‘behind’ |
| <b>pjà-teə-kə-lə</b>    | ‘potter wasp’            |   |
| <b>phà-ma-kja-la</b>    | ‘spider sp.’             |   |
| <b>lò-pə-teá-la</b>     | ‘long-tailed shrike’     |   |

One final example has alliteration across the four syllables.

|                     |                        |
|---------------------|------------------------|
| <b>kù-kuu-kú-kò</b> | ‘dragonfly sp., small’ |
|---------------------|------------------------|

The pitch moves low-mid-high in the reduplications. Thus tone also appears to be an important part of the reduplication, although the rules governing these patterns are not yet clear.

The data in this section show how Sida animal names use reduplication, alliteration, assonance and the /l/-intensification within a basic four-syllable template. The /l/ syllables carry no semantic weight, but they are key to maintaining a sound-rhythm aesthetic in these words. The effect is related to the fact that these syllables produce both differentiation in the /l/ and similarity in the assimilated vowel. Words without the /l/ syllable use identical reduplication together with syllables of contrasting sound and meaning to produce a poetic parallelism.

#### 4.3 Expressivity and anthroproximity in the Sida fauna lexicon

Chamberlain explains the fauna nomenclature system of Tai languages using the concept of “anthroximity” (Chamberlain 1992), based on the taxonomic system reflected in the use of classifiers and word-formation. He also includes social criteria, such as eating restrictions and appearance in myths and rituals, in his analysis. Animals that take the most general element \*tua/\*dua, called Unique Beginner, are closer than those names which use the life-form elements \*nrok DS BIRDS, \*ŋwaa A SNAKES, \*plaa A FISH, \*mleeŋ A ARTHROPODS and \*hwii A MOLLUSCS. At the same time, a scheme of birds < snakes < fish < arthropods < mollusks represents proximity, in order of descending closeness (Chamberlain 1977). The concept of anthroproximity is helpful in understanding the general system of fauna nomenclature in Sida as well.

As discussed above, only a small number of animal names consists of monomorphemes. In general, these are animals that are found near the house or in forest areas near the house. This is exemplified, by the Sida word **mɿ** ‘tick’, which is one of the very few insects with a monosyllabic name, a seeming contradiction to what I have argued above. However, together with **hé** ‘head louse’, the tick lives on the bodies of people and domestic animals, and thus the two are kept within this area of “domestic” and its scheme of short, transparent nomenclature. Included in this group is a small list of animals that are essentially monomorphemes that take a nominalizing prefix. It stands then that the longer names that encode intimacy through expressive word formation patterns are iconic of a close relationship between humans and those animals that are “wild”. The bulk of the lexicon is made up of polymorphemic names, with the general

observation that smaller animals often have longer names. I argued that bimorphemic names are the product of word formation processes using well-known principles of compounding. These names are the most transparent, as they are based on a general term that is modified with a descriptive element. They are animals encountered in the forest, and are often hunted.

The concern of this paper has been the apparent opacity in the nomenclature of smaller animals, including birds and insects. While these two are located at opposite ends of the anthropoximity spectrum in Chamberlain's analysis, it is for birds and insects that expressive reduplication is most frequently employed in naming. My argument has been that these words are marked to achieve more vivid imagery, through patterns of reduplication and use of intensification with a special sense of sound, where notions of basic mimetic motivation interface with more abstract aesthetics of word play.

Why might this be the case for birds and insects? Sida informants have explained how birds are special because they call out to people. They also explain that identification is not only a visual process, but relies heavily on knowledge of, and familiarity with, the calls and songs as well. For insects, although they could be considered distant from humans in terms of being sources of food or other livelihood needs, they are encountered in everyday situations in and around houses and fields. They also have intensely distinctive bodily characteristics and movements. Not surprisingly, they occur frequently in folktales, together with birds. Compared to fish, nomenclature for birds and insects utilize more expressive word formation, suggesting that more than a matter of food source, their role in the daily cultural lives of people could motivate more marked naming practices. It could also be argued that the sheer amount of variation Sida speakers make within the birds and insects requires more complex and productive processes. Stated simply, it seems that Sida speakers have a sense of intimacy with these animals, which they encode in less transparent, more expressive names.

To imagine how expressive reduplication may reflect proximity or intimacy in Sida linguistic culture, we will compare words for different 'hawk' types. The general term **teó-phjè** 'hawk' is expanded through reduplication for two well-known varieties **teó-phjè-teó-xú** 'yellow-foot hawk' and **teó-phjè-teó-ng** 'osprey'. In comparison to the more poetic four-element construction, 'buzzard' is referred to with the simple collocation **teó-phjè-jù-ma** 'hawk-large'. The purely descriptive type is for the buzzard, which has a negative image in Sida culture, and makes appearances as an antagonist in oral literature. Sida speakers consider the yellow and black hawks as more respectable and intelligent. In Tai languages, this group of hawks, eagles, kites and buzzards are not birds, because they do not take the Life Form Marker **nok**. In the Sida system, we are faced with the interesting situation that "no birds are birds", in that they do not have the expected Life Form Marker **ng**.

Birds seem to occupy a special situation in the Sida classificatory hierarchy. Paza and Pana, two closely related Southern Loloish languages, show the same innovation: Paza **khj-zò** and Pana **khe-lò** are the general term 'bird', cognate with Sida **khj-jà**, but

this word is lacking in specific bird names<sup>12</sup>. This indicates that there is some historical depth to the phenomenon. The general word for ‘small animals’ **è-ŋɛ-ma** is comprised of **ŋɛ** the old etyma ‘bird’ and the ambiguous **ma**. Socially directed semantic change is at work, possibly as a result of avoidance or taboo. Agnihotri and Si (2012), working in Southern India, argue that bird naming should be considered as a frequently dynamic process based on consensus-building, with regional variation common. The Sida situation is important, because it is widely believed in folk systematics that SNAKE, BIRD and FISH are common Life Forms providing important architecture for fauna classification. The Sida Life form FISH is not solid either, as seven of the 13 fish names I collected lack the **ŋɔ̃** element.

Low transparency and high expressivity names are also historical problems. The question of etymology in many animal names formed by these morphological processes is challenging. For example, three Sida words recorded for ‘spider’ in Sida, **phà-ma-kja-la** ‘spider sp’, **kjǒ-kjǒ-ló-m̄** ‘harvestman’ and **phu-phu-lú-ma** ‘edible large spider’, we see many of the expressive-type marking discussed above. Taking **phu-phu-lú-ma**, the relevant question would be the meaning of /phu/. My Sida informants could not provide the meaning. However, it could be related to Proto-Tibeto-Burman \*k(w)ɑŋ  $\approx$  \*p<sup>w</sup>ɑŋ SPIDER / SPIN / SPINDLE (STEDT #5400).<sup>13</sup> The morphological derivation provides a sense of how \*p<sup>w</sup>ɑŋ ‘to spin’ could be nominalized as ‘spider’ /phu/ through the notion of ‘spinner’. Another reconstructed etymon at the Proto-Lolo-Burmese level may offer similar evidence: \*ʔ-gyaŋ<sup>1</sup> SPIN / ROTATE / TOP (toy) (STEDT 5682) > **kjǒ-kjǒ-ló-m̄** ‘harvestman (*opilliones*)’ through a similar process. The contemporary Sida vowel reflexes are slightly problematic in both cases, but in an expressive context, an unstable vowel would not be surprising. The meaning, however, does not fit with the explanation given by my informants, where **kjǒ** was explained as meaning ‘stretch up’. In the Southern Loloish languages, we find forms like Mojiang Hani ɔ̃<sup>31</sup> ku<sup>31</sup> lu<sup>31</sup> mɔ̃<sup>33</sup> (according to STEDT, from a different Proto Tibeto-Burman etymon \*m-gu > Proto-Loloish m-gu<sup>1</sup>/m-ga<sup>2</sup> ‘spider’) containing the expected reflex ku<sup>31</sup> and a similar reduplicated /l/ element together with mɔ̃<sup>33</sup>, cognate with the Sida -**ma** ‘mother/insect’. Reflexes of m-gu<sup>1</sup>/m-ga<sup>2</sup> include the spider’s web and the spinning of its thread. The semantics of this change from ‘spin’ to ‘spider’ is non-controversial; the point here is to suggest that the expressive reduplication may have played a role in facilitating the change, contributing to the feeling of intimacy. Yet the synchronic and diachronic storylines vary, increasing the opacity of these names.

Sida kinship terms provide additional evidence in support of this intimacy argument. Maternal relatives require terms of greater intimacy, described to me as names that show

---

<sup>12</sup> Author’s field notes. Substantive comparative work is beyond the scope of this paper, but it should be noted that in these three languages, the names of mono- and disyllabic names are clearly cognate, but the more complex polysyllabic names are not. They do, however, exhibit similar word formation processes for these animal names.

<sup>13</sup> Bradley reconstructs Proto Loloish ‘spider’ \*baŋ<sup>3</sup> but the voiced stop would be realized as an unaspirated stop in Sida. Unlike vowels, Sida consonant reflexes are more regular, so this is probably not the source of /phu/.



as the interactions between organisms and how those are reflected in linguistics signs (Aung Si 2015).

## 5. Parallelism: Poetics, precision and performance in naming

There is an areal preference for language that makes use of poetic parallelism across the languages of Southeast Asia. Speakers prefer to use more words than few, and they like this speech to have a certain form that has structural symmetry, usually comprising four syllables. With these four syllables, speakers play with sound and meaning; the euphonic elements of these juxtapositions are as important as the specific meanings they convey, and the basic tools, as suggested by Jakobson (Fox 2014) and supported by the Sida data above, are assonance, alliteration and rhyme. They are employed within the structure of parallelism to create, in this case, names for animals that evoke specific vivid imagery, while at the same time achieving a type of intimate affect. As a linguistic performance, animal names foreground the light, texture and sound of the Sida socio-ecological landscape.

Koret (2014) has presented a basis for understanding the basic tendencies for this type of language in his studies of Lao literature.

Parallelism, in contrast to simple repetition, includes both an element of similarity and an element of change. Parallel phrases, lines or groups of lines are analogous to one another, but they are not identical. Parallels within Lao narrative can be comprised of two (or more) corresponding words, phrases, lines, groups of lines, or sections of narrative. They can be divided into the following general groups: a) pairs of synonymous meaning, b) pairs of opposing meaning, and c) pairs of comparative meaning or grammatic structure. Regardless of type, pairs that are matched together frequently show a correspondence not only in their meaning, but also in the grammatical structure and phrasing. (74)

He suggests that parallel pairs are pleasant because normal words are short and abrupt, they are related rather than identical, and add depth to meaning with a rhythmic sense of symmetry (Koret 1994). This case is even stronger for Sida, where the number of possible contrastive syllables is limited by the canonical C(C)V syllable structure and presence of just three tones. Four-element elaborate expressions are found in normal Sida conversation, but still with a slightly marked nuance, for example the greeting **teó-mù-teà-mù** (be-good-eat-good), or the verb meaning ‘to instruct children in the ways of life’ **hó-tehà-hó-khjó** (search-tell-search-clear).

As demonstrated above, Sida uses multiple layers of parallelism in its animal names. The processes of word formation are summarized in Table 3. Each of these reflects the preference for parallelism in word structure, ranging from simple to complex.



Table 3: Summary of word-formation in Sida faunal nomenclature

| type                   | process                 | form  |
|------------------------|-------------------------|---|
| binomials              | opaque compounding      | <b>ju-wa</b> ‘elephant’   |
|                        | redundant compounding   | <b>mjɔ-khó</b> ‘crab-eating macaque’                                      |
|                        | descriptive compounding | <b>ŋɔ-ɥ</b> ‘pufferfish’  |
| polynomials            | depictive reduplication | <b>teò-xú-teò-ɲé</b> ‘common paper wasp’                                  |
|                        | /l/-intensification     | <b>u-ló-ló-ma</b> ‘python’  |
|                        | metaphoric compounding  | <b>kjó-kjó-ló-m</b> ‘harvestman’<br><b>mo-sú=ò-khjã</b> ‘giant water bug’ |
| collocated polynomials | depictive compounding   | <b>phè-tehɣ-lɣ-tehɣ=ɲi-jɔ</b> ‘sour ant’                                  |

Binary oppositions at the phonemic level abound within the lexical structures. For example, both elements of the two syllable opposition [ɲɔ́]-[ɲɔɛ] start with alliteration and move into rhyme, but end with the contrasting creakiness and diphthong, emphasized with the rising pitch. Expanding to four-syllable parallelism, [ɲjà-tú]-[tú-ma] exemplifies the reduplicated link of symmetrical collocations. The completely unrelated first and fourth elements are balanced by the identical /tú/. In [kjó-kjó]-[ló-m], the identical reduplication is followed by a rhymed syllable, but differentiates the onset with a consonant change, and an entirely unrelated final element. The identical left two syllables are reflected with a structurally symmetrical, but unrelated, two syllables. The left and right halves are linked across the structural opposition by the rhyme /ø/. On the other hand [mì-pò]-[pá-pò] has a lexical compound on the left side, followed by two alliterated syllables of unrelated meaning. Finally, [teó-khù]-[teó-ɲɛ] has two opposed collocations of related meaning, contrasting sound within each couplet, but sharing form in reduplication in first and third elements across the symmetrical structure. The euphonic devices at work are diverse, each word suggesting that it has its own poetic story that is almost overwhelming in its microphonemics. Stepping back from the fine patterning of sound in these words, the overall impression is one of canonical parallelism, as offered by Jakobson in recognition of the fact that many languages demonstrate strong preference and even compulsive parallelism (Fox 2014). Deconstructing the sound element of these lexical structures, shines a new light on the otherwise opaque and complex forms; the key to the grammar has been performed in the poetics.

The poetics of parallelism have a seductive power (Webster 2017) that binds the speaker and the hearer through the constant tension of similarity and dissimilarity, because parallelism is an “extension of the binary principle of opposition to phonemic, syntactic and semantic levels of expression” (Fox 2014). Hence, beyond the structural types in which rhythm is key, we find a tendency in the animal names discussed above

to use identical and mutated reduplication of syllables to achieve another layer of sound aesthetic.

## 6. Conclusion

Sida speakers have much to say about the animals around them, encoding a wide range of perceptions, observation and imaginations through language that is as poetic as it is grammatical. I have presented an overview of the word-formation processes at work in Sida fauna nomenclature, paying special attention to reduplication processes, which provide an expressive layer of meaning for animals they see as more distant from humans. A focus on these processes brings not only more transparency to the naming practices observed, but takes us towards understanding how the human-animal relationship fits into the larger ecosystem (Chamberlain 1992). In doing so I follow Hymes' ethnopoetics (Hymes 1981), treating the faunal lexicon as a text that shines a linguistic light on the aesthetic forms and cultural significance of animal naming practices. Ethnopoetics should be an essential part of the study of ecological knowledge, as it highlights ethnographically and linguistically informed interpretations of local texts (Webster 2015).

In this paper I have used the term "expressive" to indicate an aesthetic of vivid imagery, closer to the poetic function of language than the grammatical. This expressive aesthetic is foregrounded by the sound textures that are produced through word formation. When I first considered the data, I suspected that there was sound symbolism at work. But analyzing the patterns of reduplication revealed that what is salient in the expressivity of these names is the rhythm of elaborate constructions, the repetition of syllables, phonemic contrasts, and the interaction between the description of observable characteristics or behavior and the depiction of imagery in its cultural context. Metaphor is employed in a way that brings daily observation and experience into the name. Moreover, the foregoing discussion suggests that there are interacting grammatical processes of verbalization and nominalization that may include an "animation" step. I argue that this feel of animation contributes to the sense of intimacy that does not exist for the nomenclature typology of larger, more economically important animals, which uses more transparent word formation.

The specifics of the Sida case are even more compelling when considered as part of a linguistic area. Apparent similarities with Akha and Lahu, suggest that some of these expressive features are part of an older Loloish linguistic heritage. Looking outside of the Tibeto-Burman family, formal parallels span the range of areal language families as well, but are not necessarily limited to the realm of fauna nomenclature. Elaborate constructions that make use of rhyming, parallelism and metaphor, extended into the cognitive landscapes of non-human life, suggest that poetics are intertwined with grammar at the very core of Southeast Asian worldviews. Speaking of the poetics of the Austroasiatic language Khmu, also spoken in Laos, Lindell (1989) commented that "[i]t would be impossible to say precisely where grammar ends and style begins". To understand these worldviews means gaining an understanding of both the word formation processes at work, while describing aesthetic forces at play.

The Siamese Slender Stick Bug can now be considered a poem in itself:

**thù-tehù thy-ly**  
**la-nó thy-ly**

‘one joint snaps,  
 the fingers break’

Two couplets on each line, with a reduplicated predicate. The final rhyme enhanced by the inherently expressive /l/, with alliteration connecting lines one and two. Broken fingers and misshapen joints depicting the stick bug perched awkwardly on a branch, silently blending into the vegetation, until someone walking through the forest notices it and lets the imagery of this intimate grammar speak.

### Acknowledgements

I would like to express thanks for the support, insights and suggestions provided by Jim Chamberlain, Gérard Diffloth and Weera Ostapirat in all matters of language, cultural and history. Bualy Paphaphanh and Khamphone Thongmixay at the National University of Laos have provided assistance, advice and shared in the joy of fieldwork in our collaborations, with a vision to deepening understanding of the many languages and dialects spoken in Laos. Hayashi Norihiko has been an important collaborator in the Sida work especially, and this paper has benefited from our many conversations in Kyoto and Kobe. Valuable feedback provided by colleagues in his Languages and Linguistics of the Middle Mekong Project is much appreciated as well. Patrick McCormick gave constructive comments to an early draft of the paper. Finally, my appreciation for the ongoing friendship and support of the village of Ban Nam Di. Mistakes in the content are of course my own.

### References

- Alves, Mark J. 2015. “Etyma for ‘Chicken’, ‘Duck’ and ‘Goose’ among Language Phyla in China and Southeast Asia”, *Journal of the Southeast Asian Linguistics Society* 8:39-55.
- Agnihotri, Samira and Aung Si. 2012. “Solega Ethno-Ornithology”, *Journal of Ethnobiology* 32(2):185-211.
- Aung Si. 2015. *The Traditional Ecological Knowledge of the Solega: A Linguistic Perspective*. London: Springer.
- Badenoch, Nathan and Hayashi Norihiko. 2017. “Phonological Sketch of the Sida Language of Luang Namtha, Laos”, *Journal of The Southeast Asian Linguistics Society*, 10(1):1-15.
- Berlin, Brent. 1992. *Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies*. Princeton: Princeton University Press.

- Bradley, David. 1979. *Proto-Loloish*. Scandinavian Institute of Asian Studies Monograph Serie. London: Curzon Press.
- , 2002. “The Sub-Grouping of Tibeto-Burman Languages”, in *Medieval Tibeto-Burman Languages*. Leiden: Brill.
- , 2017. “Phylogeny of Sino-Tibetan from Plants and Animals”, *Evolution of Eastern Himalayan Prehistory*.
- Chamberlain, James R. 1977. *An Introduction to Proto Tai Zoology*. Ph.D. Dissertation. University of Michigan.
- , 1992. “Biolinguistic Systematics and Marking”, *The Third International Symposium on Languages and Linguistics: Pan-Asiatic Linguistics vol. III*. Chulalongkorn University, Bangkok.
- , 2018. “A Kri-Mol (Vietic) Bestiary: Prolegomena to the Study of Ethnozoology in the Northern Annamites”. Kyoto Working Papers on Area Studies No. 133, Center for Southeast Asian Studies, Kyoto University.  
[https://repository.kulib.kyotou.ac.jp/dspace/bitstream/2433/231260/1/kwpas\\_133.pdf](https://repository.kulib.kyotou.ac.jp/dspace/bitstream/2433/231260/1/kwpas_133.pdf)
- , 2019. “History that Slithers: Kra-Dai and the Pythonidae”, *Southeast Asian Studies* 8 (1), pp. 25-51. <https://englishkyoto-seas.org/2019/04/vol-8-no-1-james-r-chamberlain/>
- Diffloth, Gérard. 1972. “Notes on Expressive Meaning.” *Chicago Linguistic Society* 8 (44): 440–47.
- Dingemans, Mark. 2012. “Advances in the Cross-Linguistic Study of Ideophones.” *Language and Linguistics Compass* 6 (10): 654–72.
- Fox, James. 2014. “Roman Jakobson and the comparative study of parallelism”, in *Explorations in Semantic Parallelism*. Canberra: ANU Press.
- Friedrich, Paul. 1986. *The Language Parallax: Linguistic Relativism and Poetic Indeterminacy*. Austin: University of Texas Press.
- Hayashi Norihiko. 2009. *A Descriptive Study on the Grammar of the Jino Language (Youle Dialect)*. Kobe City University of Foreign Studies Linguistics Monograph Series No. 43. Kobe: Kobe City University of Foreign Studies. 林範彦 『チノ語文法(悠楽方言)の記述研究』 神戸市外国語大学 研究叢書第43冊 2009
- Hymes, Dell. 1981. *In Vain I Tried to Tell You”: Essays in Native American Ethnopoetics*. Philadelphia: University of Pennsylvania Press.
- King, Alexander K. 2015. “The Patterning of Style: Indices of Performance through Ethnopoetic Analysis of Centery-Old Wax Cylinders”, in Kroskirty and Webster (eds) *The Legacy of Dell Hymes: Ethnopoetics, Narrative Inequality, and Voice*. Bloomington, Indiana: Indiana University Press.
- Koret, Peter. 2014. “Whispered so softly it resounds through the forest, spoken so loudly it can hardly be heard: The art of parallelism in traditional Lao poetry”. Doctoral Dissertation, University of London.
- Kristina Lindell, Jan-Öjvind Swahn, Damrong Tayanin. 1989. *Folk Tales From Kammu – IV A Master Teller’s Tales*. Copenhagen: Nordic Institute of Asian Studies.

- Lewis, Paul. 1989. *Akha-English-Thai Dictionary*. Akha Foundation: Chiang Mai.
- Matisoff, James A. 1992. "The Mother of All Morphemes: augmentatives and diminutives in a real and universal perspective", in *Papers from the First Annual Meeting of the Southeast Asian Linguistics Society*, ed. M. Ratliff and E. Schiller, pp. 293-349. Arizona State University, Program for Southeast Asian Studies.
- , 2006. *English-Lahu Lexicon*. University of California Publications in Linguistics, Volume 139. Berkeley and Los Angeles, California: University of California Press.
- , 2011. "Areal and Universal Issues in Plant and Animal Nomenclature", *Bulletin of the National Museum of Ethnology* 35 (4):655-679.
- STEDT Database. 2010-2013. University of California, Berkeley. <http://stedt.berkeley.edu>
- Svantesson, Jan-Olof, Kristina Lindell, Kam Raw and Hakan Lundstrom. 2014. *Dictionary of Kammu Yuan Language and Culture*. Copenhagen: NIAS Press.
- Theraphan L-Thongkum. 2002. "Old Tai Dam (Black Tai) and the Meanings of Ambiguous Words in Modern Thai Elaborate Expressions", paper presented at the 12th Annual Conference of the Southeast Asian Linguistics Society (SEALS XII), Northern Illinois University, DeKalb, May 15-17, 2002.
- Webster, Anthony K. 2015a. *Intimate Grammars: An Ethnography of Navajo Poetry*. Tucson: The University of Arizona Press.
- , 2015b. " 'The Validity of Navajo Is in Its Sounds': On Hymes, Navajo Poetry, Punning and the Recognition of Voice", in Kroskrity and Webster (eds) *The Legacy of Dell Hymes: Ethnopoetics, Narrative Inequality, and Voice*. Bloomington, Indiana: Indiana University Press.
- , 2017. "So it's got three meanings dil dil." Seductive ideophony and the sounds of Navajo poetry. *Canadian Journal of Linguistics/Revue canadienne de linguistique* 62 (2), 173-195.

## Appendix 1: Full List of Sida Animals

### Mammals

|                      |                         |
|----------------------|-------------------------|
| <b>tehé</b>          | deer                    |
| <b>tehy-jà</b>       | barking deer            |
| <b>tehy-pò</b>       | lesser mouse-deer       |
| <b>wè</b>            | pig                     |
| <b>wè-th`</b>        | wild boar, male         |
| <b>wè-ú</b>          | wild boar, female       |
| <b>à-á</b>           | bear                    |
| <b>ó-j`</b>          | binturong               |
| <b>mó-khù</b>        | dog                     |
| <b>à-wá</b>          | dhole                   |
| <b>mó-pu</b>         | cow                     |
| <b>pò-nè</b>         | buffalo                 |
| <b>hà-pò</b>         | gaur                    |
| <b>nò</b>            | rhinoceros              |
| <b>ju-wa</b>         | elephant                |
| <b>mjà</b>           | horse                   |
| <b>mí-mí</b>         | cat                     |
| <b>la-ma</b>         | tiger                   |
| <b>pjeu</b>          | leopard                 |
| <b>hy-px</b>         | monkey                  |
| <b>mjà-khó</b>       | crab-eating macaque     |
| <b>mjà-pý</b>        | macaque                 |
| <b>è-ló</b>          | slow loris              |
| <b>khù-sy</b>        | ferret badger           |
| <b>wè-sy</b>         | hog badger              |
| <b>jè-tehù</b>       | rabbit                  |
| <b>ú-ma</b>          | civet                   |
| <b>pà-wà</b>         | crab eating mongoose    |
| <b>pha-jò</b>        | civet, eats fruit       |
| <b>phà-jò-jò-phú</b> | large grey civet        |
| <b>phà-jò-jò-nè</b>  | fragrant civet          |
| <b>ó</b>             | long-tailed civet       |
| <b>ɔ-</b>            | general small mammal    |
| <b>ɔ-tehè</b>        | rat, mouse              |
| <b>ɔ-tshý</b>        | squirrel                |
| <b>ɔ-ló</b>          | type of rat, large ears |
| <b>ɔ-phè</b>         | bamboo rat              |
| <b>ɔ-phú</b>         | porcupine               |

|                |                    |
|----------------|--------------------|
| ɔ-tchò         | long-nose squirrel |
| ɔ-kjì          |                    |
| ɔ-pý           |                    |
| ɔ-sɛ           | giant squirrel     |
| ɔ-pa           | flying lemur       |
| wà-pó=ɔ-phè    | bamboo rat, large  |
| mjó-pó=ɔ-phè   | bamboo rat, small  |
| hù             | flying squirrel    |
| è-há           | otter              |
| pjò-só         | flying squirrel    |
| kou-fù         | dog-bear           |
| teu-fù         | pig-bear           |
| té-mà-fù       | horse-bear         |
| pà-wà=thò-hlíi | large bat          |

### Reptiles

|             |                          |
|-------------|--------------------------|
| ú-          | general snake-like type  |
| ú-ló        | snake                    |
| ú-pý        | green snake              |
| suu-tɛ=ú-ló | Oriental whip snake      |
| ú-ló=ki-pà  | king cobra               |
| u-ló-ló-ma  | python                   |
| u-ló-ló-nɛ  | cobra                    |
| tho-khu     | pangolin                 |
| kɔ̃-kɛɛ     | monitor lizard           |
| pɛ-jò-pɛ-tɔ | crocodile, <i>ngueak</i> |
| jó-pá-lá-ma | lizard                   |
| jó-lé-lé    | skink                    |

### Amphibians

|              |                     |
|--------------|---------------------|
| phà-         | general turtles     |
| phà-nɔ̃      | frog                |
| phà-pu       |                     |
| phà-a        | type of paddy frog  |
| phà-phí      | paddy frog          |
| phà-pjɔ̃-lɔ̃ | Asian grass frog    |
| pú-lú        | flying frog         |
| tɔ-kho       | turtle              |
| pjè-fé       | soft-shelled turtle |

## Insects

|                          |   |
|--------------------------|---|
| hé                       | head louse                                    |
| hé-phjú                  | body louse                                    |
| khw-hé                   | flea (dog)                                    |
| mɿ                       | tick  |
| á-phỳ                    | chicken louse                                 |
| pì-jɔ̌                   | ant   |
| phɛ̌-tehɿ-lɿ-tehɿ=pì-jɔ̌ | sour ant                                      |
| pó-mǎ                   | termite                                       |
| nø-pjý-pjý-khɛ̌          | grasshopper sp.                               |
| pì-teà                   | cicada  |
| o-xú=pì-teà              | type of shield bug found in harvest season    |
| tɔ̌-ɛ̌=pì-teà            | type of cicada                                |
| ú-teɿ=è-mǎ              | cricket, Gryllotalpa gryllotalpa              |
| ú-i                      | type of cricket                               |
| tei-lò-teí-teí           | cricket                                       |
| pò-ko-ló-ko              | longhorn beetle (Cerambycidae)                |
| pì-teù                   | beetle larvae, in trees (general term)        |
| pú-mǎ                   | stag beetle                                   |
| ò-hé                     | lac insect                                    |
| pì-tehí=è-mǎ            | scissors turtle bug, Acanthosoma labiduroides |
| mi-sɛ̌=kjí-kjí           | cockroach                                     |
| mò-khɛ̌-mò-khá           | lac insect                                    |
| kɔ̌-sù-thɿ-lɿ=è-mǎ      | jewel beetle                                  |
| pò-khù-lú-khù            | larvae of longhorn beetle                     |
| pjà-ku-lú-kù             | cockschafer, Melolontha melolontha            |
| pì-sɛ̌-lé-sɛ̌            | type of insect, painful bite                  |
| pú-ì-ná-ì                | long-legged bush katydid                      |
| teè-teè-nó-kó-ló         | type of beetle (Carabidae)                    |
| pì-tí-lí                 | beetle larvae, in ground                      |
| há-thà-là-mǎ            | earwig (Dermaptera)                           |
| ki-tehɿ=mò-phé           | Garrulax                                      |
| é-hli-nè-tehɿ-né-tehɿ    | katydid                                       |
| mó-sú=ò-khjà̌            | giant water bug                               |
| wɛ̌-é-hli-jò-la=è-mǎ    | type of insect                                |
| wɛ̌-mǎ=tò-sù            | dragonfly larvae                              |
| teè-kɔ̌-lɔ̌              | mantis  |
| tehó-tehɔ̌=mjɛ̌-nø=è-mǎ | striped blister beetle                        |
| mó-sú=ò-khjà̌=è-tehí-lí  | small water bug                               |
| í-tehɔ̌=à-mǎ            | water strider, small                          |
| thù-tehù=thy-ly=la-      | Siam slender stick bug (Phasmotodea)          |
| nó=thy-ly                |   |



|                               |                                       |
|-------------------------------|---------------------------------------|
| <b>ǰǰ-ǰǰ-ǰǰ-é / ǰǰ-ǰǰ-ǰǰε</b> | cicada sp.                            |
| <b>ǰǰ-ǰǰ</b>                  | house fly                             |
| <b>ǰǰ-kǰǰ</b>                 | mosquito                              |
| <b>sǰ-ǰǰ</b>                  | green housefly                        |
| <b>phǰ-ǰǰ</b>                 | gnat                                  |
| <b>mǰ-kǰǰ-kǰǰ-ǰǰ=è-mǰ</b>     | firefly                               |
| <b>ǰǰ-thǰ</b>                 | maggot                                |
| <b>ǰǰ-mǰ-è-mǰ</b>             | weevil, eats rice in barn             |
| <b>ǰǰ-ǰǰ=è-nǰ-ǰǰ</b>          | black butterfly                       |
| <b>ǰǰ-ǰǰ=è-ǰǰǰ-ǰǰ</b>         | striped butterfly                     |
| <b>ǰǰ-ǰǰ=è-xǰǰ-ǰǰ</b>         | yellow butterfly                      |
| <b>ǰǰ-ǰǰ=è-phǰǰ-ǰǰ</b>        | white butterfly                       |
| <b>ǰǰ-ǰǰ=kǰǰ-thǰ</b>          | black butterfly                       |
| <b>kǰǰ-kǰǰ-kǰǰ-kǰ</b>         | type of small dragonfly               |
| <b>phǰ-ǰǰ=ǰǰ-ǰǰ</b>           | type of red moth                      |
| <b>ǰǰ-nǰ=ǰǰ-ǰǰ</b>            | archduke butterfly ('Pana butterfly') |
| <b>tǰ-ǰǰ=ǰǰ-ǰǰ=ǰǰ-ǰǰ</b>      | bat moth                              |
| <b>ǰǰ-ǰǰ=ǰǰ-ǰǰ=ǰǰ-ǰǰ</b>      | type of moth                          |
| <b>ǰǰǰ-</b>                   | bee                                   |
| <b>ǰǰǰ-tǰ</b>                 | hornet                                |
| <b>ǰǰǰ-xǰǰ</b>                | common nocturnal hornet               |
| <b>ǰǰǰ-mǰǰ</b>                | type of bee, makes hive in ground     |
| <b>ǰǰǰ-tǰ</b>                 | small bee, makes flat hive            |
| <b>ǰǰǰ-hǰ</b>                 | small bee, Lao: <i>mim</i>            |
| <b>ǰǰǰ-tǰ-tǰ-ǰǰǰ</b>          | lesser banded hornet                  |
| <b>ǰǰǰ-tǰ-tǰ-mǰ</b>           | Asian giant hornet                    |
| <b>ǰǰǰ-kǰ-kǰ-nǰ</b>           | north-Siam tiger wasp                 |
| <b>ǰǰǰ-tǰǰ-hǰ-tǰǰ-nǰ</b>      | common paper wasp                     |
| <b>ǰǰǰ-ǰǰ-ǰǰ</b>              | blue-banded bee                       |
| <b>ǰǰǰ-tǰǰ-kǰ-ǰǰ</b>          | potter wasp                           |
| <b>ǰǰǰ-tǰǰ-ǰǰǰ-mǰ</b>         | giant carpenter bee                   |
| <b>è-tǰǰ</b>                  | wasp, makes nest in the ground        |
| <b>ǰǰ</b>                     | wasp                                  |

### Invertebrates

|                      |  |
|----------------------|--|
| <b>phǰ-mǰ-kǰǰ-lǰ</b> | spider   |
| <b>kǰǰ-kǰǰ-ǰǰ-ǰǰ</b> | harvestman, daddy longlegs                       |
| <b>phǰ-ǰǰ-ǰǰ-mǰ</b>  | edible large black spider                        |
| <b>ǰǰ-tǰǰ</b>        | centipede  |
| <b>ǰǰ-kǰǰ</b>        | house centipede                                  |
| <b>tǰ-sǰ</b>         | type of centipede, rolls into a ball (Glomerida) |

|                 |   |
|-----------------|---|
| mì-pò-pá-pò     | type of red centipede                                   |
| phjà-p̣x̣=è-ma  | type of centipede                                       |
| ú-kè            | water leech, in streams, goes up bovine's nose          |
| kè-pa           | water leech, found in paddy                             |
| kè-tho          | land leech  |
| kè-p̣y          | green leech, lives in trees, can get into people's eyes |
| pì-tx-lx        | earthworm, long   |
| bø-khjò-ló-khjò | slug  |

### Fish

|                        |                                     |
|------------------------|-------------------------------------|
| η̣ò-tx                 | fish, general                       |
| phè-tehi=η̣ò-tx        | fish sp.                            |
| η̣ò-tx=ló-tchè=à-nà-là | minnow, tiger danio                 |
| pja-p̣ə                | minnow, <i>Bangana sp</i>           |
| η̣ò-nɣ                 | black shark minnow                  |
| η̣ò-tx=lə-pò           | stone loach                         |
| tx-nx                  | stone loach (Lao: <i>paa deen</i> ) |
| η̣ò-tò                 | red catfish                         |
| η̣ò-tchỳ-lỳ            | fish sp.                            |
| kjɐ-tehiaw             | black catfish                       |
| η̣ò-ú-ló               | tire-track eel                      |
| kḥì-lò                | fish sp. (Lao: <i>paa kaan</i> )    |
| p̣x-ṣè                | fish, sp. small <i>paa kaan</i>     |
| η̣ò-ɥ                  | small puffer fish                   |
| pì-khja                | crab                                |
| lo-teḥù               | snail                               |
| hò-fé                  | eel                                 |
| lò-tea                 | tadpole                             |

### Birds

|                 |                      |
|-----------------|----------------------|
| kḥì-jà         | bird                 |
| teo-khy         | duck                 |
| ɣ               | chicken              |
| ɣ-p̣x̣          | wild fowl            |
| ḳx̣            | peacock              |
| ḳx̣-phó        | silver pheasant      |
| teo-phjè        | hawk, osprey         |
| teó-phjè-teó-xú | hawk, yellow feet    |
| teó-kḥù-teó-nɣ | hawk, largest, black |
| teó-phjè-jù-ma  | buzzard              |

|                          |  |
|--------------------------|--|
| <b>khə-khỳ=teo-phjè</b>  | <i>nok tuu</i>                                     |
| <b>ɣ-ma</b>              | type of bird, larger than pì-teà (toɛ-toɛ-toɛ cry) |
| <b>lu-mè</b>             | crow   |
| <b>téhó-o-pè-o</b>       | grackle  |
| <b>lò-pə-tché-lè</b>     | red breasted parakeet                              |
| <b>kù</b>                | general for dove-types                             |
| <b>kù-nɛ</b>             | oriental turtle dove                               |
| <b>téhò-kù</b>           | emerald dove                                       |
| <b>kù-ný</b>             | dove sp., Lao: <i>nok paw</i>                      |
| <b>khə-khjò</b>          | red collared dove                                  |
| <b>khó-lò</b>            | green-billed Malkoha                               |
| <b>pú</b>                | general for owls-types                             |
| <b>khò-pú</b>            | barn owls  |
| <b>ú-phí</b>             | kingfishers  |
| <b>kji-kji-kɣ-kɣ</b>     | Eurasian hoopoe                                    |
| <b>ò</b>                 | general hornbill                                   |
| <b>ò-ka</b>              | small hornbill                                     |
| <b>ò-lò</b>              | large hornbill                                     |
| <b>ò-xú</b>              | hornbill, yellow beak                              |
| <b>su-ɲú-lú</b>          | large barbet, Lao: taaj loo                        |
| <b>pò-to-lo</b>          | small barbet                                       |
| <b>téhó-jó</b>           | woodpeckers  |
| <b>teì-jà</b>            | type of parrot                                     |
| <b>pá-teí-jà</b>         | forest parrot                                      |
| <b>teù-í-teù=nɣ-lɣ</b>   | scarlet minivet                                    |
| <b>teù-í-teù-xú-lú</b>   | yellow oriole                                      |
| <b>khy-pjɛ</b>           | drongo   |
| <b>khì-to-phja-la</b>    | Malaysian pied fantail                             |
| <b>lo-pjò</b>            | large bulbul                                       |
| <b>teɔ-teɔ</b>           | general bulbul                                     |
| <b>kì-xú=teɔ-teɔ</b>     | bulbul, sp.  |
| <b>ɲò-ɲɔ</b>             | puff-throated bulbul                               |
| <b>téhỳ-wa=à-phjú-lú</b> | white crested laughing thrush                      |
| <b>téhỳ-wa=à-xú-lú</b>   | yellow laughing thrush                             |
| <b>téhỳ-wa=à-na-la</b>   | white cheeked laughing thrush                      |
| <b>pjó-teý=thì-lì</b>    | white wagtail                                      |
| <b>pjó-teý=à-pjò-lò</b>  | eastern yellow wagtail                             |
| <b>pì-lí</b>             | white trumped munia                                |

