

A STUDY OF THE MORPHOLOGY OF VERBS AND NOUNS IN THE SINWAL DIALECT OF THE RAWANG LANGUAGE*

Hpung Sarep
Payap University, Chiangmai

I. INTRODUCTION

1. HISTORICAL AND GEOGRAPHICAL BACKGROUND

The name "**Rawang**"¹ is a general term which refers to a body of people who speak approximately 70 dialects (probably some could be called closely related languages) and live in upper Kachin State, Myanmar (Burma). Formerly, the Rawangs were referred to as the **Nung**, **Kanung**, **Hkenung**, or **Ganung** by other tribes. The problem of nomenclature was discussed by Robert H. Morse (1962:15, 28) in his "Hierarchical levels of Rawang phonology". He finally arrived at the name "Ganung-Rawang" for the people and "Rawang" for the language. However, the term "Rawang" is understood by the Rawangs as referring both to them and to their language, and it has since been officially adopted.

Robert and Betty Morse (1966:200) divided the Rawang people into five branches by general names which tended to differentiate the groups on the basis of culture and social structure: **Ganung**, **Rawang**, **Longmi**, **Nung** and **Tangsar**. Stephen A. Morse (1989:239) made the same five-branch distinction but with some changes in the branch names: **Daru-Jerwang** (Ganung or **Ganong**), **Matwang** (Rawang), **Lungmi**, **Anung** (Nung), and **Tangsar**. This is only a general grouping and each major group comprises several subgroups. For instance, the Daru-Jerwang branch includes smaller subgroups such as **Maláng**, **Zewàng** (Jerwàng), **Tashø**, **Dazøwàng**, **Taláwang**, **Taluq**, **Akøpáy**, **Anàmpáy**, **Tarùng** (Drung/Dulong), etc. (Maniq 1992).

Robert and Betty Morse described the Rawang homeland in the following way:

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¹ Bold typeface is used to highlight Rawang names which appear for the first time in the text.

Their hereditary homeland includes all that combination of high mountains and low tropical jungle valleys just south of the Eastern Himalayas, which is bounded by the Kaolikung Range to the east and the Patkoi-Mishmi Range to the west (1966:195).

This area includes Putao, NogMung, Khawbude, Machanbaw, and Sumbrabum townships of Kachin State. Besides this area, many Rawangs are found also in Myitkyina, Kamaing, and Sawlaw townships of Kachin State.

In addition, Robert Morse (1965:38 footnotes) mentioned that the Rawangs are found also in the adjoining areas of the Nu (Salween) River Valley in Yunnan, China. The Rawangs in China are identified as the Drung (also as Dulong or Trung), a sub-group of the Daru-Jerwang branch, and Nu (also as Anung or Anu) nationalities. It is reported that the Drungs are living in the Drung river valley in Gongshan County, while the Nus live in Gongshan, Fugong, Bijiang, Lanping and Weixi counties in the Nu River valley (Shen and Lu 1989). Betty M. Morse (1975:33) has reported that a Rawang dialect speaking people, probably known only as Mishmis, are found in the adjoining areas of India. Theraphan (1985:6) listed the Rawang language among the minority languages of Thailand and mentioned that a few Rawangs are living in the Chiangmai and Chiangrai provinces of Thailand.

The total Rawang population is not yet known due to the lack of a thorough census. Robert H. Morse (1962:12) estimated that the number did not exceed 60,000. This figure still seems to hold true for the Rawang population in Myanmar. According to a former township government officer of Putao, the total in Myanmar is estimated to be 55,000 people. In China, the Drung population is estimated to be 4,680, and the Nu population 23,000 (Shen and Lu 1989). Thus, the entire tribe would number over 80,000 people.

Great snow-covered mountains, mountainous subtropical jungles, and dense rainfall have kept the Rawangs in almost total isolation, not only from other tribes, but even from their relatives in adjoining valleys (Robert Morse 1962:21). Nowadays, irregular flights between Putao and Myitkyina, the capital of Kachin State, are the only means by which the Rawangs can reach the people outside their isolated terrain. The Rawangs are bounded on the east by the Lisu and Naxi, on the southeast by the Maru and Lashi, on the south by the Jinghpaw, on the southwest by the Khamti Shan, on the west by the Mishmi (known as Manloq by Rawangs), and on the north by the Tibetans (Stephen A. Morse 1989:238).

The Rawangs are gentle, peace-loving (Betty Morse 1975:28) and law-abiding people (Barnard 1934:117). They are traditionally swidden farmers. Many still use the slash and burn form of agriculture. The Rawangs in the low

valleys cultivate irrigated farms, which are relatively small. They grow rice as their main crop; citrus fruit, vegetables, and other crops are also grown.

Rawangs name their children according to birth order, using different names for male and female. The terms and their pronunciations differ from clan to clan or from family to family. The following is an example of the names.

Birth Order	Male	Female
First	Pung	Nang
Second	Dø, Tin	Nen, Nyen, Ney
Third	Ken, Kwen, or Jong	Chang, Hko
Fourth	Søn, Ko, Dó	Nøn, Tsin, Ti
Fifth	Zeng, Min, Nøn	Kùr
Sixth	Pi or Guq	Gin, Gong
Seventh	Yung, Kaq	Tam
...
Last	Yin, Tinaq	Yin, Tinaq

Table 1. Rawang names according to birth order.

The Rawang kinship system seems originally to have been, in Schusky's term, of the Iroquois type, in which cross cousins are referred to by the same term (Schusky 1972). Though the northern Rawang groups do have the Iroquois system, the middle and southern Rawang kinship systems exhibit some characteristics of the Omaha type. This might be a result of the influence of the Jinghpaws whose kinship system is of the Omaha type, and who are located just to the south of the Rawangs. The Rawang kinship relationship is based on patrilineal descent. Their social structure units are family, clan and affinal kin groups. Rawang marriage is exogamous. The giving of the bride goes in one direction only, i.e., if clan A takes brides from clan B, then clan B cannot take brides from clan A. Exchanging brides between two clans is prohibited. The Rawang people practice monogamy and marriages last throughout their lifetimes.

Rawangs used to be animists but almost all the Rawangs in Myanmar today are Christians. In Rawang mythology, there are several **Pángs** (spirits). Above these is **Gamøpè**, the Creator. Barnard (1934:114) wrote that there is no account of hell or heaven, but there is a flood story involving a pair of humans being saved. But according to my language helper, Rawangs traditionally believed that when a person dies, he goes, according to the Creator's will, either to a place where the evil spirits can torture him or to the

Creator's place where he can have peace. All people who die accidentally are believed to be tortured by the evil spirits. When a young child dies, the Rawangs believe that the Creator has taken the child back to his residence. The Creator propitiation ceremony includes a traditional dance called **Azòlám**, in which many people may participate. The shaman and his assistants lead the dance and the host family, their clan members, their relatives, and other guests follow after, dancing around the altar poles. Later, a bovine which is tied to the poles is speared as a sacrifice.

Being animists, the Rawangs handed down their myths as well as tribal history and migration accounts through a very strict oral literature, called **Mangròng**, a kind of chant or ballad (Morse and Morse 1966:202-203). Such speech forms, whether shaman chants or ballads, contain a more accurate chronology of tribal history and migration than the usual history and genealogies handed down by ordinary speech forms. The contents are set in rigid and unchangeable sequence, exact correctness being of utmost importance, so that later generations cannot change the facts. Otherwise disaster might result from the spirits losing the way. Extracted from such accounts, Rawang history starts with stories and legends of creation and a flood. The patriarchs of the Rawangs descended from the high mountain **Sangban-kwinzu Sòng** 'people migrating projection peak'. The places where they settled were chronologically as follows: **Tongzòng Adám** 'alkali flats', **Shazèng Adám** 'animal multiplying plain', **Sangzèng Adám** 'people multiplying plain', **Sangwál Adám** 'race dividing plain', **Móngkòm-wayàng** 'united ingathering plain,' **Anam Adám** 'sun flats', and **Showá Adám** 'in-common flat'. From this point on there seem to be a few differences in the accounts of the different branches. But there follows an account which tells of a salt source where the salt is taken up as coarse sand.

A tentative identification of these locations are given by Betty Morse (1975):

... it does seem that certain areas of northern Tibet and inner Asia fit the description of places mentioned in the chants. We find alkali licks and watered marshy areas on maps of this area. There are vast animal grazing grasslands ... and it is now known that the centres of ancient peoples ... are located in Northeast Tibet and Northwest China.

Her hypothesis suggests that the origin of the Rawangs might be from Western Tibet. This still needs confirmation, however.

Then accounts of three rivers are found. They are **Timashewang** 'Red water river' (Salween), **Tinaqwang** 'Black water river' (Mekong), and **Timongwang** 'White water river' (Yangtze). Rawangs claim that they are the

middle river migrants. Two of these rivers were passed but not the third, the Yangtze. Then through the high mountain passes, they migrated into the uninhabited land in northern Myanmar. The names of the mountain passes and the villages, where Rawang pronunciations are partially retained, are some evidence of their migration (see Morse and Morse 1966:204).

Among the migrants, according to my language helpers, were the ancestors of the **Wadamkong** clan, part of the Matwang branch. They settled down on **Hol Adám**, on **Tongzong Adám** 'All-settled flat', and then on **Zilon Adam** 'Zilon's flat'. It was from the Zilon Adam period that this clan called itself Wadamkong. Then they migrated on and settled on **Yoraqqang**, **Zaki Adám**, and **Cholo Adám**, which are in the Mekong and Salween valleys. Then some of them passed the **Punggagap** pass and settled down on **Waqdam Tung** in the N'Mai valley (called **Rameti** by Rawangs) in Myanmar. From there many of them migrated in different directions, and some reached the Putao plain (also called **Gømdì** by Rawangs), but most of them returned back to the east later. However, it is said that one family (**Wadamhkong Pung**'s family) migrated into **Bongnøn** land (probably North Assam) in the west. From the Waqdam Tung, several subclans of the Wadamhkong clan began to adopt their own names. The **Sinwal** clan, the clan of this author's language helpers, is one of them.

2. THE LANGUAGE AND ITS AFFILIATION

The dialect which this paper studies is the dialect that most of the Sinwal clan people speak. It is the writer's mother tongue dialect. This dialect is known as the Wadamhkong dialect by the Rawangs, but, according to the writer's language helper, it is slightly different from the pure Wadamhkong dialect. Thus the term Sinwal is temporarily assigned to refer to this dialect. The Sinwal dialect belongs to the Matwang branch and is very close to the **Ráwàng** dialect, the *lingua franca* of the Rawangs.

Grierson and Konow, who first classified the Tibeto-Burman languages, were unaware of the Rawang language. Barnard (1934:x) suggested that the Nung (Rawang) language belongs to the Tibeto-Burman family and placed it under the Hsifan group. He also recognized the existence of many dialects of Nung and referred to "Rawang" as one of them. Shafer (1955) lists Rawang as a language of the Nungish section of the Burmic division of the Tibeto-Burman family. Nishida (1970) grouped "Nung" under Kachinic alongside Chinghpaw. Benedict (1972) listed "Nung" as a Nungish language under Burmese-Lolo. Voegelin and Voegelin (1977) differentiated between the Nung and Rawang, and listed them under the Kachin branch of the Bodo-Naga-Kachin subgroup of Tibeto-Burman (Hale 1982). Thurgood (1984), as

quoted by Stephen Morse (1989:238), suggested “Rung” as a major new Tibeto-Burman subgroup, including the Nungish languages (Trung, Rawang and Taruang) alongside the Gyarung dialects and the Qiangic languages. A similar classification to that of Thurgood is made also by DeLancey (1987). This last classification, in regard to the Rawang language, is an intriguing one, but scholars have not yet made a final decision where to place the Rawang language in the classification of the Tibeto-Burman languages.²

Although Rawangs are referred to as a single tribe with five branches, they actually comprise many small groups each with their own dialect. There are even dialects which are mutually unintelligible. Although the writer is a native Rawang speaker who speaks several dialects, there are still many dialects which are unintelligible to him. When Rawangs talk together, usually the individual speaker uses his own dialect and he switches to another dialect only when the listener does not understand. Rawang dialects vary according to geographical location and clan. For example, **Razà** is a regional dialect, and **Sarep** is a clan dialect. According to Robert Morse (1962:25), a partial count exceeds 70 dialects, suggesting up to a hundred dialects in total. According to the writer’s calculations, the level of lexical cognates between some dialects ranges from 55% to 90%. Levels of lexical cognates for some other Tibeto-Burman languages are: 12.50% for Tsangla,³ 16.82% for Jinghpaw, and 14.47% for Colloquial Burmese.

Up until the British rule, the Rawangs ordinarily lived in small villages, and large villages were rare (Barnard 1934:117). At the present time, however, larger villages are emerging, with the result that speakers of individual dialects have more exposure to other dialects or languages. Due to the influence of the Burmese language as the official language and the medium of education, the promotion of the Ráwàng dialect as *lingua franca* among the Rawangs, and great intercourse between different dialects and other languages such as Dureng (Jinghpaw) and Lisu, many language changes are occurring rapidly among the Rawangs. Some dialects are facing the danger of extinction due to merging, assimilation or absorption. For example, the young generation today no longer speak the **Gongrø (Gonglu)** dialect. In some places, new dialects are emerging due to dialect merger. For example, young people in Nam Kham village of Machanbaw Township, a village with over ten dialects spoken, have begun to speak a distinct dialect in which most of the dialects spoken in the village are mixed.

² The view adopted by the STEDT project is that Rawang belongs to the Nungish branch of Jingpho-Nungish-Luish. [Ed.]

³ This is based on the Tsangla wordlist by Erik Andvik (1993).

The present orthography of Rawang, which uses the Roman script, was established by Robert Morse who was a Christian missionary to the Lisu and Rawang peoples. He initiated the translation of the Bible into the Ráwàng dialect of the Matwang branch.

3. OBJECTIVES AND SCOPE OF THE RESEARCH

In order to accomplish an appropriate amount of research in a certain period of time, my research objectives and scope have been set as follows.

The objectives of this research are: (a) to describe the structures of verbs and nouns; (b) to examine the functions of morphemes within morphological structures; (c) to examine the allomorphs; (d) to describe the morphophonemic rules; and (e) to relate the findings to problems of translation.

The scope of this study is restricted as follows.

a) This research studies only the Sinwal dialect of the Rawang language.

b) Though the Rawangs do not have a written form of speech, they do have a form of speech used in traditional chants. The speech form used in these chants is excluded from this study, because it uses ancient words which are complicated and difficult to understand. Thus the language studied is of the current spoken form.

c) Since this is a morphological study, only word formations are dealt with. In cases where word formations are relevant to the syntactic level, the relevant features are discussed if they are directly relevant to morpheme contrasts or to the functions of a morpheme.

d) Though there are several word classes which undergo word formation processes, only verbs and nouns are studied because of their complexity and the writer's limited time.

4. SOURCE OF DATA AND METHODOLOGY

Since the writer speaks the Sinwal dialect, much of the data comes from the writer himself. For checking whether this introspectional data is generally valid for this dialect, two language helpers, one man and one woman, were chosen for this study. They speak the Sinwal dialect as their mother tongue, and have contributed valuable data to this study.

Generally, the theoretical stance of this analysis is an eclectic one. Sometimes, though, a modified form of the tagmemic model is applied in certain places. For example, the descriptions will use some tagmemic terminology such as tagmeme, slot, filler, etc.

This study assumes that a unit of language is composed of different constituent parts which occur in a certain order. In other words, the structure of a language unit consists of several slots filled by certain smaller units, i.e.

slot fillers. In the structure certain slots may be obligatory and others, optional. Thus, a structure may have a minimal possible form and a maximal form. The difference in the occurrence of slot fillers results from different co-occurrence restrictions on the slots or on the slot-fillers within or outside the structure.

Since morphology is the study of the structure of words, a comment on the definition of a "word" is relevant. Though there is no non-arbitrary way of defining a "word" in Rawang, this research assumes that some definitions given by scholars such as Healey (1988), Pike and Pike (1982), and Matthews (1974) are plausible. However, "a minimum free form", the definition given by Bloomfield (1933:178), is considered as the basic idea of what 'a word' is. In most cases, this research assumes that a word is the smallest unit of language which can convey an idea, which can stand alone, which can be assigned to a specific word class and which may have a number of grammatical functions. In other words, the working element is, in Matthews' sense, a grammatical word (see Matthews 1974:32ff).

A morpheme is the smallest meaningful stretch of speech. A word may be composed of a single morpheme or several morphemes. In polymorphemic words, the boundaries between morphemes can be clear-cut or obscure. In Rawang words, the morpheme boundaries are mostly clear-cut.

A morpheme in a polymorphemic word may be realized as one of several variants, or allomorphs, according to certain conditioning factors. The conditioning factors can be morphological, phonological, both morphological and phonological, or grammatical.

Kinds of morphemes can be distinguished according to several different criteria. Distribution is a criterion which distinguishes morphemes as bound vs. free, root vs. non-root, stems vs. affixes, nuclear vs. peripheral, mutually exclusive vs. mutually obligatory, obligatory vs. optional, closing vs. non-closing, etc. Affixes can be further categorized as prefixes, suffixes, infixes, suprafixes or simulfixes. Other kinds of morphemes are zero morphemes, portmanteau morphs and discontinuous morphemes.

Morphological processes can be roughly classified as addition, replacement, subtraction or suppletion (Nida 1949, Elson and Pickett 1976). Addition can be further divided into affixation, reduplication, and compounding. Affixation can be either inflectional or derivational. Reduplication may be either partial or total reduplication. Reduplication is not observed in Rawang verb and noun morphology, but is a significant process of adverbialization in Rawang. Compounding can take place between various combinations of cores of the same or different word classes.

When two morphemes come together, phonological changes may occur. The most common are changes like assimilation, dissimilation, weakening, palatalization, nasalization, tone perturbation, reduction, addition, vowel lengthening, fusion, and metathesis.

In this research, a couple of texts were elicited first. Then verbs and nouns found in the texts were sorted separately and their structures were studied.

The prominent morphological processes in Rawang verb formation are compounding, derivation, and inflection. Noun formation processes are compounding and derivation. Allomorphs and their conditioning factors are discussed as appropriate. Subtraction, replacement, and suppletion processes have not been observed for Rawang.

5. PHONOLOGY SUMMARY

5.1. *The phonology of the Sinwal dialect of Rawang*

The Sinwal dialect is rather closely related to the Matwang dialect, of which Robert Morse (1962) made a phonological study. The phonology of the Sinwal dialect, according to the writer's analysis thus far, exhibits several differences from that of the Matwang dialect. The phonology of the Sinwal dialect is summarized below.

		bilabial	alveolar	alveo- palatal	velar	glottal
stops	asp	p ^h	t ^h		k ^h	
	unasp	b	d		g	ʔ
affricates	asp		ts ^h	tʃ ^h		
	unasp			dʒ		
fricatives	vless		s	ʃ		h
	voiced		z			
nasals		m	n	ɲ	ŋ	
lateral			l			
vibrant			ʁ			
approximant		w		j		

Table 2. Consonant phonemes of the Sinwal dialect.

Robert H. Morse (1962) listed twenty consonants as exhibiting phonemic contrast in the Matwang dialect. Stephen A. Morse (1989) listed twenty-two consonant phonemes in some Rawang dialects (Jerwang, **Mvbøq**, **Tsangnai**,

Koduq, and Matwang) he had studied. The Sinwal dialect also has the same twenty-two consonant phonemes, as shown above.

Of these consonants, /ts/ and /ɲ/ were not listed by Robert Morse because they do not occur in the Matwang dialect. Of the stops he wrote:

The stops /p, t, k/ exhibit voiceless released aspirate and voiceless unreleased allophones which are in complementary distribution. The voiceless aspirate allophones [p^h, t^h, k^h] occur only initially, and the voiceless unreleased allophones [p^ʰ, t^ʰ, k^ʰ] occur syllable finally. Glottal stop occurs finally with only a fortis unreleased stop allophone. (Robert Morse 1962:76)

In the Sinwal dialect, the nasal plus glottal stop clusters [mʔ, nʔ, ɲʔ] in syllable final position are considered to be as allophones of /p^h, t^h, k^h/. The Rawang language distinguishes between aspirated and unaspirated stops, but not between voiced and voiceless stops.

Both Robert H. Morse (1962) and Stephen A. Morse (1989) listed seven Rawang vowel phonemes. As opposed to the seven vowels they listed, the Sinwal dialect has eight: two front vowels, four central vowels, and two back vowels. See Table 3:

	<i>front unrounded</i>	<i>central unrounded</i>	<i>back rounded</i>
<i>high</i>	i	ɨ	u
<i>mid high</i>		ə	
<i>mid low</i>	ɛ	ɐ	ɔ
<i>low</i>		a	

Table 3. Vowel phonemes of the Sinwal dialect.

The fact that the Sinwal dialect has four central vowel phonemes raises a question concerning the symmetry of the phonemic inventory. Though minimal pairs which demonstrate phonemic contrasts among the four central vowels have been found, the writer admits that a more detailed study is needed to confirm this. An example where the contrasts among all the central vowels are demonstrated is shown below:

- (1) *dìng* 'large, big'
- (2) *dàng* 'last (v)'
- (3) *dềng* 'nest'
- (4) *dàng* 'put (smth) against (smth)'

The central mid open vowel /ɐ/, (for which Robert Morse used the symbol /ə/) and the central mid close vowel /ə/ (which Robert Morse considered as an allophone of /i/) contrast only when they occur before final consonants. The vowel /ɐ/ is relatively shorter than the other vowels. The front mid open vowel /ɛ/ and the back mid open vowel /ɔ/ occur only as the nucleus of open syllables. The front mid close vowel /e/, an allophone of /ɛ/, and the back mid close vowel /o/, an allophone of /ɔ/, occur before syllable-final consonants except glottal stop /ʔ/.

Concerning vowel length, Robert Morse rejected both an analysis which includes pairs of long and short vowel phonemes and an analysis in which phonetically long vowels are treated as clusters of identical short vowels. Instead he proposed an analysis that includes short vowels and an additional phoneme of length, written as /:/ . He said that this phoneme occurs in combination with all seven vowels preceding syllable-final consonants except for /w/ and /j/. Length is also predictable for the vowel of a closed syllable preceding a final /i/ (Robert H. Morse 1962:79-80). In addition, vowel length seems also to occur with the vowel of a closed syllable preceding a final /o/ and /a/. In the Sinwal dialect, lengthening of the vowel /ɐ/ does not occur; instead the lengthening shifts to the next element, the syllable-final element.

In Rawang, a syllable usually occurs as a minimal word unit or as a component element in polysyllabic words. The minimal syllable consists of a nucleus plus a toneme. The maximal syllable exhibits a toneme plus an onset, a nucleus, and a coda. Only vowels occur in the nucleus. If there is a sequence of vowels, in which each vowel has a different tone, then each vowel-tone combination is interpreted as a syllable (Robert Morse 1962:62). The second component of a sequence of two vowels (diphthongs) are interpreted as consonants, when no obligatory toneme occurs on it. For example, [i] or [u] as in [ai, au, oi], are interpreted as /j/ and /w/ since there is no tone on the second vowel. Similar to what Robert Morse observed in the Matwang dialect, no syllabic consonants occur in the syllable nucleus in the Sinwal dialect. In syllable initial and final positions, consonant clusters with at most two components can occur. In syllable initial position, consonant clusters /k^{hr}, br, hw, k^{hw}/ and /nw/ are found. /k^{hr}/, and /br/ are observed mostly in loan words. /n/ and /j/ occur as the first components of syllable-final consonant clusters.

At morpheme boundaries, all syllable final unreleased stops are released as nasals at the same point of articulation when they are followed by vowels.

Robert Morse (1962:71) posited four tonemes in the Matwang dialect, involving three pitch-registers. The Sinwal dialect also has four tonemes, but they are different from those of the Matwang dialect. If the highest pitch level

in the tones is marked with the tone number [5], the middle level pitch with [3], and the lowest level pitch with [1], the tonemes of the Sinwal dialect are as follows:

- tone 1. [55] high level tone
- tone 2. [33] mid level tone
- tone 3. [41] high-low sharp falling tone
- tone 4. [00] neutral, non-contrastive tone

Out of the four tonemes, tone 3, the high-low sharp falling contour tone, is different from the corresponding tone of the Matwang dialect, the low tone. In fact, low level tone does occur in Sinwal, but only as an allophone of tone 3 (falling tone) in free variation with the high-low contour.

Tone 4 occurs in syllables with a stop coda and in open syllables with the phoneme /ɐ/. Usually, tone 4 is represented by mid level tone, but occasionally it can be represented by either high tone or low tone.

5.2. The orthography

This study does not use the IPA characters as its orthography. For typing convenience, some phonemes are written with symbols that diverge from their phonetic realizations. For example, /p^h, t^h, k^h/ are written as /p, t, k/. Our orthography is presented in Table 4.

The tones are represented over the vowels as follows:

- tone 1. [55] high level / ˊ / as in /á/
- tone 2. [33] mid level / ˘ / as in /ã/
- tone 3. [41] high-low falling / ˋ / as in /à/
- tone 4. [00] neutral tone is not indicated in the orthography

Vowel length is marked by the colon /:/.

phoneme		orthography	phoneme		orthography
/p ^h /	=	p	/ɲ/	=	ny
/t ^h /	=	t	/ŋ/	=	ng
/k ^h /	=	k	/l/	=	l
/b/	=	b	/ɹ/	=	r
/d/	=	d	/w/	=	w
/g/	=	g	/j/	=	y
/ʔ/	=	q	/i/	=	i
/ts ^h /	=	ts	/ɛ/	=	e
/tʃ ^h /	=	ch	/i/	=	ø
/dʒ/	=	j	/ə/	=	ə
/s/	=	s	/ɐ/	=	ɑ
/ʃ/	=	sh	/a/	=	a
/z/	=	z	/u/	=	u
/m/	=	m	/ɔ/	=	o
/n/	=	n			

Table 4. Orthographic representation.

6. A BRIEF SURVEY OF THE SYNTAX OF RAWANG

6.1. Sentence

Rawang is an SOV language. A sentence can be categorized according to these parameters: simple, compound, or complex; complete or incomplete. A typical (compound and complete) sentence structure is comprised of an optional concomitant slot (CON:) filled by any number ($n \geq 0$) of dependent clauses (D-Cl) with obligatory clausal conjunctives (ClConj), followed by an obligatory nucleus (NUC:) filled by an independent clause (I-Cl) and sentence final intonation (INT). (See Diagram 1.) A minimal sentence consists of a single independent clause.

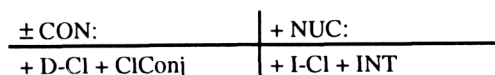


Diagram 1. Sentence structure.

Complete, independent sentences are rare in actual speech exchanges. This is well explained by Morse:

One of the first impressions one gets when considering the syntax of Tibeto-Burman languages is their seemingly endless rambling. The predilection of all native speakers is to make sentences paragraph-size, stringing along clause after clause with no intention of full stop in grammar or intonation, until the complete thought has been expressed. (Morse 1965:339)

6.2. Clause

The typical clause structure is summarized in the following diagram.

± T	± SL	± S	± DL	± BP	± IA	± O	± Av	+ P
								V
								VP

Diagram 2. Clause structure.⁴

The above structure is to be interpreted as follows: a typical independent clause consists of an obligatory predicate (P) filled by a verb or a verb phrase, and optional tagmemes such as time (T), stative locative (SL), subject (S), directional locative (DL), benefactive purpose (BP), instrument-association (IA), object (O), and adverbial (Av) (Morse 1965). The order of these clausal tagmemes can generally be said to be arbitrary. Generally, phrase-final particles (case markers) prevent possible ambiguities among the clause tagmemes. It is common, though, that time and stative locative tagmemes precede the subject. A rule of focus may occur, in which the emphasized tagmeme is located near the predicate verb. Different types of focus or emphasis are also signaled by particles such as /nø/ and /gø/ occurring post-positionally after the emphasized tagmeme. Thus, the focussed item can occur at any place in the sentence structure.

Native speakers are not limited, however, to the typical structures. Although the predicate verb typically occurs at the end of a clause, native speakers often put other tagmemes after the predicate verb.

Clause types can be divided into transitive, intransitive, quotative, stative and equational.

⁴ From this diagram onward, fillers of some slots will not be specified.

- (1) òng m̃ tsat kh̃i:tnòē (transitive)
 he AG rice cook
 'He cooks the rice.'⁵
- (2) ngà ñ zòng kaq d̃ngē (intransitive)
 I EMPH school to go
 'I go to school.'
- (3) òng ñ zàngē wāē (quotative)
 he EMPH ill quote
 'He said "I am ill."'
- (4) òng ñ adāē (stative)
 he EMPH rich
 'He is rich.'
- (5) ngà ñ zòng sarā óngē (equational)
 I EMPH school teacher be
 'I am a teacher.'

6.3. Phrases

A phrase is a cluster of two or more words, belonging together but not constituting a complete statement. It does not have its own subject and predicate as a clause does. A phrase normally functions as a component of a clause. Rawang phrases can be categorized as noun phrases, numeral phrases, verb phrases, adverbial phrases, and relator-axis (post-positional) phrases. These are summarized below.

6.3.1. Noun phrases

Noun phrases can be classified as modified noun phrases, genitive phrases, appositional phrases, co-ordinate noun phrases and serial noun phrases. A modified noun phrase consists of an obligatory head noun, and optional elements such as modifier, number, and classifier.

± modifier	+ head	± number	± classifier
relative clause	noun	quantifier	
noun phrase	noun phrase	numeral	

Diagram 3. Modified noun phrase 1.

For example,

⁵ For a list of the abbreviations used from this point on, please see pp. XX. [Ed.]

- (6) mǒng dǎng wā ā kǒm aní dǒ
 white by do RLT house two CLSS
 'two white houses'

There is another kind of modified noun phrase in which the head noun is plural; i.e. it is followed by the plural marker clitic. In this kind of noun phrase, a number and classifier cannot occur after the head noun.

+ modifier	+ head	+ clitic
relative clause	noun	-rì
noun phrase		

Diagram 4. Modified noun phrase 2.

For example:

- (7) kū mǎrèng asàngrì
 that village people
 'the people of that village'

If the head noun is obvious or understood, the head noun stem and the relativizer in the modifier slot can be omitted. Only the plural marker occurs in the head slot (See section 4). Then the number and classifier can occur following the head. For example:

+ modifier	+ head	± number	± classifier
relative clause	rì	quantifier	
noun phrase		numeral	

Diagram 5. Modified noun phrase 3.

For example:

- (8) kū mǎrèng rì pangà yoq
 that village PLURAL five CLSS
 'five people of that village'

A genitive noun phrase is composed of a possessor slot filled by a noun or pronoun, and a following possessed slot filled by a noun or noun phrase.

+ possessor	+ possessed
noun	noun
pronoun	noun phrase

Diagram 6. Possessive noun phrase.

For example:

- (9) ngānōng kòm
we house
'our house'

Appositional noun phrases also occur in Rawang. In this kind of phrase, two nouns or noun phrases occur in juxtaposition, of which one clarifies or extends the other. In some phrases the semantic relationship is specific-generic.

+ head 1	+ head 2
NP	NP

Diagram 7. Appositional noun phrase.

For example:

- (10) zòngkòm kòm āngsà
school house new
'a new school building'

A typical co-ordinate noun phrase consists of at least two noun heads, a co-ordinate conjunction occurring before the last noun head and an optional plural marker at the end.

+ (head 1) ⁿ	+ co-ordinate	+ head 2	± number
NP	nang	NP	-rì

Diagram 8. Co-ordinate noun phrase 1.

For example:

- (11) kaq waq nàng nangwà-rì
hen pig and cattle-PL
'hens, pigs, and cattle'

Another kind of co-ordinate noun structure has a free co-ordinate particle following each head noun. The combination of head-coordinate can occur any n ($n \geq 1$) times.

(+ head	+ co-ordinate) ⁿ
NP	gø

Diagram 9. Co-ordinate noun phrase 2.

For example:

- (12) nà gø òng gø ngà gø
 you also he also I also
 'you, he, and me, too'

Serial noun phrases also occur in Rawang. An optional number slot can occur at the end. The head noun may occur any n ($n \geq 1$) times.

(+ head) ⁿ	± number
NP	-rì

Diagram 10. Serial noun phrase.

- (13) kaq waq nangwà-rì
 hen pig cattle-PL
 'hens, pigs, and cattle'

6.3.2. Numeral phrase

Numeral phrases are made up of various combinations of obligatory digit (round number) tagmemes and unit tagmemes, and the combinations can be joined by optional links. Each digit is followed by a unit tagmeme, and the larger units are followed by smaller units. Thus, the numeral phrases have the following structure.

(+ digit	+ unit) ⁿ	± link	+ digit
		nang	

Diagram 11. Numeral phrase.

For example:

- (14) tiq ḱing oní yá pangà sál taruq
 one thousand two hundred five ten six
 'one thousand two hundred and fifty-six'

6.3.3. Verb phrases

In a typical clause, the predicate occurs at the end. The predicate can be filled by either a single verb or a verb phrase. In a verb phrase, verbs which fill different slots take different suffixes. The inflections of the final verb of a verb phrase are the same as those of a single verb predicate. These inflections are discussed in chapter 2. *Different kinds of verb phrases are briefly discussed below.*

In a modified verb phrase, the modifier adverbials usually precede the verb head and the verb head can be followed by an optional auxiliary verb. The verb head can be filled with verbs with different non-final verb markers or verbs with the same non-final verb markers. The verb heads can occur n ($n \geq 1$) times. The auxiliary verbs are final verbs. This structure is presented in Diagram 12.

\pm particle	+ modifier	(+ head) ⁿ	\pm particle	\pm auxiliary
	adverbials	verb		

Diagram 12. Modified verb phrase 1.

For example:

- (15) nāmnāmwā edìshì
 unhurriedly go
 'go unhurriedly'
- (16) dílám rónglám tálám mazǝngshílám mit gǝ mawàngò
 go sit listen memorize think also not.do
 'I did not think to go, to sit, to listen and to memorize.'
- (17) tiqngantsal salaplam wàona ie
 a.little.bit to.teach may.do to.be
 '(He) might plan to teach (him) a little bit.'

In fact, Diagram 12 summarizes several different types of verb phrases. Thorough discussion of each of them is not the aim of this chapter. However, some specific types are mentioned below.

Some verb phrases have adverbs. The adverb's co-occurrence distribution is limited to one or two verbs (Morse 1965). The adverb precedes the verb head and the gloss of the adverb is difficult. For example:

- (18) chān anánbǝngà
(suddenly) was.frightened
'I was frightened (suddenly).'

Another kind of verb phrase occurs where the head verb is followed by the particle /mabat/ which marks recurring action. For example:

± clitic	± modifier 1	(+ head	+ modifier 2) ⁿ	+ auxiliary
	adverbials	verb	mabat	

Diagram 13. Modified verb phrase 2.

- (20) mamē sawár mabat tór mabat mǎndè
quite heat RECR beat RECR continue
'(He) is continuing heating (it) quite a while and beating (it) again.'

6.3.4. Adverbial phrases

In Rawang, adverbials exhibit complicated patterns. A common pattern of adverbialization is reduplication of verbs or adverbs. For example:

- (21) talē talē
replace replace
'in turn'

There is another kind of adverbial phrase which is similar to a relator-axis (postpositional) phrase. In this structure, the head (or axis) can be a noun or a noun phrase, a verb or a verb phrase, or a clause, and the relator particle can be either {yung} 'like/resemble', {ang} 'by', or {e} 'by'. For example:

- (22) shiq yūng
louse like
'like louse = thoroughly'

These common phrase types by no means exhaust the range of Rawang adverbial structures.

6.3.5. Relator-axis phrases (post-positional phrases)

In Rawang phrases, particles usually occur post-positionally. Thus, in a relator-axis phrase the axis tagmeme is followed by the relator. Included in the relator-axis phrases are case-marked noun phrases, locational phrases, and temporal phrases.

Agentive, instrumental, and dative cases are expressed by postpositional particles. For example:

- (23) àng mǝ ā pè kaq shǝngtot mǝ ǝdepbá
 he AG this CLSS to stick AG beat
 'He beat this (man) with a stick.'

In locational phrases, the relator is filled with several optional sub-slots: locational determiners, locative particles, and directional particles.

+ axis	+ relator		
noun/noun phrase	± locational determiner	± locative particle	± directional particle

Diagram 14. Relator-axis phrase.

For example:

- (24) kǝm madàm maq kaq
 house upper at to
 'onto the house'
- (25) zǝng à
 school at
 'at the school'

A temporal phrase has /dagap/ (= while) as the relator. The axis slot may be filled with temporal demonstratives or a clause. For example:

- (26) tǝ dagap
 (a) moment (past) while
 'a moment ago'
- (27) àng tsat ām dagap
 he rice eat while
 'while he eats rice'

Some adverbial phrases also have relator-axis phrase structure when they have the particle {yung}. (See 6.3.4. above). Other clause level fillers such as accompaniment and benefactor phrases are also relator-axis phrases. (cf. Pike 1982:215). For example:

- (28) àng nàng
he and
'with him'

- (29) ngà dapat
I for
'for me'

In addition to the constituents of phrases mentioned above, there is a particle which occurs post-positionally as an optional constituent. It is the particle /nø/, which marks topic or emphasis of the previous tagmeme. It occurs after clause level constituents except after the predicate. For example:

- (30) àng nø rōngē
he EMPH sit
'He sits.'

- (31) ngø yūng nø māsám
weep like EMPH not.seem
'(He does) not seem to weep.'

In verb phrases, this particle may occur after head verbs or after verb modifiers. For example:

- (32) dí nø madi
go EMPH not.go
'(He) does not go.'

- (33) loqlám nø mawā
to.go.back EMPH not.do
'(He) does not do (plan) to go back = (He) is not going back.'

6.4. Clitics

Clitics attach like affixes but move around and function more like words in phrases and clauses (Healey 1988). Clitics in Rawang include noun clitics and verb clitics.

Noun clitics are all enclitics and are quantifiers. They are /-rì/ 'general plural', /-rá/ 'small group', /-ní/ 'dual', and /-nøng/ 'general group'. Each

clitic has its own syntactic features. An incomplete description of these clitics follows.

Generally, /-rì/ and /-rá/ occur after any constituent of a noun phrase except for personal pronouns, classifiers or proper nouns. For example:

- (34) kū kòm asàng-rì > kū kòm asàngrì
RMT house people-PL
'the people of that house'

- (35) kū-rì dagī > kūrì dagī
RMT-PL dog
'those dogs'

- (36) a pè-rá > a pèrá
this CLSS-group
'these men'

/-ní/ and /-nøŋ/ occur after personal pronouns and proper nouns but not after demonstratives. For example:

- (37) nà-ní > naní
you-DL
'you two'

- (38) pūngsár-nøŋ > pūngsárnøŋ
Pungsar-group
'Pungsar and group'

- (39) kū pè-nøŋ > ku pènøŋ
RMT CLSS-group
'that man and his group'

The verb clitic /dáng-/ is a proclitic and occurs before final or non-final verbs. It denotes the speaker's conjecture or concern. For example:

- (40) loqlám dāng-wā-dī > loqlám dāngwādī
to.go.back CJR-do-OPT
'He might plan to go back.'

- (41) dāng-loqlám wā-dī > dāngloqlám wādī
CJR-to.go.back do-OPT
'He might plan to go back.'

6.5. *Relativization and adjectives*

While part-of-speech systems of all languages distinguish two open lexical classes, nouns and verbs, some languages do not have a distinct open class of adjectives. These languages can be divided into (1) those which have adjective classes which are closed rather than open and (2) those which lack a distinct adjective class altogether. The latter use nouns or verbs to express the adjectival meanings. Thus, a distinction is made between (1) adjectival-verb languages, languages which express adjectival meanings primarily by verbs, e.g. Cantonese Chinese, and (2) adjectival-noun languages, languages which express adjectival meanings primarily by nouns, e.g. Quechua (Schachter 1985). Such Tibeto-Burman languages as Lahu (Matisoff 1973), Jinghpaw, Burmese and Rawang are of the adjectival-verb type. In Rawang adjectives and verbs inflect the same in the predicate tagmeme. For example:

- (42) nān í nǝ ē-té-shì-ē
 you (two) EMPH 2-big-DL-IMPRF
 'You (two) are big.'

- (43) nān í nǝ ē-dì-shì-e
 you (two) EMPH 2-go-DL-IMPRF
 'You two are going.'

In modifying a noun, relativization is used to express the equivalent of a modifying adjective. For example:

- (44) anap ā nāmbān > anapmā nāmbān
 beautiful RLT flower
 'beautiful flower'

- (45) ngǝ-ā dotsámrá
 cry-RLT child
 'crying child'

The relativization adds a relativizer suffix {-ā} to the verb or to the adjectival-verb. When a noun phrase has a classifier, the occurrence of the relativizer is optional. When a noun phrase is represented by a classifier, the relativizer does not occur. For example:

- (46) sanbóy ongapmì (a) zòngmàng pè
 exam passed RLT student CLSS
 > sanbóy ōngāpmì zòngmàng pè
 'the student who passed the exam'

- (47) zà pè
 hurt (sick) CLSS
 'the man who is sick'

The above examples support the hypothesis that verbs and adjectives belong to the same form-class. But, there is also a closed class of words that convey adjectival meanings such as upper, lower, etc. These are demonstrative adjectives and they cannot be inflected. When they occur before nouns, they function like adjectives. When they follow nouns they encode comparison. If they are followed by locative particles, they act like a relator. (See relator-axis phrases above). For example:

- (48) madàm køm
 upper house
 'the upper house'
- (49) køm madàm
 house upper
 'on the house' or 'more than the house'
- (50) køm madàm maq
 house upper at
 'on the house'

Except for these cases, verbs and adjectives are morphologically indistinguishable.

II. VERB MORPHOLOGY

1. INTRODUCTION

Rawang verbs express typical notions such as processes and actions, and notions expressed in many languages by adjectives, such as qualities and attributes. For convenience, I will refer to the former group of verbs as "process verbs" and the latter group as "adjectival verbs". There is no morphological difference between process verb stems and adjectival verb stems. For this reason, stems of both types are grouped in the single lexical class of verbs.

In Rawang verb morphology, addition is the most significant process: reduction, while it occurs, is rare.⁶ Replacement and suppletion have not been observed.

⁶ For a more in-depth discussion of general morphological theory see Chapter I, Section 4, above.

2. COMPOUNDING

(51) sà'n + sèr > shānshér
clear clean
'holy, clean'

(52) køm + ngøm > kømngøm
be.complete to.get.together
'gather together'

(53) dōng + mǎn > dōngmǎn
be.straight be.right
'to be righteous'

Some verbs are derived from nouns. The process is deletion of all the syllables preceding the last syllable. The co-occurrence of the root and the derived form in a clause is often obligatory in order to give a complete meaning.⁷ For example:

(54) *amoq* 'hat' *moq* 'to put on (a hat)'
amoq moqòē '(Someone) puts on a hat.'

In one instance, falling tone on the last syllable changes into the mid-tone.
For example:

⁷ Such “cognate object” constructions are found in many other TB languages, e.g. Akha and Lahu. See the articles by Hansson and Matisoff in LTBA 19.1. [Ed.]

- (55) *sarəm* 'sarong (gown)' *rəm* 'to put on a gown'
sarəm rəmē '(She) puts on a gown.'

Other instances do not exhibit any phonological changes. For example:

- (56) *yāmbàn* 'migrator'
bàn 'to migrate'

An alternative analysis that nouns are derived from verbs by prefixing is rejected because there would be no way to predict what the non-final syllables in the derived noun would be. Examples (54), (55), (56) and (57) prove that the non-final syllables are unpredictable.

- (57) *lāngdōn* 'ladder'
dōn 'to put up a ladder'

4. INFLECTION

In a typical Rawang clause, the predicate occurs at the end as the most significant constituent. The predicate can be either a verb phrase or a single verb.

The inflectional morphemes on the verb encode the orientation of person, time, and space, and also reflect sentence types, moods, etc. The following is a rough representation of the structure of the inflected transitive (final) verb. An intransitive verb lacks the patient markers.

$\pm \text{Md} \pm \text{Neg} \pm \text{Ag} \pm \text{Ca} \pm \text{Rcp} + \text{V} \pm \text{Bnf} \pm \text{Ori} \pm \text{Num} \pm \text{Pt} \pm \text{SFM1} \pm \text{SFM2} \pm \text{SFM3}$

Diagram 15. Final verb structure.

The above formula can be read as follows: a verb (word) consists of: (a) an obligatory verb stem (V); (b) optional prefixes which consist of mood (Md), negative (Neg), agent (Ag), causative (Ca), and reciprocal markers (Rcp); and (c) optional suffixes which include benefactive (Bnf), orientation (Ori), number (Num), patient (Pt) markers, as well as sentence-final marker suffixes belonging to three classes: (SFM1), (SFM2) and (SFM3). A final verb may consist of a minimum of two tagmemes up to a maximum of eleven tagmemes. This structure somewhat resembles the order of morphemes in the verbal block of the Proto-Tibeto-Burman language proposed by Wolfenden (1929:10).

The final verb of a verb phrase containing multiple verbs and the verb in a predicate consisting of a single verb are inflected for the same categories.

Both types of verb will be referred to as “final verbs”. Non-final verbs in a verb phrase may be inflected but with fewer affixes. Non-final verbs are discussed in section 4.2.9.

Many of the inflectional morphemes exhibit morpheme variation. The conditioning factors are phonological, morphological, and grammatical.

4.1. Verb prefixes

Verb prefixes include mood markers, a negative marker, an agent marker, causative markers and reciprocal markers. Many of them have allomorphs conditioned by phonological, morphological or grammatical factors.

4.1.1. Mood

The slot preceding the negative morpheme has mood prefixes which express the speaker’s stance toward what he says. There are three morphemes in this slot: {laq-}, {la-}, and {ta-}.

4.1.1.1. {laq-} Permissive

The morpheme {laq-} expresses the permissive mood. It encodes approval. When the subject or the agent is in the third person, the occurrence of {laq-} can convey either a permissive or an imperative mood. The following sentence may denote that Kensar is allowed to go or is ordered to go.

- (58) Kēnsár **laq**-di > Kēnsár **laq**di
 Kensar PRMS-go
 ‘Let Kensar go.’ (or) ‘Make Kensar go.’

When the subject or the direction of the verb is marked by {e-}, {laq-} simply marks permission.

- (59) àng m̃ **laq**-ē-gār-rā > àng m̃ **laq**gār-rā
 he AG PRMS-2-protect-AT.RMT
 ‘May he protect you.’

Normally {laq} does not occur when the subject or agent is in the first person, but when it does it conveys a subjunctive mood. For example:

- (60) ngà **laq**-dī-ng wā > ngà **laq**dōng wa
 I PRMS-go-1S say
 ‘Suppose I go ...’

Note that when /laq-/ precedes the non-first person agent marker {e-}, no matter whether the negative marker occurs between them or not, the vowel /a/ of /laq-/ is replaced by /e/ (see the agent marker {e-}, below 4.1.3).

- (61) àng mō **laq**-ē-da-tá-ng-à > àng mō **leq**dētàngà
 he AG PRMS-2-CA-hear-1S-1PT
 'Let him tell me (that).'

4.1.1.2. {la-} Inquiry or concessive

This morpheme signifies that the speaker is uncertain about or does not totally agree with the reason for the action denoted by the verb, or has a doubt regarding the action.⁸ For example:

- (62) àng **la**-dī-ó > àng **lad**īó
 he INQ-go-CNF
 '(But) he goes. (He is supposed not to go).'

There are certain co-occurrence restrictions with regard to sentence-final markers (SFM) (below 4.2.5.): {la-} may not occur together with the class 1 sentence-final marker /-e/, with any class 2 markers except /-enø/ or /-è/, or with the class 3 marker /-sà/. When predicate verbs are preceded by interrogative particles, the morpheme {la-} functions as the information interrogative (substance question) marker. In this case, only /-è/ of SFM2 and /-ò/ of SFM3 can co-occur with {la-}. For example:

- (63) rā kaq **la**-ē-dī > rā kaq **lē**dī
 INTRR to INQ-2-go
 'Where do you go?'

This morpheme has five phonologically conditional allomorphs: /la-/, /lā-/, /là-/, /l-/ and /lè-/.

{la-} /la-/ ~ /lā-/ ~ /là-/ ~ /l-/ ~ /lè-/

/la-/ occurs before monosyllabic stems when the subject is the first person or the third person and the agent is non-/e-/ agent.⁹ For example:

⁸ This 'inquiry prefix' undoubtedly reflects the general TB interrogative morpheme */a/. See Hargreaves, this issue. [Ed.]

⁹ I.e., the agent that is not marked by the morpheme {e-}. See Appendix 2.

- (64) àng rā kaq **la**-dī-è > àng rakaq **lad**īè
 he what to INQ-go-INTRR
 'Where does he go?'

/lā-/ occurs before dissyllabic stems with /a/ initial when the non-first person agent marker {e-} is not present. When /lā-/ occurs, the stem initial vowel /a/ is deleted. For example:

- (65) àng m̃ **la**-ayap-b̃-à-ēñ > àng m̃ lāyapbāēñ
 he AG INQ-cut-T.RMT-PRF-INCRD
 '(But) he has cut (it).'

/lā-/ occurs before the negative marker, the causative marker, or dissyllabic stems with **Ca** initial syllable, when the non-first person agent marker {ē-} is not present. For example:

- (66) àng ñ **la**-ma-dī > àng ñ lāmadi
 he EMPH INQ-NEG-go
 '(But) he does not go.'

/l-/ occurs before the CV(C) type stems when the non-first person agent marker morpheme {e-} is present.

- (67) nà **la**-ē-dī-b̃-ì-ēñ > nà lēdībīēñ
 you INQ-2-go-T.RMT-PRF-INCRD
 '(But) you went, (didn't you?).'

/lè-/ occurs before dissyllabic stems with **Ca** or **a** initial, causative markers, and the negative marker, when the non-first person agent marker {e-} is present. For example:

- (68) **la**-ē-dag̃-b̃-à-ēñ > lēdēg̃bāēñ
 INQ-2-prepare-T.RMT-PRF-INCRD
 '(But) you have prepared.'

4.1.1.3. {ta-} *Emphatic*

The meaning of this morpheme is unclear. It indicates that the speaker wants to emphasize the action, or wants to defend the reason for the action.

- (69) àng m̃ lēgā **ta**-rí-ò-ē > àng m̃ lēgā **tar**íòē
 he AG letter EMPH-carry-3PT-IMPRF
 'He carries the letter (not other things).'

This morpheme usually occurs in the result clause of reason-result sentences.

- (70) àng nǝ zà dokàng **ta**-rǝng-ē > àng nǝ zà dokàng **tar**ǝngē
 he EMPH sick reason EMPH-sit-IMPRF
 'He sits because he is sick. (Not because of any other reason.)'

{**ta**-} has five allomorphs: /**ta**-/, /**tā**-/, /**tà**-/, /**t**-/ and /**tè**/. The conditioning factors are the same as those for the inquiry morpheme {**la**-}.

{**ta**-} /**ta**-/ ~ /**tā**-/ ~ /**tà**-/ ~ /**t**-/ ~ /**tè**/

/**ta**-/ occurs before monosyllabic stems when the non-first person agent {**e**-} is not present. For example:

- (71) **ta**-dī-ng-nī-ng > **ta**dǝngnǝng
 EMPH-go-1S-OPT-1S
 'I might have gone.'

/**tā**-/ occurs before dissyllabic stems which have /**a**/ as the initial syllable when the non-first person agent {**e**-} is not present. Then, the vowel /**a**/ of the stem is deleted. For example:

- (72) ngà mǝ **ta**-adep-ò-nǝng > ngà mǝ **tā**adepmǝnǝng
 I NOM EMPH-beat-3PT-OPT
 'I might beat (him).'

/**tà**-/ occurs before the negative marker, the causative marker, and dissyllabic stems with **Ca** initial syllable, when the non-first person agent marker {**e**-} is not present. For example:

- (73) àng mǝ **ta**-dabang-ò-ē > àng mǝ **tà**dabā:ngòe
 he AG EMPH-help-3PT-IMPRF
 'He does help (him).'

/**t**-/ occurs before monosyllabic stems when the non-first person agent {**e**-} is present. For example:

- (74) nà **ta**-ē-dī-bǝ-ì > nà **tē**dìbí
 you EMPH-2-go-T.RMT-PRF
 'You had gone (there).'

/mā-/ occurs before dissyllabic stems with /a/ initial, when the non-first person agent {e-} is not present. Then the initial vowel /a/ of the stem is deleted. Thus, the rule is:

/a/ → Ø / ma-

For example:

- (80) **ma-aga** > **māgà**
 NEG-full
 'not full (not satiated)'

/mà-/ occurs before the causative marker and dissyllabic stems with **Ca** initial, when the agent {e-} is not present. For example:

- (81) **ma-da-tá** > **màdotá**
 NEG-CA-hear
 'do not tell'

/m-/ occurs before monosyllabic stems when the non-first person agent {e-} is present. For example:

- (82) **nà nɒ kɔ̃m à ma-ē-āi-bɔ̃** > **nà nɒ kɔ̃m à mēāibɔ̃**
 you EMPH house at NEG-2-stay-T.RMT
 'You did not stay at home. (You were not at home.)'

/mè-/ occurs before stems with **Ca** or **a** initial, causative markers or the reciprocal marker when the non-first person agent marker {e-} is present. For example:

- (83) **ma-ē-a-wap-nɔ̃ng-dī** > **mēāwapnɔ̃ngdī**
 NEG-2-RCP-shoot-2PL-OPT
 'Don't shoot each other.'

The negative prefix does not co-occur with the imperfective suffix {-e}. Compare the following two examples:

- (84) **àng kaq yàng-ò-e** > **àng kaq yàngòē**
 3 to see-3PT-IMPRF
 'I see him.'
- (85) **àng kaq ma-yàng-ò** > **àng kaq mayàngò**
 3 to NEG-see-3PT
 'I do not see him.'

The co-occurrence of /ma-/ , /e-/ and /-di/ encodes prohibition. For example:

- (86) ma-ē-wā-dī > mēwādī
 NEG-2-do-OPT
 'Don't do (it)!'

4.1.3. Agent (subject) person marker

The subject or agent of the action is also reflected in the verb. This agent (subject) marker occurs before the causative morpheme in the verb structure, and has only a single slot filler {e-}. This morpheme on the intransitive verb marks that the subject of the verb is in the second person.

- (87) nà ē-dī-ē > nà ēdīē
 you 2-go-IMPRF
 'You go.'

When it occurs in transitive verbs, it signals that the agent of the verbal action is 'non-first person'. This means that the agent is either second or third person. Actually, it reflects the direction of the verbal action, i.e. it shows from which person to which person the action is conveyed. Though {e-} can mark a third person agent, it cannot mark an action conveyed from a third person to himself or to another third person (which could be referred to as 'fourth person' in this case). The differentiation between the second and third person is dependent on the patient person markers. For example:

- (88) nà m̐ ē-gēr-ò-ē > nà m̐ ēgēròē
 you AG 2-chase-3PT-IMPRF
 'You chase him.'
- (89) nà kaq ē-gēr-ē > nà kaq ēgērē
 you to 2-chase-IMPRF
 '(He) chases you (You are chased).'
- (90) àng m̐ ē-ngān-b̐-s-à > àng m̐ ēngānb̐sà
 he AG 3-scold-T.RMT-PL-PRF
 'He scolded us.' or 'He scolded you (plural).'

The occurrence of /e-/ without SFM1 markers encodes the imperative mood. For example:

- (91) tsat ē-kit-ò > tsat ēkī:tnò
 rice 2-cook-3PT
 'Cook the rice (meal)!'

{ē-} has an allomorph /nā-/. /ē-/ occurs before verb stems with consonant initials, and /na-/ occurs before verb stems with the initial vowel /a/. Then, the initial vowel /a/ is deleted.

{ ē- } /ē-/ ~ /nā-/
 /ē-/ occurs before consonants
 /nā-/ occurs before /ā/

/ɑ/ > Ø / nā-_____

- (92) nà háng maqdò e-atáng-rat-ì > nà háng maqdò **natángratnì**
 you farm from 2-return-FROM.RMT-PRF
 ‘You returned from the farm.’

This agent marker morpheme {ē-} can affect a following vowel /a/. When {ē-} precedes a dissyllabic stem in which the first syllable is open and the vowel is /a/, or when it precedes the causative marker {da-}, the vowel /e-/ is shifted to the following syllable, where it replaces the vowel /a/.

$$\begin{array}{lcl} \{\bar{e}-\} + \text{CaCV(C)} & > & \text{CeCV(C)} \\ \{\bar{e}-\} + /da-/ & > & /de-/ \end{array}$$

- (93) \bar{e} -gɔyaq-ò-e > g̃ɛyaqòe
2-destroy-3PT-IMPRF
'You destroy it.'
- (94) \bar{e} -da-tá-b̃ɔ-s-à > dētáb̃ɔsà
2-CA-tell-T.RMT-PL-PRF
'(He) told (us).'

The morpheme {*ẽ-*} also affects the vowel /*ɑ*/ of the morphemes of the preceding two slots: the negative and the mood slots. This preceding vowel /*ɑ*/ changes into /*e*/. (See above, 4.1.1 and 4.1.2.)

- (95) nà n̄ɓ la-ma-ē-dī-ēn̄ɓ > nà n̄ɓ lēmēdītēn̄ɓ
you EMPH INQ-NEG-2-go-INCRD
'(But) you did not go.'

The person and number of agents and patients are also encoded differently by other morphemes. See the discussions of number markers in 4.2.3 and patient markers in section 4.2.4, below.

4.1.4. {da-} Causative marker

In the transitive verb structure, the causative slot occurs before the verb stem. Morse (1965) mentioned two causative prefixes {shə-} and {da-} occurring in the Matwang dialect. He also pointed out that the morpheme {da-} occurs almost exclusively with transitive verbs, so it may be considered as a grammatically conditioned allomorph. In the Sinwal dialect, these causative morphemes are found as /sa-/ and /da-/, and they are interpreted as comprising a single morpheme. The form {da-} is arbitrarily chosen as the base morpheme. However, the conditioning factor for the morpheme variation is not the distinction between transitive and intransitive as Morse suggested for Matwang. Instead, the allomorphy is phonologically conditioned. /sa-/ is associated with sonorant phonemes in the stem, while /da-/ is associated with obstruent phonemes in the stem. Further morpheme variants also occur. /sa-/ has a variant /s-/ and /da-/ has /d-/ as its variant. Thus, the morpheme {da-} has four allomorphs.

{da-} /da-/ ~ /d-/ ~ /sa-/ ~ /s-/¹⁰

/da-/ occurs before monosyllabic stems with obstruent initial consonants. For example:

- | | | | | |
|------|-----------|-------------|-------------|------------------|
| (96) | <i>dī</i> | ‘go’ | <i>dadi</i> | ‘to cause to go’ |
| (97) | <i>tē</i> | ‘to be big’ | <i>daté</i> | ‘to enlarge’ |

/d-/ occurs before dissyllabic stems in which the vowel /a/ is the initial syllable and the second syllable has a obstruent consonant in syllable initial position. For example:

- | | | | | |
|------|--------------|-----------|---------------|-------------------------|
| (98) | <i>abàl</i> | ‘to part’ | <i>dabàl</i> | ‘to cause to be parted’ |
| (99) | <i>atáng</i> | ‘return’ | <i>datàng</i> | ‘to cause to return’ |

/sa-/ occurs before monosyllabic stems with a sonorant phoneme at the syllable initial position. For example:

- | | | | | |
|-------|------------|------------------|--------------|---------------------------|
| (100) | <i>øp</i> | ‘to fall asleep’ | <i>saøp</i> | ‘to cause to fall asleep’ |
| (101) | <i>lám</i> | ‘to dance’ | <i>salám</i> | ‘to make someone dance’ |

¹⁰ From the point of view of TB as a whole, the sibilant allomorph is primary, descending from the well-attested PTB causative prefix *s-. In Jingpho (closely related to Rawang) the basic allomorph of the causative prefix is *ṣa-*, with the variant *dṣa-* occurring before roots with aspirated or sibilant initials. [Ed.]

/s-/ occurs before dissyllabic stems in which the initial syllable is the vowel /a/ and the second syllable has a sonorant consonant in syllable initial position. For example:

- (102) *alāng* 'to fly' *salāng* 'to cause to fly'
 (103) *amāng* 'to lose' *samāng* 'to cause something to be lost'

It should be noted that there are many dissyllabic verb stems which have /da/ or /sa/ as the initial syllable. This suggests that such stems might be forms in which the causative prefix morpheme is frozen,¹¹ but their stems or roots are not found in other contexts, and native speakers cannot give glosses for the suggested would-be stems. Thus, these forms are interpreted as forms without causative prefixes, i.e. single-morpheme stems, though /da/ and /sa/ do resemble the causative prefixes.

- (104) *dadām* 'to think' **dam* ?? **adam* ??
 (105) *sanāl* 'to press' **nal* ?? **anal* ??

Although these forms are considered as single-morpheme stems, the causative prefixes cannot occur before them. When a verb stem cannot take a causative prefix, the causative is encoded by using another verb as an auxiliary after the main verb. This auxiliary is usually /dazar/ 'to ask someone to do something' or /datsu/ 'to let someone to do something'.¹²

- (106) *dadām dazár* 'to cause to think'
 datsøp datsū 'to let somebody repair'

If the causative marker co-occurs with the reciprocal morpheme {a-}, the vowel /a/ of the causative merges into /a/. The reciprocal marker also affects the vowel /a/ of the causative-like stems (described above) and changes it into /a/. In such reciprocal causative verbs, the patient markers cannot occur. Instead, the patient benefactive marker {-ke} may appear (see below, 4.2.1.4).

- (107) *sa-a-ām* > *sāám*
 CA-RCP-eat
 'to feed each other'

¹¹ Forms in which the meaning of the stem is lost, so that the stem and the affix cannot be glossed separately, are referred to as frozen forms.

¹² These auxiliaries *dazar* and *datsu* look themselves like frozen causatives! [Ed.]

- (108) *da-a-paq* > *dāpaq*
 CA-RCP-stick.on (by itself)
 ‘to stick something on each other’

Another filler /ta-/ may occur in this slot. This morpheme signals that the action denoted by the verb can happen. In other words, it denotes capability. This morpheme is normally used in an absolute sense. For example:

- (109) *ā mé tì nō ma-ta-lé* > *ā mé tì nō màtalé*
 this CLSS river EMPH NEG-CAP-cross
 ‘This river cannot be crossed.’

4.1.5. {a-} Reciprocal marker

{a-} marks reciprocal action on some transitive verb stems. When it appears, patient markers cannot co-occur. For example:

- (110) *a-wap* > *awap*
 RCP-shoot
 ‘shoot each other’

However, some transitive stems which have the initial vowel /a/ cannot take the reciprocal marker {a-}. This initial /a/ causes the morphological processes and the semantic notions to be more complicated. In such verbs, we cannot separate the vowel /a/ from the rest of the verb root and cannot gloss them separately.

- (111) *atuq* ‘to cut’ *a-* = ?? *tuq* = ??

The interpretation of the morpheme {a-} is complicated further by the fact that {a-} sometimes does not mark reciprocal action and the meaning is uncertain.

- (112) *būngkà a-puq-ē* > *būngkà apuqē*
 door ??-open-IMPRF
 ‘The door is open.’¹³

A morphophonemic process is also observed here. If the reciprocal marker {a-} is preceded or followed by the vowel /a/, the vowels merge into /a/. For example:

¹³ In sentences like this *a-* seems to be marking a kind of middle voice. There is a similar morpheme *-aa-* in Lai Chin. See Tomoko Yamashita Smith’s paper “The middle voice in Lai”, to appear in *LTBA* 20.2. [Ed.]

- (113) sa-α-naq > sānaq
 CA-RCP-black
 'to paint one another black' (see 107, above)

However, more study is needed to describe the morpheme {α-} clearly.

4.2. Suffixes

Verb suffixes include markers of benefaction, orientation, number, and patients, as well as sentence final markers belonging to three classes.

4.2.1. Benefactor markers

The benefactor markers are suffixes occurring between the verb stem and the orientation marker slot. They include reflexive, substitutional benefactive, reflexive benefactive, and patient benefactive markers. These morphemes mark who is affected by the action of the verb. Thus, this slot somewhat resembles the adverbial infixes of the Proto-Tibeto-Burman verbal block presented by Wolfenden (1929:10).

4.2.1.1. {-shī} Reflexive

This reflexive morpheme marks that the agent and the patient are in the same person. When the subject is in the third person in the imperfective aspect, the mid tone on the vowel /i/ changes into a falling tone. In other words, {-shī} has an allomorph /-shì/, when the subject is in the third person and the aspect is imperfective.

- {-shī} /-shī/ ~ /-shì/
 /-shì/ occurs with imperfective verbs in the third person
 /-shī/ occurs elsewhere

- (114) àng n̄ sàm m̄ atuq-shī-ē > àng n̄ sàm m̄ atuqshìē
 he EMPH knife NOM cut-RFL-IMPRF
 'He cuts himself with a knife.'

When it occurs before /-ng/, the vowel /i/ of {-shī} becomes /ø/.

- (115) ngà n̄ ūr adep-shī-ng-e > ngà n̄ ūr adephōngē
 I EMPH hand hit-RFL-1S-IMPRF
 'I hit my hand by myself.'

When the reflexive {-shī} occurs the patient markers cannot be used.

4.2.1.2. {-ā} Substitutional benefactive

This morpheme marks an agent that acts for the benefit of someone else, not for himself. No allomorphic variants have been observed.

- (116) dakà ē-waq-ā-ì-ē > dakà ēwaqāiē
 wage 3-settle-SBNF-1PL-IMPRF
 ‘(He) settled (paid) the wage (for us).’

4.2.1.3. {-am} Reflexive benefactive

This morpheme marks an agent that acts for the benefit of himself. {-ām} has an allophone /ám/ when it is followed by a high tone or falling tone.

- {-ām} /-ám/ ~ /-ām/
 /-ám/ occurs before high tone or falling tone
 /-ām/ occurs elsewhere

- (117) shǒngshí kat-ām-e > shǒngshí katnāmē
 fruit plant-RFL.BNF-IMPRF
 ‘(I) plant fruit for myself.’

- (118) shǒngshí kat-ām-bǒ-ì > shǒngshí katnámǐ
 fruit plant-RFL.BNF-T.RMT-PRF
 ‘He planted the fruit for himself.’

4.2.1.4. {-ke} Patient benefactive

The exact meaning of this morpheme is unclear. It sometimes seems to convey an idea similar to the passive voice. The following examples illustrate some aspects of its meaning.

- (119) āngní a-dapat-kē-bǒ-ì > āngní dāpatkébí
 they.two RCP-push-RCP.BNF-T.RMT-PRF
 ‘They (two) pushed each other.’

- (120) òng kaq tap-kē-bǒ-à > òng kaq topkébá
 he to arrest-RCP.BNF-T.RMT-PRF
 ‘He was arrested.’

- (121) òng nǒ ngā tap-kē-ē > òng nǒ ngā topkēē
 he EMPH fish catch-RCP.BNF-IMPRF
 ‘He catches fish for himself.’

4.2.2. Orientation markers (deixis markers)

In the Rawang verb, there are inflectional morphemes which mark personal, temporal and spatial orientation, or deixis. In this orientation marker slot, the filler morphemes can be roughly divided into temporal orientation markers and spatial orientation markers. The personal orientation (subject-object agreement) markers occur as agent markers, patient markers and number markers, each of which occur in separate slots of the verb. (See 4.1.3, 4.2.3, and 4.2.4.)

The temporal and spatial orientation markers occur after the benefactive slot. Some of them encode tense or spatial orientation only, but some encode tense as well as spatial orientation at the same time. In general, the orientation morphemes carry the idea that the event is not at the present time or not at the present location. In other words, they encode the distance from the present time, or the distance from either the speaker or the listener, or both.

4.2.2.1. Temporal orientation markers

Temporal orientation markers include a zero morpheme, /-bø/, /-zø/, /-ap/, and /-yàng/. These morphemes mark different ideas of location in time (as well as in space).

Since orientation markers encode past tense and future tense only, the lack of these markers (occurrence of a zero suffix), encodes the simple present tense. In other words, the simple present tense is unmarked. However, spatial deixis markers may occur expressing the present tense (see 4.2.2.2).

- (122) ngà dī-ng-Ø-ē > ngà dǝngē
I go-1S-PRES-IMPRF
'I go.'

4.2.2.1.1. /-bø/ Toward-remote and /-zø/ Unknown-remote

A time which is not the present time and a place which is not the present location(s) of the speaker and the listener are signaled by both {-bō} and {-zō}. Mostly they encode the past tense, but sometimes they can signal the future. When signalling the future, a co-occurring morpheme belonging to the (SFM1) class, i.e. the imperfect affirmative marker {-e}, is required. However, this co-occurrence can also convey the past tense meaning depending on the context.

{-bø} refers to the time or location of the action of the verb as being remote from both the speaker and the addressee.

- (123) da-tá-ng-**b̃**-ng-à > datáng**b̃**ngà
 CA-listen-1S-T.RMT-1S-PRF
 'I told them.'

When used with action verbs or motion verbs, {-b̃} indicates that the movement is toward the remote.

- (124) kū kaq dī-ng-**b̃**-ng-ē > kū kaq d̃ng**b̃**ngē
 there to go-1S-T.RMT-1S-IMPRF
 'I will go there.'

In contrast with {-b̃}, {-z̃} encodes the idea that the action of the verb takes place in such a way that the listener or the speaker does not notice it, or that the action is done without consent or willingness. In other words, it reveals the speaker's discovery of the action.

- (125) ngāñng dī-**z̃**-s-à > ngāñng dīz̃sà
 we go-U.RMT-PLURAL-PRF
 'We went. (You did not notice that.)'

A tone sandhi is observed here. When followed by a syllable with a falling tone on the vowel, the mid-tone on the morpheme {-b̃} and {-z̃} changes into a high tone. Other orientation slot fillers which have mid-tones also exhibit this same phenomenon.

mid tone > high / ____ falling tone

- {-b̃} /-b̃/ ~ /b̃̃/
 /-b̃̃/ occurs before falling tone
 /-b̃/ occurs elsewhere
 {-z̃} /-z̃/ ~ /z̃̃/
 /-z̃̃/ occurs before falling tone
 /-z̃/ occurs elsewhere

- (126) nà ē-dī-**b̃**-ē > nà ēdī**b̃**ē
 you 2-go-T.RMT-IMPRF
 '(I know that) You went (there).'

- (127) zòng kaq ē-dī-**z̃**-s-à > zòng kaq ēdīz̃sà
 school to 2-go-U.RMT-PL.-PRF
 'You went to school. '

Another morphophonemic process is observed here. The vowel /ø/ is lost when followed by a vowel with a falling tone, but the tone on the vowel /ø/ shifts onto the following vowel.

(/ø/ + high tone) + (vowel + falling tone) > following vowel + high tone

/-bø/ + /-ì/ > /-bí/

/-bø/ + /-à/ > /-bá/

/-zø/ + /-ì/ > /-zí/

/-zø/ + /-à/ > /-zá/

- (128) àng dì-bø-ì > àng dìbí
 he go-T.RMT-PRF
 'He went.'

But this rule is not consistently followed. The unchanged forms are used sometimes in free variation with the sandhi forms.

- (129) dì-bø-ì > dìbøì
 go-T.RMT-PRF
 'He went.'

4.2.2.1.2. /-ap/ Near-remote and /-yàng/ Far-remote

These morphemes mark an action located at a remote time. Since they mark only remoteness in time, this remote time can be either past tense or future tense. However, these morphemes are used mostly in the sense of past tense. A distinction is made between near-remote and far-remote.

Near-remote refers to a time which is within a day to a couple of months distant from the present time. Near-remote is marked by the morpheme {-ap}.

- (130) dì-**ap**-s-à > dìapsà
 go-NEAR.RMT-PL-PRF
 'We went.'

A phonological rule applies here. When {-ap} is followed by a vowel, a nasal /m/ is inserted between the syllable final /p/ and the following vowel. Because the syllable final unreleased /p/ needs to be released, it is released as a nasal at the same point of articulation. For example:

- (131) àng dì-**ap**-ì > àng dìapmì
 he go-NEAR.RMT-PRF
 'He went (days ago).'

Far-remote is marked by {-yàng}. Far-remote refers to a time which is within a year to more than a year distant from the present time. {-yàng} has an allomorph /-yáng/ which occurs in free variation.

{-yàng} /-yàng/ ~ /yáng/

(132) àng dì-yàng-ì > àng dìyàngì
 he go-FAR.RMT-PRF
 'He went (years ago).'

(133) àng dì-yàng-ì > àng dìyángì
 he go-FAR.RMT-PRF
 'He went (years ago).'

4.2.2.2. Spatial orientation markers

Spatial deixis markers mark the spatial position of the addressee or the location where the action takes place. They distinguish whether the speaker is at a location which is higher, lower, or at the same level as the listener, or whether the location of the action is far from the speaker or the listener. The markers are {-zaq}, {-nǝng}, {-rat}, and {-rā}. In general, all these morphemes mark the starting point or the ending point of the action as being remote from the speaker or the addressee. The remoteness of these points can be temporal or spatial. Thus, these morphemes sometimes convey tense meanings as well. The co-occurrence of these morphemes with the imperfective affirmative {-e} encodes the future tense or intention, while in other occurrences they can carry either present or past tense meanings. The distinction is inferred from the context.

The morpheme {-zaq} marks that the speaker is located at a place which is lower than the addressee.¹⁴

(134) ē-dī-zaq > edīzaq
 2-go-SP.LOW
 'Come down.'

{-zaq} has an allomorph /-zak/ which results from assimilation. /-zak/ occurs when followed by /-ng/.

¹⁴ This directional morpheme has evidently been grammaticalized from the general TB verb root *zak 'to descend'. See Benedict 1972 p. 30 and Matisoff 1972 #121. [Ed.]

- {-zaq} /-zaq/ ~ /-zak/
 /-zak/ occurs before /-ng/
 /-zaq/ occurs elsewhere

- (135) dī-ng-**zaq**-ng-à > dǝngzakngà
 go-1S-SP.LOW-1S-PRF
 'I have come (up).'

{-nǝng} conveys the opposite meaning from the morpheme {-zaq}.
 {-nǝng} shows that the speaker is located at a place higher than the addressee.

- (136) dī-ng-**nǝng**-ē > dǝngnǝngē
 go-1S-SP.HIGH-IMPRF
 'I will come down.'

When {-nǝng} is followed by a falling tone, its mid tone changes into a high tone.

- (137) dī-**nǝng**-shì-ē > dìnǝngshìē
 go-SP.HIGH-DL-IMPRF
 'We (two) will come down.'

The suffix {-rat} shows that the addressee is located at a certain remote place. This morpheme does not distinguish whether the speaker is located at a lower place or not. It shows that the direction of the movement of the action is either to the speaker or to the listener or to some other person. When /-rat/ is followed by a vowel, a nasal /n/ is inserted between the /t/ and the following vowel.¹⁵

- (138) kū marèng-rì dī-**rat**-ì > kū marèng rì dīratnì
 that village-PLURAL go-FROM.RMT-PRF
 'People from that village come.'

Another morpheme {-rā} simply encodes that the action of the verb occurs at a remote time, or at a remote place from someone or something, not the present time and place. The subject of the verb, e.g. first person, can be remote from other persons, e.g. second and third persons, at the time the action of the verb takes place. No spatial movement direction is marked by this morpheme. In the following example, the sentence can be understood as: "At the time I am waiting for you, you will be away from me."

¹⁵ When followed by vowels, all syllable-final stops are released as nasals at the same point of articulation.

- (139) *nà kaq āmaq tsā-ng-rā-ng-ē* > *nà kaq amaq tsāngrānge*
 you to here wait-1S-AT.RMT-1S-IMPRF
 ‘(I) will wait for you here.’

The morpheme {*-rā*} has an allomorph /*-rá*/ when preceding a falling tone. This exhibits the tone sandhi mentioned in section 4.2.2.1.1 above.

- (140) *dì-rá-s-à* > *dìrásà*
 go-AT.RMT-PL-PRF
 ‘(We) went to your house, too.’

4.2.3. Number markers

The number of people in the subject are reflected also in the verb structure. These number markers usually occur as suffixes after the orientation markers. The first person singular is marked with {*-ng*}, no matter whether he/she is subject, agent or patient.¹⁶ The occurrence of this morpheme is dependent on the phonological shape of the morphemes. It occurs after the verb stem, the benefactive markers, and the orientation markers when these morphemes end in a vowel or in a [+back] stop /*k*/ or /*q*/; and after the optative morpheme {*dī*}. This implies that /*-ng*/ can occur more than once within a final verb structure.¹⁷ This is a peculiar feature of Rawang verb morphology. Note that the syllable final stop /*q*/ changes into /*k*/ when followed by /*-ng*/. For example:

- (141) *dī-ng-bḥ-ng-à* > *dḥngbḥngà*
 go-1S-T.RMT-1S-PRF
 ‘I went.’
- (142) *waq-ng-ā-ng-bḥ-ng-à* > *wakngāngbḥngà*
 settle-1S-SBNF-1S-T.RMT-1S-PRF
 ‘I settled (the debt) for (him).’

Other than this, the singular is unmarked. For example:

- (143) *àng nḥ kām wā-ē* > *àng nḥ kām wāē*
 he EMPH firewood make-IMPRF
 ‘He makes (gathers) firewood.’

¹⁶ Thus, the first person singular is not marked in the agent and patient marker slots.

¹⁷ See also example (135) above. [Ed.]

Dual numbers of first and second persons are marked by {-shì}. An allomorph /-s/ occurs when followed by patient markers and perfective affirmative markers.

{-shì} /-shì/ ~ /-s/
 /-s/ occurs before /-à/ and /-ò/¹⁸
 /-shì/ occurs elsewhere

- (144) kəm kaq loq-shl-e > kəm kaq loqshl-e
house to go.back-DL-IMPRF
'We (two) go back to the house.'

The plural is marked normally for the first person and second person. The first person plural is marked by {-ì}. {-ì} has an allomorph /-s/ when followed by /-à/.

{-ì}	/-ì/ ~ /-s/
	/-s/ occurs before /-à/
	/-ì/ occurs elsewhere

- (145) ngānǝŋ nǝ kǝm wà-l-e > ngānǝŋ nǝ kǝm wàìe
we EMPH house make-1PL-IMPRF
'We are building a house.'

- (146) ngānōng nō kōm wà-bō-s-à > ngānōng nō kōm wàbōsà
we EMPH house make-T.RMT-PL-PRF
'We built a house.'

The second person plural is marked by {-nờng}. An allomorph /-s/ occurs when followed by /-à/.

- (147) kũ kỏm à ē-àl-nong-ē > kũ kỏm ēàlnongē
that house at 2-stay-2PL-IMPRF
'You are staying at that house.'

- (148) kū kōm à ē-əl-bō-s-à > kū kōm à èòlbòsà
that house at 2-stay-T.RMT-PL-PRF
'You stayed at that house.'

¹⁸ See below 4.2.4.2 and 4.2.4.3. [Ed.]

When the direction of the action goes from the second person plural subject to the first person plural object in the imperfect aspect, only the first plural is marked on the verb.

- (149) ngānǝng kaq ē-dabang-ì-ē > ngānǝng kaq dēbāngè
 we to 2-help-1PL-IMPRF
 'You are helping us.'

A common pattern is observed among dual and plural markings. All dual and plural markers have the same allomorph /-s/ when followed by /-à/; that is the dual-plural distinction is neutralized before /-à/.

$$\left\{ \begin{array}{l} \{-shì\} \\ \{-ì\} \\ \{-nǝng\} \end{array} \right\} \quad \text{neutralized} \quad \rightarrow \quad /-s/ \text{ / } __ à$$

In the transitive verb structure, number markers can agree with the agent or the patient. Then, a problem arises as to which number should be marked. In this case, two solutions are observed: (a) if both the agent and the patient are in the singular, the first person has precedence, (b) if the agent and the patient are of different numbers (e.g. if the agent is first person singular and the patient is second person dual), the larger number, the dual in this instance, is marked.

- (150) nà kaq lā-ng-e > nà kaq lānge
 you to look.for-1S-IMPRF
 'I am looking for you.'

- (151) ē-zī-ng-à-ē > ēzǝngàe
 2-give-1S-1PT-IMPRF
 'You (two) chase after me.'

- (152) nānì mǝ ē-gēr-s-à-ē > nānì mǝ ēgērsàe
 you (two) AG 2-chase.after-PL-1PT-IMPRF
 'You (two) chase after me.'

No number clash arises with the third person, since number is not marked on the third person, whether it is the agent or the patient.

4.2.4. Patient markers

In the transitive verb structure, the next peripheral suffix slot after the number slot is the patient marker slot. The morphemes in this slot mark the patient or object person.

4.2.4.1. {Ø} Second person patient marker

Generally, it can be said that a second person patient is marked by the absence of a patient marker, i.e., by a zero morpheme. In fact, what marks the second person patient is obscure, because it is true that no specific morpheme that marks a second person patient can be found in the patient marker slot. However, a second person patient can often be inferred by the occurrence of the non-first person marker {e-} in the agent markers slot. (See section 4.1.3.)

In the agent marker slot, the occurrence of the morpheme {e-} is interpreted roughly as encoding a second person agent. Actually, {e-} encodes both second and third person agents. The significant governing factor is the direction of the action of the transitive verb. When the action of the transitive verb is transmitted from the second person or when it is transmitted from the third person, but not from the third to another third person, the same morpheme {e-} occurs as the agent marker (see section 4.1.3). Thus, {e-} occurs when the direction of the verb goes from the third person to the second person. Although no morpheme occurs in the patient marker slot, the morpheme {e-} in the agent slot, therefore, can be interpreted as marking the second person patient, when the action goes from the third person agent to the second person object.

- (153) nà kaq shung-e > nà kaq shùngē
 you to like-IMPRF
 'I like you.'

- (154) nà kaq ē-shùng-Ø-ē > nà kaq ēshùngē
 you to 3-like--IMPRF
 'He/she likes you.'

One ambiguity arises when the direction goes from the third person to the second person, because the verb structure with the zero morpheme patient suffix and the prefix {e-} is identical with the intransitive verb structure where the subject is the second person. Only the transitivity of the verb stem differentiates the transitive verb structure from the intransitive verb structure.

- (155) zòng kaq ē-dì-bø-ì > zòng kaq edìbí (intransitive)
 school to 2-go-T.RMT-PRF
 'You went to school.'
- (156) nà kaq e-tap-bø-ì > nà kaq etapbí (transitive)
 you to 2-arrested-T.RMT-PRF
 '(He) arrested you.'

4.2.4.2. {-à} First person patient marker

{-à} marks first-person patient. Some restrictions on its occurrence have been observed. It is optional when the agent (subject) is the second person singular and the patient is the first person plural.¹⁹

- (157) lēgā tiq buk ē-zí-ì-Ø-ē > lēgā tiq buk ēzìē
 book one CLSS 2-give-1PL-IMPRF
 'You give us (more than two people) a book.'
- (158) lēgā tiq buk ē-zí-s-à-ē > lēgā tiq buk ēzísàē
 book one CLSS 2-give-PL-1PT-IMPRF
 'You give us (could be two or more people) a book.'

When the dual-plural distinction is made for a first person patient (see 4.2.3), {-à} cannot occur, i.e., it occurs when the dual-plural distinction of a first person patient is neutralized.

- (159) ē-tap-shì-ē > ētapshìē
 2-arrest-DL-IMPRF
 'We (two) are arrested.'

When the patient is in the first person singular, the patient marker is optional.

- (160) lēgā tiq buk ē-zī-ng-à-ē > lēgā tiqbuk ēzøngàē
 book one CLSS 2-give-1S-1PT-IMPRF
 'You give me a book.'
- (161) lēgā tiq-buk ē-zī-ng-Ø-ē > lēgā tiq buk ēzøngē
 book one-CLSS 2-give-1S-1PT-IMPRF
 'You give me a book.'

Structurally, this second option can be confused with an unmarked second person patient. The person and case markings in the noun phrases are the only

¹⁹ In this case, the first person plural number marker /-ì/ can occur.

way to make the distinction between a first and second person patient when the first person patient is unmarked.

Another restriction is that the agent marker {e-} must co-occur with the first person patient marker, when the action is transmitted from the second person to the first person. Without the agent marker, the occurrence of {-à} by itself is unnatural and results in obscure meaning. This seems to suggest the possibility that the combination of {-à} with {e-} is a single discontinuous morpheme {e-...-à}. But {e-} can occur in combinations with other person markers, e.g. with {-ò} or with {Ø}. Thus, {e-} and {-à} are interpreted as separate morphemes.

- (162) *shǒngshí tiq-dǒ zǐ-ng-à-e > *shǒngshí tiqdǒ zǒngàē
 fruit one-CLSS give-1S-1PT-IMPRF
 ‘*(He or you or I?) give/s (me or to whom?) a fruit.’

The verb in the above sentence is not understood clearly by native speakers because it lacks the obligatory co-occurrence element, the agent person marker. A Rawang transitive verb in the imperfective aspect usually marks what DeLancey (1981) calls “direction marking”, or agent-patient marking.

4.2.4.3. {-ò} Third person patient marker

This morpheme was interpreted by Robert Morse (1965:348) as a transitive-active marker. Basing his description on the syntactic frames for Rawang verbs, it is apparent that he did not recognize that {-ò} is different from the first person patient marker {-à} and the second person patient marker {Ø}; the morpheme {-ò} marks the third person patient only. No matter from which person the action is transmitted, the suffix {-ò} marks the third person patient in the imperfect aspect.

- (163) aq-tì zǐ-ng-ò-ē > aqtì zǒngòē
 drinking-water give-1S-3PT-IMPRF
 ‘I give him drinking water.’

In regard to the occurrence of {-ò}, there are two exceptions. The third person patient marker does not occur when the agent is first person plural or second person plural. In this case, the patient or object is identified only by the case markers in the clause.

- (164) òng kaq tsā-l-ē > òng **kaq** tsāìē
 he to wait.for-1PL-IMPRF
 'We wait for him.'
- (165) òng kaq na-adeⁿ-nòng-ē > òng kaq nādepⁿnòngē
 he to 2-beat-2PL-IMPRF
 'You beat him.'

A phonological change is conditioned by the morpheme {-ò}. If the patient marker {-ò} is preceded by a syllable with the vowel /a/, the /a/ changes into /ā/. This is analyzed by Morse (1965:348) as a rule which lengthens the vowel. But the vowel /a/ does not change when the agent is in the first person.

- (166) òng kaq kūmaq gəl-ò-ē > òng kaq kūmaq gəlòē
 he to there put-3PT-IMPRF
 'They put him there.'
- (167) ngà m̃ ãmé kūmaq gəl-ò-ē > ngà m̃ ãmé kūmaq gəlòē
 I AG this there put-3PT-IMPRF
 'I put this there.'

4.2.4.4. Additional notes on patient markers

Sometimes, transitive verbs which express a general assertion of the action do not have the patient markers.

- (168) òng ñ nongwà rēm-ē > òng ñ nongwà rēmē
 he EMPH cattle raise-IMPRF
 'He raises cattle.'

When the aspect of the transitive verb is perfective, the patient markers do not occur, except for the first person singular patient when the agent is a non-first person {e-}.

- (169) ē-tap-b̃-ng-à > ētapb̃ngà
 2-arrest-T.RMT-1S-PRF
 '(Someone) arrested me.'
- (170) nongwà tiq-gúng wān-b̃-ng-à > nongwà tiqgúng wānbá
 cattle one-CLSS buy-T.RMT-PRF
 'He bought a head of cattle.'

- (171) *nà kaq gāmpə̀ng ē-zí-bə̀-ì* > *nà kàq gāmpə̀ng ēzíbí*
 you to money 2-give-T.RMT-PRF
 '(He) gave you the money.'

4.2.5. Sentence final marker suffix class 1 (SFM1)

Sentence final marker suffixes occur in three slots. Therefore, they are categorized as being in three classes: class 1, class 2, and class 3.

The class 1 suffixes (SFM1) occur after the patient marker slot. In class 1, the slot fillers are */-ē/* the imperfective marker, *{-à}* the perfective marker, and *{-dī}* the optative marker.

4.2.5.1. *{-ē}* Imperfective

Generally, *{-ē}* encodes an imperfective or simple affirmative sense. It is used mostly with the present tense. Thus, Morse (1965) interpreted this morpheme as a non-past affirmative sentence marker.

- (172) *àng nə zòng kaq dī-ē* > *àng nə zòng kaq dīē*
 he EMPH school to go-IMPRF
 'He goes to school.'

- (173) *ngà mə ngā tap-ò-ē* > *ngà mə ngā tapmòē*
 I AG fish catch-3PT-IMPRF
 'I catch fish.'

But *{-e}* is used also with the past tense to encode past imperfective. When used with the past tense, the co-occurrence of orientation markers is obligatory.

- (174) *nà nə zòng-à ē-əl-rā-ē* > *nà nə zòngà ēəl-rāē*
 you EMPH school-at 2-stay-AT.RMT-IMPRF
 'You were at the school there.'

- (175) *àng nə naám ām-bə̀-ē* > *àng nə naám āmbə̀ē*
 he EMPH food eat-R=RMT-IMPRF
 'He was eating food.'

When *{-ē}* co-occurs with *{-bə̀}* in the past tense, the subject cannot be in the first person. When the subject or agent is in the first person, the co-occurrence of *{-ē}* with the orientation markers encodes future intention or probability. In this case, the morphophonemic process which deletes the vowel */ə/* is optional. (See 4.2.2.1.1.)

- (176) dī-bǝ-l-ē > dībǝlē = dībīē
 go-T.RMT-1PL-IMPRF
 '(We) will go (there).'
- (177) dī-zǝ-l-ē > dīzǝlē = dīzīē
 go-U.RMT-1PL-IMPRF
 '(We) may go.'

{-ē} cannot co-occur with {mǝ-} 'negative', {lǝ-} 'inquiry', or {laq-} 'permissive'. {-ē} has an invariant phonological shape.

4.2.5.2. {-à} *Perfective marker*

This morpheme can be interpreted as encoding the perfective aspect, but its co-occurrence with orientation markers marks past tense. This implies that it marks the perfective as well as the past tense at the same time.

- (178) dī-ng-bǝ-ng-à > dǝngbǝngà
 go-1S-T.RMT-1S-PRF
 'I went/ I have gone/ I had gone.'

The {-à} morpheme was interpreted as a transitive clause marker in the past tense by Robert Morse (1965). Actually, this morpheme can occur with intransitive verbs. A couple of constraints are relevant here. When {-à} occurs on the intransitive verb, the subject or agent cannot be the second person singular or the third person. Only the first person, and the second person dual and plural can be the subject or the agent.

- (179) rǝng-bǝ-ng-à > rǝngbǝngà
 sit-T.RMT-1S-PRF
 'I sat/ I have sat/ I had sat.'
- (180) dī-bǝ-s-à > dībǝsà
 go-T.RMT-PL-PRF
 'We went.'
- (181) ē-dī-bǝ-s-à > ēdībǝsà
 2-go-T.RMT-PL-PRF
 'You (plural) went.'

When {-à} occurs on the transitive verb stem, the direction of the verb cannot be from the third person to the second person singular.

- (182) ē-tap-bə̀-à > ētapbá
2-catch-T.RMT-PRF
'You have caught (it).'
- (183) gəl-bə̀-ng-à > gəlbə̀ngà
put-T.RMT-1S-PRF
'I have put (it).'
- (184) radəl-bə̀-à > radəlbə̀à
roll-T.RMT-PRF
'(He) rolled (it) up.'

Some morphophonemic processes are observed here. Before /-à/, the dual-plural distinction is neutralized (see 4.2.3), and only /-s/ is used for marking plurality. This implies that {-ì} the first person plural and {-nə̀ng} the second person plural never occur before {-à}. (See 4.2.3.)

$$\left\{ \begin{array}{l} /-shì/ \\ /-ì/ \\ /-nə̀ng/ \end{array} \right\} \rightarrow /-s/ \text{ before } /-à/$$

Also at work here is the tone sandhi phenomenon described in section 4.2.2.1.1: when /-à/ follows the vowel /ə̀/, the vowel /ə̀/ is deleted. The tone on the vowel /ə̀/ shifts onto the vowel /a/ and replaces its previous tone. But this process is optional.

- (185) tap-bə̀-à > tapbá
catch-T.RMT-PRF
'(He) caught (it).'

{-à} cannot occur in the imperative mood. This means that it cannot co-occur with {-nà} 'requestive' or {-nà} 'hortatory', the variant markers of the imperative sentence. (See 4.2.6.2)

There is an allomorph /-ì/. The conditioning factor is grammatical. The differentiation between /-à/ and /-ì/ lies in the subject-verb agreement (or the direction of the transitive verb). The allomorphs encode mutually exclusive directions of the action of the verb.²⁰ Robert Morse interpreted this morpheme /-ì/ as an intransitive clause marker in the past tense. Actually, /-ì/ can occur in both the intransitive verb and the transitive verb. When

²⁰ A verb in a transitive clause, however, may appear without patient marker. In this case, the verb inflects like an intransitive verb by taking the allomorph /-ì/.

occurring in the intransitive verb, the subject is in the second person singular or the third person.

- (186) ē-dī-bō-ì > edìbí
2-go-T.RMT-PRF
'You went.'

- (187) øp-bō-ì > øpbí
sleep-T.RMT-PRF
'(He) slept.'

When /-ì/ occurs on the transitive verb, the agent is the third person and the patient is the second person singular.

- (188) àng mō nà kaq muk ē-zī-bō-ì > àng mō nà kāq muk ēzíbí
he AG you to bread 2-give-T.RMT-PRF
'He gave you bread.'

- (189) nà kaq ē-yàng-yàng-ì > nà kaq eyàngyàngì
you to 2-see-FAR.RMT-PRF
'He has seen you (before).'

Again, it was shown above that /-à/ can occur on a transitive verb, but not when the subject is in the third person or the direct object is in the second person singular. Since they occur in complementary grammatical environments, /-à/ and /-ì/ are interpreted as comprising one morpheme.

When /-ì/ is preceded by the vowel /ø/, the vowel /ø/ is deleted and the tone on /ø/ shifts to the following vowel /i/. (See examples 187 and 188).

4.2.5.3. {-dī} Optative

{-dī} is a SFM1 slot filler marking the speaker's desire or conjecture. When the subject or agent is in the first person, this morpheme simply marks the speaker's willingness to do the action.

- (190) nganí dī-bō-shì-dī > nganí dībōshìdī
we (two) go-T.RMT-DL-OPT
'We (two) will go. (We are willing to go.)'

When the subject or agent is in the second person, the speaker asks if the second person has a desire. Often, this usage is complemented by the occurrence of the yes/no interrogative {-má}.

(191) *nà ē-dī-dī* > *nà edīdī*
 you 2-go-OPT
 'Will you go?'

(192) *e-dī-dī-má* > *ēdīdīmá*
 2-go-OPT-INTRR
 'Will you go?'

When the subject or agent is in the third person, the speaker makes a conjecture about the third person's action. In this case, the conjecture particle {*dóng-*} or the emphatic {*ta-*} can co-occur.

(193) *àng dánh dī-dī* > *àng dánhīdī*
 he CJR go-OPT
 'He might go.'

{*-dī*} has an allomorph /-nī/ when followed by the first person singular marker /-ng/.²¹ Then the vowel /i/ becomes /ø/ before /ng/.

(194) *ngà dī-ng-bø-ng-nī-ng* > *ngà døbngbøngnøng*
 I go-1S-T.RMT-1S-OPT-1S
 'I will go.'

{*-dī*} cannot co-occur with {-*ēnø*}, {-*ānø*}, or {-*sà*} in the independent clause.

4.2.6. Sentence-final marker suffix class 2 (SFM2)

Class 2 sentence final marker suffixes (SFM2) occur after the sentence final marker class 1. In this slot several moods are expressed by different morphemes. Some of these morphemes somewhat modify the moods expressed by SFM1.

4.2.6.1. Interrogative markers

There are three interrogative markers in the SFM2 slot. They are {-*má*} 'yes/no interrogative', {-*è*} 'informational interrogative' and {-*á*} 'confirmatory interrogative'.

4.2.6.1.1. {-*má*} Yes/no interrogative

This morpheme marks yes/no questions when no interrogative pronoun precedes the predicate verb.

²¹ On the multiple occurrences of /-ng/, see section 4.2.3.

- (195) dī-bǝ-ì-má > dībímá
 go-T.RMT-PRF-INTRR
 'Did (he) go?'

When interrogative pronouns precede the predicate verb, {-má} becomes a general interrogative marker.

- (196) àng nǝ rākaq dī-bǝ-ì-má > àng nǝ rākaq dībímá
 he EMPH to.where go-T.RMT-PRF-INTRR
 'Where did he go?'

When an interrogative pronoun precedes the predicate verb, and when the subject is in the second or third person, {-má} cannot occur. In this case, the inquiry prefix {lǝ-} occurs before the stem (see 4.1.1.2), and the informational interrogative {-è} also commonly occurs (see 4.2.6.1.2).

- (197) rāwà lǝ-wā > rāwà lowā
 what INQ-do
 'What does he do?'
- (198) rāwà lǝ-wā-è > rāwà lowāè
 what INQ-do-INTRR
 'What does he do?'

When {-má} co-occurs with the mood markers, the optative marker and the imperfective marker cannot co-occur.

4.2.6.1.2. {-è} Informational interrogative

This morpheme marks the informational interrogative.

- (199) nà rākaq lǝ-ē-dī-è > nà rākaq lēdīè
 you to.where INQ-2-go-INTRR
 'Where do you go?'

The morpheme always co-occurs with the inquiry prefix {lǝ-}. The predicate verb is always preceded by an interrogative pronoun.

As mentioned in 4.1.1.2, {lǝ-} alone, without any sentence final marker, can also indicate an interrogative sentence.

- (200) nà rākaq lǝ-ē-dī > nà rākaq lēdī
 you to.where INQ-2-go
 'Where do you go?'

The occurrence of {-è}, however, "softens the mood" of the speaker; it marks that the interrogative is friendly.

4.2.6.1.3. {-á} Confirmatory interrogative

{-á} is a confirmatory interrogative. This morpheme signals that the speaker wants confirmation of the information he has received.

- (201) àng n̄ zòng kaq dī-b̄-ì-á > àng n̄ zòng kaq dībíá
 he EMPH school to go-T.RMT-PRF-INTRR
 'Did you say that) He went to school?'

{-á} has an allomorph /-lá/ conditioned morphologically. /-lá/ occurs after the imperfective morpheme /-ē/.

- (202) àng dī-ē-lá > àng dīēlá
 he go-IMPRF-INTRR
 'He goes?'

Often the imperfective morpheme /-ē/ is omitted. Thus, /-lá/ is often found without the co-occurrence of /-ē/, yet the verb is in the imperfective aspect.

- (203) àng m̄ lù-ò-lá > àng m̄ lùòlá
 he AG take-3PT-INTRR
 'He takes (it)?'

/-lá/ cannot co-occur with the negative marker. Only /-á/ can co-occur with the negative marker or the perfective markers. {m̄-} never co-occurs with the imperfective morpheme {-ē}.

- (204) nà m̄-ē-dī-á > nà mēdíá
 you NEG-2-go-INTRR
 'You aren't going?'

After the morpheme {-á}, the SFM class 3 cannot occur. In the Rawang orthography, /-á/ is written as a suffix but /-lá/ is written as a particle, a separate word.

4.2.6.2. Imperative markers

Morse (1965) wrote that the imperative mood is expressed by the obligatory occurrence of the second person marker prefix {ē-} without the

sentence final marker suffixes. In fact the situation is more complicated. Imperative expressions can be categorized either as direct (addressed to the second person), signaled by {ē-}, or indirect (addressed to the third person), signaled by {laq-} ‘permissive’ (see 4.1.1.1). These can be divided further into subtypes: requestive and hortatory. These subtypes of the imperative are expressed in the sentence-final marker suffix class 2 (SFM2) slot. The requestive is expressed by {-nà} and the hortatory by {-ná}.

- (205) ē-dī-bǝ-nà > ēdībǝnà
 2-go-T.RMT-RQS
 ‘You go, please./Why don’t you do it?’
- (206) laq-dī-bǝ-nà > lāqdībǝnà
 PRMS-go-T.RMT-RQS
 ‘Make (him) go.’
- (207) ē-wà-ò-ná > ēwàòná
 2-do-3PT-HRT
 ‘(I suggest) you should do it.’

No morphophonemic changes are observed when {-nà} and {-ná} occur. The co-occurrence restrictions are the same for both. These morphemes cannot co-occur with the perfective and imperfective markers (4.2.5.1 and 4.2.5.2), {-sà} ‘declamatory’ (4.2.7), {ta-} ‘emphatic’ (4.1.1.3) or {la-} ‘inquiry’ (4.1.1.2).

4.2.6.3. *Adversative markers*

In the sentence final marker suffix class 2 (SFM2) slot, there are three adversative morphemes. They are {-ā} ‘exclamatory adversative’, {-anǝ} ‘assertive adversative’ and {-enǝ} ‘emphatic adversative’. These three morphemes all mark that there is something different than what was expected.

4.2.6.3.1. *{-ā} Adversative 1*

The use of {-ā} as a sentence final marker is rare and strange. {-ā} is used as a sentence final marker mostly in exclamations. {-ā} marks that the result or consequence of the verb to which {-ā} is attached is not what the speaker had expected. For example:

- (208) àng dì-bǝ-ì-ā > àng dìbǝā
 he go-T.RMT-PRF-ADVR
 ‘He went. (but...)’

- (209) àng n̄ m̄-dī-ā > àng n̄ madīā
 he EMPH NEG-go-ADVR
 'He did not go. (but...)'
- (210) àng ḡ ta-dī-dī-ā > àng ḡ tadīdīā
 he also EMPH-go-OPT-ADVR
 'He would have gone, too (but ...).'

{-ā} cannot co-occur with {-ē} 'imperfective'.

4.2.6.3.2. {-ēn̄} Emphatic adversative

Another adversative marker in the SFM2 slot is {-ēn̄} 'emphatic adversative'. It must always co-occur with {ta-} or {la-} (see 4.1.1.2 and 4.1.1.3). The co-occurrence of {-ēn̄} and {ta-} marks that the speaker's meaning is contrary to the expectation or accusation of others.

- (211) zòng kaq ta-dī-ēn̄ (háng kaq n̄ m̄-dī-é)
 school to EMPH-go-ADVR field to EMPH NEG-go-IMPRF
 '(He) goes to the school (not to the field).'

The co-occurrence with {la-} marks that the speaker wants to question the action of the verb since it is contrary to the knowledge of the listener or others.

- (212) àng kū kaq la-dī-ēn̄ > àng kū kaq ladīēn̄
 he that to INQ-go-ADVR
 '(Contrary to what you expected) he goes there.'
- (213) nà m̄ la-ē-tóm-b̄-à-ēn̄ > nà m̄ lētómb̄àēn̄
 you AG INQ-2-pour-T.RMT-PRF-ADVR
 '(Contrary to what you said) you have poured it.'

{-ēn̄} cannot co-occur with {-ē} 'imperfective' (4.2.5.1), {laq-} 'permissive' (4.1.1.1) or {-sà} 'declamatory' (4.2.7).

4.2.6.3.3. {-ān̄} Assertive adversative

{-ān̄} 'assertive adversative' is another marker which occurs in the SFM2 slot. This morpheme marks that the speaker is reporting something that was not expected to happen or something that is not supposed to happen.

- (214) àng dī-ānǝ > àng diānǝ
 he go-ADVR
 'But he goes. (contrary to what I guessed)'
- (215) àng nǝ ma-dī-ānǝ > àng nǝ modiānǝ
 he EMPH NEG-go-ADVR
 'He does not go. (contrary to the fact that he should go)'

{-ānǝ} cannot co-occur with {-ē} 'imperfective', the mood markers (4.1), or {-sà} 'declaratory' (4.2.7).

{-ēnǝ} and {-ānǝ} can be confused with the conjunctions {ānǝ} 'factual', and {ēnǝ} 'conditional'. The conjunctions have different co-occurrence restrictions.

4.2.6.4. {-é} *Emphatic assertion*

Another SFM2 slot filler is {-é} which marks emphatic assertion.

- (216) àng ma-dī-é > àng modīé
 he NEG-go-SFM2
 'He does not go.'

It can occur with any morpheme except {ta-} 'stress', {la-} 'inquiry' or sentence-final class 3 markers.

{-é} has an allomorph {-lé}.

{-é} /-é/ ~ /-lé/

/-lé/ occurs when the verb is in the imperfective, i.e., when the verb has the imperfective marker {-ē}. /-é/ occurs elsewhere. Since {-ē} 'imperfective' is mutually exclusive with the negative marker, only /-é/ occurs with the negative marker morpheme.

- (217) ngà gǝ dī-ng-nī-ng-ē-lé > ngà gǝ dǝngnǝngēlé
 I also go-1S-OPT-1S-IMPRF-SFM2
 'I will go along, too.'
- (218) àng dī-ē-lé > àng dīlé
 he go-IMPRF-SFM2
 'He does go.'

It is common that the imperfective marker {-ē} is omitted when /-lé/ occurs. In the following examples, the parentheses show the omitted morpheme.

- (219) ē-lù-ò(-ē)-lé > ēlùòlé
 2-take-3PT-IMPRF-SFM2
 'You do take (it).'
- (220) tsā-ng-ò(-ē)-lé > tsāngòlé
 wait-1S-3PT-IMPRF-SFM2
 'I do wait for (him).'

4.2.7. Sentence final marker suffix class 3 (SFM3)

The last constituent of a verb (word) is the sentence final marker suffix class 3 (SFM3) slot. This slot marks kinds of confirmation. There are two slot fillers: {-ó} 'confirmatory assertion' and {-sà} 'declamatory'.

{-ó} is the confirmatory assertion marker. It shows that the speaker wants to assert the truth of what he is saying.

- (221) àng dī-bǝ-ì-ó > àng dìbíó
 he go-T.RMT-PRF-SFM3
 'He *did* go.'

Co-occurrence of {ó} with the negative morpheme marks the speaker's frustration.

- (222) àng laq-ma-dī-ó > àng laqmadīó
 he PRM-NEG-go-SFM3
 'Oh, don't let him (actually) go!'

Mostly, {-ó} is used when answering the confirmatory interrogative {-á} (above 4.2.6.1.3). {-ó} has an allomorph {-ló} which occurs after the imperfective marker {-ē}. It is common that {-ē} is omitted when followed by /-ló/.

- (223) àng dī(-ē)-ló > àng dīló
 he go-IMPRF-SFM3
 'He does go.'

{-ó} cannot occur with {-é} 'emphatic assertion' (4.2.6.4), {-á} 'confirmatory interrogative' (4.2.6.1.3), {ma-} 'negative' (4.1.2) or mood markers (4.1.1).

{-sà} marks a declamatory attitude. It shows that the speaker is serious about what he mentions. {-sà} has an allomorph {-sànø} which occurs in free variation. {-sà} usually co-occurs with {-ā} adversative (4.2.6.3).

{-sà} /-sà/ ~ /-sànø/

- (224) àng gǝ dī-ā-sà > àng gǝ dīāsà
 he also go-ADVR-DCLM
 '(Of course!) He does go, too.'

- (225) àng gǝ tɑ-dī-yàng-ā-sànø > àng gǝ tɑdīyàngāsànø
 he also EMPH-go-FAR.RMT-ADVS-DCLM
 '(Of course!) He did go, too.'

{-sà} cannot co-occur with {-é} 'emphatic assertion', {-á} 'confirmatory interrogative' (4.2.6.1.3), {-ēnø} 'emphatic adversative', {-ānø} 'assertive adversative' (4.2.6.3), {-è} 'informational interrogative' (4.2.6.1.2), or {la-} 'inquiry' (4.1.1.2).

4.2.8. Final verb inflections and Rawang orthography

So far, the inflectional morphemes with their structural constraints and their morphophonemic interactions with final verbs have been described.

- (226) āl-ē > ālē
 stay-IMPRF
 '(He) stays.'

- (227) mɑ-ē-dɑ-tá-ng-ā-ng-bǝ-ng-à-nī-ng-má-ó
 NEG-2-CA-hear-1S-BNF-1S-T.RMT-1S-1PT-OPT-1S-INTRR-CNF
 'mèdētángāngbǝngànǝngmáo = Won't you tell it for me?'

In Rawang orthography, the whole structure of the final or single verb is not written as one word. Instead, it is divided into three parts, as if they were three words. The first part includes all the prefixes, the verb stem, and the benefactor marker slot. The second part begins from the orientation markers slot and ends at the sentence final marker suffixes class 1. Finally, SFM class 2 and class 3 are included in the third part. However, single vowel morphemes of SFM classes 2 and 3 are written as suffixes to the preceding (i.e. middle) part. For illustration, the following are written in the orthography but are analyzed in this paper as single words.

- (228) *dòng bốnggầ sàñ* '(Of course!) I did go.'
 (229) *dīē lé* 'He does go.'
 (230) *dībīé* 'He did go.'
 (231) *mèdētánggăng bốnggầñg máó* 'Won't you tell it for me?'

4.2.9. Non-final verb marker suffixes

A Rawang verb phrase can comprise several verbs. The non-final verbs may or may not have inflections. When they are inflected, their inflections and their structural order are similar to those of final verbs. The difference is that the final verb structure can include sentence final marker suffixes and mood markers, while the non-final verb structures cannot. Instead, they have *non-final verb marker suffixes* which occur as final constituents.

The non-final verb marker (NFM) suffixes can be divided into three categories according to their structural co-occurrences and their semantic content.

The first category of NFM suffixes includes {-nàng} 'purpose', and {-lám} 'intention'. All these morphemes mark an action of the verb which will happen. With these morphemes only negative (4.1.2), causative (4.1.4), reciprocal (4.1.5) and benefactive markers (4.2.1) can co-occur. However, the co-occurrence of the negative marker sounds awkward and is very rare. The word structure can be seen as follows:

± Neg	± Ca	± Rcp	+ Stem	± Bnf	± NFM
			Verb		-nàng -lám

Diagram 16. Non-final verb structure 1.

A non-final verb of this class may consist of a minimum of two tagmemes or a maximum of five tagmemes. For example:

- (232) *ám-nàng loqratnì* > *ámñàng loqratnì*
 eat-PURP came.back
 '(He) comes back to eat.'
- (233) *ంగాq-lám wāē* > *ంగాqlám wāē*
 fall-INTN do
 '(It) is going to fall.'

The second category of NFM suffixes includes the conjectural morpheme {-nā}. The structure in which {-nā} occurs is similar to the structure of the

final verb except for the omission of the mood and the sentence final marker slots. In this structure, {-nā} occurs as the last constituent. The structure can be charted as follows:

± Neg	± Ag	± Ca	± Rcp	+ V	± Bnf	± Ori	± Num	± Pt	± NFM
				Verb					-nā

Diagram 17. Non-final verb structure 2.

A non-final verb of this class may have a minimum of two elements or a maximum of eight elements. A verb with the {-nā} morpheme is always followed by the verb {í} 'to be' which occurs as an auxiliary final verb. For example:

- (234) dí-nā íe > dínā íe
 go-CJR be
 '(He) may go.'

- (235) ma-e-da-tá-a-bø-ò-na íe > mèdetáábøònā íe
 NEG-2-CA-hear-BNF-T.RMT-3PT-CJR be
 'You might not have told (it) for (him).'

The third category of NFM suffixes includes the discontinuous morpheme {a-...-saq} which marks the passive perfective. With this morpheme, only negative, causative, and benefactive markers can co-occur. The first part /a-/ occurs between the causative and the verb stem slots. The second part /-saq/ occurs as the last constituent. The word structure can be seen as follows:

± Neg	± Ca	± /a-/	+ Stem	± Bnf	± /-saq/
			Verb		

Diagram 18. Non-final verb structure 3.

A non-final verb of this class may consist of a minimum of two elements or a maximum of five elements. For example:

- (236) ām nø a-dúr-saq íē > ām nø adúrsaq íē
 rice EMPH PPF1-pound-PPF2 be
 'The rice has (already) been pounded.'

- (237) *mə-də-ə-gə-ā-saq* *īē* > *mədāgəāsəq īē*
 NEG-CA-PPF1-complete-SBNF-PPF2 be
 '(It) has not yet been prepared for (him).'

When {*ə-...-saq*} co-occurs with the negative marker {*mə-*}, the second part */-saq/* can be omitted. For example, compare examples (237) and (238).

- (238) *mə-də-ə-gə-ā-saq* *īē* > *mədāgəā īē*
 NEG-CA-PPF1-complete-SBNF-PPF2 be
 'not yet prepared for (him)'

This optional occurrence somewhat suggests that */-saq/* could be a separate morpheme. Moreover, Morse (1965:353) interpreted */a-/* (*/ə-/* in his orthography) as a voice prefix, and */-saq/* as a passive suffix. The problem is more complicated when considering the prefix */a-/*. There is a reciprocal prefix */a-/* which occurs in the same structural environment as the first part */a-/* of the discontinuous morpheme. Both of these prefixes and the first vowel */a/* of some verb stems complicate morphophonemic processes and the interpretation of morphemes. This vowel */a/* might have an interesting historical background, but historical considerations are beyond the scope of this study; thus, the problem concerning the prefix vowel */a-/* remains unsolved here. However, */-saq/* is always bound to */a-/* and their meanings cannot be explained separately. This is the only reason to interpret them as a discontinuous morpheme for the time being.

5. RESIDUE

Tones in Rawang verbs change when the morphemes are put together or assigned to certain structural positions or to certain functions. In this study, however, tones are not given full attention, because they seem to involve etymological or diachronic considerations. Morse suggests that tonal contrasts were developed to compensate for the loss of prefixes (Morse 1962:10). Yet, the morphology of Rawang can be described fairly well without giving full attention to the tones. Diachronic research is beyond the scope of this study. Thus, serious tonal analysis has not been attempted. In particular, the tones on the verb stems have been mostly ignored. However, tonal changes on the affixes have been mentioned occasionally where necessary.

III. NOUNS

1. INTRODUCTION

Nouns include the names of persons, places, things and concepts. Typical categories associated with nouns across languages are case, number, class or gender and definiteness (Schachter 1985). Case in Rawang is marked at phrase level by postpositions. Generally, Rawang nouns are not marked morphologically for gender or number. Number markers are analyzed as clitics, which distinguish singular, dual and plural (see Chapter One section 6.4).

In Rawang noun morphology, compounding and derivation are the prominent word formation processes.

2. COMPOUNDING

Compound nouns in Rawang are formed by various combinations of noun, verb and classifier roots. Verb roots may be either process verbs or adjectival verbs. These verb roots in compound nouns are uninflected forms. The various combinations of roots in noun compounds are:

noun + process verb,
 noun + adjectival verb,
 noun + classifier,
 process verb + adjectival verb,
 process verb + noun,
 noun + noun,
 process verb + classifier,
 noun + classifier + noun,
 noun + noun + classifier, and
 noun + verb + noun.

2.1. Noun + Verb (*process*)

This combination results in names of things such as *wall*, *broom*, *confluence*, etc. In these forms, a falling tone on the first core element changes into a non-distinctive, i. e. neutral, tone. For example:

(239)	kø̌m	+	kū̌l	>	kø̌mkū̌l
	house		to fence		
	'wall'				

- (240) tì + tuq > tituq
 water arrive/meet
 'confluence'

In some instances, if the first element is disyllabic, its second syllable is deleted. For example:

- (241) tāngrà + sòm > tangsòm
 floor sweep
 'broom'

2.2. Noun + Verb (adjectival)

This kind of compound word is an adjectivally modified noun. The adjectival verb follows the noun it modifies. The two elements of the compound word are articulated rapidly. Verbs do not occur after a noun as a free form modifying the noun. Thus, the **noun + adjectival verb** combination is interpreted as a compound word. For example:

- (242) yoq + naq > yōnaq ~ yoqnaq
 cloth black
 'a black cloth'

The above example shows deletion of the syllable final glottal stop of the first element. This deletion process is optional, occurring mostly in rapid speech.

2.3. Noun + Classifier

Some **noun + classifier** combinations are interpreted as compound nouns. Compound nouns of this type have a semantic feature of indefiniteness. When a **noun + classifier** combination refers to a definite thing, it is interpreted as a noun phrase. A phonological criterion is relevant to the differentiation of whether the combination is a compound or a noun phrase: the compound is articulated more rapidly than is the noun phrase. Of the following two examples, the first is a compound and the second is a phrase.

- (243) shǒng + gòng > shǒnggòng
 wood CLSS
 'a log or logs' (in general)

- (244) shǒng + gòng > shǒng gòng
 wood CLSS
 'the log' (definite)

2.4. *Verb (process) + Verb (adjectival)*

Some compound nouns are formed by combining process verbs and adjectival verbs. For example:

- (245) rōng + adāng > róngdāng
sit to.be.stuck
'chair'

In this example, the mid tone of the first element changes into high tone in the compound word, and the initial vowel /a/ of the second element is deleted.

2.5. *Verb (process) + Noun*

Compounds of this combination are rare, and the only verbs observed so far in this combination are /øp/ (to sleep) and /rong/ (to sit). For example:

- (246) øp + gù > øpgù
to.sleep bed
'bed'
- (247) rōng + tàng > róngtàng
to.sit floor
'floor/throne'

2.6. *Noun + Noun*

Combinations of two or more nouns also form compound nouns. This combination can have several semantic interpretations. For example:

- a) Both elements have similar meaning.

This is semantic reduplication. For example:

- (248) tì + ramè > tìramè
water river
'river'

- b) purpose - thing

The first (modifying) element indicates what the second element is made for. For example:

- (249) waq + kōng > waqkōng
pig trough
'a swine trough'

c) material - thing

The first element identifies what material the second element is made of. For example:

- (250) tawā + dóng > tawādóng
bamboo tube
'bamboo tube'

2.7. *Verb (process) + Classifier*

This compound structure is derived from a modified noun phrase in which the modifier is a process verb with non-final verb suffix /-lám/ (Chapter One section 4.2.9) by a process which deletes the suffix /-lám/. In this construction, the classifiers observed so far are /rà/ (locative classifier) and /wà/ (a classifier for things in general). The combination with /rà/ refers to the place where the action of the process verb is done. For example:

- (251) øp + rà > øprà
sleep CLSS
'place to sleep = bed'

The combination with /wà/ denotes an object or an instrument. For example:

- (252) óm + wà > ãmwà
eat + CLSS
'things to eat = food'

2.8. *Noun + Verb + Noun*

This compound type also results from a modified noun phrase in which the modifier is a verb phrase with non-final verb suffix /-lám/ by a process which deletes the suffix /-lám/. Thus, the first two elements of this compound modify the third element. For example:

- (253) ām + dūr + jak > āmdúrkak
rice pound machine
'Rice pounding machine = rice mill/ rice huller machine'

2.9. *(Noun + Classifier) + Noun*

This combination is simply a compound noun embedded in the structure of a **Noun + Noun** combination. The embedded compound noun is of **Noun + Classifier** structure (see section 2.3). For example:

- (254) (shǒng + kǒm) + kǒm > shǒngkǒmkǒm
 wood CLSS house
 'Wood-plank house = wooden house'

2.10. Noun + (Noun + Classifier)

This is another case of a compound embedded in the **Noun + Noun** compound structure. The **Noun + Classifier** structure is embedded in the second element. Since the first part or element of the **Noun + Noun** compound modifies the second element, the embedded part is modified by the first element. For example:

- (255) tawā + (dǒng + tǎn) > tawādǒngtǎn
 bamboo tube CLSS
 'Bamboo tube'

3. DERIVATION

Derivation is another prominent process in noun formations. This derivation is accomplished by affixation. Derivational affixes are divided into prefixes and suffixes. These affixes change verbs and classifiers into nouns, or nouns into derived noun forms. (Some nouns are derived by compounding, as above.)

3.1. Prefixes

Only four derivational prefixes have been observed: /a-/ , /ang-/ , /da-/ and /ta-/ . Both /a-/ and /ang-/ may correspond to a noun prefix of vague meaning that appears all over the Tibeto-Burman family, exemplified by Burmese /ʔə/, Lahu /ə-/ , Bisu /aŋ-/ ~ /ak-/ , Jinghpaw /ʔə/, Written Tibetan /ḥ-/ , etc. (See Matisoff 1973.)

3.1.1. /a-/ Nominalizer 1

This prefix is attached to some process verb roots to derive a form which refers to the subject or agent of the verb root. For example:

- (256) a- ngǒ > angǒ
 NOM-cry/weep
 'a person who weeps easily'

3.1.2. /āng-/ Nominalizer 2

This prefix changes some classifiers and verbs into nouns, and some nouns into derived noun forms.

a) /āng-/ + Classifier

Derived words of this type denote the abstract property to which the classifier refers. For example:

- (257) tòng = Classifier for long and round objects
 āng-tòng > angtòng
 NOM-CLSS
 'the state of being round and long (cylindrical shape)'

b) /āng-/ + Verb (process)

Derived words of this type denote an instrument used in performing the activity to which the verb refers. For example:

- (258) āng-wām > āngwām
 NOM-to.cover
 'the cover'

c) /āng-/ + Verb (adjectival)

Derived words of this type denote the abstract state or property to which the adjectival verb refers. For example:

- (259) āng-mòng > āngmòng
 NOM-to.be.white
 'the white colour'

d) /ang-/ + Noun

Some nouns are derived from nouns by the prefix /ang-/.^{22,23} Again, the derived form denotes an abstract status or state. For example:

- (260) āng-tì > āngtì
 NOM-water
 'liquid'

3.1.3. /da-/ Nominalizer 3

This prefix changes some verbs into nouns. For example:

- (261) da-løp > døløp
 NOM-bury
 'grave'

²² Some nouns derived by this process have become frozen forms such that their root forms cannot be found as free forms and cannot be glossed. For example: *angkè* = solid thing, but *kè* = ?

²³ This root certainly looks cognate to Jingpho *ké*? 'congeal, coagulate'. [Ed.]

An allomorph /ta-/ is observed occurring in free variation. For example:

- (262) *daløp* = grave
 taløp = grave

3.1.4. /ta-/ Nominalizer 4

This prefix changes some classifiers into nouns. For example:

- (263) *yø* = a classifier for things in a row
 ta-yø > *tayø*
 NOM-CLSS
 ‘row’

3.2. Suffix

There is only one derivational suffix that has been observed, /-shú/. This morpheme derives nouns from some action verb roots.²⁴ The resultant noun refers to the agent of the verb. For example:

- (264) *ām-shú* > *ámshú*
 eat-NOM
 ‘person who eats’

/-shú/ can be attached to non-final verbs. The resultant noun still refers to the agent of the verb root. For example:

- (265) *tap-lám-shú* > *taplámshú*
 catch-INTN-NOM
 ‘person who catches’

IV. CONCLUSION

1. SUMMARY

1.1. Verb morphology

Compounding in verb formations is merely reduplication of semantically similar verbs. Verbs may be derived from nouns by deleting any syllable that precedes the last syllable. Since compounding and derivation are not extensive, there are only a few phonological changes that occur. One tone change that may occur in either compounding or derivation is for the falling

²⁴ This morpheme seems to reflect PTB **su* ‘remote third person; who?’ [Ed.]

tone to change into mid-tone. In compounding, a palatalization process occurs in which /s/ changes into /sh/.

Inflection is the most significant and productive process in Rawang verb morphology. A number of prefixes and suffixes and one discontinuous morpheme are involved in the inflectional verb morphology.

Rawang verbs can be divided into final and non-final verbs. Though they take some of the same inflections, they differ in that final verbs have sentence-final marker suffixes while non-final verbs take non-final verb marker suffixes. Diagram 19 summarizes the final transitive verb structure, which the intransitive verb resembles except for the lack of patient markers. All tagmemes are optional except for the verb stem. A final verb may be composed of a minimum of two elements or a maximum of eleven elements.

Many of the verb affixes have allomorphs. The conditioning factors for the morpheme variations are phonological, morphological and/or grammatical.

Md	Neg	Ag	Ca	Rcp	Stem	Bnf	Ori	Num	Pt	SFM1	SFM2	SFM3
laq-	ma-	ē-	da-	a-		-shī	-bō	-ng	-Ø	-e	-má	ó
la-			ta-			-ā	-zō	-Ø	-à	-à	-è	sà
ta-						-ām	-q̄p	-shì	-ò	-dī	-á	
						-kē	-yàng	-ì			-nà	
							-zaq	-nòng			-ná	
							-nōng				-ā	
							-rat				-ānō	
							-rā				-ēnō	
											-é	

Diagram 19. Final verb structure with slot filler affixes.

A couple of phonological processes are involved in this allomorphy. The first is assimilation. The vowels of the prefixes and the first syllables of **CaCV(C)** syllables are assimilated to the vowel /e/ of the non-first person agent marker {ē-}. This assimilation could be called a morphologically conditioned process because those vowels change into /e/ even if the allomorph /na-/ of the morpheme {ē-} occurs in the structure. Another type of phonological conditioning is involved with the syllable structure. For example, /na-/, the allomorph of {ē-}, occurs before **aCV(C)** syllables and before the reciprocal prefix /a-/.

Morphological conditioning is also observed. For example, a lateral /l/ is inserted before the vowels /-á/, /-ó/, and /-é/, when they occur after the /-ē/ imperfective marker; thus, the allomorphs /-lá/, /-ló/, and /-lé/ occur after /-ē/.

Grammatical conditioning on morpheme variation also occurs. The perfective marker {-à} has allomorphs /-à/ and /-ì/. They are conditioned by mutually exclusive patterns of subject-object agreement marking on the verb.

A multiple occurrence of the morpheme {-ng} which is particular to the Rawang language has been described. The first person singular marker /-ng/ is suffixed to the verb stem, benefactive, orientation and SFM1 suffixes at the same time, i.e., several instances of /-ng/ are suffixed to those items simultaneously. But it occurs only on open syllables and syllables with /k/ or /q/ finals.

A couple of morphophonemic processes have been noted.

- 1) Backing: The front high unrounded vowel /i/ of some open syllable stems changes into the central high unrounded vowel /ø/ when followed by /ng/.
- 2) Merging: The central high unrounded vowel /ø/ is deleted when the front high unrounded vowel /i/ follows, but the tone on the vowel /ø/ moves onto the following vowel /i/ and replaces the existing one. Thus, for instance, this process merges /bø/ and /ì/ into /bí/.
- 3) Lengthening: A grammatically conditioned vowel lengthening occurs. The vowels of closed syllable verb stems are lengthened when followed by /i/ and /o/ and when the agent is not in the first person singular.
- 4) Neutralization: Another process is neutralization. /-shì/, /-ì/, and /-nøng/ (dual-plural distinction) are neutralized before the morphemes /-à/ 'first person patient' and /-à/ 'completive', and only the allomorph /-s/ occurs. Since the first person patient marker and perfective marker are homophonous, the conditioning can be described as phonological.²⁵

Non-final verbs differ from final verbs in that non-final verbs do not have mood markers or sentence final markers. Instead they have non-final verb marker suffixes. Other affixes are the same for non-final and final verbs. In non-final verb formations, no significant morphophonemic processes occur, which is different from the case of final verbs. It is only in non-final verbs that the discontinuous morpheme {a...saq} is observed (above 4.2.8).

1.2. Noun morphology

In noun morphology, compounding and derivation are prominent. Compounding involves various combinations of two or three lexical items such as nouns, classifiers, process verbs and adjectival verbs. Three-element compounds are primarily two-element compounds in which one element has another two-element compound embedded in it. For most of the compound nouns, preceding elements modify the following elements. Of **noun +**

²⁵ In this instance, the distinction between the first person patient marker and the perfective marker is not clear either, since these markers are homophonous.

classifier combinations, those which are indefinite are analyzed as words and those which refer to specific things are analyzed as phrases.

In noun derivation, four prefixes and one suffix occur. /a-/ changes some process verbs into nouns. /ōng-/ changes classifiers and verbs into nouns and nouns into derived nouns. /da-/ changes verbs and /ta-/ changes some classifiers into nouns. /-shú/ is suffixed to some transitive verbs to change them into nouns which refer to the agent of the verb. Inflection is not a feature of noun morphology.

2. SOME IMPLICATIONS FOR TRANSLATION

In translation, a word is viewed as a bundle of meaning components (Larson 1984). The translation process involves analyzing these meaning components in the source language and re-expressing them in a natural form in the receptor language (Barnwell 1980). Thus, understanding the meaning (information) packaging in both the source language and the receptor language is important.

Since Rawang verbs comprise both process verbs and adjectival verbs, the meaning concepts that Rawang verbs convey are both events and attributes. Along with these events and attributes, other concepts are also packaged in a verb at word level.

Generally, a Rawang verb at word level includes such elements of meaning as tense, spatial orientation, aspect, mood or modes, voice and agreement. These concepts are marked by individual affixes, various co-occurrences of affixes, and omission of the affixes (in other words, by the appearance of zero morphemes).

Tenses can be distinguished as simple present, simple past, simple future, near-remote, and far-remote. However, these ideas are not always conveyed by clear-cut morphemes. For example, future sense is expressed by several co-occurrences of morphemes in different slots. Spatial orientation distinguishes meanings such as toward-remote, from-remote, at-remote, speaker at higher location, and speaker at lower location. Generally, aspects expressed at word level can be labelled as perfective and imperfective. Co-occurrences of aspect markers with tense and spatial orientation markers result in several types of perfective and imperfective meanings.²⁶

Besides tense, spatial orientation and aspect, Rawang verbs also convey moods of the speaker. Moods expressed at word level are permissive, concessive, emphatic, optative, interrogative, and imperative.

²⁶ In fact, all tense, spatial orientation and aspect morphemes are interrelated with each other.

Interrogatives include informational, yes/no, and confirmatory questions. Imperative is refined further by SFM2 markers as requestive or hortatory.

The active-passive distinction at word level is made only by the discontinuous morpheme which denotes passive-perfective. This morpheme also implies that the action is done in preparation for a certain purpose. Other voices are reflexive, reciprocal, causative, middle benefactive, and substitutive benefactive.

Rawang verbs also convey agreement with both subject and object of the verb. This agreement distinguishes person (1st, 2nd, 3rd) and number (singular, dual, plural). First person singular is specially marked.

The main concept conveyed in nouns is THING. In some compound nouns, the preceding elements modify the following elements. In noun-classifier compounds a specific-generic distinction is made

In order to translate from a language into the natural form of Rawang, such semantic features should be extracted from the source language.

For example, to translate tenses into Rawang, the translator should examine the tense in the source language: how far the referred time is from the present moment and whether it is present, past or future. Trying to find such meaning components will help to overcome the problem of semantic skewing and help to produce the natural form in the receptor language.

However, it should not be forgotten that the meanings of a word in a source language cannot always be equivalent to the meanings of the corresponding word in the receptor language. The necessary information should sometimes be extracted from larger contexts. For example, a Rawang verb sometimes does not express aspects explicitly. e.g. the word /dìbì/ (/dì/ = go, /b̥/ = toward remote, /-ì/ = perfective) can mean either 'went', 'has already been going', or 'has gone' in English. The precise aspect can be inferred from the context.

3. SOME SUGGESTIONS FOR FUTURE RESEARCH

This paper presents the morphology of verbs and nouns, but it does not cover the structure of adverbials. It is mentioned in Chapter One that reduplication is prominent in adverbialization. Adverbials exhibit several different patterns of reduplication and several other morphological processes. A study of these adverbializations may be of interest for future study.

Many other topics in Rawang grammar, including the case system, syntactic structure, and discourse analysis of traditional chants would be valuable objects of study for Tibeto-Burman linguists. Comparative studies of Rawang dialects would also be informative since there are over seventy dialects spoken by the Rawangs. Along with these mother tongue dialects, the

Rawangs also speak other languages such as Jingphaw, Burmese, and Lisu. This causes much language change. Studying these changes would also be beneficial for future research.

ABBREVIATIONS

1PL	First person plural suffix	-ì
1S	First person singular suffix	-ng
2, 3	Non-first person agent	ē-
2PL	Second person plural	-nøng
3	He/she	òng
3PT	Third person patient	-ò
ADVR	Adversative 1	-ā
ADVR	Emphatic adversative	-ēnø
AG	Agentive	mø
AT.RMT	At-remote	-ra
BNF	Benefactive	-a
CA	Causative	da--d--sa--s-
CAP	Capability	ta-
CJR	Conjecture	dáng-, -nā
CLSS	Classifier (long, round objects)	tòng
CLSS	Classifier (places)	rà
CLSS	Classifier (things used for a purpose)	wà
CLSS	Classifier (tubular objects)	tān
CLSS	Classifier (people)	yoq
CLSS	Classifier (males)	pè
CLSS	Classifier (objects)	mé
CLSS	Classifier (books)	buk
CLSS	Classifier (round objects)	dø
CLSS	Classifier (animals)	gúng
CLSS	Classifier (long objects)	gòng
CLSS	Classifier (thin, flat, wide objects)	kòm
CNF	Confirmatory assertion	-ó
DCLM	Declamatory	-sà--sànø
DL	Dual	-shì
EMPH	Emphasis	nø
EMPH	Stress	ta--ta--tà--t--tè-
FAR.RMT	Far-remote	-yàng
FROM.RMT	From-remote	-rat
HRT	Hortatory	ná
IMPRF	Imperfective	-ē
INCRD	Incredulous = emphatic adversative	ēnø
INQ	Inquiry (interrogative)	la--la--là--l--lè-
INTN	Intention	-lám

INTRR	Interrogative (like 'wh' in English)	rā
INTRR	Interrogative (informational)	-è
INTRR	Yes/no question	-má
INTRR	Confirmatory interrogative	-á ~ -lá
NEAR.RMT	Near-remote	-ap
NEG	Negative	mā--ma--mà--m- ~mè-
NFM	Non-final verb marker	-nàng, -lám, -nā
NOM	Nominalizer (agentive)	-shú
NOM	Nominalizer 1	α-
NOM	Nominalizer 2	ang-
NOM	Nominalizer 3	da-
NOM	Nominalizer 4	ta-
OPT	Optative	-dī ~ -nī
PL	Plural	-s, -rì
PPF1...PPF2	Passive perfective	α...-saq
PRES	Present	-Ø
PRF	Perfective	-à ~ -ì
PRF	Perfective	-ì
PRMS	Permissive	laq-
PT	First person patient	-à
PURP	Purpose	-nàng
RCP	Reciprocal	α-
RCP.BNF	Reciprocal benefactive	-kē
RECR	Recurrent action	mabat
RFL	Reflexive	-shī
RFL.BNF	Reflexive benefactive	-am
RLT	Relativizer	ā
RMT	Remote	kū
RQS	Requestive	-nà
SBNF	Substitutional benefactive	-ā
SFM1	Sentence final marker 1	-e
SFM2	Emphatic assertion (sentence final marker 2)	-enø, -é~lé
SFM3	Sentence final marker 3	-sà, -ó, -ló
SP.HIGH	Speaker at higher place	-nōng
SP.LOW	Speaker at lower place	-zaq
T.RMT	Simple past (toward-remote)	-bō
U.RMT	Unknown remote (discovery)	-zō

APPENDIX 1

LEXICON

VERB INFLECTIONS

Prefixes

la- ~ lā- ~ là- ~	Inquiry	da- ~ d- ~	Causative
l- ~ lè-	(interrogative)	sa- ~ s-	
ta- ~ tā- ~ tà- ~	Stress	ta-	Capability
t- ~ tè-		a-	Reciprocal
ma-~mā-~mà-~	Negative	ē-	Non-first person agent
m-~mè-			

Suffixes

-am	Reflexive benefactive	-kē	Reciprocal benefactive
-ap	Near-remote	-má	Yes/no question
-ā	Substitutional benefactive	-nǝng	Speaker at higher place
-ā	Adversative 1	-nǝng	Second person plural
-à	First person patient	-ng	First person singular
-à ~ -ì	Perfective	-ó	Confirmatory assertion
-á ~ -lá	Confirmatory interrogative	-ò	Third person patient
-bǝ	Simple past (toward-remote)	-rā	At-remote
-dī ~ -nī	Optative	-rat	From-remote
-ē	Imperfective	-shī	Reflexive
-è	Interrogative (informational)	-shì	Dual
-é ~ lé	Emphatic assertion	-sà ~ -sànǝ	Declamatory
-ēnǝ	Emphatic adversative	-yàng	Far-remote
-ì	First person plural	-zaq	Speaker at lower place
		-zǝ	Unknown-remote (discovery)

Discontinuous morpheme

α-...-saq	Passive perfective
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Non-final verb marker suffixes

-lám	Intention	-nā	Conjecture
-nàng	Purpose		

VERBS

abàl	to part	datsu	to let someone do something
adang	to be obstructed	dazár	to make someone do something
adep	to beat	dazəmdazī	to serve
agà	to be full (by eating food)	dáng	to finish
ām	to eat	dī	to go
amāng	to be lost	dōn	to put a ladder on
āl	to stay	dəng	to be straight
alāng	to fly	dəngmān	to be righteous
alī	to be heavy	dúng	to reach/to arrive
apaq	to be stuck on	dúr	to pound
apuq	to be open	gəl	to put/to keep
ará	to be equal	gayaq	to destroy
at	to flee, to run	gēr	to chase
atáng	to return	goq	to call/to shout
atāng	to be utmost	kat	to plant
ataq	to hammer	kit	to cook
atuq	to cut	kəm	to be present, to be complete
atsaq	to be stuck in	kəmnəgəm	to be together
atsar	to be far	lām	to dance
ayap	to cut grass, bushes, etc.	lā	to search for
awàng	to turn back	lé	to pass through, to cross
aq	to drink	loq	to go back, to come back
bàn	to migrate	lù	to take/to bring
dabāng	to help	moq	to put on a hat
dadām	to think	naq	to be black
dagàng	to hurry up/to insist	nóng	to abandon
dagə	to prepare	ngān	to be angry/to scold, to rebuke
dapat	to push	ngàng	to be strong and last for a long time
dapaq	to stick		
datá	to tell		
datsəp	to repair		

ngò̃m	to be present, to gather together	tale	to replace
puq	to open	tap	to arrest/to catch
radō̃l	to roll up	tá	to hear, to listen to
raq	to weave	tē	to be big
rí	to carry	tuq	to arrive
rēm	to nurse/to raise animals	tóm	to pour
ròl	to wrestle	tsā	to wait for
rō̃ng	to sit	wān	to buy
røm	to put on a sarong, pants, etc.	wap	to shoot
sanāl	to surpress, to press on	wā	to do/say
sawàr	to heat	waq	to settle a debt
sá	to know	yā̃ng	to be long
sàn	to be clear	yàng	to see
sèr	to be clean	yēl	to give way/to avoid
shanshér	to be holy	zà	to be sick, to be hurt
shù̃ng	to like/to want	zí	to give
		zøm	to hold

NOUNS

ām	rice/paddy	jō̃mlēgā	Bible
āmdúrjak	rice mill	ērtsīn	ring for hooking a strap
amè	my mother		
amoq	hat	gā̃mpà̃ng	money
ámwà	food	garè	thing
angō̃	a person who cries easily	háng	paddy field/ farm
ā̃ngtì	liquid	lēgā	letter/book/ literature
ā̃ngwām	cover/ lid	kā̃nggō	pumpkin
ā̃ngpō̃ng	in round shape	kaq	hen/fowl
apè	my father	kām	firewood
øpgù	bed	kē̃nsár	Kensar (a boy's name)
øprà	bed/place to sleep		
bú̃ngkà	door	kī	spoon
dadīn	bamboo strips	kō̃ng	plate, bowl
dagī	dog	køm	house
dakà	wage/debt	køm̃kū̃l	wall
dalø̃p	grave	lā̃ngdō̃n	ladder
dóng	tube	marà	sin

marèng	village	tarà	road/path
muk	bread/cookies	tawā	bamboo
nambē	pants/shorts	tayǝ	row
nanglārà	manhood/the class of man/male	taq	pot
nangwà	cattle/cow	tì	water
nǝám	food/rice	tìramè	river
ngā	fish	tìtuq	confluence
róngdāng	chair	chapkop	a kind of shelter
salaq	salt	waqkōng	swine trough
sàm (shàm)	knife	yāmbàn	migrator/ migration
saná	nose	wūr (ūr)	hand
sarǝm	sarong	yoq	cloth/clothes
shǝnggòng	log	yoqnaq	black cloth
shǝngshí	fruit	zòng	school
tāngshǝm (tāngràsǝm)	broom		

Noun affixes

α-	Nominalizer 1	da-	Nominalizer 3
ang-	Nominalizer 2	ta-	Nominalizer 4

Pronouns

àng	he/she	nanǝng	you (plural)
angní	they two	ngà	I
angnǝng	they (plural 3 people or more)	nganí	we two
nà	you (singular)	nganǝng	we (plural)
naní	you two	nǝng	you (plural)

NUMERALS

tiq	one	shangit	seven
aní	two	ashat	eight
asǝm	three	dagǝ	nine
abì	four	tiqsál	ten
pangà	five	tiqsál tiq	eleven
taruq	six	tiqyá	one hundred

PARTICLES

a	this	maqđò	from
à	at	mø	agentive
dakàng	because of, for this reason	nø	emphasis
kū	that	rā	interrogative (like 'wh' in English)
kaq	to	gø	also
madàm	upper		

CLASSIFIERS

bēn	thin and flat object	mé	object
buk	book	mè	female
dø	round object	pàn	kind
gòng	long object	pè	male
gúng	animal	yoq	person ²⁷
kø̃m	thin and flat and wide object		

²⁷ Cf. WB *yok* (Mod Bs. *yáu?*). [Ed.]

APPENDIX 2

AGENT-PATIENT AGREEMENT MARKING ON THE VERB
(PRESENT TENSE)

		PATIENT						
		<i>First person</i>			<i>Second person</i>			<i>Third</i>
		s	dl	pl	s	dl	pl	
A G E N T	1 s	V-shøng			V	V-shì	V-nøng	V-ò
	dl		V-shìshì		V-shì	V-shì	V-nøng	V-sò
	pl			V-shiì	V-ì	V-ì	V-nøng*	V-ì
E N T	2 s	e-V-à	e-V-sà	e-V-sà	e-V-shi			e-V-ò
	dl	e-V-sà	e-V-sà	e-V-sà		e-V-shishì		e-V-sò
	pl	e-V-sà	e-V-sà	e-V-sà*			e-V-shinøng	e-V-nøng
	3	e-V-à	e-V-sà	e-V-sà*	e-V-	e-V-shì	e-V-nøng	V-shi

*These can be replaced by /-ì/. e.g. e-V-ì.

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