

CHAPTER TWO

VERB MORPHOLOGY

1. INTRODUCTION

Rawang verbs express typical notions such as processes, actions, etc., 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 a single lexical class, verb.

In Rawang verb morphology, addition is observed as the most significant process, and reduction also is observed but rare.⁴ Replacement and suppletion are not observed.

Three types of morphological processes occur: compounding, derivation, and inflection. Affixes include prefixes, suffixes, and discontinuous morphemes. Infixes do not occur in Rawang verb morphology.

2. COMPOUNDING

Compounding is a morphological process in which two or more roots are put together to form a word. Verb compounding in Rawang is not very extensive. Compounding is manifested by the occurrence of couplets which consists of stems which have similar meaning. For example:

⁴For a more in-depth discussion of general morphological theory see section 4. in Chapter One.

- (51) *sàn + sèr > shānshér*
 clear clean
 'Holy, clean'

In this example, the falling tone on the first element changes into mid tone and the falling tone on the second element changes into high tone. Voiceless alveolar fricative /s/ is palatalized and becomes /sh/. In other instances the phonological change is not found. For example:

- (52) *kəm + ngəm > kəmgəm*
 be complete to get together
 'Gather together'

- (53) *dǒng + mǎn > dǒngmǎn*
 be straight be right
 'To be righteous'

3. DERIVATION

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. For example:

- (54) *amog = hat moq = to put on (a hat)*
amog moqəē = (Someone) puts on a hat.

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

- (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) *yāmbān* = migrator
bān = 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. The data presented in examples (54), (55), (56), and (57) prove that 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 of the clause as the most significant constituent. The predicate can be either a verb phrase or a single verb.

The inflectional morphemes on the verb manifest the orientation of person, time, and space, and also reflect the 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.

± Md ± Neg ± Ag ± Ca ± Rcp + V ± Bnf ± Ori ± Num ± Pt ± SFM1 ± SFM2 ± SFM3

Diagram 15: Final Verb Structure

The above formula can be read as a verb (word) consists of: 1) an obligatory verb stem (V), 2) optional prefixes which consist of mood (Md), negative (Neg), agent (Ag), causative (Ca), and reciprocal markers (Rcp), and 3) optional suffixes which consist of benefactive (Bnf), orientation (Ori), number (Num), patient (Pt) markers and sentence-final marker suffixes class 1 (SFM1), class 2 (SFM2), and class 3 (SFM3). A final verb (word) may consist of a minimum of two tagmemes or a maximum of eleven tagmemes. This structure somewhat resembles the order of morphemes in the verbal block (verb structure) of 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 of a verb phrase may be inflected but with fewer inflections. 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 and grammatical factors.

4.1.1. Mood

The slot preceding the negative slot has filler prefixes which express the speaker's stance toward what he says. There are three morphemes in this slot: {laq-}, {lα-}, and {tα-}.

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 both 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 laqdi*
 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 mō laq- ē- gār -rǎ* > *àng mō leqgārrǎ*
 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 denotes subjunctive. For example:

- (60) *ngà laq- dī -ng wā* > *ngà laqdōng wa*
 I prms go 1 say
 'Suppose I go ...'

Note that /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 agent marker {ē-}).

- (61) àng mǝ **laq-** ē- dǎ- tá -ng -à > àng mǝ **leq**dētángà
 he Ag prms 2 ca hear 1s 1pt
 'Let him tell me (that).'

4.1.1.2. {lǎ-} 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. For example:

- (62) àng **lǎ-** dī -ó > àng **ladī**ó
 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) (discussed in section 4.2.5.): {lǎ-} may not occur together with class 1 sentence-final marker /-e/, with any class 2 markers except /-enǝ/ or /-è/, or with class 3 marker /-sà/. When predicate verbs are preceded by interrogative particles, the morpheme {lǎ-} functions as the information interrogative marker. In this case, only /-è/ of SFM2 and /-ó/ of SFM3 can co-occur with {lǎ-}. For example:

- (63) rǎ kaq **lǎ-** ē- dī > rǎ kaq **lēdi**
 Intr to inq 2 go
 'Where do you go?'

This morpheme has five allomorphs conditioned by phonological factors: /lǎ-/ , /lǎ̃-/ , /lǎ-/ , /l-/ and /lè-/.

{lǎ-} /lǎ-/ ~ /lǎ̃-/ ~ /lǎ-/ ~ /l-/ ~ /lè-/

/lα-/ occurs before monosyllabic stems when the subject is the first person or the third person and the agent is non-/e-/ agent⁵. For example:

- (64) àng rā kaq lα- dī -è > àng rākaq lαdīè
 he what to inq go intrr
 'Where does he go?'

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

- (65) àng mō lα- ayap -bó -à -ēnō > àng mō lāyapbāēnō
 he Ag inq cut t-rmt prf inchr
 '(But) he has cut (it).'

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

- (66) àng nō là- mα- di > àng nō làmαdī
 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 lα- ē- di -bó -i -ēnō > nà lēdibíēnō
 you inq 2 go t-rmt prf inchr
 '(But) you went, (didn't you?).'

⁵ Here it refers to the agent that is not marked by the morpheme {e-}. (See Appendix 2.)

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

- (68) **lα-** ē- dagò -bò -à -ēñò > **lèdēgòbáēñò**
 inq 2 prepare t-rmt prf incrd
 '(But) you have prepared.'

4.1.1.3. {tα-} **Emphatic**

The meaning of this morpheme is unclear. This morpheme indicates the idea that the speaker wants to make an emphasis on the action, or wants to defend the reason of the action.

- (69) àng mō lēgā **tα-** rí -ò -ē > àng mō lēgā **tα**riòē
 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 sentence.

- (70) àng nō zà dakàng **tα-** rōng -ē > àng nō zà dakàng **tα**rōngē
 he Emph sick reason emph sit imprf
 'He sits because he is sick. (Not because of other reason).'

{tα-} has five allomorphs: /tα-/ , /tā-/ , /tà-/ , /t-/ and /tè/. The conditioning factors are the same as that of the inquiry morpheme {lα-}.

{tα-} /tα-/ ~ /tā-/ ~ /tà-/ ~ /t-/ ~ /tè-/

/tα-/ occurs before monosyllable stems when the non-first person agent {ē-} is not present. For example:

- (71) **tα-** dī -ng -nī -ng > **tadōngnōng**
 emph go 1s opt 1s
 'I might have gone.'

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

- (72) **ngà mō tα-** αdep -ò -nōng > **ngà mō tādepmònōng**
 I nom. emph beat 3pt opt
 'I might beat (him).'

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

- (73) àng mō **tα-** dabāng -ò -ē > àng mō **tàdabā:ngòe**
 he Ag emph help 3pt imprf
 'He does help (him).'

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

- (74) **nà tα-** ē- di -bō -i > **nà tēdìbí**
 you emph 2 go t-rmt prf
 'You had gone (there).'

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

- (75) *nà* **ta-** *ē-* *atáng* *-bó* *-i* > *nà* **tènātángbí**
 you emph 2 return t-rmt prf
 'You did return.'

When preceding monosyllabic stems, the tone on /te-/ can either be high or middle tone, depending on the individual speakers. For example:

- (76) *nà* *kaq* **ta-** *ē-* *goq* *-dī* > *nà* *kaq* **tēgoqdī**
 you to emph 2 call opt
 '(He) might have called you.'

- (77) *ngà* *kaq* **ta-** *ē-* *zí* *-ng* *-à* *-ē* > *ngà* *kaq* **tézǒngàē**
 I to emph 2 give 1s 1pt imprf
 '(Oh! You) did give it to me.'

When {ta-} co-occurs with the optative /-di/, they encode the assumptive-optative mood. For example:

- (78) **ta-** *tap* *-ò* **-di** > **tatā:pmòdī**
 emph catch 3pt opt
 'He might catch (it).'

4.1.2. {mα-} Negative Marker

The negative marker slot occurs after the mood marker slot and precedes the agent marker slot. Negative is marked with the morpheme {mα-}. This morpheme also has five allomorphs: /mα-/ , /mā-/ , /mà-/ , /m-/ and /mè-/.

{mɔ-} /mɔ-/ ~ /mā-/ ~ /mà-/ ~ /m-/ ~ /mè-/

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

- (79) àng zòng kaq **mɔ-** dī > àng zòng kaq **madi**
 he school to neg go
 'He does not go to school.'

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

/a/ ----> φ / ma-

For example:

- (80) **mɔ-** agà > **māgà**
 neg full
 'not full (not satisfied)'

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

- (81) **mɔ-** dα- tá > **màdatá**
 neg ca hear
 'do not tell'

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

- (82) *nà nǒ kòm à mǎ- ē- ǎl -bǒ* > *nà nǒ kòm à mēǎlbǒ*
 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 **Cα** or **α** initial, causative markers and reciprocal marker when the non-first person agent marker {e-} is present. For example:

- (83) *mǎ- ē- α- wǎp -nǎng -dī* > *mènāwǎpnǎngdī*
 neg 2 rcp shoot pl opt
 'Don't shoot each other.'

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

- (84) *àng kaq yàng -ò -ē* > *àng kaq yàngòē*
 3 to see 3pt impf
 'I see him.'

- (85) *àng kaq mǎ- yàng -ò* > *àng kaq mǎyàngò*
 3 tp neg see 3pt
 'I do not see him.'

The co-occurrence of /mǎ-/, /e-/ and /-dī/ encodes prohibition. For example:

- (86) *mǎ- ē- wǎ -dī* > *mēwādī*
 neg 2 do optt
 'Don't do!'

4.1.3. Agent (Subject) Person Marker

Subject or agent of the action of the verb is also reflected in the verb. This agent (subject) slot occurs before the causative slot in the verb structure, and has one 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 the transitive verbs, it marks that the agent of the action of the verb is 'non-first person'. This means that the agent is the second person or third person. Actually, it reflexes the direction of the verb action. By direction of the verb means from which person to which person the action of the verb is conveyed. Though {e-} can mark the third person agent, it cannot mark the action conveyed from a third person to a 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 mō ē- gēr -ò -ē* > *nà mō 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 mō ē- ngān -bó -s -à* > *àng mō ēngānbósà*
 he Ag 3 scold t-rmt pl prf
 'He scolded us.' or 'He scolded you (plural).'

The occurrence of /ē-/ 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-/ . /e-/ occurs before verb stems with consonant initials, and /na-/ occurs before verb stems with the initial vowel /α/. Then, the initial vowel /α/ is deleted.

{e-} /e-/ ~ /nā-/
 /e-/ occurs before consonants
 /nā-/ occurs before /α/
 /α/ > ϕ /na- _

- (92) *nà háng maqdò e- atáng -rat -i* > *nà háng maqdò natángratni*
 you farm from 2 return a-rmt prf
 'You returned from the farm.'

This agent marker morpheme {ē-} can effect the following vowel /α/. When {ē-} precedes a dissyllabic stem in which the first syllable is an open syllable and the vowel is /α/, or when it precedes the causative marker {dα-}, the vowel /e-/ replaces the following the vowel /α/.

{e-} + CαCV(C) > CeCV(C)
 {e-} + /dα-/ > /de-/

- (93) *e- गयाq -ò -e* > *gēyaqòe*
 2 destroy 3pt imprf
 'You destroy it.'

(94) ē- dα- tá -bó -s -à > dētábósà

2 ca tell t-rmt pl. prf

'(He) told (us).'

The morpheme {e-} affects the vowel /α/ of the morphemes of the preceding two slots: the negative slot and the mood slot, too. The vowel /α/ changes into /e/. (See 4.1.1. & 4.1.2.)

(95) nà nō lα- mα- ē- dī -ēnō > nà nō lēmēdīēnō

you emph inq neg 2 go inchr

'(But) you did not go.'

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

4.1.4. {dα-} Causative Marker

In the transitive verb structure, the causative slot occurs before the verb stem slot. Morse (1965) mentioned two causative prefixes {shα-} and {dα-} occurring in the Matwang dialect. He also pointed out that the morpheme {dα-} occurs almost exclusively with transitive verbs, so it may be considered as an allomorph. In the Sinwal dialect, these causative morphemes are found as /sα-/ and /dα-/, and they are interpreted as comprising a single morpheme. The form {dα-} is arbitrarily chosen as the base morpheme. However, the conditioning factor of the morpheme variation is not the differentiation of the transitive and intransitive as Morse suggested. Instead, it is phonological conditioning. /sα-/ is considered

as the allomorph, and its occurrence is associated with sonorant phonemes in the stem. /dα-/ is associated with obstruent phonemes in the stem. Further morpheme variants are also observed. /sα-/ has a variant /s-/ and /da-/ has /d-/ as its variant. Thus, the base form {dα-} has four morpheme variants.

{dα-} /dα-/ ~ /d-/ ~ /sα-/ ~ /s-/

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

(96) *dĩ* = go ***da**di* = to cause to go

(97) *tē* = to be big ***da**té* = to enlarge

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

(98) *abàl* = to part ***da**bàl* = to cause to be apart

(99) *atáng* = return ***da**tàng* = to cause to return

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

(100) *əp* = to fall asleep ***sa**əp* = to cause fall asleep

(101) *lám* = to dance ***sa**lám* = to make someone dance

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

- (102) *αlāng* = to fly *sαlāng* = to cause fly
 (103) *amāng* = to lose *samáng* = to cause something to be lost

It should be noted that there are many dissyllabic verb stems which have /dα/ or /sα/ as the initial syllable. This somewhat suggests that such stems might also be forms in which the causative prefix morpheme is frozen⁶, but their stems or roots are not found in other contexts, and native speakers cannot give the gloss of the suggested would-be stems. Thus, these forms are interpreted as forms without causative prefixes or single morpheme stems, though /dα/ and /sα/ 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. There are stems which cannot take the causative prefixes. When the stems do not take the causative prefixes, the causative is encoded by using another verb as an auxiliary verb in the verb phrase after the main verb. Usually, /dαzαr/ 'to ask someone to do something' or /dαtsu/ 'to let someone to do something' is used as the auxiliary verb.

- (106) *dadām dαzār* = to cause to think
 dαtsəp dαtsū = to let somebody repair

⁶Forms in which the meaning of the stem is lost that the stem and the affix cannot be glossed separately are referred to as frozen forms.

If the causative marker co-occurs with the reciprocal marker {α-}, the vowel /α/ of the causative marker merges into /a/. The reciprocal marker also affects the vowel /α/ of the causative-like stems (described above) and changes it into /α/. In this reciprocal causative verb, the patient markers cannot occur. Instead, the patient benefactive marker {-ke} can occur.

- (107) *sα- α- ām* > *sāám*
 ca rcp eat
 'to feed each other'
- (108) *dα- α- apaq* > *dāpaq*
 ca rcp stick on (by itself)
 'to stick something on each other'

There is another filler /tα-/ in this slot. This morpheme marks that the action denoted by the verb can happen. In other words, it denotes capability. This morpheme is used normally in absolutive sense. For example:

- (109) *ā mé ti nō mα- tα- lé* > *ā mé ti nō màtalé*
 this Cls river Emph neg cap cross
 'This river cannot be crossed.'

4.1.5. {α-} Reciprocal Marker

{α-} marks reciprocal action on some transitive verb stems. In this case, patient markers cannot co-occur. For example:

- (110) *α- wap* > *awap*
 rcp shoot
 'Shoot each other'

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

(111) *atug* = to cut α- = ?? *tug* = ??

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

(112) *būngkà α- puq -ē* > *būngkà apuqē*
 door ?? open impf
 'The door is open.'

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

(113) *sα- α- naq* > *sānaq*
 ca rcp black
 'to paint one another black'

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

4.2. Suffixes

Verb suffixes include benefactive markers, orientation markers, number markers, patient markers, class 1 sentence final marker suffixes,

class 2 sentence final marker suffixes, and class 3 sentence final marker suffix.

4.2.1. Benefactor Markers

The benefactor markers are suffixes, and they occur between the verb stem and the orientation marker slots. 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 is a reflexive morpheme. It marks that the agent and the patient are in the same person. When the subject is in 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 before falling tone
 /-shī/ occurs elsewhere

- (114) àng nǒ sàm mǒ atuq **-shī** -ē > àng nǒ sàm mǒ atuq**shīē**
 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 nǒ ūr adep **-shī** -ng -e > ngà nǒ ūr adep**shǎngē**
 I emph hand hit rfl. 1s imprf
 'I hit my hand by myself.'

When the reflexive {-shī} occurs the patient markers cannot co-occur.

4.2.1.2. {-ā} Substitutional Benefactive

This morpheme marks the agent that acts for the benefit of someone else, not for himself. No allomorph of it is observed.

- (116) *dakà ē- waq -ā -i -ē* > *dakà ēwaqāiē*
 wage 3 settle sbnf 1pl. imprf
 '(He) settled (paid) the wage (for us).'

4.2.1.3. {-ām} Reflexive Benefactive

This morpheme marks the 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 and falling tone
 /-ām/ occurs elsewhere

- (117) *shóngshí kat -ām -ē* > *shóngshí katnāmē*
 fruit plant rfl.bnf imprf
 '(I) plant fruit for myself.'

- (118) *shóngshí kat -ām -bó -i* > *shóngshí katnámí*
 fruit plant rfl.bnf t-rmt prf
 'He planted the fruit for himself.'

4.2.1.4. {-kē} Patient Benefactive

The exact meaning of this morpheme is unclear. This morpheme sometimes seems to mark the idea similar to the passive voice. The following examples give some aspects of its meaning.

(119) *āngní* *α-* *dapat* **-kē** *-bó* *-i* > *āngní* *dāpat***ké***bí*
 they two rcp push bnf t-rmt prf
 'They (two) pushed each other.'

(120) *àng* *kaq* *tap* **-kē** *-bó* *-à* > *àng* *kaq* *tap***ké***bá*
 he to arrest bnf t-rmt prf
 'He was arrested.'

(121) *àng* *nō* *ngā* *tap* **-kē** *-ē* > *àng* *nō* *ngā* *tap***kēē**
 he emph fish catch bnf imprf
 'He catches fish for himself.'

4.2.2. Orientation Markers (Deixis markers)

In the Rawang verb, there are inflectional morphemes which mark the personal, temporal, and spatial orientation, or deixis. In this orientation marker slot, slot 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., & 4.2.4.)

The temporal orientation markers and spatial orientation markers occur after the benefactive markers slot. Some of them encode tense only and some encode 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 in 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, /-bǝ/, /-zǝ/, /-ɔp/, and /-yǝng/. 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), encode 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 -ϕ -ē > ngà dǝngē*
 I go 1s present imprf
 'I go.'

4.2.2.1.1. /-bǝ/ Toward-remote and /-zǝ/ 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 {-bǝ} and {-zǝ}. Mostly, they encode the past tense. But sometimes, they can signal the future. While signalling the future, a co-occurring morpheme, the sentence final marker (SFM1), the imperfect affirmative marker {-e}, is required. However, this co-occurrence can bring the past tense meaning depending on the context of the speech.

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

- (123) *da- tá -ng -bǝ -ng -à > datángbǝngà*
 ca listen 1s t-rmt 1s prf
 'I told them.'

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

- (124) *kū kaq dī -ng -bō -ng -ē > kū kaq dōngbōngē*
 there to go 1s t-rmt 1s imprf
 'I will go there.'

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

- (125) *ngānōng di -zō -s -à > ngānōng dìzósà*
 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 {-bō} and {-zō} changes into a high tone. Other orientation slot fillers which have mid-tones also exhibit this same phenomenon.

mid tone	>	high / -	falling tone
{-bō}	/-bó/	~	/bō/
	/-bó/		occurs before falling tone
	/-bō/		occurs elsewhere
{-zō}	/-zó/	~	/-zō/
	/-zó/		occurs before falling tone
	/-zō/		occurs elsewhere

- (126) *nà ē- dī -bō -ē > nà ēdībōē*
 you 2 go t-rmt imprf
 '(I know that) You went (there).'

- (127) *zòng kaq ē- di -zō -s -à > zòng kaq ēdizósà*
 school to 2 go u-rmt pl. prf
 'You went to school.'

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

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

/-bə/ + /-i/ > /-bí/

/-bə/ + /-à/ > /-bá/

/-zə/ + /-i/ > /-zí/

/-zə/ + /-à/ > /-zá/

(128) àng dì -bə -i > àng dibí

he go t-rmt prf

'He went.'

But this rule is not consistently followed. The unchanged forms are used sometimes and they occur in free variation.

(129) dì -bə -i > dibəi

go t-rmt prf

'He went.'

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

These morphemes mark an action located at a remote time. Since these morphemes mark only remoteness in time, the remote time can be past tense or future tense. However, these morphemes are used mostly in the sense of past tense. The remoteness is divided as 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 {-əp}.

- (130) *di -ap -s -à > diapsà*
 go n-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 phoneme /p/ and the following vowel. Because the syllable final unreleased phoneme /p/ needs to be released, then, the phoneme /p/ is released as a nasal at the same point of articulation. For example:

- (131) *àng di -ap -i > àng diapmi*
 he go n-Past 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/
 /-yáng/ occurs in free variation

- (132) *àng di -yàng -i > àng diyàngi*
 he go f-past prf
 'He went (years ago).'

- (133) *àng di -yáng -i > àng diyángi*
 he go f-past prf
 'He went (years ago).'

4.2.2.2. Spatial Orientation Markers

Spatial deixis markers distinguish 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 the same level as the listener, or whether the location where the action or things take place is far from the speaker or the listener. The markers are {-zaq}, {-nǝng}, {-rǝt}, and {-rǎ}. In general, all these morphemes mark the starting point or the ending point of the action being remote from the speaker or the addressee. The remoteness of these points can be temporal or spatial. Thus, it is possible that these morphemes sometimes convey tenses, too. The co-occurrence of these morphemes with the imperfective affirmative {-ē} encodes the future tense or intention, and in other occurrences, they can carry either present or past tense meanings. The distinction is made from the context.

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

- (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/.

{-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).'

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

- (136) dī -ng **-nǒng** -e > dǒng**nǒng**ē
 go 1s sp-high imprf
 'I will come down.'

When {-nǒng} is followed by a falling tone, mid tone on the morpheme changes into a high tone.

- (137) dī **-nǒng** -shì -ē > dī**nǒng**shìē
 go sp-high dual 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 the other person. When /-rat/ is followed by a vowel, a nasal /n/ is inserted between /t/ and the following vowel.⁷

- (138) kū marèng -rì dì **-rat** -ì > kū marèng rì dī**rat**nì
 that village plural go a-rmt prf
 'People from that village come.'

Another morpheme {-rǎ} simply encodes that the action of the verb occurs at a remote time, or at a remote place from someone or something,

⁷ When followed by vowels, all syllable-final stops are released as nasals at the same point of articulation.

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."

- (139) *nà kaq āmaq tsā -ng -rā -ng -ē* > *nà kaq āmaq tsāngrānge*
 you to here wait 1s remote 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) *dī -rá -s -à* > *dīrásà*
 go remote 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 after the orientation markers as suffixes. The first person singular is marked with {-ng}, no matter whether he/she is subject, agent or patient.⁸ The occurrence of this morpheme is dependent on the phonological shape of the morphemes. It occurs on the open syllables of the verb stem, the benefactive markers, and the orientation markers, when these morphemes have [+back] stops /k/ or /q/ as syllable finals, and on the optative morpheme {-dī}. This implies that /-ng/ can occur more than once within a final verb structure. This is

⁸ Thus, the first person singular is not marked in agent and patient marker slots.

a particular feature of Rawang verb morphology. Note that the syllable final stop /q/ changes into /k/ when followed by /-ng/. For example:

- (141) dī -ng -bō -ng -à > dēngbóngà
 go 1s t-rmt 1s prf
 'I went.'

- (142) waq -ng -ā -ng -bō -ng -à > wakngāngbóngà
 settle 1s sbnf 1s t-rmt 1s prf
 'I settled (the debt) for (him).'

Besides this, the singular is unmarked. For example:

- (143) āng nō kām wā -ē > āng nō kām wāē
 he emph firewood make imprf
 'He makes (gathers) firewood.'

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/
 /-shì/ occurs elsewhere

- (144) kēm kaq loq -shì -e > kēm kaq loqshie
 house to go back dual 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) *ngānōng nō kēm wà -ì -e* > *ngānōng nō kēm wàie*
 we emph house make 1pl imprf
 'We are building a house.'

(146) *ngānōng nō kēm wà -bō -s -à* > *ngānōng nō kēm wàbósà*
 we emph house make t-rmt pl prf
 'We built a house.'

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

(147) *kū kēm à ē- àl -nòng -e* > *kū kēm ēàlnòngē*
 that house at 2 stay pl imprf
 'You are staying at that house.'

(148) *kū kēm à ē- àl -bō -s -à* > *kū kēm à ēàlbósà*
 that house at 2 stay t-rmt pl prf
 'You stayed at that house.'

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

(149) *ngānōng kaq ē- dabang -ì -ē* > *ngānōng kaq dēbāngiē*
 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/, and only /-s/ is used to mark the plurality.

neutralized

{ -shì }	----->	/-s/ / - à
{ -ì }		
{ -nòng }		

In the transitive verb structure, number markers can agree with the agent or the patient. Then, a problem arises in regard to the question of which number should be marked. In this case, two solutions are observed. The first solution is that if both the agent and the patient are in the singular numbers, the first person singular has the precedence of number marking over the other. Secondly, if the agent and the patient are of different numbers (e.g. 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 lǎ -ng -e > nà kaq lǎnge*
 you to look for 1s imprf
 'I am looking for you.'

(151) *ē- zī -ng -à -ē > ēzóngàe*
 2 give 1s 1pt imprf
 'You (two) chase after me.'

(152) *nānǐ mō ē- gēr -s -à -ē > nānǐ mō ēgērsǎe*
 you (two) Ag 2 chase after pl 1pt imprf
 'You (two) chase after me.'

Since the third person number is not marked, no matter whether the third person is the agent or the patient, only the number of the other person number is marked. No clash arises with the third person.

4.2.4. Patient Markers

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

4.2.4.1. { ϕ } Second Person Patient Marker

Generally, it can be said that the second person patient is marked by the omission of the patient markers, i.e., by a zero morpheme. In fact, what marks the second person patient is obscure, because, structurally, it is true that no specific morpheme that marks the second person patient is observed in the patient marker slot. But the second person patient is distinguished also by the occurrence of {e-} the non-first person marker 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 the second person agent. Actually, {e-} encodes both the 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 and 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 -∅ -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 in which the occurrence of the zero morpheme patient suffix and the prefix {ē-} is identical with the structure of the intransitive verb structure in which the subject is the second person. Only the transitivity of the verb stem differentiates which is the transitive verb structure and which is the intransitive verb structure.

- (155) *zòng kaq ē- dì -bó -i* > *zòng kaq edibí* (intransitive)
 school to 2 go t-rmt prf
 'You went to school.'

- (156) *nà kaq e- tap -bø -i* > *nà kaq etapbí* (transitive)
 you to 2 arrested t-rmt prf
 '(He) arrested you.'

4.2.4.2. {-à} First Person Patient Marker

{-à} inflects the patient that is the first person. Some restrictions are observed in regard to the occurrence of it. The occurrence of {-à} is optional when the agent (subject) is the second person singular and the patient is the first person plural⁹.

- (157) *lēgā tiq buk ē-zí -i -∅ -ē* > *lēgā tiq buk ēzīiē*
 book one clss. 2 give lpl. imprf
 'You give us (more than two people) a book.'

⁹ In this case, first person plural number marker /-i/ can occur.

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

- (159) *ē- tāp -shī -ē* > *etāpshīe*
 2 arrest dl impf
 '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 -e* > *lēgā tiqbuk ēzóngàē*
 book one clss 2 give 1s 1pt imprf
 'You give me a book.'

- (161) *lēgā tiq -buk ē- zī -ng -∅ -ē* > *lēgā tiq buk ēzōngē*
 book one clss 2 give 1s 1pt imprf
 'You give me a book.'

Structurally, the second option can be confused with the unmarked second person patient. The person and case markings in the noun phrases are the only source of making distinctions between the first person patient and the second person patient when the first person patient is unmarked.

Another restriction is that the agent marker {ē-} is obligatory to the co-occurrence 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} itself is unnatural and results in obscure

meaning. This seems to suggest the possibility that the combination of {-à} with {ē-} is a single discontinuous morpheme {ē-...-à}. But {ē-} can occur in combinations with other person markers. For example, {ē-} with {-ò} or with {-φ}. Thus, {ē-} itself is a separate morpheme and {-à} also is interpreted as a separate single morpheme.

- (162) *shóngshí tiq dè zí -ng -à -e > *shóngshí tiqdè zóngàē
 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 occurrence element, the agent person marker. A Rawang transitive verb in the imperfective aspect usually marks what DeLancey (1980) 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 the transitive-active marker suffix. Inferring his description on the syntactic frames for the 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 {-φ}; 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- ti zí -ng -ò -ē > aqti zóngòē
 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 the first person plural or the second person plural. In this case, the patient or object is identified only by the case markers in the clause.

- (164) àng kaq tsā -i -ē > àng **kaq** tsāiē
 he to wait for 1pl. imprf
 'We wait for him.'

- (165) àng kaq na- adep -nòng -e > àng kaq nādepnòngē
 he to 2 beat 2pl imprf
 'You beat him.'

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

- (166) àng kaq kūmaq gāl -ò -e > àng kaq kūmaq gālòē
 he to there put 3pt imprf
 'They put him there.'

- (167) ngà mǝ āmé kūmaq gāl -ò -e > ngà mǝ āmé kūmaq gālòē
 I Ag this there put 3pt imprf
 'I put this there.'

4.2.4.4. Additional Notes on Patient markers

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

- (168) àng nō nangwà rēm -ē > àng nō nangwà rēmē
 he emph cattle raise imprf
 'He raises cattle.'

When the aspect of the transitive verb is in the 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- tǎp -bō -ng -à > ētǎpbóngà
 2 arrest t-rmt 1s prf
 '(Someone) arrested me.'

- (170) nangwà tiq -gúng wān -bō -à > nangwà tiqgúng wānbá
 cattle one class buy t-rmt prf
 'He bought a cattle.'

- (171) nà kǎq gǎmpèng ē- zí -bō -i > nà kǎq gǎmpèng ēzíbí
 you to money 2 give t-rmt prf
 '(He) gave you the money.'

4.2.5. Sentence Final Marker Suffixes Class 1 (SFM1)

Sentence final marker suffixes occur in three slots. Therefore, they are categorized being of as 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. {-e} Imperfective

Generally, {-ē} encodes the imperfective or the 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 nō zòng kaq dī -ē > àng nō zòng kaq dīē
 he emph school to go imprf
 'He goes to school.'

- (173) ngà mō ngā tap -ò -ē > ngà mō ngā tapmōē
 I Ag fish catch 3pt imprf
 'I catch fish.'

But /-ē/ is used also with past tense encoding past imperfective. When used with the past tense, the co-occurrence of orientation markers is obligatory.

- (174) nà nō zòng -à ē- āl -rā -ē > nà nō zòngà ēālrāē
 you emph school at 2 stay a-rmt imprf
 'You were at the school there.'

- (175) àng nō náám ān -bō -ē > àng nō náám āmbōē
 he emph food eat r-rmt imprf
 'He was eating food.'

When /-ē/ co-occurs with {-bō} 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 the future intention or probability. In this case, the morphophonemic process which deletes the vowel /ø/ is optional. (See 4.2.2.1.1.)

- (176) dī -bō -i -e > dibóie = dibíe
 go t-rmt 1pl imprf
 '(We) will go (there).'

- (177) dī -zō -i -e > dizóie = dizíe
 go u-rmt 1pl imprf
 '(We) may go.'

/-ē/ cannot co-occur with {mǎ-} the negative marker, {lǎ-} inquiry, {laq-} permissive. No allomorph is observed.

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 -bǒ -ng -à* > *dǒngbǒngà*
 go 1s t-rmt 1s prf
 'I went/ I have gone/ I had gone.'

{-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) *róng -bǒ -ng -à* > *róngbǒngà*
 sit t-rmt 1s prf
 'I sat/ I have sat/ I had sat.'

- (180) *dì -bǒ -s -à* > *dìbǒsà*
 go t-rmt pl prf
 'We went.'

- (181) *ē- dì -bǒ -s -à* > *ēdìbǒsà*
 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 -bē -à* > *ētapbá*
 2 catch t-rmt prf
 'You have caught (it).'

- (183) *gāl -bē -ng -à* > *gālbóngà*
 put t-rmt 1s prf
 'I have put (it).'

- (184) *radōl -bē -à* > *radōlbéà*
 roll t-rmt prf
 '(He) rolled (it) up.'

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

/-shì/ -----> /-s/ before /-à/
 /-ì/
 /-nòng/

Another process is tone sandhi described in section (4.2.2.1.1.) that when /-à/ follows the vowel /ø/, the vowel /ø/ is deleted. The tone on the vowel /ø/ shifts to the vowel /a/ and replaces the existing one. But this process is optional.

- (185) *tap -bē -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 and {-ná} 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/ is the subject-verb agreement (or the direction of the transitive verb). They encode mutually exclusive directions of the action of the verb.¹⁰ 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 occurring in the intransitive verb, the subject is in the second person singular or the third person.

(186) ē- di -bō -ì > edibí
2 go t-rmt prf
'You went.'

(187) øp -bō -ì > øpí
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 ēzibí
he Ag you to bread 2 give t-rmt prf
'He gave you bread.'

(189) nà kaq ē- yàng -yàng -ì > nà kaq eyàngyàngi
you to 2 see f-rmt prf
'He has seen you (before).'

¹⁰ 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/.

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

When /-i/ 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 & 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) *ngāní di -bø -shì -dī* > *nganí dibøshidī*
 we (two) go t-rmt dual 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 complimented by the occurrence of the yes/no interrogative {-má}.

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

- (192) *e- di -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 clitic {dǎng-} or the emphatic {tǎ-} can co-occur.

- (193) àng dǎng- dī -dī > àng dǎngdīdī
 he cjr go opt
 'He might go.'

{-dī} has an allomorph /-nī/ when followed by the first person singular marker /-ng/¹¹. Then the vowel /i/ becomes /ø/ before /ng/.

- (194) ngà dī -ng -bō -ng -nī -ng > ngà dēngbōngnōng
 I go 1s t-rmt 1s opt 1s
 'I will go.'

{-dī} cannot co-occur with {-ēnō}, {-ānō}, and {-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.

¹¹On the multiple occurrence of /-ng/, see section 4.2.3.

4.2.6.1.1. {-má} Yes/no Interrogative

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

- (195) *dì -bó -i -má > dibímá*
 go t-rmt prf intrr
 'Did (he) go?'

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

- (196) *àng nō rākaq dì -bó -i -má > àng nō rākaq dibímá*
 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 {lα-} occurs before the stem (see 4.1.1.2.), and it is common that the informational interrogative {-è} also occurs (see 4.2.6.1.2.).

- (197) *rāwà lα- wā > rāwà lawā*
 what inq do
 'What does he do?'

- (198) *rāwà lα- wā -è > rāwà lawāè*
 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 lα- 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 {lα-}. The predicate verb is always preceded by an interrogative pronoun.

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

- (200) *nà rākaq lα- 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, i.e., it marks that the interrogative is friendly.

4.2.6.1.3. {-á} Confirmatory Interrogative

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

- (201) *àng nǎ zòng kaq dī -bǎ -i -á* > *àng nǎ zòng kaq dìbíá*
 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 morpheme /-e/ imperfective.

- (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 mō lù -ò -lá > àng mō lùòlá
 he Ag take 3pt intrr
 'He takes (it)?'

/-lá/ cannot co-occur with the negative marker. Thus, only /-á/ can co-occur with the negative marker and the perfective markers. {mā-} never co-occurs with the morpheme {-ē} imperfective.

- (204) nà mā- ē- di -á > nà mēdiá
 you neg 2 go intrr
 'You aren't going?'

After the morpheme {-á}, the sentence final marker 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 imperative expressions can be categorized as the direct imperative (addressed for the second person), signaled by {-ē-}, and the indirect imperative (addressed for the third

person), signaled by {laq-} permissive (see 4.1.1.1.). They can be divided further into sub-types: requestive and hortatory. These sub-types of the imperative are expressed in the sentence-final marker suffix class 2 (SFM2) slot. The requestive is expressed by {-nà} and the hortatory is expressed by {-ná}.

(205) ē- dī -bō -nà > ēdībōnà
 2 go t-rmt rqs
 'You go, please./Why don't you do it?'

(206) laq- dī -bō -nà > lāqdībōnà
 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 process is 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. & 4.2.5.2.), {-sà} the declamatory (4.2.7.), {tα-} emphatic (4.1.1.3.), and {lα-} 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} the exclamatory adversative, {-ānō} the assertive adversative, and {-ēnō} the emphatic adversative. All these three morphemes mark that there is something different than what is 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 exclamation. {-ā} marks that the result or consequence of the verb to which {-ā} is attached is not what the speaker expects. For example:

(208) àng dī -bō -i -ā > àng dibíā
 he go t-rmt prf advr
 'He went. (but...)'

(209) àng nō mā- dī -ā > àng nō mādíā
 he emph neg go advr
 'He did not go. (but...)'

(210) àng gō tā- dī -dī -ā > àng gō tadídīā
 he also emph go opt advr
 'He would have gone, too (but ...).'

{-ā} cannot co-occur with {-e} the imperfective. Allomorphs and morphophonemic processes are not observed.

4.2.6.3.2. {-enō} Emphatic Adversative

Another adversative marker in the SFM2 slot is {-ēnō} the emphatic adversative. It is always bound to {tα-} or {lα-} in the co-occurrence (see 4.1.1.2. & 4.1.1.3.). The co-occurrence of {-ēnō} and {tα-} marks that the speaker's meaning is contrary to the expectation or accusation of others.

(211) zòng kaq tā- dī -ēnō (háng kaq nō mā- dī -é)
 school to emph go advr farm to Emph neg go impf
 '(He) goes to the school (not to the farm).'

The co-occurrence with {lα-} 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 kũ kaq lα- dī -ēñō > àng kũ kaq ladīēñō
 he that to inq go advr
 '(Contrary to what you expected) he goes there.'

- (213) nà mō lα- ē- tóm -bō -à -ēñō > nà mō lētóm bō àēñō
 you Ag inq 2 pour t-rmt prf advr
 '(Contrary to what you said) you have poured it.'

{-ēñō} cannot co-occur with {-ē} imperfective (4.2.5.1.), {laq-} permissive (4.1.1.1.) and {-sà} declamatory (4.2.7.). Allomorphs also are not observed.

4.2.6.3.3. {-āñō} Assertive Adversative

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

- (214) àng dī -āñō > àng diāñō
 he go advr
 'But he goes. (contrary to what I guessed)'

- (215) àng nō mα- dī -āñō > àng nō madiāñō
 he emph neg go advr
 'He does not go. (contrary to the fact that he should go)'

{-ānō} cannot co-occur with {-ē} imperfective, the mood markers (4.1.1.), and {-sà} declamatory (4.2.7.).

{-ēnō} and {-ānō} can be confused with the conjunctions {ānō} factual, and {ēnō} 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 mǎ- dī -é > àng mǎdīé
 he neg go SFM2
 'He does not go.'

It can occur with any morpheme except {tǎ-} stress, {lǎ-} inquiry, and 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 {-e}. /-é/ occurs elsewhere. Since the {-e} imperfective is mutually exclusive with the negative marker, only /-é/ occurs with the negative marker morpheme.

- (217) ngà gǒ dī -ng -nī -ng -ē -lé > ngà gǒ dōngnōngēlé
 I also go 1s opt 1s imprf SFM2
 'I will come along, too.'

- (218) àng dī -ē -lé > àng dīēlé
 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 shows the omitted morpheme.

- (219) ē- lù -ò (-ē) -lé > ēlùòlé
 2 take 3pt imprf
 '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 confirmatory assertion marker. It marks that the speaker wants to assert his confirmation of what he mentions.

- (221) àng dī -bē -i -ó > àng dibíó
 he go t-rmt prf SFM3
 'He did go.'

The co-occurrence with the negative morpheme marks the speaker's frustration, too.

- (222) àng laq- mā- dī -ó > àng laqmadíó
 he prm neg go SFM3
 'Do not let him (actually) go.'

Mostly, {-ó} is used when answering the confirmatory interrogative. {-ó} has an allomorph {-ló} which occurs after the imperfective marker

{-e}. It is common that the imperfective marker {-e} is omitted when followed by /-ló/.

- (223) àng dī (-ē) -ló > àng dīló
 he go imprf SEM3
 '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.), and mood markers (4.1.1.).

{-sà} marks declamatory. 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 {-a} adversative (4.2.6.3.).

{-sà} /-sà/ ~ /-sànø/

- (224) àng gō dī -ā -sà > àng gō dīāsà
 he also go advr dclm
 '(Of course!) He does go, too.'

- (225) àng gō tā- dī -yàng -ā -sànō > àng gō tadīyàngāsànō
 he also emph go f-pst advs dclm
 '(Of course!) He did go, too.'

{-sà} cannot co-occur with {-é} emphatic assertion, {-á} confirmatory interrogative (4.2.6.1.3.), {-ēnō} emphatic adversative, {-ānō} assertive adversative (4.2.6.3.), {-è} informational interrogative (4.2.6.1.2.), and {lǎ-} inquiry (4.1.1.2.).

4.2.8. Final Verb Inflections and Rawang Orthography

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

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

- (227) *mā- ē- dā- tá -ng -ā -ng -bō -ng -à -nī -ng -má -ó*
 neg 2 ca hear 1s bnf 1s t-rmt 1s 1pt opt 1s intrr cnfrm
 'mèdētāngāngbóngànōngmáo = 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 and finally, the sentence final marker suffixes class 2 and class 3 are included in the third part. But, single vowel morphemes of sentence final marker suffixes class 2 and class 3 are written as suffixes to the preceding, that is middle, part. For illustration, the following are written in the orthography but are analyzed in this paper as single words.

- (228) *dòng bōngāā sàñō* = (Of course!) I did go.
 (229) *dīē lé* = He does go.
 (230) *dibíé* = He did go.
 (231) *mèdētāngāng bōngànōng máó* = Won't you tell it for me?

4.2.8. Non-final Verb Marker Suffixes

In a Rawang verb phrase, there can be several verbs comprising the phrase. In the verb phrase, the non-final verbs may or may not have

inflections. When they are inflected, the inflections and their structural order are similar to that of the final verbs. The difference is that the final verb structure has sentence final marker suffixes and mood markers, but the non-final verb structures do not have them. Instead, they have the 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 notions.

The first category of NFM suffixes includes {-nàng} purpose, and {-lám} intention. All these morphemes mark the action of the verb which would 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 loqratni* > *ám^hnàng loqratni*
 eat purp came back
 '(He) comes back to eat.'

(233) *angaq -lám wāē* > *angaq^hlám wāē*
 fall intn do
 '(It) is going to fall.'

The second category of NFM suffixes includes the conjecture morpheme {-nā}. The structure in which {-nā} occurs is similar to the structure of final verb except for the omission of the mood slot and the sentence final marker slots. In this structure, {-nā} occurs as the last constituent. The structure can be seen 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. The verb with {-nā} final is always followed by the verb {í} 'to be' which occurs as the final verb and an auxiliary. For example:

(234) *dí -nā íē* > *dínā íē*
 go cnj be
 'May go.'

(235) *mā- ē- da- tá -ā -bā -ò -nā íē* > *mèdētāābōónā íē*
 neg 2 ca hear bnf t-rmt 3pt cnj be
 'You might not have told (it) for (him).'

The third category of NFM suffixes includes the discontinuous morpheme {α-...-saq} which marks the passive perfective. With this morpheme, only negative, causative, and benefactive markers can co-occur. The first part /α-/ 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	± /α-/	+ 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 nō α- dūr -saq iē* > *ām nō αdūrsaq iē*
 rice emph ppf1 pound ppf2 be
 'The rice has (already) been pounded.'

(237) *mα- dα- α- gò -ā -saq iē* > *màdāgòāsāq iē*
 neg ca ppf1 complete bnf ppf2 be
 '(It) has not yet been prepared for (him).'

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

(238) *mα- dα- α- gò -ā -saq iē* > *màdāgòā iē*
 neg ca ppf1 complete bnf ppf2 be
 'not yet prepared for (him)'

This optional occurrence somewhat suggests that /-saq/ could be a separate morpheme. Moreover, Morse (1965:353) interpreted /α-/ (/ / in his orthography) as voice prefix, and /-saq/ (/saq/) as passive suffix. The problem is more complicated when considering the prefix /α-/. There is a reciprocal marker prefix /α-/ which occurs in the same structural environment of the first part /α-/ of the discontinuous morpheme. Both of

these prefixes and the first vowel /α/ of some verb stems complicate the morphophonemic processes and the interpretation of morphemes. This vowel /α/ mentioned here might have a historical background. But, historical consideration is out of the scope of this study; thus, the problem concerning the prefix vowel /α-/ remains unsolved in this study. However, /-saq/ is always bound to /α-/ and their meanings cannot be explained separately. This is the only reason to interpret them as a discontinuous morpheme at the moment.

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 need etymological or diachronic considerations. Morse suggests that tonal contrasts were developed by losing prefixes (Morse 1962:10). Yet, the morphology of Rawang can be described fairly well without giving full attention to the tones. Diachronic research is out of the scope of this study. Thus, tonal analysis is omitted in this study. Especially, the tones on the verb stems are mostly ignored. However, the tonal changes on the affixes are mentioned occasionally when it is necessary.