

A GRAMMAR OF HAKHUN TANGSA

by

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DISSERTATION ABSTRACT

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Title: A Grammar of Hakhun Tangsa

Hakhun Tangsa is one of around eighty ethnic and linguistic communities called Tangsa or Tangshang. Hakhuns live mostly in Arunachal Pradesh, India, and in Sagaing Division, Myanmar. The number of speakers is estimated at around ten thousand. Hakhun is a Tibeto-Burman language, and it forms a subgroup with Nocte, Wancho, Phom, Konyak, Chang, and Khiamngan called Konyak or Northern Naga.

Hakhun is a tonal language with twenty-two consonants, six vowels, and a simple syllable structure. Open word classes include Nouns and Verbs; property concept terms form a subclass of verbs. Noun roots are mostly monosyllabic, and most multisyllabic nouns are compounds. Nominal morphology includes possessive prefixes and a set of semantically specific suffixes. Case is coded by postpositions.

Verb roots are also mostly monosyllabic. A few verbs have suppletive stems. Verb serialization is common, and expresses complex events like resultative and sequential. A few grammaticalized verbs/elements contribute abstract meanings like phase, associated motion, causative, benefactive, etc. Typical verbal categories are expressed by independent particles. The most extensive and grammatically obligatory set consists of single syllable particles called operators, which express verbal categories like tense, mood, deixis, negation, inverse, and argument indexation. The typical argument indexation pattern is hierarchical. Deviations from this pattern is used to express certain pragmatic effects like affectedness and politeness.

Non-verbal clauses may take overt copulas depending on tense and polarity. Most semantic distinctions, such as equation, property-concepts, quantification, simulation, and location are expressed by the nominal strategy. Existential and possession are expressed by a distinct strategy. Typical verbal clauses include intransitive, transitive, and ditransitive; less typical ones include weather condition, sensation-emotion, reflexive, reciprocal, and 'need' constructions. Person-based split-ergativity is seen in case marking, where first and second person singular arguments follow accusative, and the rest ergative alignment. Accusative alignment is also found in argument indexation in non-final clauses. The object alignment is indirective in case marking.

Complement clauses include sentence-like, non-finite, and infinitive complement clauses. Adverbial clauses include various kinds of temporal clauses, temporal/conditional clauses, counterfactual, concessive, purpose, and substitutive clauses. Clause chaining (medial-final) is prevalent. Independent sentences are linked through tail-head linking and through connectives.

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CHAPTER I

INTRODUCTION

This is the first of nine chapters on the grammar of Hakhun Tangsa, a language spoken by a Tangsa community known as Hakhun, who live in the Indian states of Arunachal Pradesh and Assam and just across the national border in the Sagaing Division of Myanmar. This chapter introduces the Hakhun community, discusses the literature and the theoretical framework, describes the fieldwork methodology and the data on which this work is based, and presents the outline of this dissertation.

§1.1 provides ethnographic and demographic information on the Hakhun community. This section talks about ethnic and linguistic affiliation of the community, population and geographical spread, various aspects of their cultural and social organization, language contact, and language vitality. §1.2 talks about the existing and current work on this language, which until now is minimal. §1.3.1 presents the theoretical framework being followed in this work and §1.3.2 provides a detailed report on fieldwork undertaken for collecting the data for this dissertation. This section identifies and profiles my language consultants. It describes the equipment, data formats, and technical specifications used in data collection. It also describes data management and processing tools and techniques used. Finally, it describes the nature and amount of data used for writing this dissertation.

Finally, §1.4 provides a chapter outline of this dissertation.

1.1 Hakhun People, Language and Culture

1.1.1 Autonym and Exonyms

The autonym for the community as well as their language is **Hakhun** (*haʔk^hûn*). My consultants see this name as consisting of *haʔ* ‘earth, land’ and *k^hûn* ‘under’. According to one of the folk tales on the origin of the Hakhun tribe told by Phulim Hakhun (henceforth PH), this name was chosen by the community because they lived on a piece of ground which was lower than the grounds of other Tangsa communities. This place, where the name Hakhun originates, is believed to be the place called Khunsa (*k^hûnc^hà*) in Arunachal Pradesh.

There are several exonyms used by other neighboring Tangsa communities. Two of these exonyms, **Hikhun** (*hiʔk^hûn*) used by Tangsa communities like Kimsing and Singke, and **Hakhan** (*haʔk^hân*) used by Tangsa communities like Hakhi, Game, and Gazi, seem to be language specific pronunciations of the word Hakhun. The exonym **Kangkhu** (*káŋk^hû*) used by Tangsa communities like Hasik seems to have come from a place name. According to the folk tale mentioned above, after living at Khunsa for a long time the community moved from there along the Tirap river and settled down at a place called Kangkhu, which is currently known as Upper Changlang. Another exonym is **Kahuk** (*kàhuk*) used by the Tangsa community Bote. The source for this exonym is not clear to me. According to my consultant PH, none of these exonyms is pejorative.

1.1.2 Ethnic and Linguistic Affiliation

The Hakhun community lives next to several other similar small ethnic communities in India and Myanmar. Each of these communities has its own ethnic name and speech variety. In the past, various names have been used to collectively refer to these ethnic communities, such as Hemi, Pangmi, Rangpan, etc. My elderly consultant PH grew up hearing the name Hemi up until his youth in the 1980s. Then came the name Pangmi. Eventually, they came to be known as **Tangsa** in India and **Tangshang** in Myanmar. According to Saul (2005: 28), the term Tangsa was first coined in 1956. The *Ethnologue* (Simons & Fennig, 2017) has two entries for these ethnic communities with the same ISO code ISO 639-3 nst – Tase Naga and Tangshang Naga. The word Tase is the equivalent of Tangsa in one of the sub-groups known as Chamchang or Kimsing (Morey 2015). Including Hakhun, there are around 80 such ethnic sub-groups who are known today as Tangsa/Tangshang. Some of these communities are found both in India and Myanmar, such as Hakhun, while some others are found either only in India, such as Tikhak, or only in Myanmar, such as Gazi¹.

The speech varieties of the Tangsa communities comprise a closely-knit language group. Some of the speech varieties are almost identical, while others are not mutually intelligible (Morey, 2011a). The sub-grouping of these speech varieties is yet to be done (see Morey, 2015; Statezni, 2013). According to my consultants, Hakhun is similar to Bote and Lama, two apparently mutually intelligible speech varieties, and to some extent to Cholim. However, Hakhun is most similar to the

¹ See the Wikipedia page titled 'Tangsa people' at https://en.wikipedia.org/wiki/Tangsa_people for a list of the Tangsa communities. (Accessed 23rd March 2017)

speech variety of another ethnic community known as Nocte. Noctes are ethnically distinct from Tangsa, at least in India. Both Nocte and Hakhun people maintain that their speech varieties are very similar, and some go a step further and maintain that they are ‘essentially the same’ language. It seems people are referring to the number of shared vocabulary items in such cases. These two varieties certainly have considerably different grammar, and it becomes obvious when looking at descriptions like Rahman (2016) on Nocte. §7.5 presents a comparison of the argument indexation systems of the two speech varieties.

The speech varieties of the Tangsa groups, including that of Hakhun along with Nocte and few other languages like Wancho, Konyak, Phom, Chang and Khiamngan, are considered as a genetic sub-group known as Northern Naga (Bradley, 1997; French, 1983) or Konyak (Burling, 2003). Northern Naga or Konyak then is considered to form a higher group with the Bodo-Garo and Jinghpaw groups, known as the Sal or Bodo-Konyak-Jinghpaw group within the Tibeto-Burman or Trans-Himalayan family (Burling, 1983, 2003).

1.1.3 Population and Geographical Spread

Hakhun people are mainly found in Changlang and Tirap Districts of the Indian state of Arunachal Pradesh and just across the national border in the Sagaing Division of Myanmar (also known as Burma). There is no official estimate of the Hakhun population, although there is an estimate of the population of all the Tangsa communities combined. The *Ethnologue* (Simons & Fennig, 2017) gives an estimate of 100,100 speakers of Tangsa varieties in all countries for the year of 2010; 60,000 of which live in Myanmar. Bradley (1997) gives a conservative estimate of 15,000 in India and around 40,000 in total in India and Burma.

My consultant Khithung Hakhun prepared a list of Hakhun villages he could think of both in India and in Myanmar. Some of the well-known Hakhun villages/localities in Myanmar along with the estimated number of families are: Hakhun Nuknyu (200), Vanruk (80), Hahung (150), Kolang (30), Thangzung (100), Hakhi (50), Phakit (40), Thimtom (40), Litu (50), Namzung (50), Holung (30), Thaho 2 (30), Thaho 3 (150), Lammung (50), Bote (20), Lehung (20), Zura (30), Pangsua (20), and Khamti (10). Some of the Hakhun villages/localities in Arunachal Pradesh are: Rangring Kan (30), Relang Kan (30), Phimviro (30), Khiti (75), Tingsa (65), Old Changlang (10), New Changlang (20), Lungtum (30), and Panchun (30). Besides these villages/localities, there are also three Hakhun villages in the Margherita subdivision of the Tinsukia District of the Indian state of Assam. They are Malugaon (40), Mullong (30), and Lekhapani (10). Most households are joint families with between 10 to 15 family members, even larger in villages in Myanmar. Thus, we can estimate the Hakhun population to be around 10,000 in both countries. According to my consultant PH, Hakhun is one of the larger tribes of the Tangsa community. Figure 1 shows a broad aerial view of the Hakhun area. Figure 2 shows a close view of the Hakhun area. These maps have been drawn on the basis of the list of Hakhun villages provided by Khithung Hakhun. Major townships which form the boundary of the Hakhun area can be seen on the second map – Kharsang (Arunachal Pradesh) on the top, Margherita (Assam), Changlang (Arunachal Pradesh), Khonsa (Arunachal Pradesh), Pansaung (Sagaing), Nan Yung (Sagaing), and Lahe (Sagaing) at the bottom.

Figure 1: Geographical spread of Hakhun

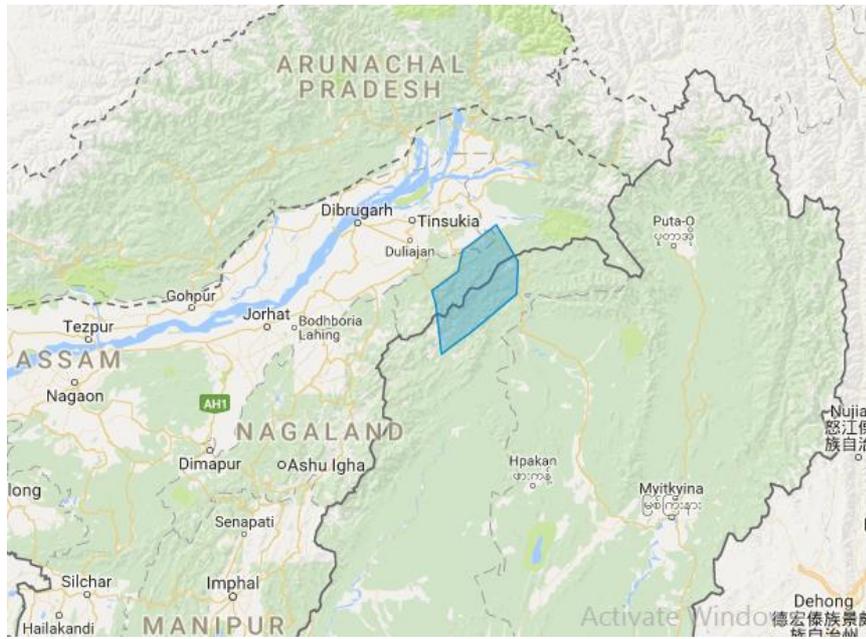
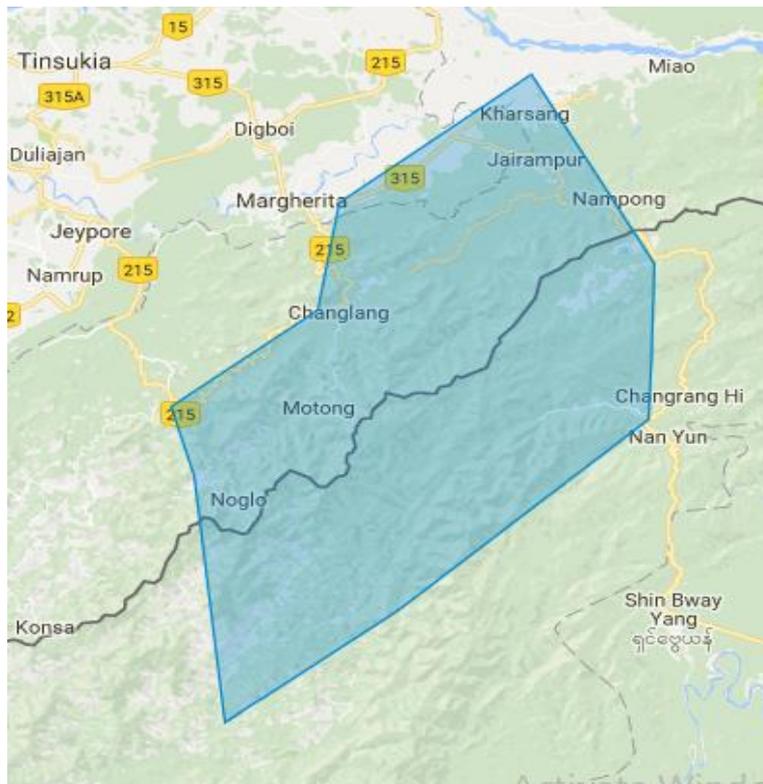


Figure 2: Geographical spread of Hakhun



1.1.4 Aspects of Hakhun Culture and Social Organization

1.1.4.1 Origin of Hakhun and Tangsa People

According to PH, there used to be elaborate stories of from where, when, and how all the Tangsa people migrated to their current locations. However, PH and many other older people do not remember all the details anymore. In short, it is believed that Tangsa people originally migrated from Mongolia. They came through China and Myanmar, and reached two villages named Tangnyu and Sangnyu, which are currently located in the state of Nagaland, India. After settling there for a long time, they eventually moved to their current locations in Arunachal Pradesh, and across the border in Myanmar.

1.1.4.2 Food and Habitation

Hakhun people live in small villages which they call *nuk* or *ha?súŋ*. The second word for village is a compound of *ha?* ‘earth, land’ and *súŋ* ‘to establish a village’. The largest Hakhun village, called **Hakhun Nuknyu**, which is in Myanmar, has around 200 families. The name of this village itself translates as Big Village (*nuk* ‘village’, *ju* ‘big’ or ‘mother’). Traditionally Hakhun people live in houses which are mounted above the ground such that the floor does not touch the ground. The floors and walls are usually made from bamboo and the roofs are mostly made from palm leaves. Traditionally, houses are divided into three parts or rooms known as *váká*, *kátap*, and *himmûŋ*. The room *váká* is the first room in the front side of the house. This room is dedicated for men to sit and socialize with other men. This is also the

room where they would keep heads of animals for decorative purposes. Each part of the house has its own fireplace, which remains lit the whole day, every day throughout the year with dry firewood brought from the hills. On the fireplace is an iron stand for mounting cooking pots over the fire, and on it most of the time there is a tea pot boiling bitter tea made from dried homemade tea. It is hard to drink it at first, but one gets used to it quickly. Next to the *váká* further inside the house is the *kátap* room, which is considered sacred and is mostly for ceremonial purposes; outsiders are not usually allowed in it. The last room and the inner most room is the *himmûñ*, which is a compound of *hìm* ‘house’ and *mûñ* ‘inside’, which is used by women.

These houses also have bamboo floors that extend outside the house, which are used for drying rice, other seeds, tea leaves, etc., and for family gatherings in the evening.

Most Hakhun families are large extended families, consisting of around 10 to 15 family members. They may or may not share the same roof, but they share the kitchen. The Hakhun women are particularly hard-working. Besides preparing food and running the household, they take active part in the cultivation process – in clearing the field by cutting trees and woods, in planting seeds, in weeding the paddy field, in harvesting crops. They also gather the daily necessary items, like firewood from the hills, vegetables from the paddy field, water from the streams. They use a special type of basket to carry these items on their back strapped to their forehead with a piece of rope.

Hakhun people produce most of what they consume on daily basis. They grow rice, corn, vegetables of various kinds in the hills using a practice called shifting cultivation. The villagers of a village would clear a piece of land in the hills by cutting

down trees and woods and burning them once they dry. Then they clear the field and sow or plant the seeds with an iron tool or wooden stick. Each family would plant their own crops and vegetables and harvest them when they are ripe. The next year, they would move on to another piece of land. Hakhun people living in Assam also do tea gardening. Hakhun people also hunt animals like deer, monkeys, and various kinds of rodents; they fish in the mountain streams. They raise poultry and livestock like pigs, cows, and buffaloes, which are an important part of their social life. One thing they have to import is salt. In the past, Hakhun people living in Myanmar used to walk for a week to Khamti township to get salt for their villages.

1.1.4.3 Religion and Cultural Practices

All Hakhun people in India and Myanmar are Baptists. According to PH, the first Hakhun person to get baptized was a person named Rimse Hakhun, who was baptized in Nagaland, India. Most Hakhun people got baptized in the year 1981 in Myanmar. In Malugaon, the Hakhun people regularly go to the church. They are also translating the Bible into Hakhun with help from SIL.

Hakhun people continue to practice their traditional rituals and festivals. Along with other Tangsa communities they conducted a big festival called Wihu Kuh at Malugoan, Assam, in 2010. This festival involved chanting old rituals and sacrificing animals at the altar. It also involved traditional dancing and singing alongside songs related to the church. Barkataki-Ruscheweyh (2013) discusses various elements of this festival and its significance among the Tangsa communities in the modern world².

² Photos and videos of this festival are archived in the DOBES archive, under DoBes archive > Tangsa, Tai, Singpho in North East India > Tangsa > Hakhun > Festivals at <https://corpus1.mpi.nl/ds/asv/?2&openpath=node:77915> (accessed on 24th March 2017)

Figure 3: Altar in a Hakhun Festival



Hakhun people also hold dear traditional dresses, ornaments, and musical instruments. They continue to weave their traditional dresses or import them from neighboring villages. While they may not wear them on daily basis, they keep a good stock of them and hold to them as part of their cultural identity.

Figure 4: Hakhun women in traditional dress



Figure 5: Hakhun ornaments



1.1.4.4 Clans and Social Hierarchy

All Hakhun people must know their ancestral lineage, and the name of their clan. They use this to find out if two people are related somehow and how to address each other accordingly, or to see if two people are eligible to marry each other (see §1.1.4.5 on marriage, and §3.3.2.1 on kinship terms). Moreover, individual clans belong to different classes of the Hakhun society.

There are many clans in the Hakhun community and they are divided into three classes – the Luva (*lúvʻ*) clans, the Phena (*p^henʻ*) clans, and the Punyu (*púynù*) clans. Traditionally, the Luva clans were the rulers, the Phena clans were like middle classes, and the Punyu clans are the ordinary common people. It is not clear when these clan names came into existence. The following are some of the clan names and their respective classes.

- **Luva/Luvang clans:** Kolim (*kólîm*), Kamnuk (*kámnuuk*), Vanye (*váyñê*), Vadung (*vádúŋ*)
- **Phena clans:** Ngova (*ŋóvâ*), Ciknga (*cikŋa*), Nyinru (*ŋinru*)
- **Punyu clans:** Kitsi (*kitsi*), Kakhu (*kaʔkʰuʔ*), Kade (*kade*), Laphwe (*lapʰwe*), Khace (*kʰʔʔce*), Zekha (*zeʔkʰa*), Rutha (*rutʰʔʔ*) Thikkhu (*tʰikkʰu*), Khila (*kʰilâ*), Simpi (*símpî*), Phopho (*pʰoʔpʰô*), Khatci (*kʰatcî*), Saru (*sʔruʔ*), Mantha (*mántʰʔʔ*), Hala (*haʔlâ*), Huru (*hùruʔ*), Hudung (*hùdúŋ*), Tulang (*tulaŋ*)

The modern Hakhun society is not strictly hierarchical anymore, as there are no more rulers and subjects. However, the classes still play a role in certain situations. One such situation is the collective hunting done by villagers. It is customary that the Luva clans get the head of an animal, while the Phena gets the rear end. The Punyus get everything else. Another situation is dispute settlement. Usually, Luva and Phena clans play the role of dispute settlers. My consultants Phulim Hakhun, Nokrap Hakhun, and Khithung Hakhun belong to Ngova clan, Khatci clan, and Kolim clan respectively.

1.1.4.5 Family Relations and Marriage

Marriage with other ethnic communities is allowed for both men and women. Marriage also takes place across all clans. Hakhun people also allow cross cousin marriage, though parallel cousin marriage is taboo. Thus, one man can marry his mother's brother's daughter, but cannot marry his mother's sister's daughter or his

father's brother's daughter. Thus, cross cousins have different a set of kinship terms from the parallel cousins. The kinship terms for parallel cousins is the same as the terms for one's own sibling, such as *ip^hù* for older male cousin, *ijnâ* for older female cousin, and *inâ* for younger male or female cousin. On the other hand, the term for male cross cousin is *ihù*, which is same as the term for uncle (i.e. mother's brother), and the term for female cross cousin is *ijnù dâdî*, which is the same as the term for aunt (i.e. mother's sister).

Modern day weddings take place in the church. Traditionally, a man would offer either a buffalo, or two cows, or two pigs to the bride's parents on the day of wedding, which is the opposite of many Indian societies, where it is the bride's parents who offer valuable items to the groom's family, called dowry. Hakhun people maintain family lineage from father's side. Thus, children take the clan name of their father.

1.1.4.6 Dispute Handling

My elderly consultant PH was very eager that I write down how dispute is handled in the Hakhun community. Traditionally, Hakhun people handle disputes among themselves. They have specific procedures for handling different kinds of disputes, which are called *mat*. The people who settle disputes are called Phova (*p^hôvâ*) or Kamva (*kâm^vâ*). The former is a compound of *p^hô* 'to judge' and *vâ* 'person', and the latter *kâm* 'middle man' and *vâ* 'person'. There are four important positions among the Phova or Kamva, known as Lungtung (*lútúŋ*), Vaca

(*v̄câ/v̄ncâ*), Phova (*p^hôvâ*), and Rova (*roʔvâ*). These positions are usually held by Luva or Phena clans, though anyone who is regarded as learned can hold these positions. The penalty that guilty people pay is called Simtam Nyamtam (*sîmtám jàmtám*) or Nyamtam in short. The value of one unit of Nyamtam varies from one case to another. In more serious cases like murder, one Nyamtam is either a buffalo, or two cows, or two pigs, or an equivalent value of these. In less serious cases like paying a widow (see below), one Nyamtam is one cow, or one pig, or its equivalent value. Moreover, how many units of Nyamtam are to be paid varies from case to case. The following are some of the important types of case.

Murder is one of the most serious cases, called **Milan mat** (*miʔlán mat*), where *miʔ* means ‘person’, *lán* means ‘beat/kill’. The person who is killed is referred to as **Making** (*maʔkîŋ*), the relatives who ask for justice are called **Lumhwe** (*lûmhwe*), and the fine is called **Khuto** (*k^hûtoʔ*), which means ‘fine for head’ (*k^hû* ‘head’ and *toʔ* ‘fine’). For a murder case, one Nyamtam is a buffalo or two cows or two pigs or the equivalent amount in money or other valuable items, and one has to pay five such units of Nyamtam for a murder case.

Another important type of case is called **Tingkhu mat** (*tîŋk^hû mat*), which translates as ‘family case’. This is the offence of one man getting involved with a married woman and eventually taking her away from her husband. More specifically it is called **Nyunyan mat** (*jùjân mat*), where *jù* means ‘woman’ and *jân* means

‘take away by force’. The husband who has been abandoned is called **Razo** (*rázò*), the woman who has eloped is called **Soro** (*so?rò*), and one who has taken away the woman is called **Ngila** (*ŋílâ*). In this case, one Nyamtam is a buffalo or two pigs or two cows or an equivalent of it. Four such units are required to settle this kind of case.

Another important case is the case of adultery called **Dodu mat** (*do?dù mat*).

The husband of the woman who has committed adultery is called **Roni** (*rônî*), the woman is called **Vwelo** (*vwe?lô*), and the man (who may be married or unmarried) who sleeps with the married woman is called **Saho** (*sa?hô*). In this case, if the husband does not want to keep the woman anymore, he would ask for two units of Nyamtam, each unit being a buffalo or two cows or two pigs or its equivalent amount. Otherwise, he would ask for just one Nyamtam.

Another important case is the divorce case. A mutual divorce is called **Vakha kha** (*va?k^há k^há*), which translates as ‘splitting bamboo’ (*va?k^há* ‘split bamboo’, *k^há* ‘to split’). A mutual divorce is settled just by offering something nominal to the Phovas or Kamvas. A non-mutual divorce, where a man forces a woman to leave him is called **Cya mat** (*cja? mat*). In this case, the husband is called **Kemin** (*ke?mín*), and the woman is called **Cungcha** (*cúŋc^hà*). The husband must pay three units of Nyamtam to the woman, each unit being a buffalo or two pigs or two cows or its equivalent value.

The final case here is the case of a widow who has lost her husband at a young age. This case is called **Ronyamko mat** (*rôñâmko? mat*). In this case, the parents of the dead husband pay the widow so that she has some support to continue her life (though she may or may not take another husband). The dead husband is called **Nodik** (*nódik*), and the widow is called **Bwengu** (*bwèñù*), and the parents who will pay the fine are called **Vazo** (*vâzô*). In the case, the unit of one Nyamtam is equivalent of a big pig or a cow. In this case, only one such unit is paid.

1.1.4.7 Hakhun Calendar, Festivals and Traditional Songs

A year is divided into twelve months, which are called *dá* or *dáp^h*. The word *dáp^h* also denotes the moon. According to PH, the months in Hakhun calendar correspond to the months in the English calendar. It seems that Hakhun people do not use this traditional calendar to keep track of time anymore; instead they would use the English months. But the traditional calendar is greatly intertwined with Hakhun culture – singing, dancing, cultivation, and so on. Each month has some association with some song, or dance, or some event in the Hakhun community. Hakhun songs are of two types – *sí* and *bó*. Both types of songs are sung in a group. In the first type, one person takes the lead and others follow him. In the latter kind, everyone sings simultaneously. The names of the months are given below in the chronological order – Hivun Da being the first month of the year and Sezu Da being the last month of the year.

1. Hivun Da (*hívûn dá*)
2. Chaba Da (*c^haʔbɣ dá*)
3. Minga Chaba Da (*miʔŋâ c^haʔbɣ dá*)
4. Mwe Da (*mwé dá*)
5. Sithe Da (*sít^hé dá*)
6. Chavi Da (*c^haʔví dá*)
7. Runghwe Da (*rúŋhwé dá*)
8. Beram Da (*bèrám dá*)
9. Kuse Da (*kúsé dá*)
10. Zeca Da (*ʒeʔcá dá*)
11. Cadungvi Da (*caʔdûŋví dá*)
12. Sezu Da (*sêzù dá*)

Traditionally, six of these months involve singing and dancing for various occasions, such as planting, harvesting, building roads, courting, etc. The first month Hivun Da is the month of sowing and planting crops (*vûn* ‘sow’). People sing and dance at the end of the day after sowing crops. A song sung particularly in this month is called **Zunwam Bo** (*ʒûnwàm bó*) (water flowing song), which is about sowing crops in the field. The following is how the song goes.

<i>o</i>	<i>vún</i>	<i>l-o?</i>	<i>vún</i>	<i>l-o?</i>	<i>c^ha?ló</i>
EXCLAM	sow	IMP-2SG	sow	IMP-2SG	rice.type

vún l-o?
sow IMP-2SG
‘Oh scatter the seed, the paddy seed.’

<i>o</i>	<i>k^hit</i>	<i>l-o?</i>	<i>k^hit</i>	<i>l-o?</i>	<i>c^ha?sâ</i>
EXCLAM	plant	IMP-2SG	plant	IMP-2SG	rice.type

k^hit l-o?
plant IMP-2SG
‘Plant the small paddy with a stick.’

During the fourth month called Mwe Da, when the rice plants grow, Hakhun people go to the field and pray for good crops. In the evenings, they would sing a song called **Vanrya Bo** (*vânryá bó*), which is about commemorating their ancestry.

The song goes like this:

<i>t^ha</i>	<i>rám</i>	<i>e</i>	<i>vâŋvâ</i>	<i>e</i>
???	call	EXCLAM	king	EXCLAM

‘The chief is calling.’

<i>t^ha</i>	<i>rám</i>	<i>e</i>	<i>vâŋvâ</i>	<i>e</i>
???	call	EXCLAM	king	EXCLAM

‘The chief is calling.’

<i>kâmvâ</i>	<i>e</i>	<i>t^ha</i>	<i>k^han</i>	<i>e</i>
middle.man	exclam	???	assure	exclam

‘The middleman will give his assurance.’

<i>kâmvâ</i>	<i>e</i>	<i>t^ha</i>	<i>k^han</i>	<i>e</i>
middle.man	exclam	???	assure	exclam

‘The middleman will give his assurance.’

The fifth month Sithe Da is about building bridges and roads (*sî* ‘bridge’, *t^hè* ‘set up a ladder/bridge’). People celebrate a festival called **Sithe Kuva** (*sît^hé ku?va*)

in this month, the festival of making bridges. In the evenings, they sing a song called

Sweto Si (*sweʔtò sî*), which goes like this:

raplɤ *pan* *keʔ* *e* *ŋâ*
 bridge.floor tie go 1PL say
 ‘We will go to make the foundation of the bridge.’

nwɛlɤ *nut* *keʔ* *e* *ŋâ*
 bridge.post bend go 1PL say
 ‘The two posts are bent down.’

lâm *luŋ* *a* *vè* *keʔ* *e.*
 road clean ??? cut go 1PL
 ‘Let us go and clean the road and cut (the jungle).’

The eighth month Beram Da is the month in which the village chief calls spirits from the field (*bè* ‘field’ *râm* ‘call’), and prays that they give him and his people what they want. A song particularly sung in this month is **Phungtu Si** (*p^húŋtù sî*), which goes like this:

kuʔŋù *hwe* *k-ì* *bə* *le*
 festival build PRES-1PL DEF DP
 ‘When we conduct the festival’

vəŋva *kaʔ* *rì* *meʔ*
 leader speech do ADV
 ‘By the speech of the leader’

mweŋu *hwe* *ki* *bə*
 festival build PRES-1PL DEF
 ‘When we conduct the festival’

kəmva *kaʔ* *kəp* *meʔ*
 leader speech get from
 ‘From the speech of the leader’

The ninth month Kuse Da is the month of clearing the forest for planting crops. People sacrifice animals like cows and buffalos, and get started with clearing the paddy field. A song sung in this month is **Khapa Bo** (*kʰəpâ bó*), in which they praise themselves, by saying that they are like male buffalo horn, round and plump.

o *kʰûngâŋ* *o* *rûŋ* *txʔ*
EXCLAM hakhun EXCLAM horn short.big

pùŋ *o*
male EXCLAM
‘Oh we Hakhun’s, the male buffalo horn.’

o *kʰûngâŋ* *o* *ná* *lwan*
EXCLAM hakhun EXCLAM ear large

pùŋ *o*
male EXCLAM
‘The Hakhun, the big ear of the male of buffalo.’

taŋ *e* *kəswam* *kʰûngâŋ*
tangsa.people EXCLAM honor hakhun
‘Tangsa people honor Hakhun people.’

paŋ *e* *kəsom* *kʰûngâŋ*
tangsa.people EXCLAM honor hakhun
‘Tangsa people honour the Hakhun.’

The ninth month is also known as the lover’s month. A song called **Kweso Si** (*kweʔsô sí*) sung in this month, which is about man proposing a woman for marriage, goes like this:

e *məni* *nolamŋa* *o*
EXCLAM since.before girlfriend EXCLAM
‘My old girlfriend.’

e *mik* *mə* *râ* *vɿ*
EXCLAM eye ADV want come

people from communities which do not understand Hakhun but understand one of these varieties. For instance, when Hakhun people talk to Kesan (Kaisan) people, they would use Hasik because Hasik people live between the Hakhuns and the Kesans. On a much broader level, Burmese, and Nagamese to some extent, are used as lingua francas.

The Hakhun people living in India particularly use Nagamese as lingua franca. I do not have much information on the language contact situation in Arunachal Pradesh. But in Assam, Hakhun people are in regular contact with Assamese, the state language of Assam. Almost everyone by now understands Assamese and speaks some Assamese. Most children go to Assamese medium schools and colleges. I have noticed more and more Assamese words and expressions are popping up in Hakhun speech, even in the speech of older people.

1.1.6 Language Vitality

The Tangsa communities are all very small and none of them seem to be dominant over others. As we have seen in the language contact scenario in the Hakhun area in Myanmar, people in the communities prefer to speak their own language even when they can understand each other's language. This is perhaps the main reason why so many varieties have managed to exist side by side in such a small area. It does not seem that this scenario is going to change any time soon, since this area is very hard to access. This is also true in Arunachal Pradesh. The villages are in remote places and there is no dominant language, although Nagamese may have some influence on the Tangsa languages in Arunachal.

The scenario in Assam, on the other hand, is very different. Here we have a majority state language and Hakhun people need to use it to communicate at the market, school, government offices and so on. The young generation is already adopting Assamese or even Hindi as their preferred language to communicate among peers. Therefore, it is likely that these people will lose the language in just couple of generations.

1.2 Literature Review

Hakhun Tangsa is a previously undescribed speech variety. There is no literature on Hakhun Tangsa as of now. In fact, none of the Tangsa varieties and the closely related speech varieties like Nocte have any comprehensive description. However, there are some works on Tangsa varieties as a whole and on the closely related variety Nocte, which are relevant to the current study. The earliest published works on Tangsa and Nocte are Das Gupta (1971, 1980), which contain brief sketches and elicited sentences of the target speech varieties. Das Gupta (1971) is a short description of Nocte (38 pages) in which the author presents grammatical forms, such as nominal and verbal categories like case, number, argument indexation, and a brief description of simple clauses illustrated with elicited sentences. This work also includes a list of basic vocabulary. Das Gupta (1980) is also a very short book (77 pages) in which the author presents mainly grammatical forms like pronouns, case markers, argument indexation, and a set of lexical items on eleven speech varieties of Tangsa spoken in Tirap district of Arunachal Pradesh. However, Hakhun is not one of these speech varieties. These two works had formed the only source of information on the Tangsa varieties and on Nocte until very recently, and important comparative work had to be based on these sources. A more recent and more comprehensive

description of Nocte is an MA thesis by Rahman (2016). The focus of this work is on the argument indexation system of the language. Nevertheless, it gives a comprehensive description of the language, which covers most aspects of the grammar, such as the phonology, structure of noun phrases, verbal categories, speech-act types, and so on.

Another work relevant to this study is a comparative work by French (1983), which reconstructs the phonological inventory and more than 100 basic vocabulary items of the ancestor language to which the Tangsa varieties and other related speech varieties belong to, which he calls Northern Naga. This work is based on seven speech varieties, which include two Tangsa varieties, Yogli and Mosang, and Nocte. The data for this work is largely drawn from an earlier comparative work by Marison (1967), which investigates a more diverse group of languages of northeast India belonging to different subgroups such as Bodo-Garo, Ao, Angami-Pochuri, Northern Naga, and so on.

The most significant work on the Tangsa varieties so far is a documentation project called ‘The Traditional Songs and Poetry of Upper Assam – A multifaceted Linguistic and Ethnographic Documentation of the Tangsa, Tai and Singpho Communities in Margherita, Northeast India’³. This documentation was conducted by Dr. Stephen Morey, from the Centre for Research on Language Diversity (CRLD) at La Trobe University, and his team consisting of a musicologist, Dr. Jurgen Schopf, and an anthropologist, Dr. Meenaxi Barkataki-Ruschewehy. This was a large-scale project, covering three different language communities in Upper Assam, India – Singpho, Tai, and Tangsa. This project has worked on more than twenty Tangsa

³ This project was funded under the DOBES programme, and it ran from 2007 to 2011.

varieties and produced valuable material, such as lexicons, recordings of songs, dances, stories and cultural events, some transcriptions and annotations of songs and traditional stories, and grammatical sketches, which are archived and made publicly accessible at the DoBes archive⁴. I received several recordings, some annotations, and a lexicon from this project at the very beginning of my work on this speech variety. Following this project, Dr. Stephen Morey produced several papers on various aspects of the Tangsa languages, such as argument indexation (Morey, 2011a), transitivity (Morey, 2011b), tones (Morey, 2014), internal diversity of the Tangsa varieties (Morey, 2015), and sociolinguistic context of the Tangsa varieties (Morey, in print-b).

We are at a very early stage of understanding the sociolinguistic and historical dynamics of these 80 some speech varieties labelled as Tangsa and other closely related speech varieties like Nocte, Wancho, and Tutsa spoken at the Indo-Myanmar boarder area. The existing literature does not say much about any of the individual speech varieties. However, the recent interest in language documentation is making a huge difference in discovering new speech varieties and in making linguistic resources available on these speech varieties. To this effort of shedding more light on these speech varieties, I hope this dissertation will greatly contribute towards our understanding of the structure of these languages.

⁴ The archive can be accessed here - <https://corpus1.mpi.nl/ds/asv/?0&openpath=node:77915> (last accessed 11th May 2017)

1.3 Theoretical Framework and Fieldwork

1.3.1 Functional-Typological Approach

Several assumptions have been made about linguistic structure, language function, language use, language change, and role of language in the lives of individuals and in a society throughout the research process. Most of these assumptions are shaped by the work of a few prominent linguists, whose approach is known as West Coast Functionalism. These works primarily include (DeLancey, 2001; Givon, 1995, 2001a, 2001b). A fundamental assumption, in this and other functional approaches, is that language is primarily a tool of communication. It is a tool with which we build our mental representations and it is the tool with which we try to build similar mental representations in our addressee's mind(s) when we communicate. Thus, representation of knowledge and communication of knowledge are two primary functions of human language. Moreover, language is an optimally effective, but not a perfect tool. And speakers always keep it refining either consciously or subconsciously to get the effect they want with this tool. Thus, language is a mechanism that evolves to serve the purpose of communication most effectly throughout time.

These assumptions have a great influence across the board in this research. First, absolute emphasis is given on connected speech as the source of data. Linguistic structure is best understood within a discourse. Second, no assumption is made of a fixed set of grammatical categories. On the contrary, linguistic categories are language specific and continuously shifting over time. In fact, it is more often the case that we encounter linguistic categories in the middle of their transition from one

category to another, which often makes categorization difficult. Thus, synchronic description is often combined with diachronic discussions.

However, at the same time, it is assumed that generalizations on form-function relations can be made across languages. It is of great interest to see the range of structural means employed to code a particular semantic domain, as well as to see how certain structural means are associated with a range of semantic domains across languages.

1.3.2 Fieldwork

1.3.2.1 The Field and the Consultants

Fieldwork for this dissertation was conducted intermittently between August 2009 and March 2017 for a total of about seven months. The location of my fieldwork is a village named **Malugaon** or **Malupahar** (Latitude 27°17'9.78"N, Longitude 95°44'22.03"E) in the Margherita subdivision of the Tinsukia District of Assam, India. This village is situated in the foothills of the Patkai Mountains just above a small town called Ledo. I made total of eight field trips over these years and lived at his consultant Phulim Hakhun's house in Malugaon. All my consultants with whom I have directly worked live in this village. My young consultant and friend Khithung Hakhun also collected several narratives from several speakers from another village called **Vanruk** across the border in the Sagaing Division of Myanmar, where he has relatives. He also recorded videos of singing and dancing from that village. Vanruk couldn't be located precisely on the map, but the general area determined by descriptions of how my consultants reach there is shown in the map in Figure 6. The circle on the top marks Malugaon and the one at the bottom marks Vanruk.

Figure 6: Field Locations - Malugoan (top) and Vanruk (bottom)



A total of ten Hakhun speakers from both these villages have contributed data for this dissertation, six from Malugoan and four from Vanruk. Out of six speakers from Malugoan, two are female and four are male. All speakers from Vanruk are male. All speakers are adults between the age of 29 to 80. My three main consultants with whom I have worked extensively are Phulim Hakhun (PH) (male about 70 years old), Khithung Hakhun (KH) (male about 32 years old), and Nokrap Hakhun (NH) (male about 29 years old) (see Figure 7).

Phulim Hakhun is the only person in Malugoan who has extensive knowledge of Hakhun culture and tradition, whether it is about festivals, songs, dances, or folk tales. He is also an expert singer and dancer of traditional songs and dances. Most of the narratives used in this dissertation come from him. Most of the elicitation is also done with him, though, he does not like to make grammatical judgments. Over the

course of my fieldwork with him, his speech has somewhat changed. Assamese words are now starting to pop up occasionally in his speech.

Figure 7: Main consultants - Phulim Hakhun (middle), Khithung Hakhun (right), Nokrap Hakhun (left)



Khithung Hakhun played a very important role as a translator between Phulim Hakhun and me, since Phulim does not communicate well either in Assamese, the lingua franca of the region, or English, and I do not communicate well in Hakhun Tangsa. Khithung, who has a Bachelor of Theology degree, has a very good command of spoken English. Another great contribution that Khithung has made is by collecting folk tales and videos of singing and dancing from Vanruk. Later on, he also transcribed and translated narratives. Nokrap Hakhun, who is also a Bachelor of Theology, has a very good intuition and the aptitude of a linguist. Nokrap got involved much later (in 2016 and 2017) in this project, and yet made great contributions. He has a very good sense of the tonal categories and helped finalizing tones on around three thousand lexical items. He also helped with transcription and translations of narratives and conversations.

The other three speakers from Malugaon are Jelim Hakhun, Nyalik Hakhun, and Nyamlik Hakhun. Jelim Hakhun (male around 36) took part in elicitation and recording lexical items for phonological analysis. Nyalik and Nyamlim (both female around 32 years old) provided me with lexical items for phonological analysis. The four speakers from Vanruk are Ngupong Hakhun (male, deceased in 2014 at the age of 71), Nuklwam Hakhun (male, about 80 years old), Soema Hakhun (male, around 50 years old), and Thopung Hakhun (male, deceased at the age of 71 in 2015). These speakers have contributed spoken narratives of various kinds. One special set of narratives are war stories of the Hakhun people, in which Hakhun people are portrayed as a warrior tribe who go to war to help weaker tribes against their enemies.

1.3.2.2 Equipment and Data Formats

1.3.2.2.1 Equipment

Over the course of fieldwork on Hakhun, I have used several digital recorders to record data. The first recorder used in the field was a **Tascam HD-P2** along with a Beyerdynamic condenser cardioid stereo microphone (something like CK701). The recorder allows a recording resolution of 44.1 kHz and 192 kHz at 16 to 24 bit on Compact Flash media. It records in WAVE file format. It can be run on either AA batteries (8 pieces), which run approximately for 5 hours, or DC power. It has an XLR microphone outlet. The second recorder was a much lighter **M-Audio Microtrack 24/96** with Sony ECM ZS90 electret condenser omnidirectional microphone. This stereo recorder allows us to do PCM recording at 44.1 kHz and 96 kHz at 16 or 24 bit. It has inbuilt rechargeable lithium-ion battery with a battery life of 5 to 7 hours and it also runs on DC power. The third audio recorder was another light-weight audio/video recorder **Zoom Q3HD Handy Video Recorder**, which

allowed both audio and video recorder. This recorder also allowed audio recording at 44.1 kHz and 96 kHz at 16 and 24 bit in the wave format. The final audio recorder used is the **Tascam DR-40**, a light-weight audio recorder with inbuilt high quality condenser microphones as well as XLR input. It allowed recording at 44.1 and 96 kHz at 16 and 24 bit in the linear PCM wave format.

1.3.2.2.2 Formats and Specifications

Since I intend to archive the audio files, they are all recorded using specifications and formats that are acceptable for digital archiving in an archive like DoBes. All audio files are recorded in the PCM wave format at the frequency of 44.1 kHz or higher in 16 or 24 bit.

1.3.2.3 Data Management and Processing

1.3.2.3.1 File Naming Convention and Directory Structure

All the sound files which contain primary data are named consistently following a naming convention initially designed by Dr. Stephen Morey. The name of an audio file looks like the following:

nst-Hakhun_20110802_1_KB_Z_Phulim_Bodyparts

This name has seven parts – (i) the ISO code and the name of the language or language variety (nst-Hakhun), (ii) date of recording (YYMMDD), (iii) number of recording within a particular session/day, (iv) initials of the researcher (KB), (v) name of the recording instrument (Z = Zoom Q3), (vi) name of the consultant(s), and (vii) an expression describing the content of the file (Bodyparts).

Any other file, such as annotation files like a PRAAT TextGrid files, ELAN files, or Word files, which contains annotation or transcription of what is in the sound

file is given the same name as the sound file. All these derivative files are then placed inside a folder along with the sound file. The folder is also given the same name as the sound file. Each such folder contains a single sound file and any other annotation files derived from the sound file. Thus, a piece of primary data and all its derivatives are stored as a bundle in a single directory.

1.3.2.3.2 Lexical Data Management and Processing

FieldWorks Language Explorer (FLEX)⁵ is used to keep all the relevant information on individual lexical items. An entry of a lexical item contains both broad and narrow transcriptions of the lexeme, the citation form, gloss, and occasionally example sentences. The individual entries are linked to the sound files containing an utterance of the lexical item whenever there is one. This allows us to not only to read the transcription but also to listen to the pronunciation of a lexical item. One beauty of FLEX is that it uses a relational database to store the lexical entries and it provides very powerful filtering capacities.

Another crucial benefit of storing data in FLEX is that we can import the data into other pieces of software for further processing. For example, we can import the data into **Phonology Assistant**⁶. As the name suggests, Phonology Assistant can help us doing phonological analysis. It has several useful features. We can find out the distribution of individual speech sounds, as we know distribution is everything in phonemic analysis. We may see patterns which are otherwise difficult to see. For instance, we can quickly find out if there is any restriction on the occurrence of certain vowels with certain codas. Moreover, it provides frequency information of

⁵ See <http://fieldworks.sil.org/flex/> for more information on FieldWorks Language Explorer.

⁶ See <http://phonologyassistant.sil.org/> for more information on Phonology Assistant.

individual speech sounds, which again may play a role in our analysis of the phonemic status of a particular sound. Another piece of useful software to which we can import FLEEx database is **WeSay**⁷. Using this piece of software, we can format the lexical database as a dictionary, which then we can share with other people who want to look at the lexical items.

1.3.2.3.3 Text Data, Annotation, Interlinearization, and Concordancing

FLEEx also has been used for processing connected speech like narratives, procedural descriptions, conversation, etc. as well as elicited individual sentences. Connected speech is directly transcribed into FLEEx. FLEEx allows us to divide texts into paragraphs and sentences, provide a translation for each sentence, keep notes on each sentence, and parse and gloss individual words in the sentences. Each piece of connected speech is entered as a single text entry. Elicited sentences are initially written in notebooks, and later entered in FLEEx. The lexical database in FLEEx described above and the text database work hand in hand. It stores the glossed morphemes in the lexical database and looks up the lexical database to see if any of the words or morphemes in the text are already in the lexical database. Moreover, it tries to automate the process of morphological parsing and glossing of individual words by remembering how they have been parsed and glossed before and suggesting the same parsing and glossing when we encounter the same word later in the same text or in the subsequent texts. FLEEx also provides a means for storing some metadata for individual texts, where we can store information like (i) the primary source of the text like the name of the sound file, (ii) names of the participants in the connected speech (both researcher and the consultant), (iii) genre of the connected speech, (iv)

⁷ See <http://wesay.palaso.org/> for more information on WeSay.

date of creating the text entry, which is automatically provided, and any short notes one would like to keep on the text.

A great facility of FLEx is the concordancing tool, which has helped me look at the distribution of individual morphemes and words. It also has recently incorporated Regular Expressions, which allow us to look for more complex distributions. These tools have greatly facilitated the process of analysis of my text data. However, one facility which FLEx does not have is the association of the transcribed text with the audio sound file, such that we are both able to read the transcription and listen to the pronunciation of the sentence. We can easily imagine why that might be necessary. We may leave out portions of speech untranscribed unintentionally, inaccurate transcription, and so on. **ELAN**⁸ (EUDICO Linguistic Analysis) provides just that facility. Therefore, I have annotated almost all of my connected speech in ELAN as well. These annotations have transcription and translation of individual sentences in the connected speech.

1.3.2.4 Data

The data collected during fieldwork consists of recordings of speech, transcriptions, annotations, and interlinearized texts. I will talk about the recordings under primary data and all other derivatives of the primary data under secondary data.

1.3.2.4.1 Primary Data

The primary data collected or obtained during fieldwork consists of (i) recordings of lexical items and minimal sets for vowels and tones from 5 speakers that run for approximately 45 hours and 25 minutes, (ii) recording of 8 conversations

⁸ See <https://tla.mpi.nl/tools/tla-tools/elan/> for more information on ELAN.

between two people that run for 40 minutes in total, (iii) recordings of 34 narratives from 6 speakers that run for 3 hours and 47 minutes in total, and (iv) a 2 hour and 8-minute-long movie on Hakhun about Jesus created by SIL. Most of the people who have taken roles in this movie are from Malugaon, although there are a few from neighbouring villages. The total amount of recording on connected speech (i.e. conversation, narratives, and the movie) is 6 hours and 35 minutes.

1.3.2.4.2 Secondary Data

The lexical database in FLEx contains 3320 lexical items, though there are some repetitions. All entries have a phonemic as well as phonetic transcription of the lexeme, citation form, and gloss. Most entries have word-class specification. Seven hundred entries are linked to sound files. 3000 entries have been recently double checked for tone and at least 90 percent of these entries have reliable tone marking. Of the 45 hours and 25 minutes of recordings of lexical items, 8 hours and 20 minutes of recording is annotated mostly in PRAAT TextGrid and some in ELAN.

There are 32 connected texts (movie, conversation, narratives, etc.) that run for 5 hours and 30 minutes annotated in ELAN and interlinearized in FLEx. The two hour and eight-minute-long movie has been annotated in ELAN, where each sentence has been transcribed and translated into English (1,165 sentence breaks). Subsequently the annotation has been copied into FLEx and interlinearized. Similarly, seven of the eight conversations have been annotated in ELAN and copied into FLEx. The eighth conversation only has transcription and no translation at this point. Twenty three of the thirty-four narratives have been annotated mostly in ELAN and interlinearized in FLEx. The total duration of the annotated and interlinearized narratives is two hours and forty-two minutes.

Besides the spoken connected speech, I have two sources of written data. My consultant Khithung Hakhun had written nine very short stories using a Roman based orthography. Moreover, the Bible is translated into Hakhun from English. I back-translated six chapters of the Bible (Book of Acts chapter 13-18) into English with help from Khithung Hakhun. The language of the Hakhun Bible is however very much influenced by English, especially the organization of clauses in complex sentences. Therefore, their use in the dissertation has been limited and data from the Bible is used only while discussing clause internal aspects of the grammar.

Finally, there are around 800 pages of elicited sentences (hand written in note books) collected throughout the period of fieldwork. Most of the elicited sentences are entered in FLEx so that I can concordance on them. The total number of sentence breaks in my FLEx database (which include the spoken connected speech, written data, and elicited sentences) is 4287, the total number of unique words is 4987, and total number of word tokens is 38500.

1.3.2.5 Archival

I intend to archive both the primary and secondary data in the DOBES⁹ (Dokumentation bedrohter Sprachen) archive housed at the Max Planck Institute for Psycholinguistics in Nijmegen (The Netherlands). Some Hakhun materials are already archived under the archive called ‘Tangsa, Tai, Singpho in North East India’ created by Dr. Stephen Morey, La Trobe University. My data will be archived in the same archive.

⁹ See <http://dobes.mpi.nl/> for more information on the DOBES Project.

1.4 Outline of the Grammar

The description of the grammar is divided into nine chapters. Chapter Two deals with the sound system of the language and lays out all the important features of the Hakhun phonology, such as the syllable canon, the consonant and vowel inventory, phonotactic restrictions, and the inventory of tonemes. It also provides discussion on problems of synchronic analysis of certain speech sounds, and resolutions taken for the purposes of continuing with the transcription in the rest of the dissertation. Chapter Three identifies all the important word classes and subclasses in the language. Chapter Four describes the morphological shape of nouns, and Chapter Five describes the structure of noun phrase. Chapter Six describes the morphological shape of the verb stems, and the grammatical elements that occur with the verb stem in the predicate, such as the elements which code verbal categories like tense, aspect, mood, polarity, etc. Chapter Seven is devoted to one of the major grammatical categories of verb, argument indexation (verb agreement). Hakhun has a complex hierarchical argument indexation system along with inverse marking. Chapter Eight describes the structure of simple clauses and their locutionary forces. Finally, Chapter Nine describes combining of clauses into a single sentence, as well as the combining of sentences into connected discourse.

CHAPTER II

PHONOLOGY

This chapter describes the sound system of Hakhun. This chapter primarily deals with the syllable structure, the consonant inventory, the vowel inventory, and the tone system of Hakhun. The syllable structure of Hakhun is quite simple. The most complex syllable in Hakhun consists of a cluster of a consonant plus one of two glides, *w* or *j*, the nucleus, and a coda consonant. §2.1 describes the possible syllable shapes in Hakhun. Hakhun has a total of 22 consonant phonemes, excluding the two glides, whose synchronic phonemic status is problematic. §2.2 describes the consonant inventory and §2.2.3 discusses the phonemic status of the glides. The number of contrastive consonants on the onset position is much larger, 21, than those on the coda position, which is only seven. The coda consonants include voiceless stops and nasals. The consonants are described in section 3. Hakhun has a six-vowel system in open syllables. However, the number of vowels in closed syllables is reduced to four. The contrast between mid and high vowels both in front and back vowels is not found in closed syllables. Besides the six vowels, the vowel schwa [ə] is encountered frequently in speech; its synchronic phonemic status is also problematic, as discussed in §2.3.1. §2.3 describes the vowel system in Hakhun. Three contrastive lexical tones have been identified in open syllables and syllables with nasal codas. However, no tonal contrast is found in closed syllables. §2.4 discusses a few phonotactic restrictions in segmental distribution. §2.5 talks about stress. §2.6 describes the tonemes and tone melodies found in Hakhun. Finally, §0 discusses issues with the notion of ‘word’ in Hakhun.

2.1 Syllable Shape

A minimal Hakhun syllable may consist of just the nucleus vowel and a maximal Hakhun syllable may consist of the nucleus vowel along with an onset and a coda. The onset can be a single consonant or a sequence of a consonant and one of two glides, *w* or *j*. The nucleus vowels are phonemically all monophthongs. The coda is always a single consonant. The possible syllable structures in Hakhun are illustrated in Table 1.

Table 1: Syllable Shapes in Hakhun

Syllable Shape	Example	Gloss
V	<i>i.p^hù</i>	‘my brother’
VC	<i>an</i>	‘2PL’
CV	<i>bɣ̣</i>	‘tree’
CVC	<i>hìm</i>	‘house’
CGV	<i>pwé</i>	‘cook (v)’
CGVC	<i>p^hwàm</i>	‘cloud (n)’

The first two syllable types do not occur as lexical words. They are limited to grammatical items, such as the possessive prefixes, argument indexes, and so on. The rest of the syllable types have been found as lexical words. Syllable onsets can be any of the consonants except for the glottal stop, and a coda consonant can be *p*, *t*, *k*, *ʔ*, *m*, *n*, or *ŋ*.

2.2 Consonants

There are twenty-two consonant phonemes in Hakhun. Hakhun contrasts twelve stops, four nasals, four fricatives, and two liquids. Moreover, there are two glides whose synchronic phonemic status is problematic. They are found only in an onset consonant cluster with another preceding consonant. The glides are discussed in §2.2.3. All consonant phonemes except for the glottal stop can be an onset. Only the unaspirated voiceless stops (except for the palatal stop) and the nasals (except for the palatal nasal) can be a coda. Table 2 presents all the consonant phonemes in Hakhun.

Table 2: Hakhun Consonant Inventory

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosives	p, p ^h , b		t, t ^h , d,		c, c ^h	k, k ^h , g	ʔ
Nasals	m		n		ɲ	ŋ	
Fricatives		v	s	ʃ			h
Trill/Flap			r				
Laterals			l				
Approximants	(w)				(j)		

2.2.1 Onset Consonants

All the consonant phonemes except for the glottal stop can occur in syllable onset position. Thus, there are eleven stop onsets, discussed in §2.2.1.1, four nasal onsets, discussed in §2.2.1.2, four fricative onsets, discussed in §2.2.1.3, and two liquids, discussed in §2.2.1.4.

2.2.1.1 Onset Stop Consonants

Three series of stops – voiceless unaspirated, voiceless aspirated, and voiced – contrast at the bilabial, alveolar, and velar places of articulation, and two series of stops – voiceless unaspirated and voiceless aspirated – contrast at the palatal place of articulation. The voiced velar stop, which is non-existent in some Tibeto-Burman languages like Karbi (Konnerth, 2014), is very rare in the language. It is found only in about a dozen lexical items. Table 3 presents a minimal triplet for the onset bilabial stops. Table 4 presents a minimal triplet for the onset alveolar stops. Table 5 provides a minimal pair for the onset palatal stops.

Table 3: Minimal Triplet for Bilabial Stops

Bilabial stops	Minimal Triplet	Gloss
p	<i>pí</i>	‘carry on shoulder’
p ^h	<i>p^hî</i>	‘alcohol ingredient’
b	<i>bî</i>	‘animal trap’

Table 4: Minimal Triplet for Alveolar Stops

Alveolar stops	Minimal Triplet	Gloss
t	<i>tap</i>	cut
t ^h	<i>t^hap</i>	catch between fingers
d	<i>dap</i>	pocket

Table 5: Minimal Pair for Palatal Stops

Palatal stops	Minimal Triplet	Gloss
c	câ	‘what’
c ^h	c ^h â	‘child’

Table 6 presents a minimal triplet for the velar stops.

Table 6: Minimal Triplet for Velar Stops

Velar stops	Minimal Triplet	Gloss
k	kó	‘make curry’
k ^h	k ^h ó	‘bag’
g	gó	‘to plan’

2.2.1.2 Onset Nasal Consonants

The nasals are produced at the same places of articulation as the onset stop consonants. All nasals are highly frequent in syllable initial position. Table 7 presents a minimal set demonstrating contrast among the onset nasal consonants.

Table 7: Minimal Set for Onset Nasals

Nasals	Minimal Set	Gloss
m	má	‘wound’
n	ná	‘ear’
ɲ	ɲâ	‘elder sister’
ŋ	ŋá	‘mithun’

One could argue for a smaller set of nasal phonemes by suggesting that the palatal nasal can be considered just as an alveolar nasal forming a cluster with the palatal glide i.e. [nj], since there are several consonants which form clusters with the palatal glide (see §2.2.3). There is no hard evidence for either interpretation, though frequency information does suggest that the palatal nasal is somewhat special. It is more frequent than all other consonant plus palatal clusters combined. Thirteen other consonants besides *ɲ/ɲj* are found with the palatal glide (see §2.2.3), and there are 204 instances (tokens) of them in total. Three quarters of these instances are the palatal nasal *ɲ/ɲj*. Thus, the *ɲ/ɲj* stands out from all other palatal glide clusters. Moreover, positing the palatal nasal as a phoneme makes the series of stops and nasals more symmetrical.

2.2.1.3 Onset Fricative Consonants

Fricatives are produced at four places of articulation – labio-dental, alveolar, post-alveolar and glottal. While the labio-dental and post-alveolar fricatives are voiced, the alveolar and the glottal fricatives are voiceless. The labio-dental and the post-alveolar fricatives are voiced because they have recently split from labio-velar and palatal glides, respectively. Moreover, the post-alveolar fricative is still in free variation with the palatal glide [j], suggesting the split is not complete yet (see §2.2.3 for a discussion). Table 8 presents a minimal set for the fricatives.

Table 8: Minimal Pair for Onset Fricatives

Fricatives	Minimal Triplet	Gloss
v	<i>vù</i>	‘bird’
s	<i>sù</i>	‘buttock’
ʒ	<i>ʒù</i>	‘water’
h	<i>hù</i>	‘dog’

2.2.1.4 Onset Liquid Consonants

There are two liquid consonants, a rhotic and a lateral, which we find syllable initially. The rhotic is variably realized either as a trill [r] or a flap [ɾ]. Moreover, the rhotic is produced with some amount of friction, especially in the speech of my older consultant. Table 9 presents a minimal set illustrating the contrast between the rhotic and the lateral.

Table 9: Minimal Set for the liquids

Liquids	Minimal Pair	Gloss
l	<i>lán</i>	‘to beat’
r	<i>rán</i>	‘to choose’

2.2.2 Coda Consonants

Seven contrastive consonants are found at the syllable coda position. The coda consonants are comprised of voiceless unaspirated stops at bilabial, alveolar, velar and glottal place of articulation, and nasals at bilabial, alveolar, and velar place of articulation. Table 10 presents the coda consonants.

Table 10: Coda Consonants

	Bilabial	Alveolar	Velar	Glottal
Plosives	p	t	k	ʔ
Nasals	m	n	ŋ	

2.2.2.1 Coda Stop Consonants

Four voiceless unaspirated stops are found in coda position. The velar voiceless unaspirated stop and the glottal stop are often hard to distinguish for a non-native speaker. However, they do contrast in Hakhun. Moreover, the coda velar stop has a diphthongizing effect on high nucleus vowels like *i* and *u*, such that the high front vowel *i* is realized as [ɿi] and high back vowel *u* is realized as [ou]. The glottal stop does not have that effect. Table 11, Table 12, and Table 13 present three minimal sets showing the contrast among the coda stops.

Table 11: Minimal Set for Coda Stops (1)

Stops	Minimal Set	Gloss
p	<i>sip</i>	‘straw, thetch’
t	<i>sit</i>	‘to marry’
k	<i>sik</i>	‘to understand’
ʔ	<i>siʔ</i>	‘feces, dung’

Table 12: Minimal Set for Coda Stops (2)

Stops	Minimal Set	Gloss
p	<i>lip</i>	‘frog’
t	<i>lit</i>	‘pass, miss (fail to hit)’
k	<i>lik</i>	‘wear ornament (necklace)’
ʔ	<i>liʔ</i>	‘heavy’

Table 13: Minimal Set for Coda Stops (3)

Stops	Minimal Set	Gloss
p	<i>arup</i>	‘to pinch and turn’
t	<i>arut</i>	‘to grind’
k	<i>aruk</i>	‘to burn something’
ʔ	<i>aruʔ</i>	‘this’

2.2.2.2 Coda Nasal Consonants

The coda velar nasal also has the diphthongizing effect just like the coda velar stop on the high nucleus vowels *i* and *u*, such that these vowels are realized as [ɿ] and [ɔ], respectively. However, the coda velar nasal is weakened and almost inaudible in the speech of my older speaker Phulim Hakhun. The younger speakers Khithung and Nokrep tend to produce the velar nasal in their more enunciated articulations of words. Thus, for instance the word for ‘grass’ is variably realized as [hɿŋ] or [hɿ̃], and the word for ‘to sit’ is variably realized as [toŋ] or [tõ]. Table 14 and Table 15 present two minimal triplets for nasal codas.

Table 14: Minimal Triplet for Coda Nasals (1)

Nasal	Minimal Triplet	Gloss
m	<i>húm</i>	'to breed animals'
n	<i>hùn</i>	'to carry on back'
ŋ	<i>húŋ</i>	'to appear'

Table 15: Minimal Triplet for Coda Nasals (2)

Nasal	Minimal Triplet	Gloss
m	<i>alím</i>	'make tea'
n	<i>alìn</i>	'a lot'
ŋ	<i>alíŋ</i>	'true, real'

2.2.3 Glides

There are two glides in Hakhun – labio-velar *w* and palatal *j*. They are found only in one environment, namely in an onset cluster following another consonant. The labio-velar glide is found with all onset consonants except for *g* and *ŋ*. The distribution of the labio-velar glide with onset consonants is illustrated in Table 16.

Table 16: Distribution of *w* in onset clusters

Onset Consonants	Example Words	Gloss
p	<i>pwé</i>	'cook'
p ^h	<i>p^hwe?</i>	'uproot'
b	<i>abwê</i>	'feel tired'

t	<i>atwè</i>	'take'
t ^h	<i>at^hwê</i>	'short'
d	<i>dwè</i>	'upside'
c	<i>cwê</i>	'easy'
c ^h	<i>ac^hwé</i>	'run'
k	<i>akwé</i>	'roll down'
k ^h	<i>ak^hwè</i>	'skin'
v	<i>avwé</i>	'play in mud'
s	<i>aswé</i>	'wash'
ʒ	<i>aʒwè</i>	'gather'
h	<i>ahwé</i>	'to build'
m	<i>mwé dá</i>	'name of fourth month'
n	<i>rônwè</i>	'kind of bird'
ŋ	<i>aŋwe?</i>	'fry'
r	<i>arwe?</i>	'to chirp'
l	<i>alwe?</i>	'catch'

The palatal glide is also found with most onset consonants, except for *d*, *k^h*, *g*, *n*, *ɲ*, and *ŋ*. No contrast has been found between the fricative [ʒ] and the cluster [ʒj], or between [ɲ] and [ɲj]. The distribution of the palatal glide with various onset consonants is illustrated in Table 17.

Table 17: Distribution of *j* with onset consonants

Onset Consonants	Example words	Gloss
p	<i>apja?</i>	'to scratch land'
p ^h	<i>ap^hjâ</i>	'flat'
b	<i>bjə?bjə?</i>	'sound symbolic'
t	<i>tja?rə</i>	'quickly'
t ^h	<i>at^hjâ</i>	'gather'
c	<i>acja?</i>	'divorce'
k	<i>kjácô</i>	'walking stick'
v	<i>vja?</i>	'husk'
s	<i>sjâ</i>	'diamond'
h	<i>təhja?</i>	'girl'
m	<i>pja?mja?</i>	'snail'
r	<i>arja?</i>	'to buy'
l	<i>alja?</i>	'to tell tie'

The reason behind this restricted distribution of the glides is a phonologically conditioned sound change in Hakhun. The glides have changed to fricatives when they are not in a cluster. Thus, the labio-velar glide *w* has changed to labio-dental fricative *v*, and the palatal glide *j* is in free variation between a fricative [ʃ] and a glide [j] when they are not in a cluster. The change in the labio-velar can be seen in the reflexes of Proto-Tibeto-Burman (PTB) or Proto-Northern Naga forms in Table 18.

Table 18: Reflexes of words with *w in Hakhun

*PTB or *Northern Naga	Reflexes in Hakhun
*wa ‘man/father/husband/person’ (PTB)	[và] ‘father, person’
*wa ‘bird/feather’ (PTB)	[vù] ‘bird’
*wuk ‘belly/stomach’ (PTB)	[vuk] ‘belly/stomach’
*p-wak ‘pig’ (PTB)	[vʌʔ] ‘pig’
*Ç-wuŋ ‘uncooked rice’ (Northern Naga)	[vùŋ] ‘husked rice’
*pwi ‘grandmother’ (Northern Naga)	[vì] ‘grandmother’
*ʔ-wa:r ‘fire’ (Northern Naga)	[vàn] ‘fire’
*woŋ ‘come’ (Northern Naga)	[vʌ] ‘come’
*wo:y ‘monkey’ (Northern Naga)	[vî] ‘monkey’
*Ç-wa ‘bamboo’ (Northern Naga)	[vaʔ] ‘bamboo’

The *w* is still intact in closely related speech varieties like Nocte, as shown Table 19, suggesting that it is a recent split.

Table 19: Reflexes of PTB *w in Hakhun and Nocte (Lowang)

Hakhun	Nocte (Lowang)
[vùtì] ‘egg’	<i>wo ti</i> ‘egg’
[vàn] ‘fire’	<i>wan</i> ‘fire’
[vaʔ] ‘bamboo’	<i>waʔ</i> ‘bamboo’

The change in palatal glide can be illustrated with the cognates given in Table 20.

Note that orthographic <y> represents the palatal glide [j] in this table.

Table 20: Cognate words with the palatal glide

Proto-Northern Naga	Konyak	Phom	Nocte	Wancho	Hakhun
* <i>yaw</i> ‘iron’	<i>yan</i> ‘iron’	<i>ni yam</i> ‘iron’		<i>jan</i> ‘iron’	[ʒ/jè] ‘iron’
	<i>jokpu</i> ‘lazy’	<i>ʒæk</i> ‘lazy’			[ʒ/jô] ‘lazy’
* <i>C-yuŋ</i> ‘water’	<i>yεŋ/yiang</i> ‘water’	<i>yuŋ</i> ‘water’			[ʒ/jù] ‘water’
	<i>ying</i> ‘drink’	<i>yiŋ</i> ‘drink’	<i>jok</i> ‘drink’		[ʒ/juk] ‘drink’
* <i>C-yup</i> ‘sleep’			<i>jup</i> ‘sleep’	<i>jip/zip</i> ‘sleep’	[ʒ/jip] ‘sleep’

Since the split of **w* into [w] and [v], and of **j* into [ʒ] and [j] in Hakhun is phonologically conditioned, it gives an impression of an allophonic relation between the reflexes in Hakhun. However, subsequent changes seem to have tampered with the clean split, especially with the split of **w* into [w] and [v]. There is a set of words in Hakhun which create a problem for an allophonic relation between the glide *w* and fricative *v*. The words in Table 21 have developed a sequence of [vw], and positing a single phoneme for *v* and *w* would result in positing an onset cluster of the same phoneme in these words.

Table 21: Words with a sequence of [vw]

Words	Gloss
<i>avwám</i>	‘increase’
<i>avweʔ</i>	‘cut’
<i>vweʔ</i>	‘pubic hair’
<i>vwé</i>	‘play in mud’
<i>vweʔcà</i>	‘bamboo skin’
<i>vùvwap</i>	‘a bird kind’

These [vw] sequence could have developed from different sources. One possible source may be the morphological process that gave us suppletive verb stems in Hakhun presented in Table 22 (see §6.2.1 for more detail). As we can see in the table, the labio-velar glide in the closed syllable stems in the first column regularly corresponds to a high back rounded vowel *u* in the open syllable stems in the second column. It seems the high back rounded vowel *u* has become a labio-velar glide *w* when some old morphology got frozen in verb roots with a stem with a closed syllable. Consequently, we end up with words with the sequence [vw].

Table 22: Labio-velar glide in Checked stems

Checked Stem	Open Stem	Gloss
<i>vweʔ</i>	<i>vù</i>	‘cut jungle in paddy field’
<i>lweʔ</i>	<i>lù</i>	‘catch, hold’
<i>p^hwēʔ</i>	<i>p^hù</i>	‘uproot’

<i>sweʔ</i>	<i>sù</i>	‘roast’
<i>rweʔ</i>	<i>rù</i>	‘chirp’
<i>ŋweʔ</i>	<i>ŋù</i>	‘fry’
<i>rweʔ</i>	<i>rù</i>	‘to burn (of chilli)’
<i>kweʔ</i>	<i>kù</i>	‘to climb’

We do not have any issue in treating the reflexes of *j as allophones, since there is no contrastive sequence of [ʒj]. Thus, one could argue that [ʒ] and [j] are allophones of the same phoneme *j*. However, for the sake of keeping the inventory more symmetrical, and for keeping the transcriptions closer to the phonetic realization, I will continue to treat the glides [w] and [j] as separate consonants from [v] and [ʒ] in the rest of the dissertation. When there is free variation between [ʒ] and [j], I choose ʒ to represent the category since this form is more frequent and is found in more careful pronunciation.

2.3 Vowels

Hakhun has six contrastive monophthong vowels - *i*, *e*, *a*, *o*, *u*, and *ɤ* - in open syllables. The mid vowels *e* and *o* are realized as low-mid [ɛ] and [ɔ] respectively. The number of contrastive vowels is reduced to four in closed syllables (except in syllables with glottal coda); see Figure 8. Thus, there is no longer a contrast between the high and the mid vowels in these closed syllables. The vowels are highly dispersed and longer in open syllables, but are either centralized or diphthongized in

closed syllables. The high vowels *i* and *u* are realized as [ɪ] and [ʊ] in closed syllables, except in the syllables with a velar coda, where they are realized as diphthongs [ɪɪ] and [ʊʊ]. The vowel *ɾ* is realized as a [ə] in closed syllables.

Figure 8: Vowels in open syllables (left) and closed syllables (right)

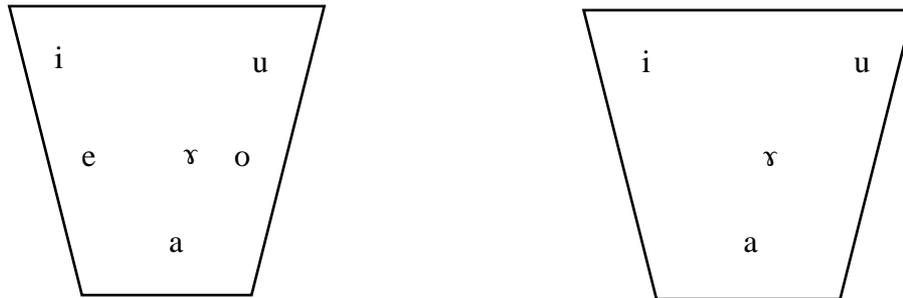


Table 23 and Table 24 present two minimal sets for the six vowels in open syllables.

Table 25, Table 26, and Table 27 present contrast in closed syllables.

Table 23: Minimal Set for Monophthong Vowels in Open Syllable (1)

Vowels	Minimal set	Gloss
i	<i>avì</i> [avì]	‘his/her grandmother’
e	<i>avê</i> [avê]	‘thin, transparent’
a	<i>avà</i> [avà]	‘his/her father’
o	<i>avò</i> [avò]	‘size of room’
u	<i>avù</i> [avù]	‘his/her bird’
ɾ	<i>avɾ</i> [avɾ]	‘to come’

Table 24: Minimal Set for Monophthong Vowels in Open Syllable (2)

Vowels	Minimal set	Gloss
i	<i>hì</i> [hì]	‘blood’
e	<i>hè</i> [hè]	‘big fire’
a	<i>hâ</i> [hâ]	‘slave’
o	<i>hó</i> [hó]	‘get aside’
u	<i>hù</i> [hù]	‘dog’
ʁ	<i>ahʁ</i> [ahʁ]	‘brave’

Table 25: Minimal Set for Monophthong Vowels in Closed Syllable (1)

Vowels	Minimal set	Gloss
i	<i>tip</i> [tɪp]	‘box’
a	<i>tap</i> [tɒp]	‘hut’
u	<i>tup</i> [tʊp]	‘hit in a certain manner’
ʁ	<i>tʁp</i> [tɚp]	‘cut (with scissor)’

Table 26: Minimal set for Monophthong Vowels in Closed Syllable (2)

Vowels	Minimal set	Gloss
i	<i>arím</i> [arim]	‘to rear livestock’
a	<i>arám</i> [arám]	‘to call’
u	<i>mʁrúm</i> [mʁrôm]	‘three’
ʁ	<i>arým</i> [aróm]	‘stain’

Table 27: Minimal Set for Monophthong Vowels in Closed Syllable (3)

Vowels	Minimal set	Gloss
i	<i>hip</i> [hɪp]	‘cut bamboo’
a	<i>hap</i> [hɒp]	‘kick, shoot’
u	<i>hup</i> [hʊp]	‘close a lid’
ɤ	<i>hɤp</i> [hɐp]	‘bundle’

Table 28 below illustrates the allophonic variations of the high vowels in different syllable types – [i] and [u] in open syllables, [ɪ] and [ʊ] in closed syllables with codas other than velars, and [ɣɪ] and [oʊ] in syllables with velar codas.

Table 29 shows the complementary distribution of the vowel phones [ɤ] and [ə] in different syllable types. The phone [ɤ] does not occur in closed syllables (except for syllables with glottal coda), and the phone [ə] does not occur in open syllables (except in grammatical elements and sesquasyllables). We will further discuss the synchronic status of the phone [ə] in 2.3.1.

Table 28: Allophonic realization of the high vowels *i* and *u*

Vowels	Open syllables	Closed syllables	Velar codas
i	<i>hì</i> [hì] ‘blood’	<i>acip</i> [acɪp] ‘smoke’	<i>mik</i> [mɣɪk] ‘eye’
	<i>lî</i> [lî] ‘seed’	<i>alit</i> [alɪt] ‘pass’	<i>rik</i> [rɣɪk] ‘die’
	<i>pí</i> [pí] ‘carry’	<i>ac^hín</i> [ac ^h ín] ‘ask’	<i>ahîŋ</i> [ahɣî(ŋ)] ‘raw, green’
	<i>sî</i> [sî] ‘bridge’	<i>ac^him</i> [ac ^h im] ‘sweet’	<i>abîŋ</i> [abɣî(ŋ)] ‘bury’

u	<i>hù</i> [hù] ‘dog’	<i>ahup</i> [ahup] ‘close lid’	<i>amuk</i> [amouk] ‘head-ache’
	<i>alû</i> [alû] ‘far’	<i>ahut</i> [ahot] ‘cover’	<i>ac^huk</i> [ac ^h ouk] ‘to cough’
	<i>pú</i> [pú] ‘snake’	<i>apún</i> [apún] ‘pluck hair’	<i>atún</i> [atou(η)] ‘to sit’
	<i>sú</i> [sú] ‘look’	<i>asúm</i> [asóm] ‘work’	<i>adún</i> [adou(η)] ‘big’

Table 29: Complementary distribution of [ɣ] and [ə]

Open syllables or ? coda	Closed syllables
<i>akɣ</i> ‘creeper’	<i>akəp</i> ‘get’
<i>ak^hɣ</i> ‘forehead’	<i>k^həm</i> ‘alcohol’
<i>rɣ</i> ‘sky’	<i>arə́m</i> ‘stain’
<i>ahɣ</i> ‘brave’	<i>ahəp</i> ‘bundle’
<i>bɣ</i> ‘tree’	<i>abə́m</i> ‘wait’
<i>tɣ</i> ‘family’	<i>tə́m</i> ‘slope’
<i>aʒɣ?</i> ‘stop’	<i>aʒəp</i> ‘to fan’

2.3.1 The Schwa

The phone [ə] is very frequent in the language, and at first sight seems to be contrastive, as we can see in Table 30. But, when we look closely, we find that this distribution of [ə] is possible only in grammatical words.

Table 30: Schwa in open syllable

Vowels	Word	Gloss
i	<i>rì</i>	‘seed’
e	<i>rê</i>	‘enemy’
a	<i>rà</i>	‘bone’
o	<i>aró</i>	‘to want’
u	<i>rù</i>	‘rope’
ɤ	<i>rɛ̂</i>	‘sky’
ə	<i>arə́</i>	‘this’

The form *arə́* ‘this’ in Table 30 has a corresponding form *are?* ‘this’ in which the rime [ə] is replaced with [e?]. This is true of all grammatical elements that end with a schwa [ə], as seen in Table 31. We usually see the strong forms when a constituent with one of these grammatical words is displaced from its usual location (such as when it is postposed to sentence final position) or when the constituent is used as an expression by itself (e.g. as a response to a question or when using the numeral ‘one’ in counting numbers).

Table 31: Variant Forms of Certain Function Words

	Weak form	Strong form	Gloss
Short locative	<i>aká</i>	<i>ake?</i>	‘here’
	<i>iká</i>	<i>ike?</i>	‘there’
Long locative	<i>aráká</i>	<i>arə́ke?</i>	‘here’

	<i>iráká</i>	<i>iráke?</i>	‘there’
Short demonstratives	<i>abá</i>	<i>abe?</i>	‘this’
	<i>ibá</i>	<i>ibe?</i>	‘that’
Long demonstratives	<i>ará</i>	<i>are?</i>	‘this’
	<i>irá</i>	<i>ire?</i>	‘that’
	<i>arábá</i>	<i>arábe?</i>	‘this’
	<i>irábá</i>	<i>irábe?</i>	‘that’
Ergative/Instrument	<i>kámá</i>	<i>káme?</i>	‘subject/instrument’
Numeral one	<i>mæt^hə</i>	<i>mæt^he?</i>	‘one, a’
Adverbializer/Non-final/Ablative	<i>mə</i>	<i>me?</i>	‘adverbial’
Connective	<i>imá</i>	<i>ime?</i>	‘then’
Dative	<i>hə</i>	<i>he?</i>	‘dative’

So, we can argue here that the [ə] in these grammatical elements results from a reduction in the forms of the grammatical elements in certain grammatical/discourse environments. However, it is not always possible to see the underlying vowel, even though we know we have a reduced form. One such scenario is the vowel reduction in the initial syllables of certain words. These syllables are known as sesquisyllables in Tibeto-Burman (Matisoff, 1989). Table 32 shows disyllabic words with reduced initial syllables. One possible source of these syllables is old compounds. For example, bird names often have an initial prefix *və-*, which is most likely related to the word *vù* ‘bird’. In the word *təhja?* ‘girl’, *hja?* is an identifiable root seen

elsewhere, such as *ahjaʔ* ‘nephew/niece’. Thus, *tə* in the words ‘girl’ and ‘boy’ must be some kind of old formative. The form *la* in ‘boy’ is probably the male gender suffix *la*. Thus, Hakhun has these initial syllables with the reduced vowel schwa, and it is not possible to tell what the underlying vowel might be.

Table 32: Schwa in Initial Syllables

Word	Gloss
<i>vəŋim</i>	‘bird type’
<i>təhjaʔ</i>	‘girl’
<i>təlâ</i>	‘boy’
<i>p^həlap</i>	‘tea’
<i>hərù</i>	‘type of wild animal’

Thus, on the one hand, it is not possible to show that [ə] is contrastive, and on the other hand, it is also not possible to dismiss it as an allophone in the transcriptions. Therefore, I will continue to transcribe the schwa ə in grammatical words, in the sesquisyllables, as well as in lexical items with [ə] for the sake of keeping the transcriptions closer to surface realization in the rest of the dissertation.

2.4 Phonotactics

There are a few notable restrictions in the distribution of vowels and consonants, some of which are already noted above. One notable restriction has to do with the mid vowels *e* and *o*, which are phonetically realized as [ɛ] and [ɔ]. These

vowels are not found in closed syllables, except for the syllables with a glottal coda, as shown in Table 33 and Table 34.

Table 33: Neutralization of high and mid vowels in closed syllables (1)

Vowels	Bilabial Coda	Alveolar Coda	Velar Coda	Glottal Coda
i	<i>tɪp</i> ‘box’	<i>sit</i> ‘to marry’	<i>pik</i> ‘to fly’	<i>miʔ</i> ‘person’
e				<i>seʔ</i> ‘wake up’
a	<i>tap</i> ‘hut’	<i>pat</i> ‘to throw’		<i>haʔ</i> ‘land’
u	<i>rup</i> ‘pinch’	<i>tʰut</i> ‘to dig’	<i>vuk</i> ‘belly’	<i>buʔ</i> ‘neck’
o				<i>poʔ</i> ‘elephant’
ɣ	<i>təp</i> ‘cut’		<i>vəkɲi</i> ‘wild pig’	<i>pʰɣʔ</i> ‘eat’

Table 34: Neutralization of high and mid vowels in closed syllables (2)

Vowels	Bilabial Coda	Alveolar Coda	Velar Coda
i	<i>tʰim</i> ‘pond’	<i>apʰin</i> ‘to spear’	<i>tɪŋ</i> ‘pot’
e			
a	<i>bám</i> ‘to wait’	<i>vàn</i> ‘fire’	<i>rànŋ</i> ‘upper side’
u	<i>lúm</i> ‘to boil’	<i>bùn</i> ‘dust’	<i>púŋ</i> ‘wind’
o			
ɣ	<i>ŋəm</i> ‘meat’	<i>hánsân</i> ‘healthy’	<i>bə(ŋ)kʰà</i> ‘timber’

Thus, contrast has been neutralized between high and mid vowels in these closed syllables. My consultants, who have been translating the Bible into Hakhun, often find themselves shifting between the orthographic characters <i> and <e> for front vowel, and <u> and <o> for back rounded vowel. Phonetically also there is

variation in the production of the front vowel and the back rounded vowel in closed syllables. The front vowel is produced in the vowel space somewhere between [i] and [e], and the back rounded vowel is produced in the vowel space somewhere between [u] and [o]. However, they are never as low as [ɛ] and [ɔ], like the mid vowels in open syllables. Therefore, I use *i* to represent the front vowel, and *u* to represent the back rounded vowel in the closed syllables (except for syllables with glottal coda).

Another set of restrictions is found on the glides, discussed in §2.2.3 above. Remember that the glides occur only in the syllable onset position following another consonant, represented with C below. The first restriction is that both the labio-velar and the palatal glides, preceded by a consonant, can occur only with the two vowels *e* and *a*. Thus, the only attested glide and vowel sequences are [Cwe], [Cwa], [Cje], and [Cja]. The sequences [Cwa], [Cwe], and [Cja] are more common (73, 141, 46 tokens respectively), whereas the sequence [Cje] is very rare (only 3 tokens). The second interesting restriction is on what kind of syllable these glide and vowel sequences can occur in. The distribution of the glide and vowel sequences is presented in Table 35. The symbol \$ represents syllable boundary.

Table 35: Distribution of glides and vowel sequences with different codas

Glide-vowel	_ \$	_ p\$	_ t\$	_ k\$	_ m\$	_ n\$	_ ŋ\$	_ ?\$
[Cwe]	Yes							Yes
[Cwa]		Yes			Yes			
[Cje]	Yes							
[Cja]	Yes							Yes

We can see that the sequences [Cwe], [Cje], and [Cja] are never found in closed syllables, except for syllables with glottal coda. The sequence [Cwa], on the other hand, is found only in syllables with bilabial codas. It is not clear as to why there are such phonotactic restrictions on the glides in the language.

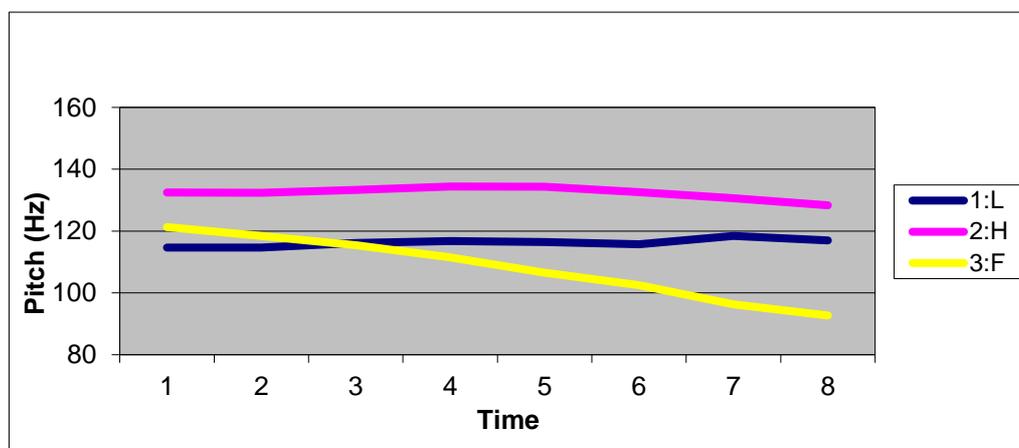
2.5 Stress

Stress is not contrastive in Hakhun, most probably because one of the correlates of stress, namely pitch, is used for lexical contrast. In terms of enunciation, all syllables in multi-syllabic words are more or less equally enunciated. This may be partly due to the fact that most multi-syllabic words are compounds. Except for a few prefixes and suffixes, most grammatical elements, such as case markers, inflected operators, question particles, hearsay markers, subordinators, and discourse markers are all stressed elements. It is not quite possible to tell just by listening to the pronunciation which elements in a sentence are grammatical and which elements are lexical. Therefore, most grammatical elements are treated as phonologically independent particles in this work.

2.6 Tone

Pitch is contrastive in open syllables and syllables with sonorant codas. However, there is no tonal contrast in syllables with stop codas. Contrast is found between a low-pitched tone, a high-pitched tone, and a falling contour. The low tone often ends with a glottal constriction or glottalization, even in syllables with nasal codas. However, the glottal constriction disappears when the lexical items are followed by other lexical or grammatical elements. The high tone has no glottal constriction, nor does the falling tone. The falling tone is usually longer than the other two tones. Figure 9 shows the pitch tracks of three lexical items – *nà* ‘paddy field’ (1:L), *ná* ‘ear’ (2:H), and *nâ* ‘younger brother/sister’ (3:F).

Figure 9: Pitch tracks for the tonal set na



A total of thirty tonal triplets or near triplets have been confirmed in my database. There are lot more minimal pairs between the tones. The tones are elicited in isolation and in the frame ‘I said _____’, which translates as ‘*ɲà ____ ɲâ kɔ̀*’. No difference has been found in the tones produced in isolation and in this frame. The word class of the lexical items does not seem to affect the tones of individual lexical items. All

three tones are found across word classes, and even on grammatical elements like case markers and inflected operators. The triplets are given in Table 36.

Table 36: Minimal Sets for Tones

Low tone	High tone	Falling Tone
<i>nà</i> ‘paddy field’	<i>ná</i> ‘ear’	<i>nâ</i> ‘brother/sister’
<i>adì</i> ‘intestine’	<i>adí</i> ‘climbing from tree to tree’	<i>adî</i> ‘back side’
<i>aràn</i> ‘heart’	<i>arán</i> ‘choose, select’	<i>arân</i> ‘small, few’
<i>cà</i> ‘what’	<i>cá</i> ‘axe’	<i>câ</i> ‘large basket’
<i>apùŋ</i> ‘seedling’	<i>pùŋ</i> ‘air, wind’	<i>apûŋ</i> ‘hair on pig’s neck’
<i>ac^hàm</i> ‘know’	<i>ac^hám</i> ‘wear sari’	<i>ac^hâm</i> ‘side of chest’
<i>ŋà</i> ‘I’	<i>ŋá</i> ‘mithun’	<i>ŋâ</i> ‘side, tasteless’
<i>ak^hù</i> ‘nose’	<i>ak^hú</i> ‘animal track’	<i>ak^hû</i> ‘head’
<i>sè</i> ‘crab’	<i>asé</i> ‘used tea’	<i>sê</i> ‘sun’
<i>sù</i> ‘roast’ (open stem)	<i>sú</i> ‘watch’ (open stem)	<i>sû</i> ‘buttock’
<i>apìŋ</i> ‘without a hole’	<i>apíŋ</i> ‘fat, oil’	<i>apîŋ</i> ‘granary’
<i>p^hà</i> ‘lower belly’	<i>p^há</i> ‘basket’	<i>p^hâ</i> ‘piece’
<i>mà</i> ‘not yet’	<i>má</i> ‘wound’	<i>mâ</i> ‘later’
<i>k^hàm</i> ‘altar for sacrifice’	<i>k^hám</i> ‘promise’	<i>k^hâm</i> ‘alcohol’
<i>d̥ɔ</i> ‘knife’	<i>d̥ɔ́</i> ‘log, piece’	<i>d̥ɔ̂</i> ‘be cooked’
<i>akàm</i> ‘half empty’	<i>kám</i> ‘spread’	<i>kâm</i> ‘believe’
<i>akùn</i> ‘seed’	<i>akún</i> ‘to bend (intr)’	<i>akûn</i> ‘hole’
<i>cùŋpù</i> ‘flower’	<i>pú</i> ‘snake’	<i>zəpû</i> ‘breast’

<i>t^hùŋ</i> ‘post’	<i>t^húŋ</i> ‘large meat piece’	<i>t^hûŋ</i> ‘garden’
<i>ʒeʔk^hì</i> ‘squirrel’	<i>ŋap^hí</i> ‘see’	<i>k^húnk^hí</i> ‘wood insect’
<i>atìŋ</i> ‘road blocked with plants’	<i>atíŋ</i> ‘get’	<i>tîŋ</i> ‘water tank’
<i>mûswè</i> ‘rat’	<i>swé</i> ‘paint house’	<i>swê</i> ‘jackal’
<i>c^hì</i> ‘basket’	<i>heʔc^hí</i> ‘keep’	<i>c^hìpc^hí</i> ‘tiny ants’
<i>miklì</i> ‘spectacle’	<i>lí</i> ‘dog mite’	<i>lî</i> ‘buffalo’
<i>dàsùŋ</i> ‘slipper’	<i>haʔsúŋ</i> ‘village’	<i>haʔsûŋ</i> ‘slope (down)’
<i>aŋàŋ</i> ‘slippery’	<i>aŋán</i> ‘take away forcefully’	<i>ɖɔʔŋân</i> ‘left’
<i>lù</i> ‘hold’ (open stem)	<i>alú</i> ‘having hole’	<i>alû</i> ‘far’
<i>ɖɔʔhà</i> ‘forearm’	<i>ahúhá</i> ‘to worry’	<i>hâ</i> ‘slave’
<i>vatẓỵ</i> ‘dress type’	<i>aʒỵ</i> ‘wear pant’	<i>ʒỵ</i> ‘tree kind’
<i>arè</i> ‘to dry (intr)’	<i>rézap</i> ‘talk’	<i>rê</i> ‘enemy’

The question of tone on grammatical elements is little tricky. First, no tonal contrast is found in open syllables containing schwa as the nucleus. This kind of syllable is very common in grammatical elements, such as the definite particle *bə*, the demonstratives *irə* ‘that’, *arə* ‘this’, the ergative *kámə*, the locative *kə* and so on. Some of these elements like the demonstratives are produced with invariant high pitch, and others like the definite or the locative copy the pitch of the preceding element. This kind of syllable is also found as sesquisyllables mentioned in §2.3.1 in words like (note the initial syllables) *vəŋím* ‘bird type’, *təlâ* ‘boy’, etc.

Moreover, tonal contrast is never found on prefixes consisting of just the nucleus, such as the nominalizer *a-*, possessive prefixes *i-* ‘1SG’ and *a-* ‘3SG’, or consisting of a reduced open syllable with schwa, such as the permissive/causative *tə-*, or possessive prefixes *mə-/bə-* ‘2SG’. These prefixes are unstressed and produced with a high pitch. There are also suffixes, such as the non-final suffix *-mə* or the reciprocal suffix *-mun*, which do not have inherent tone, and they either have an invariant high pitch or simply copy the pitch of the preceding root. However, there are some prefixes and suffixes (which contain a nucleus vowel other than a schwa) which have inherent tones, such as the possessive prefix *nî-* ‘1SG.INCL’ or the masculine honorific suffix *-vâ*. I specify the tonal/atonal status of prefixes and suffixes in appropriate sections where they are discussed.

As mentioned in the previous section, most grammatical categories are expressed with phonetically independent particles. The tonal behavior of such particles varies from one particle to another. Some grammatical particles freely copy the tone of the root. For instance, the locative *nʔ* can take any of the three tones depending on the tone of the root. If asked to compare it with the second person singular pronoun *nʔ* ‘you’ in isolation, speakers say they have different tones and describes the tone of the locative as high. It is perhaps the case that a grammatical element like *nʔ* ‘locative’ has an underlying high tone, which comes out different on the surface. However, this kind of overt comparison is not possible for most particles, and determining the underlying tone in such cases is difficult. There are several

grammatical particles which alternate between a high tone and a falling tone depending on the tone of the root, but they never take the low tone. For instance, the inflected proximal/inverse operators, such as *rɣ* ‘NON.PAST.PROX.1SG’ and *t^hɣ* ‘PAST.PROX.1SG’ are found either with high or falling tone depending on the tone of the root, but not with the low tone. So, it is not obvious what the underlying tone is for these operators. Finally, there are some grammatical particles which are tonal and never vary their tone depending on context. For instance, the present tense operator, as in *kɣ* ‘PRES.1SG’, always has a low tone. I mark tone on the grammatical particles only when there is some indication of an underlying tone.

A detailed investigation of surface tone realization is yet to be done. The tones marked on the example sentences throughout the dissertation are the tones found when the lexical items are produced in isolation or in the frame mentioned above. However, there are some indications that the tone of some roots changes when they are prefixed with the nominalizer *a-*. This alternation is found between high and falling tone. Thus, some lexical items with a falling tone change their tone to high when prefixed with *a-*, shown in Table 37. All possible tone combinations are attested in the database on disyllabic words, as shown in Table 38.

Table 37: Tone alternation on a- prefixed lexical items

Gloss	Bare stem	Prefixed with a-
‘believe’	<i>kâm</i>	<i>akám</i>
‘to split’	<i>k^hâ</i>	<i>ak^há</i>
‘to walk’	<i>k^hwâm</i>	<i>ak^hwám</i>

‘be proud’	<i>ŋâm</i>	<i>aŋám</i>
‘reap’	<i>k^hân</i>	<i>ak^hán</i>

Table 38: Tone melodies on disyllables

Tone Melody	Word	Gloss
HH	<i>húhá</i>	‘to worry’
HL	<i>nábà</i>	‘deaf’
HF	<i>cúp^hî</i>	‘pray’
LL	<i>k^hùpù</i>	‘nostril’
LH	<i>dàp^há</i>	‘bottom of foot’
LF	<i>dàbê</i>	‘leg hair’
FF	<i>gôcâ</i>	‘to plan’
FH	<i>rôpá</i>	‘year’
FL	<i>k^hûrà</i>	‘skull’

2.7 The Word in Hakhun

Deciding where to put the word boundary has proven very difficult in Hakhun, for me as well as for my consultants who have been translating the Bible to their own language for past two years. It is hard to decide whether to treat a grammatical element as a suffix, clitic or an independent particle mainly because phonological features of words and grammatical features of words do not seem to go together (cf. Dixon & Aikhenvald, 2002). Moreover, as a speaker of an agglutinating and somewhat synthetic language Bodo, I strongly feel that there are times when using white space is plain wrong. Thus, I would not recommend anyone putting space in

place of hyphens in the Bodo sentence in (1). The word *zùbt^harnaiou* ‘at the end’ is a single word with the root *zùb* ‘end’, because (i) except for *zùb* the rest of the morphemes are bound forms, (ii) have no stress, (iii) have no inherent tone, (iv) have grammatical meaning which modify the meaning of the root, and (iv) they always go in that order.

- (1) *zùb-t^har-nai-ou* *muider-a* *t^hui-nu* *gunəŋ*
 end-REALLY-NMLZ-LOC elephant-NOM die-INF need
- za-duŋ-mun*
 happen-RLS-PST
 ‘The elephant had to die at the very end.’ (Boro & Basumatary, 2015)

The phonological and grammatical properties go hand in hand in Bodo. The forms *-t^har*, *-nai*, and *-ou* are phonologically and grammatically dependent on *zùb*. In Hakhun, on the other hand, phonological and grammatical properties do not always go together. Thus, I have found myself using white space more often than I am used to in Bodo. Below I outline the features I have considered in deciding when to use white space between two morphemes.

One phonological feature which starkly contrasts Hakhun with Bodo is stress. The root in a word like *zùbt^harnaiou* ‘at the end’ in Bodo stands out from the rest of the grammatical morphemes in terms of loudness and clarity. The root is more enunciated than the rest. In Hakhun, on the other hand, most grammatical elements are more or less equally enunciated as the roots. Thus, for instance, all the case markers (§5.2.11) and the verbal operators (§6.5) are no less enunciated than the nominal and verbal roots. Thus, as far as stress is concerned, these grammatical elements are independent phonological words.

The tone, as we have seen in the previous section, is not a uniform property of all grammatical particles. Some grammatical elements freely take the tone of the root. Others alternate between a high tone and a falling tone depending on the tone of the root, but they never take the low tone. There are yet others which never change their tone. Thus, though grammatically the inflected proximal/inverse operators *r-* and *t^h-*, and the present tense operator *k-* are all part of single grammatical category/paradigm, their tonal behavior is not the same. It will be very confusing to write some of the operators as suffixes, while others as free words depending on whether they are tonal or atonal. This is also true of prefixes and suffixes. Thus, some of the possessive prefixes have inherent tone, while others do not, and treating some as words and others as prefixes will lead to more confusion than clarity.

Some grammatical elements are characterized by segmental reduction in certain environments. These include the nominal elements like the definite marker *bə/beʔ*, locative *kə/keʔ*, the adverbializer *mə/meʔ*, the numeral ‘one’ *t^hə/t^heʔ*, and the ergative *kámá/kámeʔ*. The forms with the full front mid vowel and the glottal stop are found when the NP with these markers occur sentence finally. Otherwise we find the reduced form. There are also some verbal elements which undergo segmental reduction, such as the third person inflected present tense *kaʔ*, past tense *taʔ*, and non-final operators *la* become *kə*, *tə*, and *lə* respectively when they are followed by other verbal elements, such as aspectual particles or the hearsay marker. Although these forms have undergone reduction in certain environments, they are not particularly unstressed. They are still enunciated. Moreover, the processes of reduction does not

happen across the grammatical categories. Thus, not all case markers or all inflected forms of the verbal operators undergo similar reduction. Once again, marking some case markers, and some inflected forms of the same operator as suffixes or clitics would create more confusion than clarity.

Thus, I have treated all case markers and all the verbal operators and elements as independent particles. These are not treated as clitics because they are all stressed elements. Only a few elements are treated as suffixes. These are a few unstressed elements which are highly selective of their base and occur closest to the base. One such element is the plural suffix, which is unstressed and immediately follows a noun root. Another such element is the reciprocal suffix *-mun*, which immediately follows a verb root. Most prefixal elements are unstressed. These include possessive prefixes, class term prefixes, and a nominalizing prefix *a-*.

CHAPTER III

WORD CLASSES

This chapter describes word classes in Hakhun. It starts out with a discussion on the two major word classes, nouns and verbs, in §3.1. Some of the major morphosyntactic differences between the two major word classes are laid down in this section. The third largest class of words are the property concept terms (PCT) or the descriptive adjectives. They can be considered as a sub-class of verbs. The PCT's, just like verbs, are found in two forms – bare root and prefixed with an old nominalizer *a-*. The bare forms function as predicates just the way verbs do. The bare forms also modify a preceding head noun, which is a unique feature of the PCT's. The *a-* prefixed forms have the distribution of nouns. But these distributions are unique to PCT's, and not shared by any verbs, except for a few stative verbs. Thus, they stand out as separate from verbs, though they share some features. §3.2 discusses various morphosyntactic properties of the PCT's.

Within the class of nouns, a few sub-sets of nouns stand out morphosyntactically. One such set is the relator nouns, which always take a nominal or pronominal modifier and a locative case marker. Functionally they code more specific locations than the locative postpositions. The relator nouns mostly function as adverbials, rather than as arguments. Another set of nouns that are morphosyntactically distinct are the kinship terms and body-part terms. The kinship terms, in particular, are inalienably possessed, and do not occur without a nominal or pronominal possessor. Finally, there are nouns that behave like classifiers by directly taking numerals on them. These sub-classes of nouns are discussed in §3.3. Hakhun has numeral classifiers, which are bound forms prefixed to numerals. They code

features like animacy, humanness, inanimate entities of various kinds, shapes, sizes, and various units of measurement. The classifiers are discussed in §3.4. Various kinds of pro-forms, like personal pronouns, interrogative pronouns, indefinite and universal pronouns, demonstrative pronouns, and reflexive pronouns, are discussed in §3.5. An additional sub-class of verbs, the copulas, are described in §3.6. Finally, §3.7 describes two minor word classes – adverbs and numerals.

3.1 Nouns and Verbs

Nouns and verbs are the largest, and only truly open, word classes in the language. We can distinguish a noun from a verb based on the grammatical categories they can take and the grammatical functions they can perform in a clause. In this section, I lay out briefly the morphosyntactic properties that help us distinguish these two word classes in Hakhun.

Grammatical categories that nouns can be specified for in Hakhun are number, case, class, and definiteness. Nouns can be marked morphologically as plural with the suffix *-hɣ*. The category of case is marked with postpositions. Nouns can be marked with the ergative *kámá*, locatives *nɣ* and *kə*, ablative *vaʔ*, and dative *hə* depending on their grammatical function in a clause. Nouns are specified with numeral classifiers, which are bound forms attached to the numerals in a NP. Thus, when numerals modify nouns, they take a classifier that is appropriate for the head noun. Finally, nouns can be marked as definite with the particle *bə/beʔ* under appropriate discourse context.

Besides these typical grammatical categories that we usually see marked on nouns, there is another set of morphology that we find on nouns in Hakhun. These are a set of pronominal prefixes, distinct in form from personal pronouns, which typically refer to the ‘possessor’ of the referent of base noun. These are the equivalent of English possessive pronouns like ‘my’, ‘our’, ‘your’, ‘his’, ‘her’, and ‘their’. These prefixes are called possessive prefixes. Certain classes of nouns, such as the kinship terms and often the body-part terms as well, take the possessive prefixes obligatorily. Example (2) illustrates the noun *rɿ* ‘wing’ prefixed with the second person singular possessive prefix *mə-*.

- (2) *irábá mə-rɿ káme? pán bu? he?*
 that 2SG-wing INST blow.away beat keep
- kà l-o?*
 go IMP-2SG
 ‘Go and drop (the fire) by beating with your wing.’ [SNR-7-1.36]

Verbs in Hakhun are typically specified for tense, argument indexation, inverse, deixis, and polarity. These categories are marked with a set of seven phonologically independent particles, called verbal operators, which follow the verb stem in the verb complex. The onset consonant of these particles code tense, deixis, polarity, and inverse, and the rime codes argument indexation. In example (3), the verb *túŋ* ‘sit’ is followed by the past tense operator *ta?*, which consists of the past tense marker *t-* and the third person argument indexation marker *-a?*.

- (3) *sa?-ŋù bə to?to? [túŋ t-a?]*
 tiger-FEM DEF SS sit PST-3
 ‘The tigress just sat there (waiting for the pangolin).’ [SNR-3-1.7]

Besides these usual verbal categories, verbs in Hakhun are associated with a few more language specific morphemes. When verbs are produced in isolation, for instance in elicitation of words, the verb lexemes are produced with a prefix *a-*. This prefix is an old nominalizer, and we find it in a few constructions like the construction that I call auxiliary construction, illustrated in (4), and in some complement clauses. The prefix *a-* on the verb *zùn* ‘chase’ is an integral part of the auxiliary construction along with the auxiliary verb *rì* in (4).

- (4) *ηà* [*a-zùn* *rì* *r-γ*] *i-p^hù*
 1SG NMLZ-chase AUX INV.NON.PST-1SG 1SG-elder.brother
- káme?* *a*
 ERG DP
 ‘My elder brother will chase me away.’ [SNR-13-1.38]

There is also another prefix *tə-* that we find solely on verbs, which adds permissive/causative meaning. In example (5), the verb *ha* ‘take out’ is prefixed with *tə-*, and indicates that the speaker is asking for permission.

- (5) *lik* *cûη* [*tə-há* *mγ* *k-γ̣*] *jò*
 ornament bag PERM-take.out first PRES-1SG EXCLAM
 ‘Let me take out the bag of ornaments first (from the hole).’ [SNR-6-4.61]

In Hakhun as elsewhere, the characteristic function of nouns in a clause is as arguments or heads of arguments, while the characteristic function of verbs in a clause is as the predicate. Of course, it is possible for a noun to function as a predicate, and for a verb to be the head of an argument. But, this switch in role brings about changes in the structure of the argument or the predicate. Thus, nominal

predicates and the verbal predicates are structurally different, so are the arguments headed by a noun and arguments headed by a verb.

Nominal predicates usually do not take inflected operators when they express an affirmative present proposition, as shown in (6). The subject NP and the predicate NP are simply juxtaposed. Verbal clauses, on the other hand, always require an inflected operator, as shown in (7). When a nominal predicate clause expresses a past or future proposition or a negative proposition, it takes a copula followed by an inflected operator, as shown in (8), which expresses a negative proposition and takes the copula *dɣ* followed by the inflected negative operator *ma?*. It is not possible to add an operator directly to a nominal predicate without a copula. The only exception to this is the past tense operator *t-*, which can directly follow a nominal predicate, as shown in (9), where the inflected past tense operator *ta?* directly follows the predicate NP *ke?pa* ‘Keqpa’.

(6) *sè-ŋà* *bə* *a-ŋù*
 crab-FEM DEF 3-mother
 ‘The crab is the mother.’ [SNR-6-4.2]

(7) *ŋà* *bə* *hìm* *hwé* *gó* *k-ɣ*
 1SG DEF house build plan PRES-1SG
 ‘I am planning to build a house.’ [SCN-4-1.1]

(8) *ibá* *ha?-tí* *zùbê* *dɣ* *m-a?*
 that earth-PERSON spirit COP NEG-3
 ‘That is not an earthly spirit.’ [SNR-9-4.3]

(9) *ke?pa* *t-a?* *a-mún* *bə*
 PN PST-3 3-name DEF
 ‘His name was Keqpa.’ [SNR-14-1.9]

When a verbal clause functions as an argument or modifier of a noun, the verb is usually marked with one of two nominalizers, the agent nominalizer *-tî* or the nominalizer *t^hîŋ*. In example (10), the NP inside the brackets, which functions as the S argument of the verb *túŋ* ‘sit’, consists of the verb *p^hô* ‘to judge’ nominalized with *-tî*. The verb is preceded by its object *mat* ‘case’, and a demonstrative modifier *irô* ‘that’. The verb is marked with the agent nominalizer *-tî*, and then suffixed with the plural suffix *-hɣ*.

- (10) *a-nuk* [*irô mat p^hô-tî-hɣ*] *a-ké* *irôká*
 3-villager that case judge-NMLZ-PL 3-edge there
- kwám-la* *túŋ l-ə-mə*
 surround-ADV sit NF-3-NF
 ‘The villagers, those who judges case, sat in circle on the edges (of the stone), and then....’ [SNR-6-4.55]

Similarly, in (11) the NP inside the brackets consists of the nominalized verb *k^hé-tî* ‘pour-NMLZ’, preceded by its object *k^hâm* ‘alcohol’. The nominalized clause is modified with the demonstrative *irábá* and marked with the ergative postposition *kámá*.

- (11) *rɣzâ* [*irábá k^hâm k^hé-tî kámá*] *k^hâm*
 evening that alcohol pour-NMLZ ERG alcohol
- k^hé zúk c^hí*
 pour drink DUR
 ‘In the evening, those who serve alcohol, poured and drank alcohol.’
 [SNR-13-1.22]

In example (12), the subject NP (of the non-verbal clause) inside the brackets consists of the nominalized verb *k^hĩ t^hĩŋ* ‘give.birth NMLZ’ and its subject *nŝ* ‘2SG’.

The clausal argument is marked with the definite *bə*.

- (12) *[nŝ kámá k^hĩ t^hĩŋ bə] koʔcê*
 2SG ERG give.birth NMLZ DEF blessed

nânâ dŝ a
 child COP 3
 ‘Whom you will give birth to will be a blessed child.’ [MOV-1-1.91]

Similarly, in (13) the NP inside the brackets, which function as an object argument of the verb *kuʔ* ‘give’, consists of the verb *p^hŝʔc^haʔ* ‘eat’ marked with nominalizer *t^hĩŋ*.

- (13) *nŝ bə hənĩrũm hə [a-p^hŝʔc^haʔ t^hĩŋ]*
 2SG DEF 3PL DAT NMLZ-eat NMLZ

kuʔ l-oʔ
 give IMP-2SG
 ‘You give them food.’ [MOV-2-1.208]

There are of course features that nouns and verbs share. For example, nominal predicates can take the aspectual particles *nà* ‘perfective’ and *tətũŋ* ‘progressive’ without requiring a copula, as shown in (14). Similarly, when clausal arguments refer to events, no nominalizer is required on the verb, as shown in (15).

- (14) *atĩ-và bə a-và nà*
 3SG-MAS DEF 3-father PFV
 ‘He has become a father.’ [Elicited]

- (15) *[miʔ hũŋ bə] mâ nŝ hũŋ t-ə nà*
 person appear DEF front LOC appear PST-3 PFV
 ‘The arrival of men was before (that).’ [SNR-9-10.44]

3.2 Property Concept Terms

Property concept terms (PCT henceforth), also called semantic adjectives (Dryer, 2007), in Hakhun can be considered as a subclass of verbs. Like verbs, the PCT's are found in two forms: bare root and prefixed with *a-*, which is an old nominalizer (see §6.7.1.1 on this prefix). Moreover, both the bare root and the *a-* prefixed form of the PCT's form the predicate of a clause just as verbs do. However, both the bare root and the *a-* prefixed form of the PCT's are found in constructions in which the corresponding forms of verbs are never found (with the exception of a few verbs, notably *c^hâm* 'know' and *ro?* 'know how to', which share some of these constructions). The *a-* prefixed form of the PCTs essentially has the distribution of nouns. There are around ninety PCT lexical items attested so far, denoting size (e.g. *adûŋ* 'big'), shape (i.e. *ap^hÿ* 'round'), height (i.e. *at^hwê* 'short'), color (e.g. *apô* 'white'), taste (e.g. *ak^ha?* 'bitter'), distance (e.g. *alû* 'far'), quality (e.g. *asân* 'good'), character (i.e. *ahÿ* 'brave'), look (i.e. *acwâm* 'pretty'), and so on. §3.2.1 describes the distribution of the bare PCT roots and §3.2.2 describes the distribution of the *a-* prefixed PCT's.

3.2.1 Distribution of the Bare PCT Roots

There are two constructions in which we find the bare roots of the PCT's. In one of them, the bare PCT is a predicate of a clause, described in §3.2.1.1, and in the other it is a modifier of a noun, described in §3.2.1.2.

3.2.1.1 Bare PCT as Predicate

The PCT's in their bare form can form the predicate of a clause just like the verbs. What this means is that a PCT can take the only obligatory grammatical element of a verbal clause, namely the inflected operators. Non-verbal clauses cannot directly take the inflected operators without a copula in the clause. Example (16) presents a clause predicated by an intransitive verb *tuŋ* 'sit', which is marked with the past tense operator *t-* inflected with a third person argument indexation marker *-a?*.

The only argument of the verb *saʔŋù bə* 'the tiger' is unmarked for case.

- (16) *saʔ-ŋù* *bə* *toʔtoʔ* [*túŋ* *t-a?*]
 tiger-FEM DEF SS sit PST-3
 'The tigress just sat there (waiting for the pangolin).' [SNR-3-1.7]

Examples (17) through (19) illustrate bare PCT roots functioning as the predicate of the clauses. Note that the PCT roots behave just like the intransitive verb *tuŋ* 'sit' above. In example (17), the PCT *dúŋ* 'big' functions as the predicate and is followed by the grammaticalized verb *kà* 'go' which denotes associated distal motion (in this case from small to big) and the past tense operator *t-* inflected with the person argument indexation marker *-a?*. The participant which is expressed as undergoing the change of state coded in the predicate is the unmarked NP *bəŋù bə* 'the big tree'.

- (17) *bəŋ-ŋù* *bə* *irə* *si?* *va?* *dúŋ* *kà* *t-a?*
 tree-AUG DEF that feces ABL big go PST-3
 'The big tree grow big out of that feces.' [SNR-2-2.18]

In example (18), the PCT *sân* ‘good’ functions as the predicate of the clause and is marked with the present tense operator *k-* inflected with the third person argument index *-a?*. The only argument in the clause is the unmarked NP *ap^ho? arâ* ‘branches’.

- (18) *a-p^ho?* *a-râ* *mì* *mámá* *sân* *k-a?*
 3-branch 3-tree.top ADD a.lot good PRES-3
 ‘The branches are also growing well.’ [SNR-2-2.11]

In example (19), the PCT *sá* ‘clean, innocent’ functions as the predicate of the clause and is followed by the present tense operator *k-* inflected with the third person argument indexation marker *-a?*. The only argument in the clause is the unmarked NP *asá và ibá* ‘the clean person’.

- (19) *a-sá* *và* *ibá* *sá* *k-a?* *sá* *k-a?*
 NMLZ-clean person that clean PRES-3 clean PRES-3
 ‘The clean person is clean.’ [SNR-6-4.104]

Thus, the clauses with bare PCT predicates are essentially intransitive clauses.

3.2.1.2 Bare PCT as Nominal Modifier

Bare PCT roots can also occur following a noun and modify the noun. This distribution is unique to PCT’s. Neither nouns nor verbs are found in this distribution. Nouns, when they modify another noun, precede the head noun, and verbs cannot modify a noun in their bare forms. The only way for verbs to modify a noun is to form a relative clause, usually marked with the nominalizers *-tì* and *t^hij*. Examples (20) through (22) illustrate bare PCT’s modifying a preceding head noun. In example (20), the PCT *nê* ‘new’ follows the head nouns *tù* ‘yam’ and *c^ha?* ‘rice’ in both NP’s inside

the brackets. In example (21), the PCT *sân* ‘good’ follows the modified noun *ha?*

‘land’. In example (22), the PCT *lû* ‘long’ follows the modified noun *mù* ‘tail’.

- (20) [tù jê] [c^ha? jê] irá bá a-k^hán rì v̄r̄
yam new rice new that NMLZ-reap AUX come

t^hŋ nà
NMLZ PFV
‘(We) should go to harvest the new yams and rice.’ [SNR-1-1.20]

- (21) a-lî p^hât^hət^hə bə [ha? sân ný] zà k-a?
3-seed some DEF land good LOC fall PRES-3
‘Some seeds fall on good soil.’ [MOV-2-1.142]

- (22) [bə-mù mù lû] so? l-o?
2SG-tail tail long enter IMP-2SG
‘Enter your long tail (inside the hole).’ [SNR-6-4.77]

This construction where a noun is modified by a following bare PCT root is somewhat formulaic or compound-like in that there is often more to the structure and meaning of this construction than just a simple modification of a noun by a PCT, and it is truer for some expressions than others. On the one extreme, we have expressions like *ha? sân* ‘good soil’ as in (21) which is transparent, compositional, and nothing idiosyncratic about it either semantically or syntactically. On the other hand, the two nouns *tù* ‘yam’ and *c^ha?* ‘rice’ modified by *jê* ‘new’ in (20) form a compound expression denoting all new crops, not just yam and rice. This is rather a formulaic and fixed expression for referring to new crops (see §4.1.2.2 on such compound expressions). The expression in (22) should strike us as odd in that we have two instances of the same noun *mù* ‘tail’ within the NP. There is at least one more

instance of this pattern, presented in example (23) where the noun *dà* ‘leg’ is repeated.

- (23) *vəp^hì* *hə* *nʻ* *bə* [*a-dà* *dà* *mîn*] *irábá*
 bird.kind DAT LOC DEF 3-leg leg blue that
- mînnó rácì* *irá* *tá* *mə* *k^hʻi?* *ku?* *t-a?*
 ornament.kind that place ABL tie give PST-3
 ‘(They) tied mino raci on the blue leg of the Vaphi bird.’ [SNR-6-4.91]

Thus, this is a rather formulaic construction and involves more than just modification of a noun with a PCT. It is very likely that expressions like *mù lú* ‘long tail’ and *dà mîn* ‘blue leg’ are rather fixed expressions with unique reference. There are certainly expressions which involve a noun and a PCT which are fixed in that they have a unique reference, such as *rʻsân* ‘good weather’ (*rʻ* ‘sky’ and *sân* ‘good’), *rʻc^hi?* ‘bad weather’ (*rʻ* ‘sky’, *c^hi?* ‘bad’), *vùsân* ‘good omen’ (*vù* ‘bird’, *sân* ‘good’). On the other extreme, we have frozen compounds of what seems to be a noun and a PCT given below. The bare PCT’s are clearly recognizable – *sân* ‘good’ and *c^hi?* ‘bad’, but the initial formatives are no longer free elements. The form *sâm* is attested in the word *sâmla* ‘image’ and *sâmsuk* ‘mirror’ (*suk* ‘look’), but not as a free form. These compounds have the same structure as the construction under discussion in which a PCT is modifying a preceding noun. See §3.2.2.5 for more discussion on compound PCT’s.

<i>p^hôsân</i>	‘beautiful’	(<i>p^hô</i> ‘???’ , <i>sân</i> ‘good’)
<i>p^hôc^hi?</i>	‘ugly’	(<i>p^hô</i> ‘???’ , <i>c^hi?</i> ‘bad’)

<i>rósân</i>	‘beautiful’	(<i>ró</i> ‘??’, <i>sân</i> ‘good’)
<i>róc^hi?</i>	‘ugly’	(<i>ró</i> ‘??’, <i>c^hi?</i> ‘bad’)
<i>sâmc^hi?</i>	‘ugly’	(<i>sâm</i> ‘appearance’, <i>c^hi?</i> ‘bad’)

In sum, this construction where a noun is modified by a following bare PCT root is a productive source for Noun-PCT compounds, and some expressions are more compound-like, fixed expressions and others are more phrase like with more transparent meaning and structure.

3.2.2 Distribution of *a*-prefixed PCT’s

The PCT’s prefixed with the old nominalizer *a*- have the same distribution as nouns, except for in one construction – the comparative construction. First, *a*-prefixed PCT’s may form predicates just like nouns, i.e. they require a copula when they take inflected operators. There are few verbs which behave like the PCT’s in this regard, notably the stative verbs *c^hâm* ‘know’ and *ro?* ‘know how to’, and the verb *ke?* ‘go’. The *a*-prefixed PCT’s also may form predicates in the auxiliary construction with the auxiliary verb *ri*. All verbs as well can occur in this construction, when they are prefixed with the nominalizer *a*-. The predicate functions of the *a*-prefixed PCT’s are discussed in §3.2.2.1. Second, the *a*-prefixed PCT’s modify head nouns just like nouns, i.e. preceding the head nouns, discussed in §3.2.2.2. Third, the *a*-prefixed PCT’s take the same morpheme as nouns when they modify verbs, namely the ablative postposition *mə*, discussed in §3.2.2.3. Although it

is rare, the *a*-prefixed PCT's also function as the head of an NP, discussed in

§3.2.2.4. Finally, the *a*-prefixed PCT's occur in comparative constructions. We do find nouns in this construction, but they undergo change in meaning. We also find the same verbs mentioned above in this construction as well. But, no other verb has been attested in this construction. The comparative constructions are discussed in §3.2.2.5.

3.2.2.1 *a*-prefixed PCT as Predicate

The *a*-prefixed PCT's are found in two different kinds of predicate constructions – one is the nominal predicate construction and the other is the auxiliary verb construction.

Nominal predicate clauses, discussed in §8.1.1.1 in detail, do not require the inflected verbal operators when they express an affirmative and present proposition, and take a copula when they express any other kind of proposition, along with the appropriate inflected operator. The *a*-prefixed PCT's can function as predicates just as nouns do in the nominal predicate clause. Example (24) expresses an affirmative present proposition. The PCT *sô* 'red' is the predicate prefixed with the nominalizer *a*-, and there is no verbal operator following it.

- (24) *lip bə ɲi? ɲo? ɲâ imá [sè bə a-sô]*
frog DEF waist break say if crab DEF NMLZ-red
'Frog's waist is broken, and crab is red.' [WNR-1-1.5]

The clause in (25) expresses a future event, and therefore we have the copula *dɣ*

followed by the zero-operator inflected with third person argument index *a*, following

the PCT *sân* ‘good’. The same exception on the requirement of a copula we have seen in the nominal clauses above also applies to the *a-* prefixed PCT predicates. The past tense operator *t-* can directly follow the predicate without a copula. In example (26), the inflected operator *tu?* directly follows the PCT *asá* ‘clean’.

(25) *atî-c^hà* *a-sân* *d^h* *a*
 3SG-DIM NMLZ-good COP 3
 ‘She will be fine.’ [MOV-1-1.289]

(26) *vəkŋî* *n^h* *mì* *a-sá* *t-u?* *nà*
 wild.pig 2SG also NMLZ-clean PST-2SG PFV
 ‘Wild pig, you are also clean (not guilty).’ [SNR-6-4.35]

A few verbs, notably the stative verbs *c^hàm* ‘know’ and *ro?* ‘know how to’, and the active verb *ke?* ‘go’, behave like PCT’s in this regard, shown in (27) through (29). In example (27), the verb *c^hàm* ‘know’ is the main verb of the matrix clause, and it is prefixed with *a-* and there is no verbal operator following it.

(27) *sərâ*, [*nîrûm* *kámá* *a-c^hàm*] *n^h* *bə* *hí*
 sir 1PL.EXCL ERG NMLZ-know 2SG DEF learn

ku? *r-i* *bə* *k^hɣ?* *k-a?*
 give INV.NON.PST-1PL DEF right PRES-3
 ‘Master, we know that what you teach is correct.’ [MOV-3-1.245]

In example (28), the verb *ro?* ‘know how to’ is prefixed with *a-* and is not followed by any verbal operator. In example (29), the verb *ke?* is prefixed with *a-* and is not followed by any verbal operator.

- (28) *ɲà bə hìm hwé a-ro?*
 1SG DEF house build NMLZ-know
 ‘I know how to build a house.’ [Elic-10-16.1]
- (29) *txti ɲà mə-nâm nɣ tʰúŋ nɣ mì a-ke?*
 God 1SG 2SG-with LOC jail LOC ADD NMLZ-go
 ‘God, I will even go to jail with you.’ [MOV-3-1.295]

The other predicate construction in which we find the *a-* prefixed PCT’s is the auxiliary construction, characterized by the presence of the auxiliary verb *rì*, which historically comes from the verb *rì* ‘do’. All verbs as well, when prefixed with the nominalizer *a-*, can occur in this construction (see §6.8.1). Historically, the PCT and the verbs prefixed with the nominalizer *a-* must have been the complement of the now auxiliary verb *rì*. In example (30), the PCT’s *dûŋ* ‘big’ and *lû* ‘long, tall’ are functioning as predicates. They are prefixed with the *a-* prefix and followed by the auxiliary verb *rì*, which, in turn, is followed by the verbal operator *kɣ*.

- (30) *ɲà [a-dûŋ rì k-ɣ], [a-lû rì k-ɣ]*
 1SG NMLZ-big AUX PRES-1SG NMLZ-tall AUX PRES-1SG
- ɲâ-mə lú nɣ? dɣ m-a?*
 think-NF have.hole tread COP NEG-3
 ‘I did not break (the head) thinking I am big, I am tall.’ [SNR-6-4.20]

3.2.2.2 *a-* prefixed PCT as Nominal Modifier

Most *a-* prefixed PCT’s modify nouns, and when they do they usually precede the head noun, just like the nouns which modify another noun, and unlike the bare PCT roots. Only one instance of an *a-* prefixed PCT following the head noun is found

(see example (34)). In example (31), the *a-* prefixed PCT *sân* ‘good’ precedes the modified noun *lâm* ‘path’, and in (32) the *a-* prefixed PCT *dûŋ* ‘big’ precedes the modified noun *hók^hám* ‘king’, and in (33) the *a-* prefixed PCT *sá* ‘clean, pure, innocent’ precedes the modified noun *và* ‘person’.

(31) *tɔti zêsu? [a-sân lâm] suk ku? r-i*
 god Jesus NMLZ-good path show give INV.NON.PST-1PL
 ‘God Jesus, show us good path.’ [MOV-2-1.63]

(32) *[a-dûŋ hók^hám hə] tûŋ ku? k-ì bə*
 NMLZ-big king DAT tax give PRES-1PL DEF

tisu tərâ lâm nʔ k^hɣ? k-ə le
 God law path LOC right PRES-3 or
 ‘Is paying tax to the emperor right in God’s law?’ [MOV-3-1.249]

(33) *[a-sá và ibá] sá k-a? sá k-a?*
 NMLZ-clean person that clean PRES-3 clean PRES-3
 ‘The clean person is clean.’ [SNR-6-4.104]

In example (34), the *a-* prefixed PCT *dûŋ* ‘big’ follows the head noun *c^hipk^hərâ* ‘ant’.

(34) *[c^hipk^hərâ a-dûŋ] ke? t^hik t-ə bə*
 ant NMLZ-big go CAUS PST-3 when
 ‘When (they) sent the big ants.....’ [SNR-7-1.43]

Examples (35) through (37) illustrate modification of nouns with another noun. In example (35), there are two NP’s under consideration inside brackets. In the first one, the noun *tʔ* ‘family’ is modified by the preceding noun *zùbê* ‘ghost’, and the noun *ha?súŋ* ‘village’ in turn is modified by the NP *zùbê tʔ* ‘ghost’s family’. In the second NP, the noun *ha?súŋ* ‘village’ is modified by the noun *mi?* ‘human, person’.

- (35) *[zùbê tʰ haʔsún]* *mámá,* *[miʔ haʔsún]*
ghost family village different human village
- bə* *mámá*
DEF different
‘The village of the ghost family is different, and the village of the humans is different.’ [SNR-8-1.1]

In example (36), the noun *coʔ* ‘body’ is modified by the preceding noun *tíkâ* ‘old man’. In example (37), the noun *múŋtân* ‘kingdom’ is modified by the preceding noun *tísû* ‘God’, and the noun *tərâ* ‘law’ in turn is modified by the NP *tísû múŋtân* ‘God’s kingdom’.

- (36) *irá kámá* *[irá tíkâ* *coʔ nʻ]* *ibá* *mácì mǎrù*
that INST that old.man body LOC that scratch
- tê* *kʰán*
try reap
‘(The ghosts) tried to reap and scratch the old man’s body with that (grass leaf).’ [SNR-8-1.21]

- (37) *zêsuʔ bə* *[tísû múŋtân* *tərâ]* *hó* *kʰwám*
Jesus DEF God kingdom law preach walk
- t-ə* *nà*
PST-3 PFV
‘Jesus preached the words of God’s kingdom.’ [MOV-2-1.105]

The verbs prefixed with *a-* cannot modify nouns the way PCT’s prefixed with *a-* can. The only way for verbs to modify a noun is to be a part of a relative clause marked with the agentive nominalizer *-tî* or the non-agent participant nominalizer *tʰîŋ*.

adverbials, though they more often function as ablative postpositional phrases (see §5.2.11.5 for ablative use of *mə*). However, adverbs cannot be derived from verbs with *mə*, save for a few exceptional stative verbs like *cí* ‘to fear’ and *k^ha?* ‘be angry’ (see below).

Examples (41) and (42) illustrate the adverbial use of the *a*-prefixed PCT’s.

In example (41), the *a*-prefixed PCT *hîŋ* ‘raw’ is marked with *mə*, and it modifies the verb *p^hʔ?* ‘eat’. In example (42), the *a*-prefixed PCT *sân* ‘good’ is marked with *mə* and it modified the verb *te?* ‘hear’.

(41) [*a-hîŋ* *mə*] *p^hʔ?* *t-ə* *ŋâ*
 NMLZ-raw ADV eat PST-3 hearsay
 ‘(They) ate (the meat) raw.’ [SNR-7-1.13]

(42) [*a-sân* *mə*] *te?* *l-at,* *ŋâ* *kámá* *càlì* *ŋâ*
 NMLZ-good ADV hear IMP-2PL 1SG ERG what say

ku? *k-ə* *ni*
 give PRES-3 Q
 ‘Listen carefully to what I am saying.’ [MOV-2-1.172]

Examples (43) and (44) illustrate two stative verbs denoting human propensity functioning as adverbials marked with *mə*. In example (43), the verb *círik* ‘fear a lot’ is prefixed with the nominalizer *a*- and followed by *mə*, and adds more information to the event of ‘planting a deer foot print’ referred to in the example. In example (44), the complex expression with the verb *k^ha?* ‘be angry’ is followed by *mə* and modifies the verb *sám* ‘cut’.

- (43) [a-cí-rik mə] zéká k^hi?hî iru? dŷ m-a?
 NMLZ-fear-die ADV now deer like.that COP NEG-3
- dŷ t-ɣ? ŋâ imá ŋâ a-zùn rì
 COP PST-1SG say if 1SG NMLZ-chase AUX
- r-ɣ i-p^hù káme? a
 INV.NON.PST-1SG 1SG-brother ERG DP
 ‘If I did not do like that with the deer (foot) in fear, my brother would have chased me away.’ [SNR-13-1.38]

- (44) [i-ràn k^ha? mə] mó sám he? t-ɣ?
 1SG-heart bitter ADV by.mistake cut.down keep PST-1SG
 ‘I cut down (the trees) mistakenly in anger.’ [SNR-6-4.33]

Examples (45) and (46) illustrate nouns marked with *mə* functioning as manner adverbials. In example (45), the NP *bekun p^hùŋ* ‘bread meal’ is followed by *mə*, and denotes the means or manner of living. In example (46), the possessed noun *abu?* ‘neck’ is followed by *mə*, and denotes the manner of chopping up a person.

- (45) mi? abá [bekun p^hùŋ mə] bà túŋ m-i?
 human this bread meal ADV REST live NEG-1PL
 ‘We humans do not live just on bread.’ [MOV-1-1.192]
- (46) [a-bu? mə] tukbat t^ha?do? he? t-a?
 3-neck ADV cut.off chop.off keep PST-3
 ‘(He) cut her into pieces by the neck.’ [SNR-9-8.7]

Verbs, on the other hand, do not take *mə* when they modify another verb.

Instead they take another morpheme *la*. Thus in (47), the verb *kwám* which means ‘to surround’ is marked with *la* and modifies the verb *túŋ* ‘sit’. In example (48), the verb

rúŋ which means ‘to gather something’ is marked with *la* and modifies the verb *túŋ* ‘sit’.

- (47) *irá mat p^hô-tî-hɣ irábá a-ké iráká*
 that case judge-NMLZ-PL that 3-edge there
 [*kwám-la túŋ l-ə-mə*
 surround-ADV sit NF-3-NF
 ‘The judges sat on the edge (of the stone) in circle, and then’ [SNR-6-4.55]

- (48) *mâ nɣ bə [rúŋ-la túŋ] t-ə ɲà*
 front LOC DEF gather-ADV sit PST-3 hearsay
 ‘Before, (they) used to live together.’ [SNR-8-1.53]

3.2.2.4 *a-* prefixed PCT as Head Noun

The *a-* prefixed PCT’s also can function as arguments, and refer to the entity of which they describe a property. In example (49), the PCT *dúŋ*, prefixed with *a-*, is the object argument of the verb *tə-kəp* ‘let-get’ and it refers to a place whose size it describes. In example (50) as well the PCT *dúŋ* ‘big’ functions as the object of the verb *kəp* ‘get’ and here it refers to game (prey).

- (49) *và-t^hə kámá ɲà bə [a-dúŋ] tə-kəp*
 CLF-one ERG 1SG DEF NMLZ-big PERM-get
l-ɣ? ɲá-mə c^həp^hù mɣ-ni aru?
 IMP-1SG say-NF brothers CLF-two like.this
dé-mun t-a?
 argue-RECIP PST-3
 ‘One said, ‘Let me have a big portion’, like that the two brothers argued.’
 [SNR-13-1.18]

- (50) *a-dûŋ* *kəp* *imá* *a-dûŋ* ... *aru?*
 NMLZ-big get if NMLZ-big like.this
- p^hàn* *t-i?*
 distribute PST-1PL
 ‘If (we) get (a) big (one), then (distribute) big, like that we distribute.’
 [SNR-17-1.57]

3.2.2.5 *a*-prefixed PCT in Comparative Constructions

The final construction in which we find the *a*-prefixed PCT’s is the comparative construction. This construction is by and large associated with the PCT’s, though there are some nouns and some verbs which occur in the degree constructions. Examples (51) and (52) illustrate PCT’s in the comparative and superlative degree. In example (51), we have a comparative degree construction. The *a*-prefixed PCT *dûŋ* ‘big’ is marked by comparative degree marker *mê*. The comparee NP *zêsu? bə* ‘Jesus’ is unmarked for case, and the standard NP *múŋvà* ‘prophet’ is marked with the comparative particle *t^hɣ?* ‘than’, which is also a relator noun denoting ‘over’ (see 3.3.1 on relator nouns). The comparative particle occasionally takes the locative *nɣ* and always takes the ablative *mə*.

- (51) *zêsu? bə* *múŋ-và* *t^hɣ?* *nɣ* *mə* [*a-dûŋ*
 Jesus DEF prophet-MAS over LOC ABL NMLZ-big
- mê]* *nê*
 COM Q
 ‘Is Jesus greater than the prophets?’ [MOV-1-1.69]

In example (52), we have a superlative degree construction, in which the *a-* prefixed PCT *dûŋ* ‘big’ is followed by the superlative degree marker *pânt^hùm*. The comparee argument is the unmarked NP *hatŋù bÿ irábá* ‘the banyan tree’.

- (52) *hatŋù* *bÿ* *irábá* [*a-dûŋ* *pânt^hùm*]
 banyan tree that NMLZ-big SPLT
 ‘The banyan tree is the biggest.’ [SNR-2-2.4]

Examples (53) through (55) illustrate some nouns in the degree constructions. The meaning of these nouns changes from referential to descriptive meaning in the degree constructions. Thus, the noun *k^həp^hû* denotes an older or adult person or the chief of a village. But when it occurs in the comparative construction with the comparative *mê* in (53), it denotes the quality of being old or aged. The noun *nâdî* in the same example refers to a younger child, but in the comparative construction it denotes the quality of being ‘young or junior’.

- (53) *nu?rûm* *t^hʔ* *mə* [*k^həp^hû* *mê*] *bə*
 2PL over ABL adult.person COM DEF

 [*nâdî* *mê*] *dʔ* *a*
 younger.child COM COP 3
 ‘Those who are older/senior than you, will become younger/junior than you.’
 [MOV-3-1.278]

Similarly, the noun *p^hùk^hû* is used to address anyone who is older but not related by blood. But when it occurs in the comparative construction with the comparative marker *mê* in (54), it also denotes the quality of being old or senior.

- (54) *hwé* [p^hùk^hù *mê*] *nî*
 who older.brother COM Q
 ‘Who is greater?’ [MOV-3-1.280]

Finally, the compound noun *ɲùvâ* consisting of *ɲù* ‘mother’ and *vâ* ‘father’ denotes ‘parents’. But it also denotes the quality of being older or aged in the comparative construction. There is no example of these nouns being used with the superlative *pànt^hùm*, though that seems just to be a gap in the database.

- (55) *ɲà nɣ mə mì* [ɲùvâ *mê*] *nà*
 1SG LOC ABL ADD parents COM PFV
 ‘(He) is older than me.’ [SNR-8-1.7]

Examples (56) through (58) illustrate a few verbs in the degree constructions. We have seen these verbs occurring in other constructions same as the PCT’s above. In example (56), the intransitive verb *ke?* ‘go’ is marked with the comparative marker *mê*, and denotes ‘to go more’.

- (56) *ibá dɣ t-ɣ?* *ɲâ imá ará dîmə ...*
 that happen PST-1SG say then this after ...

aká rwézá [*ke?* *mê* *m-a?*]
 here always go COM NEG-3
 ‘In that case, after this (you) cannot come here more.’ [SCN-2-17.1]

In examples (57) and (58), the verb *c^hàm* ‘know’, prefixed with *a-*, is marked with the comparative *mê* and the superlative *pànt^hùm* respectively.

- (57) *ɲà atî-và t^hɣ?* *mə* [*a-c^hàm* *mê*]
 1SG 3SG-MAS over ABL NMLZ-know COM
 ‘I know more than him.’ [Elicited]

- (58) *ɲà bə [a-c^hàm pànt^hùm]*
 1SG DEF a-know SPLT
 ‘I know the most.’ [Elicited]

3.2.3 Compound PCT’s

A few PCT’s are compounds composed of a PCT plus what seems to be a noun. These compounds all have to do with appearance. The compound PCT’s are listed below.

<i>p^hôsân</i>	‘beautiful’	(<i>p^hô</i> ‘??’, <i>sân</i> ‘good’)
<i>p^hôc^hî?</i>	‘ugly’	(<i>p^hô</i> ‘??’, <i>c^hî?</i> ‘bad’)
<i>rósân</i>	‘beautiful’	(<i>ró</i> ‘??’, <i>sân</i> ‘good’)
<i>róc^hî?</i>	‘ugly’	(<i>ró</i> ‘??’, <i>c^hî?</i> ‘bad’)
<i>sâmc^hî?</i>	‘ugly’	(<i>sâm</i> ‘appearance’, <i>c^hî?</i> ‘bad’)

The forms *p^hô* and *ró* are not attested on their own or in any other word which may be related to these PCT’s. However, the morpheme *sâm* has been attested in the word *sâmsuk* ‘mirror’, which is a compound of *sâm* ‘appearance’ and *suk* ‘show’, and in the expression *sâmla* ‘in appearance’, as in the following example.

- (59) *rɣdûŋ tîsû líŋvó mə təlâ nî təhja? hwé c^hí*
 God love ABL boy and girl create DUR
- t-a?*, *a-sâmla* *mə mərîŋ*
 PST-3 3-image ABL same
 ‘God created man and woman in love, who are same in appearance.’
 [MOV-1-1.8]

In two PCT's, the third person inflected negative operator *ma?* seems to have gotten frozen together with a PCT to denote the opposite. However, they still retain the predicate nature by not allowing the *a-* prefix (since PCT's and verbs directly followed by inflected operators do not take *a-* prefix).

sáma? 'dirty' (*sá* 'clean', *ma?* 'negative')

sânma? 'bad' (*sân* 'good', *ma?* 'negative')

In example (60), the word *sânma?* 'bad' is coordinated with *asân* 'good' (thus *sânma?* here is not a predicate, rather it is nominal). Note that while *sân* 'good' is prefixed with *a-*, *sânma?* is not. In example (61), *sânma?* is used attributively, modifying *dx?sum* 'work'.

(60) *atî kámá [sânma? nî a-sân] rán k-a?*
 3SG ERG bad and NMLZ-good choose PRES-3
 'He will separate bad from good.' [MOV-3-1.292]

(61) *ará mi? rikhe? rô [sânma? dx?sum]*
 this man kill PURP bad work

ləpk^hi tə m-ɣ?
 see PST NEG-1SG
 'In order to get this man killed, I have not seen (him doing) any bad work.'
 [MOV-4-1.68]

3.3 Noun Subclasses

Three subclasses of nouns are described in this section. §3.3.1 describes the relator nouns, which always take a nominal or pronominal modifier and a locative case postposition. The relator nouns mostly function as adverbials, rather than as

arguments. §3.3.2 describes a set of inalienably possessed nouns, such as the kinship terms and body-part terms. §3.3.3 describes a set of nouns which behave like classifiers by directly taking numerals on them. They mostly include nouns denoting time and place.

3.3.1 Relator Nouns

Relator nouns (DeLancey 1997) are a closed set of words denoting relational meanings which behave like nouns in certain ways. They denote more specific locations. First, like nouns they can be marked with postpositions, like the locative postposition *nʔ*. Second, they can take possessive prefixes. In fact, they are bound nouns, like the kinship terms, and therefore they are either preceded by a noun/noun phrase or prefixed with a possessive prefix. One way in which the relator nouns do not behave like nouns is that they do not function as arguments of a clause. The most common function of relator nouns is to refer to the location of an entity with reference to some space or entity. Thus, they occur most commonly along with another noun which acts as the reference point for the location that the relator nouns specify. The most commonly encountered relator nouns are described below.

***ak^huʔ* ‘top’**: The relator noun *ak^huʔ* denotes ‘on top of’ something. The entity whose ‘top’ is being referred to precedes the relator noun. There is no marker of dependency between these two nouns however. In example (62), *k^huʔ* is preceded by the noun *suʔ* ‘thorn’, whose top the relator noun refers to, and is followed by the locative postposition *nʔ*.

- (62) *a-lĩ* *p^hât^hət^hə* *bə* [*su?* *k^hu?* *nɣ̣*] *zà* *k-a?*
 3-seed some DEF thorn top LOC fall PRES-3
 ‘Some seeds fall on the thorns.’ [MOV-2-1.140]

In example (63), the relator noun is preceded by the noun *muk* ‘donkey’, whose top the relator noun refers to, and is followed by the locative postposition *nɣ̣*.

- (63) [*muk* *k^hu?* *nɣ̣*] *twè* *pí* *l-ə-mə* *taplâbû*
 donkey top LOC take carry NF-3-NF inn

nɣ̣ *hùn* *ván* *t-a?*
 LOC carry along PST-3
 ‘Carrying (the man) on a donkey, (he) took (the man) to an inn.’ [MOV-3-1.120]

In example (64), *k^hu?* is prefixed with the possessive prefix *a-*, and is followed by locative *nɣ̣*. Example (64) can be used in a context where it is obvious whose top the relator noun is referring to.

- (64) *a-k^hu?* *nɣ̣*
 3-top LOC
 ‘On top of (it).’ [Elicited]

***ak^hûn* ‘under’**: The relator noun *ak^hûn* denotes the location ‘under something’. In example (65), *k^hûn* is preceded by the noun *lùŋŋù* ‘large stone’ and followed by the locative postposition *nɣ̣*. In example (66), the relator noun is preceded by the demonstrative *irə* ‘that’ which refers to the ground and followed by the locative *nɣ̣*.

- (65) *sè [lùŋ-ŋù k^hûn nɣ] túŋ vɣ t-a?*
 crab stone-AUG under LOC stay come PST-3
 ‘The crab stayed under a large stone.’ [SNR-6-4.53]
- (66) *inɣ ha? kûn nɣ ... lip vɣ l-ə-mə*
 there ground hole LOC ... enter come NF-3-NF
- [irə k^hûn nɣ] túŋ vɣ t-a?*
 that under LOC sit come PST-3
 ‘There inside the ground hole, entered and stayed under (the ground).’
 [SNR-8-1.4]

The relator noun *ak^hûn* is the only relator noun that may occur following another relator noun, *amûŋ* ‘inside’, described below, as shown in (67).

- (67) *zùbê tɣ túŋ t^hŋ bə [ha? mûŋ k^hûn nɣ]*
 ghost family live NMLZ DEF ground inside under LOC
- dɣ t-ə ŋà*
 COP PST-3 hearsay
 ‘The dwelling place of ghosts was under the ground.’ [SNR-8-1.5]

***amûŋ* ‘inside’**: The relator noun *amûŋ* denotes the inside of a space. In example (68), the relator noun *amûŋ* is preceded by the NP *vɣ? aza?* ‘many pigs’ and followed by the locative *nɣ*. It denotes the inside of the pigs’ bodies. Here an evil spirit is asking Jesus to let it go inside the pigs’ bodies.

- (68) *[vɣ? aza? mûŋ nɣ] vɣ t^hik r-i*
 pig many inside LOC come CAUS INV.NON.PST-1PL
 ‘Let me go inside those many pigs.’ [MOV-2-1.191]

In example (69), the relator noun is prefixed with the third person possessive *a-*, which has reference to the pangolin, and it is followed by the locative *nɣ*.

(69) *vícî kámá ... [a-kûn mûŋ ný] tùm-la*
 pangolin ERG ... 3-hole inside LOC all-ADV

hwàm ván t-a?

pull along PST-3

‘The pangolin pulled (all the mushrooms) along inside its hole.’ [SNR-3-1.5]

***at^ha?* ‘over one’s head’**: The relator noun *at^ha?* refers to the location above

one’s head, such as in bed. Example (70) refers to the event of the Roman soldiers

hanging a board over Jesus’s head on the cross. Here the relator noun *t^ha?* is preceded

by the possessed noun *ak^hû* ‘his head’, and is followed by the postposition *ný*.

(70) *hənîrûm kámá [a-k^hû t^ha? ný] bək^hà tɣ?*
 3PL ERG 3-head head.side LOC board nail

ku? t-a?

give PST-3

‘They nailed a board over his head (on the cross).’ [MOV-4-1.134]

***at^hɣ?* ‘over’**: the relator noun *at^hɣ?* denotes ‘over something’. It is also

metaphorically extended as part of a comparative construction equivalent to the

English comparative particle *than*. In example (71), the relator noun is preceded by

the possessed noun *mək^hû* ‘your head’ and is followed by the locative *ný*. It is

referring to the location of the bulb with relation to the head of the addressee.

(71) *vàn [mə-k^hû t^hɣ? ný]*
 fire 2SG-head over LOC
 ‘The bulb is over your head.’ [Elic-9-89.1]

In example (72), the relator noun *tʰɣʔ* is referring to the location of a more abstract entity like a court case.

- (72) *[ʒeʔ-và tʰɣʔ nɣ] mat leʔ kuʔ t-ə nà*
 squirrel-MAS over LOC case again give PST-3 PFV
 ‘(They) registered a case again against the squirrel.’ [SNR-6-4.37]

In (73) and (74) it marks the standard of comparison in a comparative construction. In (73), the standard of comparison is denoted by a possessive prefix on the relator noun and in (74) it is denoted by a pronoun that precedes the relator noun.

- (73) *dɣ a kámí [i-tʰɣʔ nɣ] miʔ mɣ-tʰə a-dûŋ*
 however 1SG-over LOC person CLF-one NMLZ-big
vɣ r-a
 come PROX.NON.PST-3
 ‘However, someone greater than me is coming.’ [MOV-1-1.172]

- (74) *nɣ bə [tʰúmlà tʰɣʔ nɣ] koʔcê dûŋ təhjaʔ*
 2SG DEF all over LOC blessed very woman
 ‘You are more blessed than all.’ [MOV-1-1.90]

***amúŋ* ‘middle, among’**: The relator noun *amúŋ* refers to the middle or center of a space, as in (75). It may also denote ‘among’, as in (76). In example (75), the relator noun *amúŋ* occurs following the noun *haʔsúŋ* ‘village’ and is followed by the locative *nɣ*. In example (76), it follows the second person plural pronoun *nuʔrûm* and precedes the locative *nɣ*.

- (75) *[haʔsúŋ múŋ nɣ] cò tóà*
 village middle LOC school EXIST
 ‘There is a school in the middle of the village.’ [Elicited]

(76) *dɔ̃ a kámí* *ɲà* [*nuʔrúm* *múɲ nɔ́*] *dxʔsúm-tí* *mɔ̃-tʰə*
 however 1SG 2PL among LOC work-NMLZ CLF-one

dɔ̃ t-xʔ

COP PST-1SG

‘I was a worker among you.’

[MOV-3-1.283]

***aké* ‘side of or edge’**: The relator noun *aké* denotes the side or edge of a space (as opposed to the middle of that space). In example (77), the relator noun is in its possessed form *aké* and is followed by *nɔ́*, and in (78) it is preceded by *zútʰim* ‘river’ and is followed by *nɔ́*.

(77) *nɔ̃* [*a-ké* *nɔ́*], *ɲà* *a-múɲ* *nɔ́*
 2SG 3-edge LOC 1SG 3-middle LOC
 ‘You are on the edge/on the side, I am in the middle.’ [Elicited]

(78) *naʔkâ* *ɲâ* [*zútʰim* *ké* *nɔ́*] *dê* *e*
 other.side side river edge LOC cross 1PL

ɲâmâ ɲâ kuʔ

COMP say give

‘(They) said, “Towards the other side, we will cross to the river bank.”’

[MOV-2-1.179]

***akûm* ‘side of or edge’**: The relator noun *akûm* also denotes ‘side of or edge of a space’. It is not clear how it is different from *aké*. In example (79), the relator noun *akûm* is preceded by the noun *lâm* ‘road’ and is followed by the locative *nɔ́*. In example (80) it is preceded by the noun *zù* ‘water’ and is followed by the locative *nɔ́*.

(79) [*lâm* *kûm* *nɔ́*] *bɔ̃* *tóà*
 road side LOC tree EXIST
 ‘There are trees by the side of the road.’ [Elicited]

- (80) *zu anuknap nʻ nîrûm irá ha? va?*
 Jew sabbath.day LOC 1PL.EXCL that place ABL
- [zù kûm nʻ] kâ t-i?*
 water edge LOC go PST-1PL
 ‘On the sabbath day, we went from that place to the beach.’ [BT-16-6.5]

***atip* ‘near’**: The relator noun *atip* denotes ‘close to or near a space or entity’.

In example (81), it is in the 3rd person possessed form *atip*, where the possessor refers to a person, and is followed by the locative *nʻ*. In example (82), the relator noun is preceded by the NP *zùvê hókʰám* ‘governor’ and is followed by the locative *nʻ*.

- (81) *[a-tip nʻ] vʻ l-ə-mə rʻnʻ mîhe?*
 3-near LOC come NF-3-NF take.care wipe
- ku? t-a?*
 give PST-3
 ‘(He) came close to (the man) and took care of him.’ [MOV-3-1.119]

- (82) *sit ke? e [zùvê hókʰám tip nʻ]*
 take.along go 1PL region king near LOC
 ‘(We) will take (him) to the governor.’ [MOV-4-1.58]

***anâm* ‘with someone or to someone’**: The relator noun *nâm* denotes ‘with’

or ‘end up being with’. In example (83), *nâm* is prefixed with the 2nd person possessive prefix *mə-* and is followed by the locative *nʻ*. In example (84), it is preceded by the noun *pelot* ‘Pilate’ and is followed by the locative *nʻ*.

- (83) *txti ηà [mə-nâm nʻ] tʰúŋ nʻ mî a-ke?*
 God 1SG 2SG-with LOC jail LOC ADD NMLZ-go
 ‘God, I will even go to jail with you.’ [MOV-3-1.295]

- (84) *[pelot nâm nʻ]* *vín sit* *ván l-at*
 PN with LOC back take.along along IMP-2PL
 ‘Take (him) back to Pilate.’ [MOV-4-1.90]

arè ‘across’: The relator noun *rè* denotes across a space, such as a river or road.

- (85) *báráká* *ηâ imá [galili* *rè nʻ]*
 where say if PN across LOC
 ‘If you ask where, it was across (the lake) from Galilee.’ [MOV-2-1.183]

So far, we have looked at the most common relator nouns. These are characterized by being a bound lexical item (requires either a possessive prefix or a possessor noun), and are marked with a locative pronoun. However, there are some lexical items whose status is not very clear, mostly because they do not seem to be bound lexical items. These lexical items also have temporal reference besides spatial reference. One of them is *mâ* ‘front’ or ‘before’, and the other is *đi* ‘behind’ or ‘later’.

Consider the following examples.

- (86) *atî-và* *i-mâ* *nʻ*
 3SG-MAS 1SG-front LOC
 ‘He is in front of me.’ [Elic-2-79.1]

- (87) *ηà [pá-rûm* *mâ nʻ]* *guhati* *nʻ túη t-ʻʻ?*
 1SG year-three before LOC PN LOC live PST-3
 ‘I lived in Guwahati three years ago.’ [Elic-9-116.1]

- (88) *[mâ nʻ]* *bə rúη-la* *túη t-ə ηà*
 before LOC DEF gather-ADV live PST-3 hearsay
 ‘(They) used to live together earlier.’ [SNR-8-1.53]

In example (86), *mâ* ‘front’ is prefixed with the first person singular possessive prefix

i- and followed by the locative *nʻ*. In (87) it is preceded by the classifier-numeral

word *párûm* ‘three years’, and followed by the locative *ný*. However, in (88) it is not prefixed or preceded by any kind of noun. Similarly, in example (89), *dî* ‘after’ is prefixed with the possessive prefix *mə-* ‘2SG’ and followed by the locative *ný*. In example (90), it is preceded by the classifier-numeral word *naprûm* ‘three days’ and followed by the locative *ný*. However, in (91) it is not prefixed or preceded by any kind of noun.

- (89) *ɲà [mə-dî ný] kà r-ɣ nê*
 1SG 2SG-after LOC go PROX.NON.PST-1SG Q
 ‘May I come after you?’ [MOV-2-1.197]
- (90) *[nap-rûm dî ný] tîsû swámhìm ný zu p^hân*
 day-three later LOC God church LOC Jew tribe
sərâ-hɣ nâm ný ləpk^hi kà t-a?
 sir-PL with LOC see go PST-3
 ‘Three days later, (they) found him at the Jew church with the teachers.’
 [MOV-1-1.123]
- (91) *imá [dî ný] nîrûm vɣ t-i?*
 then later LOC 1PL.EXCL come PST-1PL
 ‘Then, later we left.’ [BT-16-6.12]

Moreover, there are also nouns that denote space just like the relator nouns but cannot be prefixed with a possessive prefix, though they can be preceded by a noun. One such lexical item is *tɣ* ‘outside’. In examples (92) and (93) it is not preceded by any kind of noun, though it is followed by the locative marker, and (94) shows that we cannot add a possessive prefix to this noun.

- (92) *p^hât^ho? bə [tɣ ný] pán kà a*
 chaff DEF outside LOC blow.away go 3
 ‘The chaff will blow away.’ [MOV-1-1.178]

(93) *nânâ-hɣ* [tɣ nɣ] *kà mɣ l-at*
 child-PL outside LOC go ??? IMP-2PL
 ‘Children, go outside for a while.’ [MOV-2-1.77]

(94) **atɣ nɣ*
 ‘Outside’

3.3.2 Bound Noun Roots

Noun roots denoting kinship terms, body-parts, parts-of-entities, among others are bound roots. These roots are either prefixed with *a-*, the third person possessive form, or with one of the other possessive prefixes.

3.3.2.1 Kinship Terms

Table 39 lists 27 kinship terms. They all have been listed with the first person singular possessive prefix *i-*. Interestingly, certain relations are grouped, and named with a single term. One factor that plays a role in such grouping is marriageability.

Table 39: Kinship terms

Form	Gloss
<i>ivà</i>	‘father’
<i>ijnù</i>	‘mother’
<i>ip^hù</i>	‘elder brother’, ‘elder male parallel cousin’, ‘husband’s elder brother’
<i>ijnà</i>	‘elder sister, elder female parallel cousin’
<i>inâ</i>	‘younger brother or sister or male/female parallel cousin’, ‘husband’s younger brother’,
<i>ic^hà</i>	‘child (male or female)’
<i>ic^hù</i>	‘grandchild (male/female)’

<i>ic^hà/ic^hù sùjvɔ̃</i>	‘eldest child/grandchild’
<i>ic^hà/ic^hù njidam</i>	‘second child/grandchild’
<i>ic^hà/ic^hù nâdî</i>	‘third child/grandchild’
<i>ic^hà/ic^hù pobij</i>	‘youngest child/grandchild’
<i>itî</i>	‘grandfather’
<i>ivî</i>	‘grandmother’
<i>itî tîdîŋ</i>	‘great grandfather’
<i>ivî tîdîŋ</i>	‘great grandmother’
<i>ivà dâdî</i>	‘father’s brother (younger or older)’
<i>ijî</i>	‘father’s sister (younger or older)’
<i>ijù dâdî</i>	‘father’s brother’s (younger/older) wife’, ‘mother’s sister (younger/older)’, ‘female cross cousin’
<i>ihù</i>	‘father’s sister’s (younger/older) husband, mother’s brother (younger/older), ‘male cross cousin’
<i>ihù (pàvâ)</i>	‘father-in-law’ (both for husband and wife)
<i>ijî (pàjù)</i>	‘mother-in-law’ (both for husband and wife)
<i>inampu</i>	‘daughter-in-law’
<i>inamva</i>	‘son-in-law’
<i>inîhî(vâ)</i>	‘wife’s brother (younger or older)’, ‘sister’s husband’
<i>ijànâ(jù)</i>	‘wife’s sister (younger or older)’
<i>inîhî(jù)</i>	‘husband’s sister (younger or older)’, ‘brother’s wife’
<i>ihja?</i>	‘nephew or niece’ (brother or sister’s children)’

Certain relations are paired and expressed with a prefix *c^hə-*, for instance the relation between grandfather and grandchild. This is kind of reciprocal relation – what two people are two each other. The prefix *c^hə-* is also found in the first person exclusive dual pronoun *c^həni?*.

Table 40: Reciprocal kinship terms

Form	Gloss
<i>c^hə-ŋù c^hə-và</i> (long form)	‘couple’ (<i>ŋù</i> ‘mother’, <i>và</i> ‘father’)
<i>c^hə-ŋùvà</i> (short form)	(note <i>a-ŋùvà</i> ‘parents’)
<i>c^hə-p^hù (c^hə-nâ)</i>	‘brothers’ (<i>ap^hù</i> ‘elder brother’, <i>anâ</i> ‘younger sibling’)
<i>c^hə-ŋà (c^hə-nâ)</i>	‘sisters’
<i>c^hə-p^hù c^hə-ŋà</i>	‘brothers and sisters’ (irrespective of who is older) (<i>ap^hù</i> ‘elder brother, <i>q^hà</i> ‘elder sister’)
<i>c^hə-nîhîŋù</i>	‘sisters-in-law’
<i>c^hə-hù c^hə-nîŋ</i>	‘brothers-in-law’
<i>c^hə-và (c^hə-c^hà)</i>	‘father and son’ or ‘father and daughter’
<i>c^hə-hù (c^hə-hjaʔ)</i>	‘uncle-nephew/niece’ (one’s sister’s children)
<i>c^hə-nîhî</i>	‘male in-laws’
<i>c^hə-ŋì</i>	‘female in-laws’
<i>c^hə-tî (c^hə-c^hù)</i>	‘grandfather and grandchild’
<i>c^hə-vì (c^hə-c^hù)</i>	‘grandmother and grandchild’

In example (95), the kinship term *c^hù* ‘grandchild’ is prefixed with the first person possessive prefix *i-*, in example (96), the kinship term *và* ‘father’ and *ju* ‘mother’ are prefixed with *a-*. Note that the *a-* prefix is not referential, in that there is no mention whose mother and father they are in the story till that point. Moreover, we have the reciprocal kinship term *c^həvì* that refers to an old lady and her two grandchildren in the story in example (95), and *c^həju c^həvà* that refer to the crab and the squirrel as a couple in example (96). Note that the reciprocal kinship terms are not prefixed with possessive prefixes.

- (95) *i-c^hù-hx* *níà* *târûm* *c^həvì-hx*
 1SG-grandchild-PL and 2PL grandmother.grandchild-PL
- nx?* *húhá* *an*
 PROH worry 2PL
 ‘My grandchildren and you grandmother and grandchildren, do not worry.’
 [SNR-9-8.25]

- (96) (a) *sè-ja* *níà* *ze?-và* *bə* *c^həju c^həvà*
 crab-FEM and squirrel-MAS DEF couple
 ‘The crab and the squirrel are a couple.’
- (b) *sè-ja* *bə* *a-ju,* *ze?-và* *bə* *a-và*
 crab-FEM DEF 3-mother squirrel-MAS DEF 3-father
 ‘The crab is the mother and the squirrel is the father.’ [SNR-6-4.3]

3.3.2.2 Body Parts and Parts of Objects

Body parts, parts of objects like tables, trees, etc. are usually found with the possessive prefix *a-* and the other possessive prefixes. However, they are less bound than the kinship terms, because there many occurrences of them without any prefixation. Examples (97) through (102) illustrate inalienably possessed NP’s,

prefixed with possessive *a-*, where *a-* does not refer to any identifiable possessor.

Thus, in examples (97), (98), and (99), the body parts *k^hû* ‘head’, *mù* ‘tail’ and *hì* ‘blood’ are not possessed by any particular referent, rather it is non-referential. There is no specific animal being talked about while referring to these body parts.

- (97) *lúvʻ hə nʻ a-k^hû kuʻ t-iʻ*
 leader DAT LOC 3-head give PST-1PL
 ‘(We) give the head to the chief.’ [SNR-17-1.73]
- (98) *imá a-mù ŋá bə tətà mē kámá kəp t^hŋ*
 then 3-tail side DEF junior COM ERG get should
 ‘Those who are more junior will get the tail side.’ [SNR-17-1.71]
- (99) *imá nuʻrũm kámá a-hì m̀ zuʻ m-aʻ t^hŋ*
 then 2PL ERG 3-blood ADD drink NEG-3 NMLZ
 ‘Then, you should not drink blood as well.’ [BT-15-10.8]

Similarly, in (100) and (101) there is no mention of the fruit whose seed is being referred to in the text.

- (100) *ŋà bə bʻr̀-ç^hà a-r̀-ç^hà p^hʻʻ? t-ʻʻ?*
 1SG DEF fruit-DIM 3-seed-DIM eat PST-1SG
 ‘I ate a small fruit, a small seed.’ [SNR-2-2.9]
- (101) *a-l̄ p^hât^hət^hə bə haʻ s̄n nʻ zà k-aʻ*
 3-seed some DEF land good LOC fall PRES-3
 ‘Some seeds fall on good soil.’ [MOV-2-1.142]

Example (102) illustrates possessive marking on a part of an object like a stone, such as *ké* ‘edge’.

- (102) *irá mat p^hô-t̄-hʻ irábá a-ké iráká*
 that case judge-NMLZ-PL that 3-edge there
- kwám-la túŋ l-ə-mə izúŋ sè-ŋà*
 surround-ADV sit NF-3-NF ready crab-FEM

twè ke? r-u nâ
 take go PROX-2SG PFV
 ‘The judges sat on the edge (of the stone) in circle, and said, ‘Ready, Crab, bring (it) now.’ [SNR-6-4.55]

Examples (103) and (104) illustrate body part terms which do not have any possessive prefix, such the terms *k^hû* ‘head’ and *k^hûpù* ‘nostril’.

(103) *imá k^hû k^hû-t^he? ibá k^hâkâ ha?-c^hà n^ɣ*
 then head CLF-one that one.half place-DIM LOC

k^hâ-kâ ha?-ɲù n^ɣ iru? p^hàn t-i?
 one.half place-AUG LOC like.that distribute PST-1PL
 ‘Then, the one head, one half to the small village and one half to the big village, (we) shared like that.’ [SNR-15-1.107]

(104) *k^hûpù n^ɣ tê lôpô*
 nostril LOC try play
 ‘(They) tried to have sex in the nostrils.’ [SNR-9-10.18]

3.3.3 Directly Enumerated Nouns

Most nouns when enumerated require a classifier on the numeral (see the following section on classifiers). However, there is a handful of nouns that take the numeral directly on them, either as a suffix (for numerals from ‘one’ to ‘three’) or as a modifier following the noun (for numerals higher than ‘three’). Some of these nouns have to do with time units like ‘day’, ‘week’, ‘month’, etc. Others have to do with locations, like ‘place’, ‘home’, ‘hole’, etc. Table 41 lists the nouns which take numerals directly without a classifier.

Table 41: Nouns which take numerals directly

Nouns	Meaning	Example expression
<i>nap</i>	‘day’	<i>nap^hə</i> ‘one day’, <i>nap bəlí</i> ‘four days’
<i>pân</i>	‘night’	<i>pânt^hə</i> ‘one night’
<i>r̥ŋi?</i>	‘day’	<i>r̥ŋi?t^hə</i> ‘one day’
<i>lâpân</i>	‘week’	<i>lâpânt^hə</i> ‘one week’
<i>dá</i>	‘month’	<i>dát^hə</i> ‘one month’,
<i>zé</i>	‘times’	<i>zét^hə</i> ‘once’
<i>k^həp</i>	‘times’	<i>k^həpt^hə</i> ‘once’
<i>hìm</i>	‘house/family’	<i>hìmt^hə</i> ‘one house/family’
<i>tá</i>	‘place’	<i>tát^hə</i> ‘one place’
<i>kûn</i>	‘hole’	<i>kûnt^hə</i> ‘one hole’

Examples (105) through (111) illustrate the temporal nouns taking numerals directly.

- (105) *n̥r̥rûm* *bə* *t̥əŋsəŋ* *ha?* *ir̥á* *mə* ***nap-ni*** *k^hwám*
 1PL.INCL DEF PN land that ABL day-two walk
 ‘We are at two day’s walk from the Tangshang place.’ [SNR-13-1.8]

- (106) *ir̥á-r̥ŋ* *a-sa* *t̥əlá-c^hà* *bə* *ha?* *mûŋ* *k^hûn*
 that-SIM NMLZ-holy boy-DIM DEF ground inside under

bə *nap-rûm* *nî* ***pân-rûm*** *túŋ* *a*
 DEF day-three and night-three stay 3
 ‘Like that the Holy child will stay under the ground for three days and three nights.’ [BT-64-37.4]

- (107) ***dá-t^hə*** *té* *he?* *l-i?-mə* *a-ruk*
 month-one around keep NF-1PL-NF NMLZ-burn

rì k-ì
 AUX PRES-1PL
 ‘After keeping (chopped trees) for about a month, we burn (them).’
 [SNR-1-1.4]

(108) *pá-ni pá-rúm t^hû i kámí ηé*
 year-two year-three poke 1PL though be.able

t^hû m-i? d̂ a
 poke NEG-1PL COP 3
 ‘Even though we poke (the crab’s hole) for two or three years, we will not reach her.’ [SNR-6-4.97]

(109) *n̂rúm hə n̂ ləpân-t^hə n̂ d̂r?súm*
 1PL.INCL DAT LOC week-one LOC work

súm rô nap iruk
 work PURP day six
 ‘We have six days in a week for work.’ [MOV-3-1.63]

(110) *imá k^həp-rúm n̂ zêhê m̂-t^hə le? ke?*
 then times-three LOC servant CLF-one again go

t^hik t-a?
 CAUS PST-3
 ‘On the third time, (they) again sent a servant.’ [MOV-3-1.229]

(111) *zét^hə piŋpiŋ t^hû twèhe? ku?*
 once SS hit throw give
 ‘(The tiger) hits and throws away (the pangolin) once more.’ [SNR-3-1.13]

Examples (112) through (114) illustrate nouns denoting location taking numerals directly without a classifier.

(112) *hùm-t^hə n̂ va? p^hosa? d̂r?-t^he?*
 house-one LOC ABL leaf.type CLF-one
 ‘One Phosaq leaf from one house....’ [SNR-17-1.50]

(113) *imá tá-t^hə kə houn ηâ*
 then place-one LOC SS say
 ‘(They) say *houn* at one place, and then’ [SNR-4-4.9]

- (114) *zuʔsûŋ* *kûn-tʰə* *rúŋ* *tʰù* *t-aʔ*
 rat.kind hole-one together dig PST-3
 ‘(They) dug a rat hole together.’ [SNR-7-1.8]

3.4 Classifiers

Hakhun has a fairly large number of numeral classifiers. I have listed around thirty classifiers, and this list is not exhaustive. Most nouns, except for the ones listed in §3.3.3, require a classifier on the numeral when they are enumerated. Most of the classifiers are transparently related to nouns, though there are some which do not have an identifiable source. Numeral classifiers are typically divided into sortal and mensural classifiers. The sortal classifiers classify nouns based on various aspects of the referents of the nouns, such as animacy, humanness, shape, size, etc. The mensural classifiers, on the other hand, refer to a unit of measure that applies to the referent of the head noun. The number of sortal classifiers is much larger than the number of mensural classifiers in Hakhun.

3.4.1 Sortal Classifiers

The sortal classifiers in Hakhun encode a wide range of semantic features of the referents of nouns. There are classifiers associated to human referents, plants and fruits, water bodies, various shapes and sizes, and various more specific entities. The sortal classifiers are described below.

3.4.1.1 Generic Classifier

***mɣ* ‘generic’**: This is the most generic classifier, in that it can be used with anything that can be counted. It can be used for human, animals, as well as inanimate things. However, unlike other classifiers, this classifier is used only with the numerals

one to three. It cannot be used with numerals higher than three. This classifier is used with the numerals one to three when the numerals are enumerated in isolation. In the following examples, *m̂* occurs with an inanimate noun *tap* ‘hut’ in example (115), with an animate noun *kînpîn* ‘sheep’ in (116), and with personal pronoun *nu?c^hu?* ‘you two’ in (117).

(115) *irónx̂ mé tap m̂-t^hə d̂ t-a?*
 there cow hut CLF-one COP PST-3
 ‘There was a cowshed there.’ [MOV-1-1.101]

(116) *abraham kámá kînpîn m̂-t^hə*
 PN ERG sheep CLF-one

ləpk^hî t-a?
 see PST-3
 ‘Abraham saw a sheep.’ [MOV-1-1.35]

(117) *nu?c^hu? m̂-ni ko?cê tə-d̂ l-a*
 2DL CLF-two blessed PERM-COP IMP-3
 ‘May you two be blessed.’ [MOV-1-1.118]

3.4.1.2 Classifiers for Animates and Humans

và ‘male human’: This classifier is used with nouns denoting male human beings. The morpheme *và* is also found suffixed to nouns and pronouns to denote male human, such as *səràvà* ‘male teacher’, *atívà* ‘he’. However, there is a sense of ‘respect’ or ‘honorificity’ in these usages. Animals which are personified and can talk like human beings are also marked with *và*, such as *ze?và* ‘male squirrel’ from *ze?k^hî* ‘squirrel’. In example (118) *và* occurs with *mi?* ‘person’ which refer to two men, and

in example (119), it occurs with *zùbê cʰəpʰù* ‘ghost brothers’ and *mi? cʰəpʰù* ‘human brothers’.

(118) *mi?* *và-ni* *kámá kùmpô* *nám* *t-a?*
 person CLF-two ERG money borrow PST-3
 ‘Two people borrowed money (from her).’ [MOV-2-1.86]

(119) *irá* *tânî* *zùbê* *cʰəpʰù* *và-ni*,
 that 3DL ghost brothers CLF-two

mi? *cʰəpʰù* *và-ni*
 person brothers CLF-two
 ‘They two were two ghost brothers and two human brothers.’ [SNR-7-1.5]

Unlike *mʰ*, this classifier can occur with numerals larger than three, as illustrated by the following example.

(120) *và-báí* *irábá* *zu?sún* *bə* *tʰa?rú*

 CLF-four that rat.kind DEF two.piece

rì *t-ə* *ŋà*
 do PST-3 hearsay
 ‘Those four (brothers) made the rat into two pieces.’ [SNR-7-1.10]

***ju* ‘female human’**: This classifier is used with nouns denoting female

human beings as well as some animals, such as ‘fish’. The morpheme *ju* is also found

suffixed to nouns and pronouns denoting humans, such as *səráju* ‘female teacher’,

atíju ‘she’. There is a sense of honorificity in this usage. In example (121), *ju* occurs

as a classifier with *təhja? cʰà* ‘girl child’.

- (121) *a-c^hà* *təhjaʔ-c^hà* *rɣni* *ɲù-ni* *dɣ* *t-aʔ*
 3-child girl-DIM two.human CLF-two COP PST-3
 ‘Their children were two girls.’ [SNR-12-1.3]

Besides these two classifiers, there are a few forms which refer to humans and which look like a combination of a classifier and a numeral. However, these patterns are not productive. For instance, in the form *rɣni* which denotes ‘two humans’, the form *rɣ* is not found with any other numeral. Similarly, in the form *tânî* ‘they two’, *tâ* is not a classifier, although it occurs with a numeral. Instead it is part of third person pronouns *tânî* ‘they two’ and *târûm* ‘they’ (§3.5.1). There are no other forms in which *tâ* is attested.

***tɣ* ‘family’**: This classifier refers to a family. There is also a corresponding noun *tɣ* that denotes family.

- (122) *tɣ-t^hə* *hìm* *nɣ* *vɣ*, *a-pín*
 CLF-one house LOC come NMLZ-forbid
 ‘(He) comes to one family, (they) forbid (him)...’ [SNR-9-8.16]

3.4.1.3 Classifiers for Fruits, Vegetables, and Trees

***pwé* ‘long fruits/vegies’**: This classifier refers to fruits and vegetables which are long, but not round, such as chilis, bananas, ears of corn, etc.

- (123) *ɲoʔ* *pwé-t^heʔ*
 banana CLF-one
 ‘one banana’ [Elicited]

***ɲù* ‘flower’**: This classifier refers to flowers. This morpheme is a part of the word for ‘flower’, as seen below.

- (126) *bəru?* *nî* *ŋâ* *imá* *lùŋ-p^hɣ̌* *p^hɣ̌-t^he?* *mì* *lɣ̌ʔhe?*
 how Q say if stone-round CLF-one ADD forget
m-a? *dɣ̌* *a*
 NEG-3 COP 3
 ‘Because, (they) will not forget even a single stone.’ [MOV-3-1.183]

- (127) *vànrɣ?* *nɣ̌* *dáp^hɿ* *p^hɣ̌-t^he?*, *p^hɣ̌-ni*, *p^hɣ̌-rúm*
 fire.rack LOC month CLF-one CLF-two CLF-three
ré-la *p^hu* *l-i?*-*mə* *irámá* *zu?* *t^hɿŋ*
 dry-ADV keep NF-1PL-NF then drink should
 ‘After keeping (the tea) on the rack over fire for one, two, or three months, we should drink it. [SNR-16-19.1]

***p^hâ* ‘round’**: This classifier is used with nouns referring to small round objects or lumps about the size of a coin. Thus, this classifier is used with nouns denoting seeds up to the size of mango seed, pieces of meat, small stones, money (originally coins), etc.

- (128) *nɣ̌-k^ho?**dap* *nɣ̌* *p^hâ-t^hə* *mì* *ahù* ...
 1PL.INCL-pocket LOC CLF-one ADD NEG.EXIST
 ‘There is not even a single rupee in our pocket.’ [SCN-5-11]

- (129) *ŋəm* *p^hâ-t^he?*
 meat CLF-one
 ‘a piece of meat’ [Elicited]

***rì* ‘seed-like’**: This classifier is used for small seed-like objects like flower seeds, or fruits like grapes. However, there is another classifier just for seeds, namely *lî*. The classifier *rì* is also used as a noun to denote flower seeds, as in *cûŋpù rì* ‘flower seed’.

- (130) *cûnpù rì rì-t^he?*
 flower seed CLF-one
 ‘a seed of flower’ [Elicited]

3.4.1.5.2 Long Objects

***dx* ‘long object’**: This classifier is used with nouns denoting things which are long, such as timber, bamboo, etc.

- (131) *va? dx-t^he?*
 bamboo CLF-one
 ‘a piece of bamboo’ [Elicited]

- (132) *bÿ dx-t^he?*
 tree CLF-one
 ‘a piece of timber’ [Elicited]

***ljâ* ‘long thin object’**: This classifier is used with nouns denoting things which are long but thin, such as the bamboo used for hanging clothes to dry.

- (133) *va? ljâ-t^he?*
 bamboo CLF-one
 ‘a (long) bamboo’ [Elicited]

***t^hûm* ‘long cylindrical object’**: This classifier is used for long things which are cylindrical and not split, such as bamboo or a log of wood.

- (134) *va? t^hûm-t^he?*
 bamboo CLF-one
 ‘a (unsplit) bamboo’ [Elicited]

***k^hâ* ‘vertically split object’**: This classifier is used for split things, such as bamboo or wood. It is also used for clothes. This classifier seems to have come from the noun *k^hâ* which refers to a vertically split piece of bamboo or wood. In example

(135), the classifier *k^hâ* occurs with the NP's *vaʔhàn lîŋ* 'a bamboo strip' and *baʔsâ*

k^hâ 'a piece of *Baqsa* wood'. In example (136), the classifier *k^hâ* occurs with *c^həc^húŋ* 'shirt'.

- (135) *ʒùbê tʃ kámá vaʔhàn lîŋ k^hâ-t^heʔ, baʔsâ*
ghost family ERG bamboo.type strip CLF-one tree.type
- k^hâ k^hâ-t^heʔ vveʔcà tûm-t^heʔ kuʔ t-aʔ*
split.piece CLF-one bamboo.skin CLF-one give PST-3
'Ghost family gave one bamboo strip, one long piece of Baqsa wood, and a handful of bamboo skin (to the men).' [SNR-7-1.21]

- (136) *hwé dʃ a kámí c^həc^húŋ k^hâ-ni dʃ*
who COP 3 though shirt CLF-two COP
- imá k^hâ-t^hə ahù-tî-hʃ kuʔ l-at*
then CLF-one NEG.EXIST-NMLZ-PL give IMP-2PL
'Whoever has two shirts, give one to someone who does not have.' [MOV-1-1.161]

rù 'rope-like things': This classifier is used for long flexible things, such as

rope, wire, etc. This classifier comes from the noun *rù* 'rope'.

- (137) *rù rù-t^heʔ*
rope CLF-one
'a piece of rope' [Elicited]

dà 'cane-like': This classifier refers to legs and long objects like canes. It may

come from the word *dà* 'leg'.

- (138) *rîdà dà-t^hə hûŋ l-ə-mə soʔ t-aʔ*
rattan CLF-one appear NF-3-NF enter PST-3
'Taking out a rattan cane, (he) entered (into the hole).' [SNR-6-4.94]

3.4.1.5.3 Flat Objects

ɗɾ? ‘flat objects’: This classifier refers to hands as well as flat objects like leaf, paper, etc. This word is also used as a noun to mean ‘hand’ as well as ‘leaf’.

- (139) *hìm-tʰə* *nʂ* *vaʔ* *pʰosaʔ* ***ɗɾ?-tʰeʔ*** *hìm-tʰə*
house-one LOC ABL leaf.type CLF-one house-one
- nʂ* *vaʔ* *pʰosaʔ* ***ɗɾ?-tʰeʔ*** *irǎbǎ*
LOC ABL leaf.type CLF-one that
‘One Phosa leaf from each house...’ [SNR-17-1.49]

tám ‘property/flat object’: This refers to a unit of property. In dispute settlements one such unit may be a buffalo or two cows or two pigs or the equivalent of these. It also refers to flat objects, like bread.

- (140) *nîrûm* *hə* *nʂ* *bekun* ***tám-bəŋâ***, *ŋaʔ* *mʂ-ni*
1PL.EXCL DAT LOC bread CLF-five fish CLF-two
- bà*
REST
‘We have only five loaves of bread and two fish.’ [MOV-2-1.209]

- (141) ***tàm-icʰi*** *vaʔ* *ŋà* *bə* ***tàm-tʰə*** *kuʔ* *tʰiŋ*
CLF-ten ABL 1SG DEF CLF-one give should
‘I give one-tenth (of my income).’ [MOV-1-1.257]

3.4.1.6 Miscellaneous

dap ‘book’: This classifier refers to books, and is part of the word for ‘book’.

- (142) *likdap* ***dap-tʰeʔ***
book CLF-one
‘one book’

kà ‘pen’: This morpheme refers to pens, and is a part of the word for ‘pen’.

ru ‘tuft’: This classifier refers to the clusters of things like bamboo, banana, grass, etc.

- (151) *va?* *ru-t^he?*
 bamboo CLF-one
 ‘a tuft of bamboo’ [Elicited]

3.5 Pro-Forms

This section describes various kinds of pronominal forms, including personal pronouns, possessive pronouns, interrogative pronouns, indefinite pronouns and constructions, relative/co-relative pronouns and constructions, universal pronouns, reflexive pronouns, reciprocal pronouns, and few other pronominal forms.

3.5.1 Personal Pronouns

The personal pronouns in Hakhun are listed in Table 42. There are three number distinctions in the personal pronoun system of Hakhun - singular, dual and plural. There is also a clusivity distinction in first person dual and plural. All personal pronouns have inherent tone. However, the initial syllables of the third person singular pronoun *atî*, the first person dual exclusive *c^həni?*, and the third person forms *hənî/hənîrûm* are reduced and produced with high pitch which is typical of prefixes. Therefore, these syllables are considered atonal. The pitch on the initial syllable *nɣ* in both *nɣhi?* ‘first person inclusive dual’ and *nɣrûm* ‘first person inclusive plural’ is variable between high pitch and falling pitch. Therefore, tone is not marked on this syllable.

Table 42: Personal Pronouns in Hakhun

	Singular	Duals	Plural
1SG	<i>ŋà</i>	<i>nɣhi?</i> (incl)	<i>nɣrûm</i> (incl)
		<i>c^həni?</i> (excl)	<i>nîrûm</i> (excl)
2ND	<i>nɣ̂</i>	<i>nu?c^hu?</i>	<i>nu?rûm</i>
3RD	<i>atî(-vâ/-ɲù)</i>	<i>hənî mɣ̂ni/vàni</i>	<i>hənîrûm</i>
		<i>tânî (mɣ̂ni/vàni)</i>	<i>târûm</i>

There are total of five first person pronoun forms. The first person singular *ŋà* ‘I’ has a low (glottalized) tone. There are two first person dual forms as well as two first person plural forms. The inclusive forms of the first person pronouns have the form *nɣ̂* in common, which by itself functions as the first person inclusive possessive prefix (see below). Also very rarely it functions as a first person inclusive plural pronoun by itself (i.e. without the *rûm*). The form *hi?* on the first person inclusive dual pronouns has not been attested in any other lexical item. The form *rûm*, which is found in all of the plural pronouns, however, seems to have come from the numeral *rûm* ‘three’. The exclusive forms of the first person pronouns do not share any morphological component. The form *c^hə* on the first person exclusive dual seems to be related to the initial morphemes of certain kinship terms, such as *c^hə-ɲù c^hə-vâ* or *c^hə-ɲù-vâ* ‘couple’ (*ɲù* ‘mother’ and *vâ* ‘father’), *c^hə-p^hù* ‘elder brother’ (*p^hù* ‘elder brother’), *c^hə-p^hù c^hə-nâ* ‘brothers’ (*nâ* ‘younger brother or sister’), *c^hə-ɲà* ‘sisters’ (*ɲà*

‘elder sister’). However, the form *ni?* on the first person exclusive dual pronoun is unrecognizable. The form *nî* on the first person exclusive plural form is also found as a first person exclusive plural possessive prefix (see below), and also rarely it is also found as an independent pronoun by itself (i.e. without *rûm*). The first-person pronouns are illustrated below.

- (152) *ŋâ* *bə* *bʔrî-cʰâ* *a-rî-cʰâ* *atî-cʰâ*
 1SG DEF fruit-DIM 3-seed-DIM this.much-DIM
bèhù *va?* *cʰa?* *t-ɣ?*
 other.place ABL eat PST-1SG
 ‘I ate this tiny little fruit from another place.’ [SNR-2-2.9]

- (153) *nɣhi?* *cʰəŋà* *véló* *vat* *kà* *e*
 1DL.INCL sisters swing swing go 1PL
 ‘We two sisters will go swing on the swing.’ [SNR-12-1.19]

- (154) *cʰəni?* *mɣ-ni* *bə* *rúŋrúŋ* *bà*
 1DL.EXCL CLF-two DEF together REST
dɣ *tʰŋ*
 happen NMLZ
 ‘We two will live together only.’ [SCN-1-39.1]

- (155) *nɣrûm* *bə* *irá* *lùŋ* *pʰuk* *zè* *pʰuk*
 1PL.INCL DEF that stone burst.open iron burst.open
va?
 ABL
 ‘We (humans) are all from that incident of ‘stone and iron bursting open’.
 [SNR-9-10.42]

- (156) *a* *kámá* *tə-cup* *cʰa?* *l-a,*
 this INST PERM-eat.with eat IMP-3
nîrûm *kámá* *ará* *sìm* *kámá* *cup*
 1PL.EXCL ERG this salt INST eat.with

c^ha? *k-ì*
 eat PRES-1PL
 ‘Let (them) eat (food) with this (salt). We eat (food) with this salt.’ [SNR-11-1.26]

There are three second person pronouns - singular *nŋ̌*, dual *nu?c^hu?* and plural *nu?rûm*. The dual and the plural have the form *nu?* in common, which is also found as second person plural possessive prefix (see below). The other half *c^hu?* is a reflex of the Proto-Tibeto-Burman **-tsi* ‘dual’. The second person pronouns are illustrated below.

(157) *po?-ŋù,* *nŋ̌* *bə* *mə-mù* *bê* *t^hwám*
 elephant-AUG 2SG DEF 2SG-tail hair send

he? *t-o?*
 keep PST-2SG
 ‘Elephant, (I see) you have sent (me) hair from your tail.’ [SNR-5-1.8]

(158) *nu?c^hu?* *a-vŋ̌* *a-ŋé*
 2DL NMLZ-come NMLZ-be.able
 ‘You two can come.’ [BT-16-14.2]

(159) *nu?rûm* *c^həvì-hŋ̌* *túŋ* *rô*
 2PL grandmother.grandchild-PL sit PURP

ire? *hwé* *ku?* *t^hŋ̌*
 that build give NMLZ
 ‘(I) am going to build that (house) for you, grandmother and family, to stay.’
 [SNR-9-8.37]

There are five pronominal forms in the third person. The singular form *atî* is used to refer to a more familiar individual either male or female, while *-və* for male or *-ŋù* for female is added while referring to someone less familiar or a respected

individual. These suffixes are transparently related to *và* ‘father’ and *ɲù* ‘mother’.

These forms are also attached to names of characters in the narratives, often replacing a part of the original word, such as *sè-ɲà* ‘crab’ (from *sè* ‘crab’), *ʒeʔ-và* ‘squirrel’

(from *ʒeʔkʰi* ‘squirrel’, it is not clear what *kʰi* is), *pʰi-và* ‘bird type’ (from *vəpʰi* ‘bird

type’ where *və* is a class-term prefix found on several words denoting bird names and

is probably related to *vù* ‘bird’).

There are two third person dual forms *hənî* and *tânî*. The form *hənî* does not seem to have dual reference by itself. It seems to refer to a family, as shown in (160).

As a dual third person pronoun, *hənî* is modified with a numeral ‘two’ as shown in

(161) and (162). The form *tânî* always has a third person dual reference, as shown in

(163) and (164). The semantic difference between these two dual forms is not clear.

(160) *ʒéká hənî kámá rɣdúŋ tísú nɣ kâmlâm t-aʔ*
 now their.family ERG god LOC believe PST-3
 ‘Now, they (as a family) believed in God Jesus.’ [BT-16-12.8]

(161) *hənî mɣ-ni càlì dɣʔsúm súm k-ə nî*
 3DL CLF-two what work work PRES-3 Q
 ‘What work are those two doing?’ [Elicited]

(162) *hənî tânî haʔsúŋ nɣ vín vɣ t-aʔ*
 3DL 3DL village LOC return go PST-3
 ‘They two returned to the village.’ [Elicited]

(163) *imá saʔ nî vícî abá tânî bə pʰúnâ*
 then tiger and pangolin this 3DL DEF friend
 ‘These tiger and pangolin, they two are friends.’ [SNR-3-1.2]

- (164) *imá tâní và-ni irá t^hûŋ kə va?*
 then 3DL CLF-two that place LOC ABL
- vín ṿ̀ t^hik t-a?*
 return come CAUS PST-3
 ‘Then, they two were sent back from that place.’ [BT-16-16.4]

There are also two third person plural forms, *hənîrûm* and *târûm*. The semantic difference between these two third person plural pronouns is not clear. They seem to be interchangeable. The pronoun *hənîrûm* in (165) and the pronoun *târûm* in (166) are actually referring to the same set of referents in the story, i.e. the animals of a jungle.

- (165) *irá hənîrûm c^hôc^hi? t^hûn l-ə-mə*
 that 3PL all gather NF-3-NF
- mat p^hô t-a?*
 case judge PST-3
 ‘They all gathered and judged the case (of the crab).’ [SNR-6-4.17]

- (166) *irámá ai târûm bî a-ljâ bóté*
 then EXCLAM 3PL all NMLZ-far how.much
- ṇ́ nî ṿ̀ k-ə ŋâ l-ə-mə rîdà dà-t^hə*
 LOC Q come PRES-3 say NF-3-NF cane CLF-one
- hûŋ l-ə-mə so? t-a?*
 appear NF-3-NF put.inside PST-3
 ‘They wondering how far (the crab) has gone, pulled a cane and put into the hole.’ [SNR-6-4.94]

However, the form *târûm* has another usage. It is used as a second person plural pronoun to indicate ‘social distance’ or ‘lack of intimacy’. Thus, according to Phulim Hakhun, it would be odd to address one’s own children with *târûm* ‘they’,

instead of *nuʔrûm* ‘you (pl)’. Note that the verb complexes are indexing second person plural arguments with the argument indexes *-at* and *-an* in (167) and (168).

(167) *báʒá* *târûm* *cà* *rì* *t-at* *nî*
 yesterday 2PL what do PST-2PL Q
 ‘What did you do yesterday?’ [Elicited]

(168) *târûm* *báká* *kà* *k-àn* *nî*
 2PL where go PRES-2PL Q
 ‘Where are you going?’ [Elicited]

3.5.2 Possessive Prefixes and Pronominal Modifiers

The singular pronouns in all persons and plural pronouns in the first and second person have distinct bound forms when they modify a noun, although the dual pronouns and third person plural pronouns retain their original pronominal forms described in the previous section. We will call these distinct bound forms of personal pronouns **Possessive Prefixes**. The singular prefixes are short and unstressed, and produced with high pitch, which is typical of all prefixes. The plural prefixes are however, not reduced or unstressed. The pitch on the first person plural inclusive prefix varies between high pitch and falling pitch depending on the pitch of the noun root. The first person plural exclusive, on the other hand, is consistently produced with falling tone, irrespective of the tone on the noun root. Therefore, tone is marked only on the first person plural exclusive prefix. Thus, the possessive prefixes and pronominal modifiers are given in Table 43.

Table 43: Possessive prefixes and pronominal modifiers

	Singular	Duals	Plural
1SG	<i>i-</i>	<i>nɣhi?</i> (incl)	<i>nɣ-</i> (incl)
		<i>c^həni?</i> (excl)	<i>nî-</i> (excl)
2SG	<i>mə- / bə-</i>	<i>nu?c^hu?</i>	<i>nu?</i> -
3RD	<i>a-</i>	<i>tânî</i>	<i>hənî</i> <i>târûm</i> <i>hənîrûm</i>

Note that the first person singular and the second person singular possessive prefixes are completely different from their pronoun counterparts. On the other hand, the first person plural and second person plural possessive forms consist of the initial morphemes of the independent pronouns, and have removed the form *rûm* ‘three’.

The third person singular possessive prefix is simply *a-*, lacking the form *tî* of the independent pronoun. The dual possessive forms and the third person plural possessive forms are not distinct from the independent pronominal forms. Note that the form *hənî*, which we have seen as a pronoun referring to a family and as part of third person dual in the previous section, functions as a third person plural possessive form.

First person possessive prefixes and pronominal modifiers are illustrated in examples (169) through (172).

- (169) *arábá* *i-púcó* *va?*
 this 1SG-navel ABL
 ‘This (tree) is from my navel.’ [SNR-2-2.16]
- (170) *nɣ-cʰà* *sap* *k-a?*
 1PL.INCL-child cry PRES-3
 ‘Our child is crying.’ (wife saying to husband) [SNR-6-4.39]
- (171) *nî-nuk* *kámá* *pʰùm* *nɣ* *mì*
 1PL.EXCL-villager ERG curry LOC ADD
- abá* *bi?* *pʰɣ?* *k-ì*
 this cook eat PRES-1PL
 ‘Our people put this (i.e. salt) in the curry and cook and eat it.’ [SNR-11-1.31]
- (172) *cʰəni?* *ràn* *nî* *mûŋ* *mɣ-tʰə* *mili*¹⁰ *t-i?* *nà*
 1DL.EXCL heart and soul CLF-one match PST-1PL PFV
 ‘Our heart and soul had matched.’ [SCN-1-8.1]

Examples (173) through (175) illustrate second person possessive prefixes.

The two second person singular possessive prefixes *mə-* and *bə-* are interchangeable.

- (173) *irábá* *mə-rɣ* *kámá* *pán* *bu?* *he?* *kà* *l-o?*
 that 2SG-wing INST blow.away beat keep go IMP-2SG
 ‘Go and drop (the fire) with your wing.’ [SNR-7-1.36]
- (174) *bə-kʰû* *nɣ* *vínphâ* *tə-kʰɣ?* *ku?* *e*
 2SG-head LOC decorative.item PERM-tie give 1PL
 ‘(We) will tie *vunpha* on your head.’ [SNR-6-4.76]
- (175) *ará-rɣ* *nu?-há?* *nɣ* *tóà* *ju* *nê*
 this-SIM 2PL-place LOC EXIST lot Q
 ‘Do you have more like this one (i.e. salt) at your place?’ [SNR-11-1.30]

¹⁰ Borrowed word from Assamese.

Examples (176) through (179) illustrate third person possessive prefixes and pronominal modifiers. In example (176), the noun *hìim* ‘house’ is prefixed with the third person possessive prefix *a-*.

(176)	<i>và-t^he?</i>	<i>mì</i>	<i>a-hìim</i>	<i>va?</i>	<i>kà,</i>	<i>và-t^he?</i>	<i>mì</i>
	CLF-one	ADD	3-house	ABL	go	CLF-one	ADD
	<i>a-hìim</i>	<i>va?</i>	<i>kà,</i>	<i>lâm</i>	<i>ný</i>	<i>rúŋ</i>	<i>cu?-mun</i>
	3-house	ABL	go	road	LOC	gather	meet-RECIP

kà t-a?
go PST-3

‘One person came out from his house, another person came out of his house, (they) met together on the way.’ [SNR-7-1.7]

In example (177), the noun *ràn* ‘heart’ is modified with the third person plural possessive *hənî*.

(177)	<i>iná</i>	<i>ibá</i>	<i>t^hŷ-và</i>	<i>vŷ</i>	<i>l-ə-mə</i>	<i>hənî</i>	<i>ràn</i>	<i>va?</i>
	there	that	Satan-MAS	come	NF-3-NF	3PL	heart	ABL
	<i>tísú</i>	<i>zap</i>	<i>twè</i>	<i>ke?</i>	<i>k-a?</i>			
	God	word	take	go	PRES-3			

‘Then, the Satan came and took away God’s word from their heart.’
[MOV-2-1.154]

In example (178), the noun *mərâ* ‘sin’ is modified with the full form of the third person plural pronoun *hənîrûm* ‘they’, and in example (179) the noun *zap* ‘language’ is modified by the full form of the other third person plural pronoun *târûm* ‘they’.

(178)	<i>atî-và</i>	<i>kámá</i>	<i>hənîrûm</i>	<i>mərâ</i>	<i>ho?ku?</i>	<i>k-a?</i>
	3SG-MAS	ERG	3PL	sin	forgive	PRES-3

‘He forgives their sin.’ [BT-15-4.8]

- (179) *ɲà t̄ârũm ʒap bə c̄hàm m-ɣ?*
 1SG 3PL language DEF know NEG-1SG
 ‘I do not know their language.’ [Elic-9-29.1]

One point to note about the *a-* prefix is that it is required on inalienably possessed nouns, like the kinship terms and body-part terms. Thus, in some cases the prefix *a-* is simply fulfilling this grammatical requirement, instead of marking possession. In example (180), *kũn* is an inalienably possessed noun and the *a-* prefix does not particularly mean that it is possessed by a third person singular possessor (in fact many ghosts live there).

- (180) *a-kũn nɣ inɣ túŋ k-a?*
 3-hole LOC there live PST-3
 ‘They live there in the hole.’ [SNR-8-1.30]

Similarly, in (181), the *a-* prefix on *t̄hân* ‘face’ can be interpreted as a grammatical requirement, rather than as a referring possessor marker. Otherwise, we would have to say that *a-* may refer to either a singular or a plural possessor.

- (181) *a-t̄hân vî t̄hân m̄ɣm̄ɣ, càró sit ván*
 3-face monkey face like why take along

ku? t-at nî
 give PST-2PL Q
 ‘Their face is like monkey’s face, why did you bring (them)?’ [SNR-15-1.24]

3.5.3 Interrogative Pronouns

The forms of the interrogative pronouns are given in Table 44. The interrogative pronouns basically have three roots: *hwé* for Person, *cà* for Thing and

Reason, and *bə* for Place, Time, Manner, and Amount. The *bə* root almost always can be replaced with *mə*. We have seen this alternation with the second person singular possessive prefix discussed in §3.5.2. Thus, there is a variation in interrogative words with this root, which either have a stop or a nasal initial. Speakers are hardly aware of this variation, and do not see any difference between these two forms.

Table 44: Interrogative Pronouns

Semantic Field	Form	Gloss	Components
PERSON	<i>hwé</i>	‘who, whose, whom’	
THING	<i>cà(li)(li)</i>	‘what’	<i>lí</i> ‘type’??
REASON	<i>càró</i>	‘why’	<i>cà</i> ‘what’, <i>rô</i> ‘purpose’
PLACE	<i>bá(rá)ká</i>	‘where’	<i>rə</i> ‘???’, <i>kə</i> ‘locative’
TIME	<i>bádo?ká</i>	‘when’	<i>do?</i> ‘???’, <i>kə</i> ‘locative’
MANNER	<i>báru?</i>	‘how’	<i>ru?</i> ‘like/manner’
AMOUNT	<i>báté</i>	‘how much/many’	<i>té</i> ‘around’

The **person interrogative pronoun** in Hakhun is *hwé*. Unlike all other interrogative pronouns, it does not seem to be morphologically complex. Example (182) illustrates the pronoun as the subject argument, (183) as the object argument, (184) as a modifier of the noun *tʃ* ‘family’, (185) as possessor predicate, and (186) as the nominal predicate of an equational clause.

- (182) *hwé kámá zəp rɪŋkɪ ku? t^h-u nɪ*
 who ERG speak right give INV.PST-2SG Q
 ‘Who gave you the right to speak (these words)?’ [MOV-3-1.210]

(183) *hei nɛ hwé ŋɪ k-ù ní*
 EXCLAM 2SG who laugh PRES-2SG Q
 ‘Who are you laughing at?’ [MOV-2-1.28]

(184) *abá hwé tɛ cʰà ní...*
 this who family child Q
 ‘Whose child is this?’ [MOV-1-124]

(185) *abá hwé hə va? ní*
 this who DAT ABL Q
 ‘Whose is this?’ [Elic-1-68.1]

(186) *i-hìm lúŋ-tí hwé ní*
 1SG-house attack-NMLZ who Q
 ‘Who is the attacker of my house?’ [SNR-6-4.12]

This question word is also used to inquire about someone’s name, as in (187).

(187) *mə-mún hwé ní*
 2SG-name who Q
 ‘What is your name?’ [MOV-2-1.188]

The simplest **Thing interrogative pronoun** is *cà*. The other form is *càlì*,

which has the suffix *-lì* ‘type’ or ‘kind’, as in *mì?-lì* ‘human kind’, *cɛ hùn-lì* ‘fine

bearer’ (*cɛ* ‘fine’, *hùn* ‘carry’). The suffix can be reduplicated to denote plurality of

reference. Examples (188) and (189) illustrate the short form of the interrogative

pronoun, examples (190) and (191) illustrate the long form of the interrogative

pronoun, and example (192) illustrates the interrogative pronoun with reduplication.

(188) *ibá rí imá cà dɛ a ní*
 that die if what happen 3 Q
 ‘What will happen, if it dies?’ [MOV-4-1.113]

(189) *ŋá ku? r-i nírúm bə cà*
 say give PROX.NON.PST-1PL 1PL.EXCL DEF what

rì i nî
do 1PL Q
'Tell us, what should we do?' [MOV-1-1.159]

(190) *d̂x imá càlì rì i nî*
then what do 1PL Q
'Then, what should we do?' [MOV-3-1.101]

(191) *tʰuku? r-i, càlì a-rîŋkỳ n̂x ŋâ*
tell INV.NON.PST-1PL what 3-right 2SG say

k-u nî
PRES-2SG Q
'Tell us, on what right are you saying (these words)?' [MOV-3-1.210]

(192) *càlìlì hùn ke? k-ù nî*
what carry go PRES-2SG Q
'What (things) are you carrying with you?' [Elic-1-114.1]

The interrogative pronoun *cà* is also found in other idiomatic expressions, illustrated below. Examples (193) and (194) show the use of *cà* in rhetorical questions. Example (193) implies that there is nothing to be divided, and example (194) implies that the addressee cannot run. In this usage, only the short form *cà* is found, but not the long form *càlì*.

(193) *eh cà va? pʰàn i nî*
EXCLAM what ABL divide 1PL Q
'What are we going to divide?' [SNR-3-1.9]

(194) *ah cà va? cʰwé u nî, ŋâ lik*
EXCLAM what ABL run 2SG Q 1SG FOC

cʰwé k-ỳ
run PRES-1SG
'How will you run? I can run (not you).' [SNR-4-2.4]

The short form *cà* is also found in expressions used for asking reasons, as shown in (195) and (196). The long form is again not attested in this function.

(195) *ηà nʻ cà kʰú nʻ kâm m-at nî*
 1SG LOC what reason LOC believe NEG-2PL Q
 ‘Why don’t you trust/believe me?’ [MOV-2-1.181]

(196) *poʔ, nʻ bə i-cʰà kʰú càró lú*
 elephant 2SG DEF 1SG-child head why have.hole

nʻ? cà kʰú nʻ lú nʻ? t-u? nî
 tread what reason LOC have.hole tread PST-2SG Q

ηâ-mə aru? pʰô t-a?
 say-NF like.this judge PST-3

‘‘Elephant, why did you tread and break my child’s head?’’, like this (the animals) judged (the case).’ [SNR-6-4.18]

The **Reason Interrogative Pronoun** consists of the root *cà* and the form *rô*,

which seems to be the same form as the purpose clause marker *rô* (§9.2.8). We have

seen another means of asking questions about reason in (195) and (196). Examples

(197) and (198) illustrate the reason interrogative pronoun.

(197) *iru? càró pʰʻ? k-àn nî*
 like.that why eat PRES-2PL Q
 ‘Why are you eating (the meat) like that (i.e. raw)?’ [SNR-7-1.15]

(198) *a-tʰân vî tʰân mʻmʻ, càró sit ván ku?*
 3-face monkey face like why take along give

t-at nî
 PST-2PL Q

‘Their face is like monkey’s face, why did you bring (them)?’ [SNR-15-1.24]

The more general **Time interrogative pronoun** is *bádo?ká* ‘when’, which consists of the root *bə*, the locative *kə*, and an unidentifiable element *do?*. The locative marker *kə* is, however, frozen in that it cannot be replaced by the other locative *nɣ̣*, as shown in (201). The initial consonant of this interrogative pronoun is interchangeable with a bilabial nasal, as shown in (202). A more specific point in time can be asked for using the question word *báté* ‘how much’ (see below).

(199) *bádo?ká kà u nî*
 when go 2SG Q
 ‘When will you leave?’ [Elic-7-201.1]

(200) *atî-và bádo?ká va? túŋ k-ə nà nî*
 3SG-MAS when ABL sit PRES-3 PFV Q
 ‘Since when is he staying (here)?’ [Elicited]

(201) **bádo? nɣ̣ kà u nî*
 when LOC go 2SG Q
 ‘When will you go?’ [Elicited]

(202) *atî-và kámá mádo?ká pitar imá zon ke?*
 3SG-MAS ERG when PN and PN go

ləpkʰi t-ə nî
 see PST-3 Q
 ‘When did he go and see Peter and John?’ [BT-3-3.3]

The **Place interrogative pronoun** also has a short form and a long form. The short form is *báká* ‘where’, which consists of the root *bə* and the locative *kə*. The long form is *báráká* ‘where’, which has an additional unidentifiable element *rə* which we also see in demonstratives (see §3.5.8). The nasal initial root *mə* along with the

locative *nʃ* for the place interrogative pronoun is frequently heard in daily speech.

Although the long form of the nasal initial root is not attested.

- (203) *mə-nâ-nû* ***báká*** *kà* *k-ə* *nî*
 2SG-younger.sibling-FEM where go PRES-3 Q
 ‘Where has your sister gone?’ [SNR-12-1.37]
- (204) ***báráká*** *ŋâ* *imá* *galili* *rè* *nʃ*
 where say if PN across LOC
 ‘If you ask where, it is across (the lake) from Galilee.’ [MOV-2-1.183]
- (205) *hei* *i-nâ-và* ***mánʃ*** *va?* *nî*
 EXCLAM 1SG-younger.sibling-MAS where ABL Q
 ‘Hey brother, where have you come from?’ [SNR-11-1.41]

Unlike the Time interrogative pronoun, the Place interrogative pronoun is also found with the locative *nʃ*, as shown in (206) and (207). However, the nasal initial root *mə* does not seem to occur with the locative *kə*, as shown in (208).

- (206) *atî* ***bánʃ*** *kà* *k-ə* *nî*
 3SG where go PRES-3 Q
 ‘Where has he gone?’ [Elicited]
- (207) *atî* ***báránʃ*** *kà* *k-ə* *nî*
 3SG where go PRES-3 Q
 ‘Where is s/he going.’ [Elicited]
- (208) **atî* ***máká*** *kà* *k-ə* *nî*
 3SG where go PRES-3 Q

The **Type interrogative pronoun** is also found in short and long forms. The short form is *bábá*, which consists of the root *bə* and the definite marker *bə*, and the long form is *bárábá*, which contains the form *rə*.

(209) *bábá nà nî ñâ t-ə bə, ibe?*
 which PFV Q say PST-3 when that
 ‘When (they) asked which one, (he replied) that one.’ [SNR-15-1.39]

(210) *ará vâ-rûm kə va? ami? amɣ rɣrɣ bərəbə*
 this CLF-three LOC ABL neighbour like which

dɣ t-ə nî
 COP PST-3 Q
 ‘Out of those three, which one is like a neighbour?’ [MOV-3-1.123]

The Type interrogative pronoun also functions as a modifier. However, as a modifier it does not take the definite marker *bə* and it always occurs with *rə*, as shown below.

(211) *tîsû múñtân bərə-rɣ nî irə-rɣ*
 God kingdom which-SIM Q that-SIM
 ‘It is like how God’s kingdom is.’ [MOV-3-1.35]

(212) *bərə ñâ va? vɣ r-u nî*
 which side ABL come PROX.NON.PST-2SG Q
 ‘Which side do you come?’ [Elicited]

The **Manner interrogative pronoun** consists of the root *bə*, which can be interchanged with the nasal initial root *mə*, and the element *ru?*, which is also found in expression like *iru?* ‘like that’ and *aru?* ‘like this’.

(213) *a-pe?-rik a-húhá, lùŋ bəru? kʰɪ*
 NMLZ-surprized-die NMLZ-worried stone how give.birth

t-i? nî ñâ-mə iru?
 PST-1PL Q say-NF like.that
 ‘(They were) surprised and worried, (thinking) “How did we give birth to a stone?”, like that.’ [SNR-9-10.33]

- (214) *atî-nù* *nɣ* *bəru?* *le?* *rézap* *k-ə* *nî*
 3SG-FEM LOC how again talk PRES-3 Q
 ‘How is (he) talking to her?’ [MOV-2-1.48]

The **Amount interrogative pronoun** is also found in short and long form.

The short form consists of the root *bə* or its nasal counterpart and the form *té*, which

is found in expressions like *ité* ‘that much’, *napt^hə té* ‘around a day’, etc. The long

form has the form *rə* in it. This pronoun is used to interrogate both countable entities

like people as well as uncountable entities like sin. It refers to all kinds of quantities –

number, height-weight, distance, time, amount, size, etc.

- (215) *mi?* *c^hùc^haʔ-tî* *bə* *mərə* *bəráté* *dɣ* *a* *nî*
 person cheat-NMLZ DEF sin how.much COP 3 Q
 ‘How much sin happens to a dishonest person?’ [MOV-3-1.31]

- (216) *bəráté* *dûŋ* *k-ə* *nî*
 how.much big PRES-3 Q
 ‘How great is (he)?’ [MOV-1-1.2]

- (217) *báté* *amit* *cù* *u* *nî*
 how.much interest ask.for 2SG Q
 ‘How much interest are you going to charge?’ [SCN-3-15.1]

More specific questions about ‘quantity’ can be asked with a question word consisting of an appropriate classifier plus the morpheme *rwé*, as shown below.

- (218) *k^hap-rwé* *atî-và* *hə* *mərə*
 times-how.many 3SG-MAS DAT sin

hoʔku? *ɣ* *nî*
 forgive 1SG Q
 ‘How many times will (I) forgive his sins?’ [BT-18-1.29]

- (219) *nárí-rwé* *nà* *nî*
time-how.much PFV Q
‘What time is it now?’ [Elic-2-117.1]
- (220) *hìm* *nʃ* *mi?* *mʃ-rwé* *nî*
house LOC person CLF-how.many Q
‘How many people are there in the house?’ [Elicited]
- (221) *nap-rwé* *tún* *u* *nî*
day-how.many sit 2SG Q
‘How long will (you) stay?’ [Elicited]

The Amount interrogative pronoun is also used to ask more specific questions about time, compared to the more ‘general’ question word *bádo?ká* ‘when’. Thus, the expected response to the question in (222) and (223) will be a specific time, rather than something vague like ‘later’.

- (222) *atî* *báté* *nʃ* *vʃ* *a* *nî*
3SG how.much LOC come 3 Q
‘When is he going to come?’ [Elicited-15/3/2017-PH]
- (223) *atî* *báté* *akʰín* *nʃ* *vʃ* *a* *nî*
3SG how.much time LOC come 3 Q
‘What time is he going to come?’ [Elicited-15/3/2017-PH]

3.5.4 Positive Indefinite Construction

There are two indefinite pronouns – *hipníkʰo?* ‘something’ and *hînkʰó(tî)* ‘someone’, illustrated in (224) and (225).

- (224) *hînkʰótî* *kámá* *ɲâ* *t-a?* *atî-và* *ibe?*
some.people ERG say PST-3 3SG-MAS that
‘Some people said, “That is him”.’ [MOV-1-1.66]
- (225) *bázá* *mə-dí* *kə* *hipníkʰo?* *ma?* *k-a?*
yesterday 2SG-back LOC something lose PRES-3
‘Something was lost after you (left).’ [SCN-2-1.2]

Besides these pronouns, there is a more productive indefinite construction in which indefinite pronouns are formed by combining a classifier and a reduplicated form of the numeral one. The pronoun then can either stand as a pro-NP or function as a modifier of another noun. In any event, the NP has an indefinite reference. Example (226) illustrates an indefinite pronoun containing the classifier *m̂ʔ*, which is the ‘generic’ classifier, and is used to refer to animate as well as inanimate entities. In this example, the pronoun *m̂ʔt̂ʔt̂ʔ* functions as a pro-NP, marked with the subject marker *kámá*, and refers to some human.

- (226) *ĉĥŋĉĥʔ?* *m̂ʔt̂ʔt̂ʔ* *kámá* *mə-t̂ĥân* *kə* *bu?* *imá*
 suppose someone ERG 2SG-face LOC beat then
- t̂ĥân-ka* *ŋâ* *kə* *mì* *ʒó* *bu?* *t̂ĥik* *l-o?*
 face-other side LOC ADD more beat CAUS IMP-2SG
 ‘If someone slap on your face, let him slap on the other side.’ [MOV-2-37]

Example (227) illustrates an indefinite pronoun containing the classifier *p̂ĥân* which refers to a type of an entity or a community. The indefinite pronoun *p̂ĥânt̂ʔt̂ʔ* here as well functions as pro-NP and refers to some event (a miracle).

- (227) *p̂ĥânt̂ʔt̂ʔ* *ŋà* *hə* *mì* *suk* *ku?* *r-ʔ*
 something 1SG DAT ADD look give INV.NON.PST-1SG
 ‘Show me some (miracle) too.’ [MOV-4-1.83]

Example (228) illustrates an indefinite pronoun containing the classifier *p̂ĥâ* which refer to small found things or lumps. Here the indefinite pronoun *p̂ĥât̂ʔt̂ʔ* is modifying the noun *alî* ‘seed’.

- (228) *a-lí* *p^hât^hət^hə* *bə* *ha?* *sân* *nɣ* *zà* *k-a?*
 3-seed some.seed DEF land good LOC fall PRES-3
 ‘Some seeds fall on good soil.’ [MOV-2-1.142]

In examples (229) and (230), the indefinite pronouns contain the nouns *rɣŋi?* ‘day’ and *lí* ‘type’.

- (229) *rɣŋi?t^hət^hə* *nɣ,* *dînɣ,* *a-sâmc^hi?* *vɣ* *imá* ...
 some.day LOC later NMLZ-ugly become then

mà *miksù* *l-u?* *o*
 NEG hate IMP-2SG EXCLAM
 ‘If someday, later, (she) becomes ugly, then do not hate (her).’ [SCN-1-17.1]

- (230) *a-dap* *nɣ* *lít^hət^hə* *tóà*
 3-pocket LOC something EXIST
 ‘I have something in my pocket.’ [Elic-9-86.1]

3.5.5 Negative Indefinite Construction

There is one negative indefinite pronoun *tɪŋsa* ‘anything’, and a productive negative indefinite construction. The negative indefinite construction involves the interrogative pronouns, the additive particle *mì* ‘also’ following the pronoun, and a negative predicate. Example (231) illustrates the negative indefinite pronoun *tɪŋsa*.

- (231) *ai* *nɣka?tɪŋ* *ŋà* *tɪŋsa* *twè* *tə* *m-ɣ?*
 EXCLAM swear 1SG anything take PST NEG-1SG
 ‘Hey, (I) swear, I did not take anything.’ [SCN-2-6.1]

Examples (232) through (234) illustrate negative indefinite constructions with the interrogative pronoun *hwé* ‘who’. In example (232), the interrogative pronoun *hwé* is

functioning as an ergative argument marked with *kámá* and then followed by the additive particle *mì*.

- (232) *hwé kámá mì ñé ñâ m-a?*
 who ERG ADD be.able say NEG-3
 ‘No one can say (that).’ [MOV-003-1.90]

In example (233), the interrogative pronoun is functioning as the ablative participant marked with the dative *hə* and the ablative *va?* ‘from’, and followed by the additive *mì* ‘also’.

- (233) *kəratkərat mə kûmpô hwé hə va? mì*
 forcefully ADV money who DAT ABL ADD

ny? lám cù an
 PROH look.for ask.for 2PL
 ‘Do not ask for money from anyone forcefully.’ [MOV-1-166]

In example (234), the question word *hwé* is functioning as a dative participant marked with the dative *hə*, and followed by the additive *mì*.

- (234) *càlì dɛ t-ə nî hwé hə mì*
 what happen PST-3 Q who DAT ADD

ny? t^hu?ku? an
 PROH tell 2PL
 ‘Do not tell anyone what has happened.’ [MOV-1-296]

Example (235) illustrates a negative indefinite construction with the interrogative pronoun *cà* ‘what’, followed by the additive *mì*.

- (235) *irá ak'híŋ nɣ atí cǎ mì p'hɣ?c'h'a? tə m-a?*
 that time LOC 3SG what ADD eat PST NEG-3
 'He did not eat anything at that time.' [MOV-1-187]

Examples (236) and (237) illustrate negative indefinite constructions with the interrogative pronoun *bǎrǎ* 'which' functioning as a modifier of temporal nouns like *rɣŋi?* 'day' and *rɣvú* 'day'. The NP's are then followed by the additive *mì*.

- (236) *b̀̀r̀̀r̀̀i bə bǎrǎ rɣŋi? kə mì cím m-a?*
 fruit DEF which day LOC ADD be.ripe NEG-3
 'The seed will never be ripe.' [MOV-2-163]

- (237) *i-zapri aná abá bǎrǎ rɣvú kə mì t'húm*
 1SG-word here this which day LOC ADD end

t'hwê m-a?
 short NEG-3
 'My words will never come to an end.' [MOV-4-1.228]

3.5.6 Relative/Co-relative Construction

The interrogative pronouns also function as relative pronouns in what can be considered Headless Relative Clauses or Co-relative constructions. In examples (238) through (240), the embedded relative clauses do not have a head noun either inside or outside the relative clause. In example (238), the interrogative pronoun *hwé* 'who' functions as a relative pronoun inside the bracketed clause. Note that the embedded clauses in which the relative pronouns occur are marked with the interrogative particle *nî*, even though these are not technically questions. In example (239), the interrogative pronoun *cǎ* functions as the relative pronoun inside the embedded

relative clause, and in example (240) the interrogative pronoun *bəru?* functions as the relative pronoun.

- (238) [hwé hə nɣ cəm dɣ a nɪ] a-p^hàn
 who DAT LOC rice COP 3 Q NMLZ-share
 rì l-at
 AUX IMP-2PL
 ‘Whoever has food, share it.’ [MOV-1-1.167]

- (239) hənɪrúm kámá [cə rì k-u nɪ] c^hàm m-a?
 3PL ERG what do PRES-2SG Q know NEG-3
 ‘They do not know what they are doing.’ [MOV-4-1.121]

- (240) [atɪ bəru? túŋ t-ə nɪ] nɪrúm
 3SG how live PST-3 Q 1PL.INCL
 kámá ləpk^hɪ k-ì
 ERG see PRES-1PL
 ‘We can see how he lived.’ [MOV-4-1.215]

In examples (241) through (244), there is a demonstrative pronoun or another interrogative pronoun outside the embedded clause which is coreferential with the relative pronoun inside the embedded clause. In example (241), we have the person interrogative pronoun *hwé* in the grammatical role of an object of the verb *rán* ‘select’, and it is coreferential with the demonstrative *irə hə* ‘to that’. In example (242), the interrogative pronoun *hwé* is reduplicated to denote plurality, and is coreferential with a plural demonstrative pronoun *irəhɣ nɣ* ‘to those’.

- (241) ŋà bə [hwé rán k-ɣ nɪ]
 1SG DEF who choose PRES-1SG Q

irá hə kuʔ ɣ
 that DAT give 1SG
 ‘Whoever I select, I will give it to him/her.’ [MOV-1-196]

(242) *nɣ hə [hwé hwé kámá líŋvó r-u nî]*
 2SG DAT who who ERG love INV.NON.PST-2SG Q
iráhɣ nɣ bà líŋvó imá nɣ hə
 those LOC REST love then 2SG DAT

koʔcê bəruʔ vɣ r-ə nî
 blessing how come PROX.NON.PST-3 Q
 ‘If you love only those people who love you, how would blessing come?’
 [MOV-2-42]

In example (243), the interrogative pronoun *hwé* is marked with *kámá* inside the embedded clause and is coreferential with another instance of the interrogative pronoun *hwé* in the matrix clause. Example (244) illustrates the interrogative pronoun *báté* ‘how much’ functioning as relative pronoun inside the bracketed clause. This pronoun is coreferential with the demonstrative pronoun *ité* ‘this much’.

(243) [*koʔcê rótó mə hwé kámá tísû ɣap*
 blessing happy ADV who ERG God word

teʔ a nî], hwé a-sân dɣ a nî
 hear 3 Q who NMLZ-good COP 3 Q
 ‘As far as happiness is concerned, those who listen to God, those will be happy.’
 [MOV-2-72]

(244) [*báté kuʔ t-uʔ nî] nɣ kámá*
 how.much give PST-2SG Q 2SG ERG

ité vín kəp o
 that.much back get 2SG
 ‘However much you give, you will get that much in return.’ [MOV-2-65]

3.5.7 Universal Pronouns

There are three forms which function as both pro-NP's and as modifiers which have universal and/or distributive meaning. Examples (245) through (247) illustrate the universal/distributive pronouns *c^hôc^hi?* 'all', *t^húmlà* 'all', and *k^humla* 'everyone'.

It is not clear whether the form *c^hôc^hi?* is morphologically complex. The form *t^húmlà*, however, seems to consist of a verb *t^húm* 'to end' and the adverbializer *la*. The form

k^humla also seems to have the adverbializer *la*, though the form *k^hum* does

correspond to any lexical item in the database. Examples (248) and (249) illustrate

c^hôc^hi? 'all' and *t^húmlà* 'all' as modifiers of a noun.

(245) *c^hôc^hi?* *a-sân* *rô* *túŋ* *k-ì*
 all NMLZ-good PURP stay PRES-1PL
 '(We) all are doing well.' [SCN-6-17.1]

(246) *a-sân,* *a-sân,* *t^húmlà* *a-sân* *rô*
 NMLZ-good NMLZ-good all NMLZ-good PURP

túŋ *k-ì*
 stay PRES-1PL
 '(We) all are doing well.' [SCN-6-7.1]

(247) *k^humla* *kámá* *aru?* *kəp* *ván* *t-i?*
 everyone ERG like.this get along PST-1PL
 'Everyone gets (a share of meat) like this.' [SNR-17-1.55]

(248) *c^hôc^hi?* *mi?* *kámá* *irá* *lâm* *bə*
 all person ERG that path DEF

líŋvó *k-a?*
 like PRES-3
 'Everyone likes that path/way.' [SCN-1-43.1]

(249) *t^húmlà* *mi?* *atí* *kámá* *c^hi?he?* *k-a?*
 all person 3SG ERG mislead PRES-3
 ‘He is misleading everyone.’ [MOV-4-1.85]

3.5.8 Demonstrative Pronouns

Demonstrative pronouns refer to set of closed class words that are used to “point” at referents. There are two sets of demonstrative pronouns in Hakhun – short and long, just like some of the interrogative pronouns. All demonstrative pronouns have the bound roots *a* for proximal and *i* for distal. The long forms of the demonstrative pronouns also have the element *rə*, which also has been seen in some interrogative pronouns. The demonstrative roots, both long and short, mostly occur with the definite marker *bə*, although they are also found with different case markers (see below). The demonstratives marked with the definite *bə* may have either a stressed or an unstressed form. While the unstressed forms have a reduced final schwa, the stressed forms have a full vowel followed by a glottal stop¹¹. The various forms of the demonstrative pronouns are given in Table 45 and Table 46.

Table 45: Short forms of Demonstrative Pronouns

	Singular		Plural
	Unstressed	Stressed	
Proximal	<i>abá</i>	<i>abe?</i>	
Distal	<i>ibá</i>	<i>ibe?</i>	

¹¹ Note that the long demonstrative pronouns may also have stressed forms like /are?/ and /ire?/.

Table 46: Long form of Demonstrative Pronouns

	Singular		Plural	
	Unstressed	Stressed	Unstressed	Stressed
Proximal	<i>arábá</i>	<i>arábe?</i>	<i>aráhýbá</i>	<i>aráhýbe?</i>
Distal	<i>irábá</i>	<i>irábe?</i>	<i>iráhýbá</i>	<i>iráhýbe?</i>

Note that only the long forms may be pluralized with the plural marker *hɣ*, which goes just before the definite marker (or any other case marker). Examples (250) through (253) illustrate the short forms of the demonstratives (both stressed and unstressed).

(250) *abá hwé tʃ cʰà nî*
 this who family child Q
 ‘Whose child is this?’ [MOV-1-1.124]

(251) *a-pʰɣ?cʰa? tʰɪŋ bə ábe?*
 NMLZ-eat NMLZ DEF this
 ‘Here is the food.’ [SNR-9-8.34]

(252) *ibá cʰippʰàn lúlik ŋâ k-ì*
 that PN PN say PRES-1PL

nɣ-nuk kámá
 1PL.INCL-villager ERG
 ‘Our people call that “Chippfan Lulik”.’ [SNR-7-1.1]

(253) *zapsətwe nʃ ŋâ k-ə bə íbe?*
 parable LOC say PRES-3 DEF that
 ‘What is said in the parable is that.’ [MOV-2-1.151]

Examples (254) through (256) illustrate the singular long demonstrative pronouns. Examples (257) and (258) illustrate the long plural demonstrative pronouns.

- (254) *arábá* *tʰɣ?* *l-at-mə* *aru?* *rì* *l-at-mə*
 this light NF-2PL-NF like.this do NF-2PL-NF
- pʰɣ?cʰa?* *l-at*
 eat IMP-2SG
 ‘Light this (fire), do like this, and eat.’ [SNR-7-1.23]
- (255) *ai* *càró* *dɣ* *a* *nî* *irábá*
 EXCLAM why happen 3 Q that
 ‘Why will that happen?’ [SCN-1-30.1]
- (256) *nɣ-nuk* *kámá* *zùbê* *pʰôsân* *ɲâ*
 1PL.INCL-villager ERG spirit beautiful say
- k-ì* *irábe?*
 PRES-1PL that
 ‘Our people call that (i.e. beautiful girls) “Zube Phosan”.’ [SNR-9-6.6]
- (257) *aráhýbá* *nɣ-nuk* *ha?kʰɪŋ* *ha?tʰo?*
 these 1PL.INCL.village down.the.village up.the.village
- irá* *tʰɣ?* *mə* *a-sân* *mê*
 that than ABL NMLZ-good COM
 ‘These are better than our neighbour’s.’ [SCN-5-5.1]
- (258) *iráhýbá* *kʰɣ?kʰɣ?* *redi* *gó* *cʰí* *t-u?* *nà* *nê*
 those properly ready plan DUR PST-2SG PFV Q
 ‘Have you already planned those properly?’ [SCN-1-33.1]

Only the long forms of the demonstrative pronouns can function as prenominal modifiers without taking the definite marker. The NP modified with a demonstrative pronoun, however, usually takes a definite marker (or even another demonstrative pronoun) following the head noun, unless there is a case marker (like locative or subject/instrument case marker).

- (259) *irá* *vàndùtʰúm* *ibá* *vî* *kámá* *hu?* *twè*
 that lit.firewood that monkey ERG steal take

vɔ̃ t-ə ɲá rɔ̃ɲi? nɔ̃ hìm va?
 come PST-3 say day LOC house ABL
 ‘A monkey stole away that lit firewood during the day from the house.’
 [SNR-7-1.29]

(260) *irɔ̃ hatɲù ɲìɲù bɔ̃ bə a-rìɲkɔ̃ mì*
 that banyan tree DEF 3-root ADD

mámá sán vɔ̃ k-a?
 a.lot good come PRES-3
 ‘That banyan tree, also its root, is becoming very good.’ [SNR-2-2.11]

(261) *nîrûm kámá ará sìm kámá cup*
 1PL.EXCL ERG this salt INST along.with

c^ha? k-ì
 eat PRES-1PL
 ‘We eat (food) with this salt.’ [SNR-11-1.26]

(262) *rikhe? ará mi? bə*
 kill this person DEF
 ‘Kill this person.’ [MOV-4-1.95]

Examples (263) through (266) illustrate the demonstrative roots with the subject/instrument case marker *kámá*.

(263) *irɔ̃ kámá cà rì k-ə nî*
 that ERG what do PRES-3 Q
 ‘What (wrong) has that one done?’ [MOV-4-1.63]

(264) *irɔ̃ kámá a-c^hùc^ha? rì r-u*
 that ERG NMLZ-deceive AUX INV.NON.PST-2SG
 ‘That one is deceiving you.’ [MOV-3-1.250]

(265) *a kámá tə-cup c^ha? l-a*
 this INST PERM-eat.with eat IMP-3
 ‘Let (them) eat with this.’ [SNR-11-1.26]

(266) *i kámá tja?rə pat c^hí t-a? imábá*
 that INST quickly throw DUR PST-3 then

zùbê *mì* *ləpkʰi* *m-a?* *nà*
ghost ADD see NEG-3 PFV
‘(The ghosts) threw (at men) with that (i.e. spider net) quickly, and then (the men) no longer can see the ghosts.’ [SNR-8-1.49]

There are several other words which have the demonstrative roots *a* and *i*, as well as their long forms. They are listed in Table 47.

Table 47: Demonstrative roots in other lexical items

Function	Form	Gloss	Components
Manner	<i>a-ru?</i>	‘like this’	<i>ru?</i> ‘like’
	<i>i-ru?</i>	‘like that’	
Place	<i>a-nʸ/a-rá-nʸ</i>	‘here’	<i>nʸ</i> ‘locative’
	<i>i-nʸ/i-rá-nʸ</i>	‘there’	
	<i>a-ká/a-rá-ká</i>	‘here’	<i>ká</i> ‘locative’
	<i>i-ká/i-rá-ká</i>	‘there’	
Direction	<i>a-rá ηâ</i>	‘this side’	<i>ηâ</i> ‘side’
	<i>i-rá ηâ</i>	‘that side’	
Amount	<i>i-té/i-rá-té</i>	‘this/that much’	<i>té</i> ‘amount’
Reason	<i>i-rá kʰâ-mə</i>	‘that is why’	<i>kʰâ</i> ‘reason’, <i>mə</i> ‘adverbializer’
Connectives	<i>i-má/i-rá-má</i>	‘then’	<i>mə</i> ‘adverbializer’

3.5.9 Reflexive, Reciprocal, and Other Pronouns

The form *m̂m̂* functions as the reflexive pronoun; it is obligatorily prefixed

with a possessive. This form is probably related to *m̂* ‘body’.

- (267) *a-m̂m̂ kámá ñà hók^hám ñámâ rám k-a?*
 3-self ERG 1SG king COMP call PRES-3
 ‘He calls himself, ‘I am king.’ [MOV-4-1.86]

- (268) *n̂ m̂-m̂m̂ cà ñâ k-u n̂*
 2SG 2SG-self what say PRES-2 Q
 ‘What do you call yourself?’ [MOV-4-1.80]

- (269) *n̂rûm b̂ n̂-m̂m̂ kámá te? t-i?*
 1PL.EXCL DEF 1PL.EXCL-self ERG hear PST-1PL

at̂ b̂ cà ñâ t-ə n̂
 3SG DEF what say PST-3 Q
 ‘We ourselves heard what he said.’ [MOV-4-1.57]

The form *didi* functions as a reciprocal pronoun, which take a possessive modifier, as shown in (270).

- (270) *zéká ĥn̂ didi r̂kván-mun a*
 now 3PL each.other kill-RECIP 3
 ‘Now, they will kill each other....’ [SNR-15-1.33]

There are two more forms that can be glossed as ‘on one’s own’ or ‘alone’.

These forms also take the possessive prefixes. One of these forms is *p̂ñtè*, illustrated in (271) through (273).

- (271) *ñà i-p̂ñtè v̂ t^hə r-ɣ*
 1SG 1SG-alone come PROX.PST PROX.NON.PST-1SG
 ‘I came alone or on my own.’ [Elicited]

- (272) *nî-pîntè* *he?* *r-i*
 1PL.EXCL-alone keep INV.NON.PST-1PL
 ‘Leave us alone.’ [MOV-2-1.195]
- (273) *zêsu? nî* *a-c^hàŋà-hɣ* *lipsi* *dá* *nɣ* *hənî* *pîntè*
 Jesus and 3-follower-PL PN month LOC 3PL alone
- vɣ* *t-a?*
 come PST-3
 ‘Jesus and his followers left on their own in the Lipsi month.’ [MOV-2-1.200]

The other form is *hwehwe*, which can be glossed as ‘by oneself or themselves’. This form also takes a possessive prefix, though it is also found without one. Consider the following examples.

- (274) *ŋà* *i-hwehwe* *vɣ* *t^hə* *r-ɣ*
 1SG 1SG-by.oneself come PROX.PST PROX.NON.PST-1SG
 ‘I have come on my own.’ [Elicited]
- (275) *imábá* *hənî* *c^həvì-hɣ* *hwehwe* *bə*
 then 3PL grandmother.grandchild-PL by.themselves DEF
- límlɣ?* *límlɣ?* *túŋ* *rì* *ván*
 pass.time pass.time live do along
 ‘Then the family of the grandmother and her grandchild passed time by themselves.’ (There were no one else) [SNR-9-10.16]

3.6 Verb Subclasses

PCT’s in their bare form can be considered as a subclass of verbs. See §3.2 for a discussion on various morphosyntactic properties of the PCT’s. The other subclass of verbs is the copulas, described below.

3.6.1 Copulas

There are four forms that can be described as copulas. They are given in the table below. The existential copulas *tóà* and *ahù* are unlike verbs in that they do not take any inflected operators. The copulas *dɛ* and *tún*, on the other hand, are like verbs in that they take inflected operators.

Table 48: Copulas

Copula	Construction types	Lexical source
<i>dɛ</i>	(i) Nominal Predicate (ii) Adjectival Predicate (iii) Existential Predicate (non-present) (v) Locative (non-present)	<i>dɛ</i> ‘happen’
<i>tóà</i>	(i) Existential Predicate (Present) (ii) Possessive Predicate (iii) Locative Predicate (Present)	<i>tún</i> ‘sit’
<i>tún</i>	(i) Existential Predicate (Present) (ii) Possessive Predicate (iii) Locative Predicate (Present)	<i>tún</i> ‘sit’
<i>ahù</i>	(i) Negative Existential (ii) Negative Possessive (iii) Negative Location	

3.6.1.1 The Equative Copula *dɛ*

The copula *dɛ* has a corresponding lexical verb *dɛ* ‘to happen’, illustrated in the following example.

(276) *ibá rí imá cà d̂ a ní*
 that die if what happen 3 Q
 ‘What will happen if it dies?’ [MOV-4-1.113]

As a lexical verb, it mostly denotes a change of state. As a copula, however, no such meaning exists. The copula *d̂*, however, retains a primary grammatical feature of a verb, namely the occurrence with an inflected operator. It never occurs without them.

The copula *d̂* is primarily found on Nominal and Adjectival Predicate clauses, as illustrated below. However, note that an overt copula in such clauses is found mostly under negation and in tenses other than present. In example (277), the two NP’s linked by *d̂* are *irá lúv̂ ibá* ‘that leader’ and *matvâ* ‘responsible person’.

(277) *irá lúv̂ ibá mat-vâ d̂ a*
 then leader that responsible-MAS COP 3
 ‘Then, that leader will be the responsible person (for the defeat).’ [SNR-15-1.25]

In example (278), the two NP’s are *ac^hâ t̂hja?c^hâ* ‘their girl children’ and *r̂ni jù-ni* ‘two’.

(278) *a-c^hâ t̂hja?c^hâ r̂ni jù-ni d̂ t-a?*
 3-child girl-DIM two.person CLF-two COP PST-3
 ‘Their children were two girls.’ [SNR-12-1.3]

In example (279), the two NP’s are the demonstrative pronoun *ibá* ‘that’ and *ha?tî zùbê* ‘earthly ghost’.

(279) *ibá ha?tî zùbê d̂ m-a?*
 that earth-person ghost COP NEG-3
 ‘That was not an earthly ghost.’ [SNR-9-4.3]

In example (280), it links the NP *atîc^hà* ‘she’ and the PCT *asân* ‘good’.

- (280) *atî-c^hà* *a-sân* *d̂x̂* *a*
 3SG-DIM NMLZ-good COP 3
 ‘She will be fine.’ [MOV-1-1.289]

The copula *d̂x̂* is also found in existential and locative predicate clauses, especially in tenses other than the present. Examples (281) and (282) show *d̂x̂* in an existential clause.

- (281) *vikrə* *sú* *t-ə* *bə* *in̄x̄* *mi?* *d̂x̂* *t-a?*
 quickly look PST-3 when there person COP PST-3
 ‘When (they) quickly looked (inside the coffin), there was a man there.’
 [SNR-11-1.17]

- (282) *mi?* *m̂x̂-t^hə* *d̂x̂* *t-a?*, *pê* *n̄x̄*
 person CLF-one COP PST-3 farm LOC

sábi?rì *líkâ-tí*
 grapes grow-NMLZ
 ‘There was a man who grew grapes in the farm.’ [MOV-3-1.219]

Examples (283) and (284) show *d̂x̂* in a locative predicate clause.

- (283) *nu?-sìm* *nu?-nàm* *bə* *t̄sû* *múŋtân* *n̄x̄* *d̂x̂* *a*
 2PL-property 2PL-property DEF God kingdom LOC COP 3
 ‘Your property will be in God’s kingdom.’ [MOV-3-1.49]

- (284) *zùbê* *t̄x̄* *túŋ* *t^hŋ* *bə* *ha?* *mûŋ* *k^hûn* *n̄x̄*
 ghost family stay NMLZ DEF ground inside under LOC

d̂x̂ *t-ə* *ŋà*
 COP PST-3 hearsay
 ‘The ghost family’s living place was under the ground.’ [SNR-8-1.5]

3.6.1.2 The Existential Copulas *tóà* and *túŋ*

The copulas *tóà* and *túŋ* both correspond to the lexical verb *túŋ* ‘sit’. The copula *tóà*, which is produced as *túŋá* in careful and slow pronunciation, seems to be an older version of the existential copula which has a frozen *a* in it which does not add any meaning or function to the copula. The copula *tóà* is not followed by any verbal operators, thus it differs from the equative copula *dʒ* and verbs in general. The form *túŋ* also functions as an existential copula and it transparently corresponds to the lexical verb *túŋ* ‘sit’. It takes verbal operators.

Examples (285) through (289) illustrate the copula *tóà*. The sentences in (285) and (286) are existential clauses (§8.1.1.3). The sentences in (287) and (288) are possessive clauses (§8.1.2.1), and the sentences in (289) is a locative clause (§8.1.1.7).

(285) *irónʒ* *haʒsúŋ* *tóà*
 there village COP
 ‘There is a village there.’ [MOV-2-1.205]

(286) *pê* *mì* *tóà*
 farm ADD EXIST
 ‘There is also a farm (there).’ [MOV-2-1.206]

(287) *ŋà* *hə* *nʒ* *vàn* *tóà*
 1SG DAT LOC fire EXIST
 ‘I have fire.’ [SNR-7-1.16]

(288) *và-tʰə* *ŋùcʰà* *tóà,* *và-tʰə* *ŋùcʰà* *ahù*
 CLF-one wife EXIST CLF-one wife NEG.EXIST
 ‘One has a wife, the other does not have a wife.’ [SNR-11-1.3]

- (289) *a-sá* *təlá-c^hà* *bə* *rɣdúŋ tísú* *túŋ* *t^hŋ*
 NMLZ-holy boy-DIM DEF God sit NMLZ
- dxʔlá* *ŋá* *nɣ* *tóà*
 right.hand side LOC EXIST
 ‘The Holy child is on the right side of where God sits.’ [MOV-4-1.54]

The copula *túŋ* is illustrated in examples (290) and (291), where it is followed

by the 3rd person indexed present tense operator *kə* and past tense operator *tə*

respectively. Both sentences express an existential meaning.

- (290) *nɣ* *bə* *a-c^hín* *t^hŋ* *mɣ-t^hə* *túŋ* *k-aʔ*
 2SG DEF NMLZ-ask NMLZ CLF-one EXIST PRES-3
 ‘There is one thing (I) should ask you.’ [SNR-9-1.1]

- (291) *miʔ* *nuk* *haʔsúŋ* *mɣ-t^hə* *túŋ* *l-ə-mə*
 person village village CLF-one EXIST NF-3-NF
- túŋ* *t-aʔ* *ak^hŋ* *ité* *nɣ*
 EXIST PST-3 time that.much LOC
 ‘There was a village of men at that time.’ [SNR-9-2.4]

3.6.1.3 The Negative Existential *ahù*

The copula *ahù* is the negative counter part of *tóà*. It is also found in

existential, possessive and locative non-verbal construction. Like *tóà*, it also does not

directly take an inflected tense/aspect operator.

- (292) *càlì* *miʔ* *ahù*
 what man NEG.EXIST
 ‘There is no one what so ever.’ [SNR-9-10.12]

- (293) *và-t^hə* *ŋùc^hà* *tóà,* *và-t^hə* *ŋùc^hà* *ahù*
 CLF-one wife EXIST CLF-one wife NEG.EXIST
 ‘One has a wife, the other does not have a wife.’ [SNR-11-1.3]

- (294) *a-p^hù-và* *hə* *nʃ* *a-ɲùc^hà* ***ahù***
 3-elder.brother-MAS DAT LOC 3-wife NEG.EXIST
 ‘The elder brother did not have a wife.’ [SNR-11-1.4]
- (295) *nuʔrùm* *a-hîŋ* *tún* *bə* *a-rikm̂* *t^həm* *càró*
 2PL 3-alive sit DEF 3-dead.body FOC why
- lámsú* *k-ə* *nî,* *anʃ* ***ahù***
 search PRES-3 Q here NEG.EXIST
 ‘Why are you living people looking for a dead body? It (the dead body) is not here.’ [MOV-4-1.159]

Example (292) is a negative existential construction. Examples (293) and (294) are possessive constructions, and example (295) is a locative construction.

3.7 Minor Word Classes

This section describes two more minor word classes – adverbs and numerals.

§3.7.1 describes two sets of adverbs – temporal adverbs and manner adverbs. §3.7.2 describes the numerals.

3.7.1 Adverbs

This section describes two sets of lexical adverbs – temporal and manner adverbs. In addition to these two lexical sets, there are few more lexical, phrasal, and clausal elements discussed elsewhere that function as adverbials in a clause. §3.2.2.3 describes derivation of adverbs from PCT’s and nouns by using the morpheme *mə*, which has multiple functions including that of ablative postposition and non-final clause marking. Another class of phrasal expressions which function as adverbials are the relator noun phrases, discussed in §3.3.1. These phrases primarily function as location and direction adverbials. Another set of phrasal expressions which function as adverbials is the postpositional phrases, such as locative and ablative postpositional

phrases, described in §5.2.11. Clausal adverbials of several kinds such as temporal, conditional, concessive, purpose and so on are described in §9.2. Finally, modification of a verb is also seen within the verb complex in which a serial verb/element modifies another serial verb. This kind of modification within the verb complex is discussed in §6.2.2.5 and §6.2.2.6.

3.7.1.1 Temporal Adverbs

The temporal adverbs are a closed class of lexical items, mostly consisting of day ordinals, night ordinals, year ordinals, terms for the division of the day, and terms to refer to concepts like ‘now’, ‘always’, ‘forever’, etc. The ordinals are given in Table 49, Table 50, and Table 51.

The day ordinals in Table 49 have two different roots *za* ~ *ze* and *nap*. The ordinals for ‘today’, ‘yesterday’, ‘day before yesterday’, and ‘three days ago’ have the root *za* ~ *ze*. The word for ‘today’ (and ‘now’) also seems to consist of the root *ze* and the locative *kə*. The other elements in these day ordinals (namely *k^hu*, *zi*, and *bə*) are not synchronically recognizable. The ordinals for ‘tomorrow’, ‘day after tomorrow’, ‘three days later’, ‘four days later’, and ‘five days later’ all have the root *nap*, which we find as a free form elsewhere denoting ‘day’. The day ordinals with this root are more transparent and the other elements of these words are transparently recognizable as numerals, except for one. Thus, the ordinals *nînap* ‘tomorrow’, *rûmnap* ‘three days later’, *k^hunap* ‘four days later’, and *cinap* ‘five days later’ have

the numerals *ni* ‘two’, *rûm* ‘three’, *k^hu* ‘nine’, and *cî* ‘ten’ respectively. The element *sə* in *sənap* ‘day after tomorrow’ is not recognizable.

Table 49: Day ordinals

Form	Meaning	Components
<i>za-k^hu</i>	‘three days ago’	<i>za</i> ‘??’, <i>k^hu</i> ‘??’
<i>zî-zá</i>	‘day before yesterday’	<i>zî</i> ‘??’
<i>bá-zá</i>	‘yesterday’	<i>bá</i> ‘??’
<i>zéká (rêŋi?)</i>	‘today’	<i>zéká</i> ‘now’ <i>rêŋi?</i> ‘day’
<i>nî-nap</i>	‘tomorrow’	<i>ni</i> ‘two’???, <i>nap</i> ‘day’
<i>sə-nap</i>	‘day after tomorrow’	<i>sə</i> ‘??’
<i>rûm-nap</i>	‘three days later’	<i>rûm</i> ‘three’
<i>k^hu-nap</i>	‘four days later’	<i>k^hu</i> ‘nine’ ???
<i>ci-nap</i>	‘five days later’	<i>ci</i> ‘ten’ ???

The night ordinals have the root *pân* which we find as a free form denoting ‘night’ as well as as a part of the compound *rêpân* ‘night’. The other element in the ordinal ‘tonight’, namely *zo?*, has been attested as a noun denoting ‘later’ (cf. *zo? nɔ* ‘later locative’), and denoting ‘throughout’ as in *pânzo?* ‘whole night’. The other element in the ordinal ‘last night’, namely *t^hə*, is attested in the noun *t^həpa* ‘later’. The ordinal ‘tomorrow night’ is just a juxtaposition of two nouns *nînap* ‘tomorrow’ and *rêpân* ‘night’.

Table 50: Night ordinals

Form	Meaning	Components
<i>t^hə-pân</i>	‘last night’	<i>t^hə</i> ‘???’
<i>ʒoʔ-pân</i>	‘tonight’	<i>ʒoʔ</i> ‘later’
<i>nînap rŷpân</i>	‘tomorrow night’	<i>nînap</i> ‘tomorrow’, <i>rŷpân</i> ‘night’

The year ordinals have the root *pá* which we find in the compound *rŷpá* ‘year’ (*rŷ* ‘sky’). The ordinal ‘this year’ has the same element *ʒoʔ* as ‘tonight’. The ordinal ‘next year’ has the numeral *nî* ‘two’, which we have also seen in ‘tomorrow’. The ordinal ‘last year’ has the element *man*, which probably corresponds to the initial element of the word *mânp^hân* ‘traditional story’ (cf. *p^hân* ‘to tell’).

Table 51: Year ordinals

Form	Meaning	Components
<i>mán-pâ</i>	‘last year’	<i>man</i> ‘??’, <i>pá</i> – cf. <i>rŷpá</i> ‘year’
<i>ʒoʔ-pá</i>	‘this year’	<i>ʒoʔ</i> ‘later’,
<i>nî-pá</i>	‘next year’	<i>nî</i> ‘two’???

Table 52 presents the terms for divisions of the day. Three of these terms *rŷk^haʔ* ‘morning’, *rŷʒâ* ‘evening’, and *rŷpân* ‘night’ have the element *rŷ*, which as a free form denotes ‘sky’. This element is also found in weather and season related terms like *rŷ* ‘weather’, *rŷc^hiʔ* ‘bad weather’, *rŷsân* ‘good weather’, *rŷcù* ‘summer’,

rŷki? ‘cold’, *rŷlŷm* ‘hot’, *rŷmŷ* ‘sunny’, *rŷmuk* ‘thunder’, *rŷpá* ‘spring’, *rŷpe?* ‘rain’

etc. (see §4.1.1.3). The word *vùván* ‘early morning’ is a compound of *vù* ‘bird’ and

ván ‘to crow’. The word *ŷi?dám* ‘noon’ has the element *ŷi?* seen in *rŷŷi?* ‘day’.

Table 52: Division of the day

Form	Meaning
<i>vùván</i>	‘early morning’
<i>rŷk^ha?</i>	‘morning’
<i>semuŷ</i>	‘before noon’
<i>ŷi?dám</i>	‘noon’
<i>rŷzâ</i>	‘evening’
<i>rŷpân</i>	‘night’

Table 53 presents few more temporal adverbs. The words for ‘yesterday’ and ‘day before yesterday’ are compounded to denote ‘few days ago’ and similarly the words for ‘tomorrow’ and ‘day after tomorrow’ are compounded to denote ‘few days after’. The expressions *rŷŷi? ro?vi?* and *nap ro?vi?* literally means ‘day counting’ (*ro?vi?* ‘count’, *vi?* ‘write’).

Table 53: Additional temporal adverbs

Form	Meaning
<i>zéká</i>	‘now’
<i>colup</i>	‘forever’

<i>rwetik</i>	‘forever’
<i>rwéʒʒ</i>	‘always’
<i>pattup</i>	‘everyday’
<i>ɲizoʔ ɲizoʔ</i>	‘always’
<i>rɔ̃ɲiʔ roʔviʔ</i>	‘everyday’
<i>nap roʔviʔ</i>	‘everyday’
<i>pânzoʔ</i>	‘whole night’
<i>báʒá ʒíʒá</i>	‘few days ago’
<i>nînap sənap</i>	‘few days later’

The following examples illustrate use of some of the temporal adverbs.

(296) *báʒá mə-dí kə hipníkʰoʔ maʔ k-aʔ*
yesterday 2SG-back LOC something lose PRES-3
‘Something got lost after you (left).’ [SCN-2-1.2]

(297) *báʒá ʒíʒá cʰàm tə m-iʔ*
few.days.ago know PST NEG-1PL
‘(We) did not know (about that) few days ago.’ [SNR-15-1.63]

(298) *ʒéká nɔ̃ vɔ̃ l-oʔ*
now 2SG come IMP-2SG
‘Now you leave.’ [MOV-4-1.118]

(299) *mûŋkâhaʔ a-tʰúm nɔ̃ húlà ɲà rwéʒʒ*
world 3-end LOC until 1SG always

mə-nâm nɔ̃ tə-dɔ̃ ɣ
2SG-with LOC PERM-be 1SG
‘I will always be with you until the end of the world.’ [MOV-4-1.278]

3.7.1.2 Manner Adverbs

Another closed set of adverbs are those which denote manner of some kind. The manner adverbs attested in the database are listed in Table 54. It is clear that except for the last adverb, the rest are morphologically complex, and contain the suffixes *-la* and *-rə*. Both suffixes are atonal, and produced with different pitch heights in different lexical items.

Table 54: Manner Adverbs

Words	Gloss	Components
<i>ʒʔla</i>	‘quickly’	
<i>k^hʔla</i>	‘correctly’	<i>k^hʔ</i> ‘be true’ (v)
<i>kikla</i>	‘briefly’	
<i>pweʔla</i>	‘quickly’	
<i>tikla</i>	‘not a bit / not at all’	
<i>rúŋla</i>	‘together’	<i>rúŋ</i> ‘to gather’ (v)
<i>kitla</i>	‘tightly’	
<i>hikla</i>	‘suitably’	<i>hik</i> ‘to suit’ (v)
<i>hûmla</i>	‘accurately’	<i>hûm</i> ‘be right’ (v)
<i>ʒapla</i>	‘quickly’	
<i>swamla</i>	‘immediately’	
<i>tíŋla</i>	‘suddenly’	
<i>vikrə</i>	‘quickly’	
<i>sjaʔrə</i>	‘quickly’	

<i>tjaʔrə</i>	‘quickly’	
<i>raprə</i>	‘quickly’	
<i>pukrə</i>	‘sound symbolic’	
<i>alín</i>	‘a lot’	

The suffix *-la* is often produced with low tone. Four of the roots to which *-la* is attached are independent verbs. Two of the roots, *k^hʔ* and *hûm*, are illustrated in (300) and (301). The rest of the roots which take *-la* are not attested as independent lexical items. Note that *k^hʔ* ‘correct’ is marked by the present tense operator *kaʔ* in (300), and *hum* ‘come true’ is followed by the inflected past tense operator *tə* (301).

- (300) *nʔ* *cà* *ŋâ* *t-uʔ* *nî* *ibá*
 2SG what say PST-2SG Q that
- k^hʔ* *k-aʔ*
 right PRES-3
 ‘What you are saying is correct.’ [MOV-4-1.56]

- (301) *t^húmlà* *múŋ-và-hʔ* *kámá* *viʔ* *c^hí* *t-aʔ*
 all prophet-MAS-PL ERG write DUR PST-3
- zéká* *a-sá* *təlá-c^hà-rʔ* *hûm* *t-ə* *nà*
 now NMLZ-holy boy-DIM-SIM come.true PST-3 PFV
 ‘Everything the prophets have written about the Holy child has come true.’
 [MOV-3-1.168]

These roots are also found in complex verb stems, discussed in 6.2.2, where they add adverb-like meaning to another verb root, as shown in (302) and (303). In example

(302), the root *hûm* adds the sense of ‘precisely’ to the other root *pat* ‘throw’, and in

(303) the root *hik* adds the sense of ‘properly’ to the other root *hwé* ‘build’.

- (302) *c^hîŋc^hʔ* *irá* *lùŋ* *kámá* *mi?* *k^hû* *nʔ*
 suppose that stone INST person head LOC
- [hûm* *pat]* *imá* *bo?k^ha?* *mə*
 be.precise throw if dust ADV
- dʂ* *vʂ* *a*
 happen come 3
 ‘Suppose, if (someone) throws this stone precisely on a person’s head, (s/he) will become dust (i.e. dead).’ [MOV-3-1.244]

- (303) *a-kûn* *ibá* *túŋ* *t^hîŋ* *bə* *[hik* *hwé]*
 3-hole that stay NMLZ DEF suit build
- túŋ* *vʂ* *t-a?*
 stay come PST-3
 ‘Building the hole, the dwelling place, properly, (the crab) stayed (in there).’
 [SNR-6-4.67]

None of the roots suffixed with *-rə* are attested as independent lexemes. Examples

(304) through (306) illustrate a few manner adverbs with the *-la* suffix.

- (304) *t^húmlà* *kikla* *arʔ ara?* *sukku?* *t-a?*
 all briefly precious.things show PST-3
 ‘(The Satan) showed all the precious things briefly.’

- (305) *hìm* *ʒʔla* *hwé* *ŋâ* *nî* *ŋâmâ*
 house quickly build say Q COMP
- t^hûŋhûn* *k-ʂ*
 think PRES-1SG
 ‘I am thinking about building a house quickly.’ [SCN-4-2.1]

- (306) *tr̥ti bə kʰɣʔla tʰəm se? kà t-a?*
 God DEF truly FOC wake.up go PST-3
 ‘God has truly risen (opposed to the common belief that he is dead).’
 [MOV-4-1.176]

Examples (307) and (308) illustrate two adverbs with the suffix *-rə*.

- (307) *r̥d̥úŋ t̥s̥ú múŋtân ibá sjaʔrə v̥r̥*
 God kingdom that soon come

a nê
 3 Q
 ‘Is God’s kingdom coming soon (on the way)?’ [MOV-3-1.88]

- (308) *vikrə hu? túŋ t-ə nà*
 quickly hide sit PST-3 PFV
 ‘(She) quickly hid (herself).’ [SNR-6-4.72]

Some of the roots of manner adverbs described above, such as *kʰɣʔ* and *sjaʔ* are also found in reduplicated forms. In addition to these roots, there are additional reduplicated adverbs which seem to be sound symbolic in nature. All the reduplicated adverbs are listed in Table 55.

Table 55: Reduplicated Manner Adverbs

Words	Gloss
<i>kʰɣʔkʰɣʔ</i>	‘correctly’
<i>sjaʔsjaʔ</i>	‘quickly’
<i>kelikeli</i>	‘across, through’ (as in pierce through)
<i>kiksik</i>	‘quietly’
<i>seʔseʔ</i>	‘sound symbolic’
<i>bjaʔbjaʔ</i>	‘sound symbolic’

<i>kutkut</i>	‘sound symbolic’
<i>píŋpíŋ</i>	‘sound symbolic’
<i>txʔtxʔ</i>	‘sound symbolic’

Examples (309) and (310) illustrate the roots *kʰɣʔ* and *sjaʔ* in their reduplicated form functioning as adverbs.

(309) *ibá kʰɣʔkʰɣʔ bà hxʔtʰoʔ l-oʔ*
 that correctly REST count IMP-2SG
 ‘Count those correctly.’ [SCN-4-27.1]

(310) *iráká sjaʔsjaʔ hik hwé l-ə-mə túŋ*
 there quickly properly build NF-3-NF sit

vɣ t-aʔ
 come PST-3
 ‘Quickly, properly building (the nest) there, (the crab) stayed (in there).’
 [SNR-6-4.67]

Examples (311) through (313) illustrate sound symbolic adverbs. In example (311), the sound symbolic adverb *kutkut* describes the manner of pangolin’s walking.

(311) *imá vícî kutkut kʰwám keʔ kuʔ l-ə-mə ...*
 then pangolin SS walk go give NF-3-NF
 ‘Then, the pangolin walked (back to the tiger)...’ [SNR-3-1.8]

In example (312), the sound symbolic adverb *píŋpíŋ* describes the sound of throwing the pangolin.

(312) *zétʰá píŋpíŋ tʰù twèheʔ kuʔ*
 once SS hit throw.away give
 ‘(The tiger) hits and throws away (the pangolin) once (more).’ [SNR-3-1.14]

In example (313), the adverb *bjá?bjá?* intensifies the quality of the PCT *ɲùn* ‘dirty’.

- (313) *poʔ-ɲù* *kámá* *zúk* *ɣ* *ɲâ* *le* *a-ɲùn*
 elephant-AUG ERG drink 1SG say DP NMLZ-dirty
- bjá?bjá?* *vɣ* *kuʔ*
 SS come give
 ‘When the elephant thought she would drink, (the water) came very dirty.’
 [SNR-5-1.5]

3.7.2 Numerals

Hakhun has a decimal counting system. The numerals ‘one’ to ‘ten’ are listed in Table 56. The numerals from ‘one’ to ‘three’ are bound forms and occur with a classifier or a noun that takes numerals directly. The tone on the numerals ‘one’ and ‘two’ varies depending on the tone of classifier or the noun root, and they do not seem to have an inherent tone. The generic classifier *mɣ* is used in counting in isolation. A few numerals are illustrated in example (314).

Table 56: Numerals from ‘one’ to ‘ten’

Form	Meaning
<i>mɣ-t^heʔ</i>	‘one’
<i>mɣ-ni</i>	‘two’
<i>mɣ-rûm</i>	‘three’
<i>bəlí</i>	‘four’
<i>bəɲâ</i>	‘five’
<i>iruk</i>	‘six’
<i>iját</i>	‘seven’

<i>isat</i>	‘eight’
<i>ik^hù</i>	‘nine’
<i>ic^hî</i>	‘ten’

(314) *c^ha?* *irábá* *báté* *k^hit* *t^hîŋ* *nî*
rice that how.much plant should Q

tîŋ-ni *k^hit* *t^hîŋ*, *tîŋ-rûm* *k^hit* *t^hîŋ*,
CLF-two plant should CLF-three plant should

tîŋ-balı *tîŋ-bəŋâ* *k^hit* *t^hîŋ*, *irábá*
CLF-four CLF-five plant should that

pik *nş* *sú* *l-i?-mə* *k^hit* *k-î*
field LOC look NF-1PL-NF plant PRES-1PL

‘How much rice should we plant – two containersful, three containersful, four containersful, or five containersful, that we look at the field and plant accordingly.’ [SNR-1-1.9]

The teens are formed with base ten and the numerals 1-9, e.g. *ic^hî mşî^he?*

‘eleven’, *ic^hî mşnî* ‘twelve’, *ic^hi mşrûm* ‘thirteen’, ... *ic^hî ik^hù* ‘nineteen’. Classifiers

are attached to the numerals 1-9, as shown in (315) and (316).

(315) *ic^hî* *và-ni* *zêsu?* *c^hàŋà* *kə* *va?*
ten CLF-two Jesus disciple LOC ABL

atî-và *mì* *nó* *t-a?*
3SG-MAS ADD be.part PST-3
‘He was one of the twelve disciples of Jesus.’ [MOV-3-1.309]

(316) *ic^hî* *pá-bəŋâ* *hók^hám* *t^hanperut* *kámá*
ten year-five king PN ERG

vuk *t-a?*
rule PST-3
‘Emperor Tiberius had ruled for fifteen years.’ [MOV-1-1.138]

The higher bases between ten and hundred are formed with the root *roʔ* and the numerals 2-9, e.g. *roʔni* ‘twenty’, *roʔrûm* ‘thirty’, *roʔbəlí* ‘forty’, and so on, which in turn forms the base for the corresponding teens, e.g. *roʔni m̂tʰeʔ* ‘twenty one’, *roʔni m̂nî* ‘twenty two’, ... *roʔni ikʰù* ‘twenty nine’, and so on. The numerals ‘hundred’ and ‘thousand’ have the roots *cá* and *hîŋ*. The bases above ‘ten’ are listed in Table 57.

Table 57: Numerals over 'ten'

Form	Meaning
<i>roʔ-ni</i>	‘twenty’
<i>roʔ-rûm</i>	‘thirty’
<i>roʔ-bəlí</i>	‘forty’
<i>roʔ-bəŋâ</i>	‘fifty’
<i>roʔ-iruk</i>	‘sixty’
<i>roʔ-iŋat</i>	‘seventy’
<i>roʔ-isat</i>	‘eighty’
<i>roʔ-ikʰù</i>	‘ninety’
<i>cá-tʰeʔ</i>	‘hundred’
<i>hîŋ-tʰeʔ</i>	‘thousand’

CHAPTER IV

NOUN MORPHOLOGY

This chapter describes the morphological shapes of nouns. Nouns are morphologically simple. There is no grammatically required morphology on nouns. Thus, except for a few inalienably possessed nouns, a bare noun root may occur as a free standing form in sentences. Nominal categories like case are coded with postpositions. Categories like number and gender are not grammaticalized.

Most of the morphologically complex nouns are compounds, some of which are frozen while others are transparent, discussed in §4.1. There are a handful of affixes, which do not form any coherent grammatical category, but add semantic specificity, such as ‘possessor’, ‘shape’, ‘size’, ‘gender’, ‘honorificity’, etc. Prefixes are described in §4.2, and suffixes are described in §4.3.

4.1 Compounds

Most multisyllabic noun lexemes are compounds. Some of these compounds are very old, such that either one or both components of the compounds have undergone sound change or ceased to be a free form synchronically. For instance, names of birds, fish, and some animals have prefixes which are or were nouns. There are several bird names, such as *vək^huʔ* ‘owl’, which start with *və(ŋ)*, which comes from the noun *vù* ‘bird’. The roots themselves are no longer free forms. It must have been a productive construction for bird names to have the generic word ‘bird’ followed by a more specific name for a bird. A new construction seems to have replaced this construction in which the generic word ‘bird’ is preceded by the more specific name of a bird. This new construction is very transparent, no sound change

involved, and has the same structure as a noun phrase in which the head noun is modified by a preceding noun. For instance, *mévù* ‘myna’ transparently consists of *mé* ‘cow’ and *vù* ‘bird’. Other compound nouns, which involve bound roots, include body part terms, natural objects (sun, moon, etc.), season, weather, temporal expressions referring to day, night, year, etc., and so on. These compound nouns are described in §4.1.1.

There are of course more transparent compounds. Some of these compounds involve just two noun roots. But others may involve morphologically complex noun stems. Sometimes, there are even a coordinator as part of the compounds. The transparent compounds are described in §4.1.2.

4.1.1 Frozen Compounds

Frozen compounds are those in which parts of the words are transparently recognizable while other parts may not be found elsewhere other than in the compound itself. These compounds mostly include class term compounds (discussed in §4.1.1.1), body part terms (discussed in §4.1.1.2), terms referring to natural objects, weather, seasons, etc. (discussed in §4.1.1.3), terms denoting units of time (discussed in §4.1.1.4), and terms denoting directions (discussed in §4.1.1.5).

4.1.1.1 Class Term Compounds

Most of the class term compounds have a unique structure. These compounds have endocentric semantic relation between the two elements of the compound. The initial element of the compound refers to a class of entity, such as particular kind of animal, birds, trees, etc., and thus have a wider set of referents, and the following

element denotes a more specific name, and thus restricts the reference to a subset of the class. Endocentric semantic relation is also found in the transparent compounds (discussed below) and in noun phrases in which the head noun is modified by another noun (see §5.2.9). But they have the opposite order. In transparent compounds and in noun phrases, the restricting element precedes the noun with broader reference (not follow it), except for the fruit names. Thus, most class term compounds do not follow the synchronic tendency of the language. In Hakhun, we find class term compounds for birds, fish, and some wild animals. However, there are no class term compounds for the names of trees and different kinds of animals. There are also class term compounds for fruits, though they have the same structure as transparent compounds or noun phrases. Thus, they are probably not very old compounds.

4.1.1.1.1 Names of Birds

Some of the bird names are clearly onomatopoeic and imitate the sounds that the birds make, for instance *cukcuk*, *hɣtutu*, *peperəm*, *p^hantimtu*, *p^hoʔp^hotu*, etc.

Sometimes their names correspond to other entities, for instance the name *sê^tə^lî* consists of *sê* ‘sun’ and *t^hə^lî* ‘tongue’, and *mévù* consists of *mé* ‘cow’ and *vù* ‘bird’.

These names are associated either to the look or behavior of the birds. However, most bird names start with the frozen prefix *və-*, which comes from *vù* ‘bird’. This prefix is produced with high pitch, which is true of all prefixes in Hakhun. In slow and careful pronunciation, this prefix is pronounced as *vən/ŋ*. The nasal insertion is common when word initial open syllables with a schwa are pronounced slowly. Consider the names of birds in Table 58.

Table 58: Class term prefix on bird names

<i>vəbì</i>	<i>vəc^hì</i>	<i>vəduk</i>
<i>vəpùŋ nály?</i>	<i>vəŋâ</i>	<i>vədùŋ</i>
<i>vəp^ho?</i>	<i>vərâ</i> ‘hornbill’	<i>vərik</i>
<i>vəro?</i>	<i>vərúrâ</i>	<i>vəsik</i>
<i>vəhàn</i>	<i>vəp^hì</i>	<i>vəŋím</i>
<i>vùvwap</i>	<i>vək^hâ</i> ‘crow’	<i>vək^hu?</i> ‘owl’
<i>vəsôsik</i> ‘house sparrow’	<i>vəsîm télê</i>	

The roots of these bird names are not free forms either. Thus, the roots by themselves do not have reference to a bird. One construction in which we find these roots without the prefix is when the bird names are personified in narratives, in which case they are suffixed either with the honorific masculine suffix *-vâ* or the honorific feminine suffix *-jâ* depending on whether they are characterized as male or female. Thus, the bird *vəp^hì* is addressed as *p^hì-vâ* in one of the narratives. See §4.3.2 for a discussion of the gender and honorificity suffixes.

4.1.1.1.2 Names of Fish

Most names of fish start with the form *ŋa?*, which is also the word for ‘fish’.

Table 59 provides a list fish names with this noun. The other elements of these compounds are bound forms, and do not have reference to a fish without the initial component *ŋa?*. Some of these bound forms may have come from other nouns or PCT’s. For instance, the element *t^hùm* in *ŋa?t^hùm* may have come from *t^hùm* ‘cylindrical shape’; the element *zù* in *ŋa?zù* may have come from *zù* ‘water’; the

element *pú* in *ηα?pú* may have come from *pú* ‘snake’; and the element *ju* in *ηα?ju* may have come from *ju* ‘large’.

Table 59: Class term prefix on fish names

<i>ηα?t^hum</i>	<i>ηα?kumc^hâ</i>	<i>ηα?po?</i>
<i>ηα?zù</i>	<i>ηα?lo?</i>	<i>ηα?pú</i>
<i>ηα?c^hthà</i>	<i>ηα?ju</i>	<i>ηα?sà</i>
<i>ηα?k^hu?t^ho?</i>	<i>ηα?pi</i>	<i>ηα?c^h ‘eal’</i>

4.1.1.1.3 Wild Animals

There are few animal names, mostly names of rodents, which have the initial element *zu?* ‘rat’, listed in Table 60. The other elements of these compounds are not attested as free forms, nor do they seem to correspond to any other lexical items.

Table 60: Class term prefix on animal names

<i>zu?zê</i> ‘mongoose’	<i>zu?sûη</i>	<i>zu?p^hò</i>
<i>zu?sì</i>	<i>zu?kup</i> ‘rat’	

4.1.1.1.4 Names of Fruits

The compounds denoting fruit names are not like the class term compounds discussed above; they are more like transparent compounds (discussed below) and noun phrases with a noun modifier. The element referring to the class follows the element which denote a more specific name. The element referring to the class is *ri*, which means ‘seed’ as a free form, and is part of the word *b^hri* meaning ‘fruit’, which

itself consist of *bɣ̃* ‘tree’ and *rì* ‘seed’. Probably, *rì* denoted ‘fruit’ (as well as ‘seed’) historically, and has been replaced by the compound *bɣ̃rì* synchronically as a term for ‘fruit’, and it retained the meaning of ‘fruit’ only in the fruit names. Table 61 provides a list of fruit names.

Table 61: Class term suffix on fruit names

<i>baʔsârì</i>	<i>caʔzârì</i>	<i>cèrì</i>
<i>c^hâruṭrì</i>	<i>c^haʔsêrì</i>	<i>c^húṅbóbórí</i>
<i>cutrì</i>	<i>huʔt^húṅrì</i>	<i>k^hoʔpwérí</i>
<i>ṅɣ̃bûrì</i>	<i>púṅṅɣ̃ʔrì</i>	<i>pûndúṅrì</i>
<i>səpânri</i>	<i>sísatri</i>	<i>t^hùṅkêrì</i>
<i>vəlírì</i>	<i>tîmri</i>	

Note that at least in some of these compounds, the other elements are free forms and refer to the tree whose fruit these compounds refer to. For instance, the element *baʔsâ* in *baʔsârì* refers to the tree of the fruit referred to by the compound. This makes these compounds much more transparent than other class term compounds.

4.1.1.2 Body Part Terms

Most body part terms are compounds. In general, the initial element refers to the whole and the subsequent element restricts the reference to a part of the whole.

The initial elements are mostly independent lexical items, such as *mik* ‘eye’, *dxʔ* ‘hand’, *dâ* ‘leg’, etc. The second elements may be an independent lexical item, such as *pô* ‘white’, *tâm* ‘back’, or a bound form found only in the body part compounds.

Some of the second elements, in turn, may occur as the initial elements in other compounds. For instance, the element *sù* ‘finger’ is found as the second element in *dʁʔsù* ‘finger’, but as first element in *sùŋù* ‘middle finger’. The body part terms resemble class term compounds in that the second element restricts the reference of the initial element to a part of the whole denoted by the initial element. However, the semantic relation between the elements is mostly exocentric since these compounds do not denote a subclass of another larger class.

One set of compounds denoting body parts, including the word for ‘tear’, involves the lexical item *mik* ‘eye’. Table 62 provides a list of compounds with the root *mik* ‘eye’. The second elements of these compounds either refer to another body part, or has some other meaning, or is not attested outside these compounds. For instance, the word for ‘eyelid’ is a compound of *mik* ‘eye’ and *k^hwê* ‘skin’. The word for ‘pupil’ is a compound of *mik* ‘eye’ and the PCT *ɲoʔ* ‘black’. On the other hand, the word for ‘eyeball’ consist of *mik* ‘eye’ and an element *sʁ* which is not attested elsewhere.

Table 62: Compounds with *mik* ‘eye’

Compounds	Gloss	Components
<i>mik-kâmkù-bê</i>	‘eyebrow’	<i>kâmkù</i> ‘??’, <i>bê</i> ‘body hair’
<i>mik-sʁ</i>	‘eyeball’	<i>sʁ</i> ‘???’
<i>mik-k^hwê</i>	‘eyelid’	<i>k^hwê</i> ‘skin’
<i>mik-c^hàm-c^hɪʔ</i>	‘eyedirt’	<i>c^hàm</i> ‘??’, <i>c^hɪʔ</i> ‘bad’

<i>mik-p^hú</i>	‘tear’	<i>p^hú</i> ‘???’
<i>mik-p^hú-bê-lâ</i>	‘eyelash’	<i>bê</i> ‘body hair’, <i>lâ</i> ‘string of hair’
<i>mik-bê</i>	‘eyelash’	<i>bê</i> ‘body hair’
<i>mik-pô</i>	‘white part of eye’	<i>pô</i> ‘white’
<i>mik-ɲo?</i>	‘pupil’	<i>ɲo?</i> ‘black’
<i>mik-do?</i>	‘blind’	<i>do?</i> ‘???’
<i>mik-mò</i>	‘blind’	<i>mò</i> ‘???’

There are a few other compounds in which we find the root *mik* ‘eye’, though they are not directly associated with ‘eye’; these are listed in Table 63. They all seem to have a metaphorical extension of *mik* ‘eye’.

Table 63: Compounds with mik 'eye' with metaphorical extension

Compounds	Gloss	Components
<i>mik-sik</i>	‘hatred’	<i>sik</i> ‘???’
<i>dɣ?-mik</i>	‘knuckle’	<i>dɣ?</i> ‘hand’
<i>dâ-mik</i>	‘ankle’	<i>dâ</i> ‘leg’
<i>sê-mik</i>	‘sun’	<i>sê</i> ‘sun’
<i>zù-mik</i>	‘origin of stream’	<i>zù</i> ‘water’

Another set of compounds denoting body parts involves the lexical item *dɣ?* ‘hand, arm’, listed in Table 64. Naturally several of the elements of these compounds are also found with the compounds denoting parts of leg with the root *dâ* ‘leg’. Thus,

element *sì* in *dxʔsì* ‘wrist’ is also found in *dàsì* ‘part above ankle’; the element *p^há* in *dxʔp^há* ‘palm’ is also found in *dàp^há* ‘bottom of leg’. However, there are elements which are not attested elsewhere, such as *hà* in *dxʔhà* ‘forearm’.

Table 64: Compounds with *dxʔ* ‘hand’

Compounds	Gloss	Components
<i>dxʔ-sì</i>	‘wrist’	cf. <i>dàsì</i> ‘part above ankle’
<i>dxʔ-sù</i>	‘finger’	<i>sù</i> ‘finger/toe’
<i>dxʔ-sù-k^hwap</i>	‘finger nail’	<i>sùk^hwap</i> ‘finger/toe nail’
<i>dxʔ-mik</i>	‘knuckle’	<i>mik</i> ‘eye’
<i>dxʔ-p^há</i>	‘palm’	cf. <i>dàp^há</i> ‘bottom of leg’
<i>dxʔ-rat</i>	‘lines on palm’	<i>rat</i> ‘line’???
<i>dxʔ-tàm</i>	‘back of hand’	<i>tàm</i> ‘back’
<i>dxʔ-hà</i>	‘forearm’	<i>hà</i> ‘???’
<i>dxʔ-lâ</i>	‘right hand’	<i>là</i> ‘male’ ???
<i>dxʔ-nân</i>	‘left hand’	<i>nân</i> ‘???’
<i>dxʔ-mik-kuʔ</i>	‘elbow’	<i>mik</i> ‘eye’, cf. <i>dàkuʔ</i> ‘knee’
<i>dxʔ-kò</i>	‘disabled hand’	cf. <i>dàkò</i> ‘lame’

Another compound which involves the word for ‘hand’ is *dxʔsúm* ‘work (n)’. The element *súm* functions as a verb.

There are also several compounds denoting body parts containing the root *dà* ‘leg’, listed in Table 65. These compounds also denote other entities associated with the ‘leg’, such as footwear.

Table 65: Compounds with *dà* ‘leg’

Compounds	Gloss	Components
<i>dà-ku?</i>	‘knee’	cf. <i>dr?mikku?</i> ‘elbow’
<i>dà-kap</i>	‘part behind the knee’	<i>kap</i> ‘???’
<i>dà-vuk</i>	‘calf’	<i>vuk</i> ‘belly’
<i>dà-mik</i>	‘ankle’	<i>mik</i> ‘eye’
<i>dà-p^há</i>	‘bottom of foot’	cf. <i>dr?p^há</i> ‘palm’
<i>dà-k^hǝ</i>	‘opposite side of calf’	<i>k^hǝ</i> ‘???’
<i>dà-kùm^hù</i>	‘heel’	cf. <i>pákùm^hù</i> ‘molar tooth’
<i>dà-sù</i>	‘toe’	<i>sù</i> ‘finger/toe’
<i>dà-sù-k^hwap</i>	‘toe nail’	<i>sùk^hwap</i> ‘finger/toe nail’
<i>dà-bat</i>	‘slippers’	<i>bat</i> ‘???’
<i>dà-kwap</i>	‘slippers’	<i>kwap</i> ‘???’
<i>dà-bê</i>	‘leg hair’	<i>bê</i> ‘body hair’
<i>dà-càn</i>	‘straight leg’	cf. <i>càn^hat</i> ‘straight’
<i>dà-kwàm</i>	‘bent leg’	<i>kwam</i> ‘???’
<i>dà-dwap</i>	‘socks’	<i>dwap</i> ‘???’
<i>dà-k^hip</i>	‘shoes’	<i>k^hip</i> ‘???’
<i>dà-kò</i>	‘lame’	cf. <i>dr?kò</i> ‘disabled hand’

<i>dà-mè</i>	‘footprint’	<i>mè</i> ‘scar’
<i>dà-sì</i>	‘part above ankle’	cf. <i>drʔsì</i> ‘wrist’
<i>dà-tàm</i>	‘back of feet’	<i>tàm</i> ‘back’
<i>dà-zúŋ</i>	‘middle of bottom of leg’	<i>zúŋ</i> ‘???’

A few other compound body part terms involving the elements *sù* ‘finger/toe’, *kʰù* ‘nose’, etc. are listed in Table 66.

Table 66: Additional body-part compounds

Compounds	Gloss	Components
<i>sù-cʰà</i>	‘little finger’	<i>sù</i> ‘finger’, <i>cʰà</i> ‘child, small’
<i>sù-tam</i>	‘ring finger’	<i>tam</i> ‘???’
<i>sù-nù</i>	‘middle finger’	<i>nù</i> ‘mother, big’
<i>sù-là</i>	‘pointing finger’	<i>là</i> ‘male’
<i>sù-pùŋ</i>	‘thumb’	<i>pùŋ</i> ‘male’
<i>hì-lâm</i>	‘vein’	<i>hì</i> ‘blood’, <i>lâm</i> ‘road’
<i>kʰù-pù</i>	‘nostril’	<i>kʰù</i> ‘nose’, <i>pù</i> ‘hole’
<i>kʰù-pʔʔ</i>	‘wall between nostrils’	<i>pʔʔ</i> ‘???’
<i>tʰân-kʰwê</i>	‘cheek’	<i>tʰân</i> ‘face’, <i>kʰwê</i> ‘skin’

4.1.1.3 Natural Entities

There are several compounds which contain the root *rʔ* ‘sky’ as the first element. These compounds denote temporal units (such as ‘day’, ‘night’, etc.), weather, season, temperature, and other related notions, listed in Table 67 and Table

68. In most of these compounds, the second elements are not synchronically recognizable. Three of the second elements are PCT's - *ɲɲʔ* 'black', *sân* 'good', *c^hiʔ* 'bad'; two elements, *pá* 'year' and *pân* 'night', are attested elsewhere independent of the initial *rɣ* 'sky'.

Table 67: Compounds with rɣ 'sky' referring to day-night cycle

Compound	Gloss	Components
<i>rɣ-k^haʔ</i>	'morning'	<i>k^haʔ</i> '???'
<i>rɣ-zâ</i>	'evening'	<i>zâ</i> '???'
<i>rɣ-pân</i>	'night'	cf. <i>pânt^hə</i> 'one night'
<i>rɣ-ɲɲʔ</i>	'darkness'	<i>ɲɲʔ</i> 'black'
<i>rɣ-ŋiʔ</i>	'day'	<i>ŋiʔ</i> '???'
<i>rɣ-vû</i>	'day'	<i>vû</i> '???'
<i>rɣ-pá</i>	'year'	cf. <i>pát^hə</i> 'one year'

Table 68: Compounds with rɣ 'sky' referring to weather, season, etc.

Compounds	Gloss	Components
<i>rɣ-peʔ</i>	'rain'	<i>peʔ</i> '???'
<i>rɣ-sân</i>	'good weather'	<i>sân</i> 'good'
<i>rɣ-c^hiʔ</i>	'bad weather'	<i>c^hiʔ</i> 'bad'
<i>rɣ-bik</i>	'cloudy'	<i>bik</i> '???'
<i>rɣ-k^híŋ</i>	'clear sky'	<i>k^híŋ</i> '???'
<i>rɣ-mî</i>	'sunny'	<i>mî</i> '???'

<i>rŷ-muk</i>	‘thunder’	<i>muk</i> ‘headache’ ???
<i>rŷ-p^ha?</i>	‘lightning’	<i>p^ha?</i> ‘???’
<i>rŷ-ki?</i>	‘cold’	<i>ki?</i> ‘???’
<i>rŷ-lûm</i>	‘hot’	<i>lûm</i> ‘???’
<i>rŷ-cù</i>	‘Summer’	<i>cù</i> ‘???’
<i>rŷ-pâ</i>	‘Spring’	<i>pâ</i> ‘???’

4.1.1.4 Time Words

Another set of frozen compounds are ordinal terms for the day, night, and year. In the day ordinals, the terms for the days after ‘today’ consist of the identifiable noun *nap* ‘day’. The other parts of these terms seem to be numerals – *ni* ‘two’, *rûm* ‘three’, *k^hù* ‘nine’, *cî* ‘ten’. However, the last two numerals do not quite correspond to the order being denoted. The terms for the days before ‘today’ have the root *za*. However, it does not seem to correspond to any independent noun. Moreover, the other parts of these words are not identifiable. Table 69 lists the day ordinals.

Table 69: Compounds denoting day ordinals

Compounds	Gloss	Components
<i>za-k^hu</i>	‘three days ago’	<i>za</i> ‘??’, <i>k^hu</i> ‘??’
<i>zî-zá</i>	‘day before yesterday’	<i>zî</i> ‘??’, <i>za</i> ‘??’
<i>bá-zá</i>	‘yesterday’	<i>bə</i> ‘??’, <i>za</i> ‘??’
<i>nî-nap</i>	‘tomorrow’	<i>nî</i> ‘two’, <i>nap</i> ‘day’
<i>sə-nap</i>	‘day after tomorrow’	<i>sə</i> ‘??’

<i>rûm-nap</i>	‘three days later’	<i>rûm</i> ‘three’
<i>k^hu-nap</i>	‘four days later’	<i>k^hù</i> ‘nine’ ???
<i>ci-nap</i>	‘five days later’	<i>cî</i> ‘ten’ ???

The ordinals for the night have the root *pân*, which we find in the compound *rÿpân* ‘night’. The ordinals for the year have the root *pá*, which we see in the compound *rÿpá* ‘year’. Table 70 lists the night and year ordinals.

Table 70: Compounds denoting night and year ordinals

Compounds	Gloss	Components
<i>t^hə-pân</i>	‘last night’	<i>t^hə</i> ‘???’
<i>ʒoʔ-pân</i>	‘tonight’	cf. <i>ʒoʔ</i> ‘later’
<i>mán-pâ</i>	‘last year’	<i>mân</i> ‘???’
<i>ʒoʔ-pá</i>	‘this year’	
<i>nî-pá</i>	‘next year’	<i>nî</i> ‘two’

4.1.1.5 Direction Words

Cardinal directions are also compounds which involve the root *sê* ‘sun’, and *ʒù* ‘water’. They are listed in Table 71.

Table 71: Compounds denoting cardinal directions

Compound	Gloss	Components
<i>sé-hûŋ</i>	‘east’	<i>hûŋ</i> ‘come out’
<i>sê-ŋup</i>	‘west’	<i>ŋup</i> ‘surrender, take shelter’

<i>ʒù-kuʔ</i>	‘north’	<i>ʒù</i> ‘water’, cf. <i>k^húkuʔ</i> ‘up the stream’
<i>ʒù-mù</i>	‘south’	cf. <i>k^húmù</i> ‘down the stream’, <i>mù</i> ‘tail’

Terms for the directions like ‘right’ and ‘left’ are the same as terms of hands – *ɗʁʔnân* ‘right hand’, *ɗʁʔlâ* ‘left hand’. Other directional terms which denote ‘up’ or ‘down’ the hill involve the root *lâm* ‘road’, e.g. *làmk^hìŋ* ‘down the hill/road’, *làmt^hʁʔ* ‘up the hill/road’. The form *t^hʁʔ* in ‘up the hill/road’ is also attested as relator noun meaning ‘over’.

4.1.2 Transparent Compounds

The transparent compound nouns look just the same as NP’s with a noun modifier as there is no marker of dependency between the nouns in the NP (see §5.2.9). However, we can still distinguish compounds from an NP with a noun modifier on syntactic basis. The structure of NP’s with a noun modifier is hierarchical. That is the noun which modifies one noun may in turn be modified by another modifier. However, in compounds the two nouns are structured flatly, in that the two nouns behave like a single constituent within an NP, and one component noun cannot not be modified on its own. §4.1.2.1 discusses compounding of independent noun roots. §4.1.2.2 discusses compounding of noun stems, and §4.1.2.3 discusses compounding that involves a coordinator.

4.1.2.1 Compounding of Roots

Compounding of simple roots to create new meaning is amply attested. Table 72 presents a list of compounds consisting of two noun roots. Table 73 presents a list

of compounds consisting of a noun root and a PCT root. Table 74 presents a list of compounds consisting of a noun root and a verb root.

Note that the compounds consisting of two nouns or a noun and a PCT mostly have an endocentric semantic relation between the components. In noun-noun compounds, the initial noun restricts the reference of the subsequent noun. Thus, *si?tap* ‘restroom’ is a kind of *tap* ‘hut’, *vùηəm* ‘chicken’ is a kind of *ηəm* ‘meat’ (also see §5.2.9 for modification of a head noun by a preceding noun modifier). In noun-PCT compounds, the noun root is the initial element and the PCT is the second element. The PCT acts as the restricting element in these compounds. Thus, *tapdûη* ‘main fireplace’ is a kind of *tap* ‘fireplace’, and *mi?c^{hi?}* ‘bad person’ is a kind of *mi?* ‘person’ (also see §3.2.1.2 for modification of head nouns by subsequent bare PCT’s).

Table 72: Noun-noun compounds

Compound	Meaning	Root 1	Root 2
<i>si?tap</i>	‘restroom’	<i>si?</i> ‘feces’	<i>tap</i> ‘hut’
<i>vântap</i>	‘fireplace’	<i>vân</i> ‘fire’	<i>tap</i> ‘fireplace’
<i>vùηəm</i>	‘chicken’	<i>vù</i> ‘bird’	<i>ηəm</i> ‘meat’
<i>câmtik</i>	‘cooking pot’	<i>câm</i> ‘rice’	<i>tik</i> ‘pot’
<i>hùc^hà</i>	‘puppy’	<i>hù</i> ‘dog’	<i>c^hà</i> ‘child’
<i>vânhi?</i>	‘charcoal’	<i>vân</i> ‘fire’	<i>hi?</i> ‘waste’
<i>k^hùrà</i>	‘skull’	<i>k^hù</i> ‘head’	<i>rà</i> ‘bone’

Table 73: Noun-PCT compounds

Compound	Meaning	Root 1	Root 2
<i>tapdûŋ</i>	‘main fireplace’	<i>tap</i> ‘fireplace’	<i>dûŋ</i> ‘big’
<i>mi?c^hi?</i>	‘bad people’	<i>mi?</i> ‘person’	<i>c^hi?</i> ‘bad’
<i>mi?lîŋ</i>	‘virgin’	<i>mi?</i> ‘person’	<i>lîŋ</i> ‘true’
<i>k^hûŋè</i>	‘soft-spot’	<i>k^hû</i> ‘head’	<i>ŋè</i> ‘soft’

Table 74: Noun-verb compounds

Compound	Meaning	Stem 1	Stem 2
<i>ac^hàŋà</i>	‘follower’	<i>a-c^hà</i> ‘3-child’	<i>ŋà</i> ‘say’???
<i>ak^hûmuk</i>	‘headache’	<i>a-k^hû</i> ‘3-head’	<i>muk</i> ‘ache’
<i>bÿk^hà</i>	‘timber’	<i>bÿ</i> ‘tree’	<i>k^hà</i> ‘to split’
<i>sâmsuk</i>	‘mirror’	<i>sâm</i> ‘appearance’	<i>suk</i> ‘look’

4.1.2.2 Compounding of Noun Stems

One productive pattern of compounding involves nouns which have related meanings. The two nouns refer to the typical members of a class of entities, and the compound denotes the entire class of the object. This pattern of compounding involves some amount of reduplication. Sometimes, part of the second noun is reduplicated as the first component of the compound. Very often though it is unclear whether one of the nouns is an independent noun or not. Moreover, sometimes it seems like as if the two syllables of a word are separated into two parts to make it look like a compound. Table 75 presents compounds of noun stems in which both

stems are attested as independent nouns. Table 76 presents compounds in which only one of the two stems is identifiable as independent noun.

Table 75: Compounds of noun stems - independent nouns

Compound	Meaning	Stem 1	Gloss	Stem 2	Gloss
<i>hìmtî haʔtî</i>	‘family members’	<i>hìm-tî</i>	house-dweller	<i>haʔ-tî</i>	land-dweller
<i>ahuʔ aljaʔ</i>	‘thieves’	<i>a-huʔ</i>	NMLZ-steal	<i>a-ljaʔ</i>	NMLZ-lie
<i>ac^hik alîŋ</i>	‘simple person;’	<i>a-c^hik</i>	‘NMLZ-be good’	<i>a-lîŋ</i>	‘NMLZ-be true’
<i>ap^hoʔ arâ</i>	‘tree brunches’	<i>a-p^hoʔ</i>	‘3-branch’	<i>a-râ</i>	‘3-top’
<i>pînvà rêvâ</i>	‘enemy’	<i>pîŋ-vâ</i>	‘enemy due to adultery-person’	<i>rê-vâ</i>	‘enemy-person’
<i>ap^hân amaʔ</i>	‘own people/clan’	<i>a-p^hân</i>	3-tribe	<i>a-maʔ</i>	‘3-clan’
<i>nɣtî nɣvâ</i>	‘forefathers’	<i>nɣ-tî</i>	1PL.INCL-grandfather	<i>nɣ-vâ</i>	1PL.INCL-father
<i>ic^hù ic^hâ</i>	‘my children’	<i>i-c^hù</i>	1SG-grandchild’	<i>i-c^hâ</i>	1SG-child
<i>ijù ivâ</i>	‘my parents’	<i>i-jù</i>	1SG-mother	<i>i-vâ</i>	1SG-father

Table 76: Compounds of noun stems - one identifiable noun stem

Compound	Meaning	Stem 1	Gloss	Stem 2	Gloss
<i>ak^hat ak^hù</i>	‘clothes and jewelry’	<i>a-k^hat</i>	3-clothe	<i>a-k^hù</i>	???
<i>alî akâ</i>	‘seeds’	<i>a-lî</i>	3-seed	<i>a-kâ</i>	???

<i>acwam</i> <i>arwam</i>	‘clothes and jewelry’	<i>a-cwam</i>	‘NMLZ-dress up’	<i>a-rwam</i>	???
<i>ap^hún at^hà</i>	‘price’	<i>ap^hún</i>	???	<i>at^hà</i>	‘price’
<i>t^hÿvâ làmvâ</i>	‘evil’	<i>t^hÿ-vâ</i>	evil-person	<i>làmvâ</i>	???
<i>atún anún</i>	‘small expenses’	<i>a-tún</i>	‘NMLZ-live’	<i>a-nún</i>	???

There is evidence that the pattern being described involves some reduplication. In Table 77, the form *jàm* ‘panicle’ on *tù* ‘yam’ is clearly a reduplication (since ‘yams’ do not have ‘panicles’). It is perhaps to make the two components sound similar. Similarly, the form *c^hûŋrì* does not have any independent meaning outside this compound.

Table 77: Compounds of noun stem with partial reduplication

Compound	Meaning	Stem 1	Gloss	Stem 2	Gloss
<i>tùjàm</i> <i>c^ha?jàm</i>	‘harvested food item’	<i>tù-jàm</i>	yam-RED	<i>c^ha?-jàm</i>	rice-panicle
<i>c^hûŋrì bÿrì</i>	‘fruits’	<i>c^hûŋ-rì</i>	RED-seed	<i>bÿrì</i>	‘fruit’

Finally, the compounds in Table 78 correspond to verb stems in which the two roots form a single verb stem. Although, the roots *cám* ‘suffer’ and *kâm* ‘believe’ are found elsewhere (thus making *camso?* and *kâmlâm* morphologically complex), the verb *rótó* ‘be happy’ is not known to be morphologically complex.

Table 78: Compounds corresponding to verb roots

Compound	Meaning	Corresponding verb	Gloss
<i>acám aso?</i>	‘hard-working people’	<i>cámso?</i>	‘to suffer’
<i>aró ató</i>	‘happiness’	<i>rótó</i>	‘be happy’
<i>akâm alâm</i>	‘faith’	<i>kâmlâm</i>	‘believe’

4.1.2.3 Compounding with Coordinator

Some of the compounds described above are also found in coordinated forms and express the same meaning. The coordinated forms tend to have only the roots combined with the coordinator *nî* ‘and’, see Table 79.

Table 79: Compound with coordinator

Compound	Coordinated	Gloss	Components
<i>ap^hân ama?</i>	<i>p^hân nî ma?</i>	‘own people/clan’	<i>p^hân</i> ‘tribe’, <i>ma?</i> ‘clan’
<i>ak^hat ak^hù</i>	<i>k^hat nî k^hù</i>	‘clothes & jewelry’	<i>k^hat</i> ‘clothe’, <i>k^hù</i> ‘???’
<i>sìmk^hù nàm^kâ</i>	<i>sìm nî nàm</i>	‘property’	<i>sìm</i> ‘property’, <i>nàm</i> ‘property’

4.2 Prefixes

Only two sets of prefixes are attested on nouns – (i) possessive prefixes and (ii) a kinship term prefix.

4.2.1 Possessive Prefixes

There is a set of prefixes to denote the ‘possessor’ of a noun, which are distinct in form from the personal pronouns. The possessive prefixes are discussed in detail in §3.5.2. Examples (317) and (318) illustrate the first person singular possessive prefix *i-* and the first person plural inclusive possessive prefix *ny-* respectively.

(317) *arábá* *i-púcó* *va?*
this 1SG-navel ABL
‘This (tree) is from my navel.’ [SNR-2-2.16]

(318) *ny-c^hà* *sap* *k-a?*
1PL.INCL-child cry PRES-3
‘Our child is crying.’ (wife saying to husband) [SNR-6-4.39]

4.2.2 Reciprocal Kinship Prefix

There is a special prefix *c^hə-* on kinship terms to indicate that the kinship term refers to a reciprocal kin relation between two individuals, such as between two brothers, between two sisters, between grandmother and grandchildren, etc. Very often kinship terms referring to both individuals are overtly present, as in *c^hə-ŋù* *c^hə-và* ‘couple’ (*ŋù* ‘mother’, *và* ‘father’). In some cases, the first kinship term alone is enough to indicate which kin relations are denoted (indicated with bracket). For instance, *c^hə-vì* refers to the relation between grandmother and grandchild, but only *vì* ‘grandmother’ is overtly mentioned. Table 80 lists some reciprocal kinship terms.

Table 80: Reciprocal Kinship Terms

Form	Gloss	Components
<i>c^hə-ɲù c^hə-và</i>	‘couple’	<i>ɲù</i> ‘mother’, <i>và</i> ‘father’
<i>c^hə-p^hù (c^hə-nâ)</i>	‘brothers’	<i>p^hù</i> ‘elder brother’, <i>nâ</i> ‘younger sibling’
<i>c^hə-ɲà (c^hə-nâ)</i>	‘sisters’	<i>ɲà</i> ‘elder sister’, <i>nâ</i> ‘younger sibling’
<i>c^hə-p^hù c^hə-ɲà</i>	‘brothers and sisters’	<i>p^hù</i> ‘elder brother’, <i>ɲà</i> ‘elder sister’
<i>c^hə-nîhîɲù</i>	‘sisters-in-law’	<i>nîhîɲù</i> ‘sister-in-law’
<i>c^hə-nîhî</i>	‘brothers-in-law’	<i>nîhî</i> ‘brother-in-law’
<i>c^hə-và (c^hə-c^hà)</i>	‘father and son/daughter’	<i>và</i> ‘father’, <i>c^hà</i> ‘child’
<i>c^hə-hù (c^hə-hjaʔ)</i>	‘uncle-nephew/niece’ (sister’s children)	<i>hù</i> ‘uncle’, <i>hjaʔ</i> ‘nephew/niece’
<i>c^hə-hù c^hə-niɲ</i>	‘male in-laws’	<i>hù</i> ‘uncle’, <i>niɲ</i> ‘???’
<i>c^hə-ɲì</i>	‘female in-laws’	<i>ɲì</i> ‘mother-in-law’
<i>c^hə-tî (c^hə-c^hù)</i>	‘grandfather and grandchild’	<i>tî</i> ‘grandfather’, <i>c^hù</i> ‘grandchild’
<i>c^hə-vì (c^hə-c^hù)</i>	‘grandmother and grandchild’	<i>vì</i> ‘grandmother’, <i>c^hù</i> ‘grandchild’

Examples (319) through (321) illustrate a few kinship terms with the prefix *c^hə-*.

(319) ... *c^həp^hù* *mɣ-ni* *aruʔ*
 ... brothers CLF-two like.this

dé-mun *t-aʔ*
 argue-RECIP PST-3
 ‘The two brothers fought with each other like this.’ [SNR-13-1.18]

(320) *nɣhi?* *c^hɛɲà* *véló* *vat* *kà* *e*
 IDL.INCL sisters swing swing go 1PL
 ‘We two sisters will go swing the swing.’ [SNR-12-1.19]

(321) *sè-ɲà* *níà* *ze?-và* *bə* *c^hɛɲù c^həvà*
 crab-FEM and squirrel-MAS DEF couple
 ‘The crab and the squirrel are a couple.’ [SNR-6-4.2]

4.3 Suffixes

There are about twenty suffixes which occur on nouns. These suffixes code various kinds of meanings and do not form a coherent grammatical category. None of these suffixes are grammatically required, instead they add semantic specificity. Moreover, many of these suffixes are transparently related to nouns. For instance, masculine suffix *-và* comes from *và* ‘person/father’, feminine suffix *-ɲà* comes from *ɲà* ‘elder sister’, diminutive suffix *-c^hà* comes from *c^hà* ‘child’, augmentative suffix *-ɲù* comes from *ɲù* ‘mother’, and so on. Several of these suffixes are also found as classifiers. Thus, *và* and *ɲù* are also classifiers, see §3.4.1.2.

The suffixes are sorted based on their meaning and discussed in separate subsections. §4.3.1 describes the suffixes which denote shape and size of the referent of the noun. §4.3.2 describes the suffixes which indicate gender and honorificity of the referent of the noun. §4.3.3 describes the suffixes which denote class/type, direction, and so on. §4.3.4 describes the plural suffix, and §4.3.5 describes a simulative suffix.

4.3.1 Shape and Size Suffixes

There are a few suffixes which denote the shape and size of the referent of the noun. Most of these nouns are free roots. Table 81 presents a list of these suffixes along with example words. The suffixes are also illustrated in sentences in examples (322) through (325). The tone on suffixes *-p^hɣ* and *-p^ha* varies between falling and low tone. The suffix *-t^hum* is found only with one lexical item, and has the same tone as the root. Thus, it is not clear if this suffix has an inherent tone. The suffixes *-ɲù* and *-c^hà* has low tones consistent with their lexical counterparts. Note that the suffixes *-p^hɣ*, *-p^ha*, *-tam* and *-t^hum* are also found as numeral classifiers (see §3.4.1.5).

Table 81: Shape and Size Noun Suffixes

Suffix	Gloss	Source	Example words
<i>-p^hɣ</i>	‘round’	unknown	<i>ak^hû-p^hɣ</i> ‘head’; <i>apik-p^hɣ</i> ‘gizzard’; <i>lùŋ-p^hɣ</i> ‘stone’; <i>pì-p^hɣ</i> ‘fruit type’; <i>swê-p^hɣ</i> ‘onion’; <i>amik-p^hɣ</i> ‘eye’
<i>-p^ha</i>	‘round’ (small objects)	unknown	<i>ɲun-p^ha</i> ‘coin’; <i>ʒəpû-p^hà</i> ‘nipple’; <i>lik-p^hâ</i> ‘perl’; <i>sím-p^hâ</i> ‘salt grain’; <i>hì-p^hâ</i> ‘blood drop’;
<i>-tàm</i>	‘flat object’	unknown	<i>ha?-tàm</i> ‘place’;
<i>-t^hum</i>	‘cylindrical’	unknown	<i>vî-t^hum</i> ‘thigh’;

<i>-jù</i>	‘large’, ‘a lot’, ‘main’	<i>jù</i> ‘mother’	<i>poʔ-jù</i> ‘elephant’; <i>haʔ-jù</i> ‘main village’; <i>nuk-jù</i> ‘main village’; <i>aʒaʔ-jù</i> ‘a lot’; <i>alû-jù</i> ‘very far’; <i>hatjù</i> ‘banyan tree’
<i>-c^hà</i>	‘small’, ‘little bit’	<i>c^hà</i> ‘child’	<i>atî-c^hà</i> ‘3SG-small’; <i>até-c^hà</i> ‘this much small’; <i>haʔ-c^hà</i> ‘small village’; <i>t^haruʔ-c^hà</i> ‘little bit’; <i>mè-c^hà-t^hə</i> ‘little bit’; <i>kikla-c^hà</i> ‘little while’; <i>nânâ-c^hà</i> ‘small kids’; <i>bìc^hà</i> ‘sand grains’;

(322) *t^hʔ* *t-aʔ* *ibá* *lùŋ-p^hʔ* *pê* *poʔ* *t-ə*
set.fire PST-3 that stone-round break burst PST-3

bə *c^hôc^hʔ* *miʔ* *ròkò*
when all person everywhere
‘When (they) set the stone on fire, it burst opened and there were people everywhere.’ [SNR-9-10.38]

(323) *ʒùmik* *nʔ* *sè* *lùŋ-jù* *k^hûn* *nʔ*
stream LOC crab stone-AUG under LOC

túŋ *vʔ* *t-aʔ*
sit come PST-3
‘The crab went and stayed under the large stone in the stream.’ [SNR-6-4.53]

(324) *vík^hà* *nî* *poʔ-jù* *abá* *ʒùk^hú* *k^hú-t^hə*
porcupine and elephant-AUG this stream CLF-one

nʔ *rúŋ* *túŋ* *t-aʔ*
LOC gather sit PST-3
‘Porcupine and Elephant were sitting together in a stream.’ [SNR-5-1.2]

(325) *atî-c^hà* *a-sân* *dʔ* *a*
3SG-DIM NMLZ-good COP 3
‘She (i.e. a kid) will be fine.’ [MOV-1-1.289]

4.3.2 Gender and Honorificity Suffixes

The suffix *-ɲù*, which we have seen as the augmentative marker above, is also used to mark the referent of a noun/pronoun as female. Moreover, it has a sense of honorificity. The suffix *-vâ* is used to mark the referent of a noun/pronoun as male. It also has a sense of honorificity. The suffix *-ɲâ* is also used to mark the referent of a noun as young female. It is not clear if it has a sense of honorificity. The suffixes *-vâ* and *-ɲâ* are also found with personified animal names. The class-term affixes on the animal names, if any, are dropped when used with these suffixes. Thus, *vəp^hî* ‘bird type’ becomes *p^hî-vâ*, and *ʒeʔk^hî* becomes *ʒeʔ-vâ* (*k^hî* probably means ‘wild’, as in *ɲap^hî* ‘wild banana’). There are two suffixes *-pùŋ* and *-lâ* for marking an animal referent as male. The choice of these two suffixes does not seem to correspond to any classes of animals. Rather, which type of animal takes which of these two suffixes needs to be individually specified. The above mentioned suffixes are listed along with example expressions in Table 82.

Table 82: Gender and Honorificity Noun Suffixes

Suffix	Gloss	Honorific	Source	Example words
<i>-ɲù</i>	‘female’	YES	<i>ɲù</i> ‘mother’	<i>atî-ɲù</i> ‘she’; <i>səɾâ-ɲù</i> ‘madam’; <i>mé-ɲù</i> ‘cow’; <i>anâ-ɲù</i> ‘younger sister’;

-vâ	‘male’	YES	vâ ‘father’	atî-vâ ‘he’; sərâ-vâ ‘sir’; ze?-vâ ‘squirrel-male’; p ^h î-vâ ‘bird.type-male’;
-nâ	‘female’ (young)	???	nâ ‘elder sister’	rî-tî-nâ ‘sky lady’; sè-nâ ‘crab-female’;
-pùŋ	‘male’ (animal)		unknown	kîn-pùŋ ‘he-goat’; mé-pùŋ ‘bullock’; vù-pùŋ ‘rooster’;
-là	‘male’ (animal)		unknown	hù-là ‘male dog’;

4.3.3 Type, Direction, and Other Suffixes

The suffix *-tî* indicates that the noun or pronoun refers to a person who is associated with the referent of the noun, mostly as a dweller or an owner of the referent. The suffix *-lî* is added to refer to the species or class of the referent of the noun. Both *-tî* and *-lî* are also attested as nominalizers (see §6.7.2.3 and §6.7.2.5). The suffix *-he* mostly occurs with classifiers and adds the sense of ‘other’ or ‘another’.

The suffix *-ka* refers to other half of the entity referred to by the noun. Tone on both *-he* and *-ka* varies between high and falling. The suffixes *-ku?* and *-mù* are used with nouns/classifiers denoting river and stream; the former refers to the upper side of

the river and the latter refers to the lower side of the river/stream. The suffixes *k^hɪŋ* and *t^hɣ?* have reference to terrain, where the former refers to the side which is down the hill and the latter refers to the side which is up the hill with reference to a particular location. Except for the suffix *-lî*, which comes from *lî* ‘seed’, the source of the suffixes is unknown. Table 83 lists and exemplifies the above mentioned suffixes.

Table 83: Type, direction, and other Noun suffixes

Suffix	Gloss	Example words
<i>-lî</i>	‘kind’	<i>mi?-lî</i> ‘humankind’; <i>rik-lî</i> ‘louse kind’; <i>tù-lî</i> ‘vegetables’; (cf. <i>tù</i> ‘yam’) <i>c^ha?-lî</i> ‘rice kind’; (cf. <i>c^ha?</i> ‘rice’)
<i>-tî</i>	‘person’	<i>rɣ-tî</i> ‘person from sky’; <i>hìm-tî</i> ‘person at home’ (i.e. wife); <i>ha?-tî</i> ‘villagers’; (<i>ha?</i> ‘earth, land’) <i>ahé-tî</i> ‘other person’; (<i>hé</i> ‘other’) <i>hɪŋk^hó-tî</i> ‘some people’; <i>rím-tî</i> ‘farm owner’; (<i>rím</i> ‘farm’)
<i>-he</i>	‘other’	<i>pá-hé</i> ‘another year’; (<i>pá</i> ‘CLF:year’) <i>lî-hé</i> ‘other kind’; (<i>lî</i> ‘CLF:kind’) <i>tá-hé</i> ‘elsewhere’; (<i>tá</i> ‘CLF:place’) <i>mɣ-hé</i> ‘other’; (<i>mɣ</i> ‘CLF:generic’) <i>mi?-hé</i> ‘other people’; (<i>mi?</i> ‘person/people’)

		<i>nap-hé</i> ‘another day’; (<i>nap</i> ‘day’)
<i>-ka</i>	‘half, side’	<i>k^há-kâ</i> ‘one half’; (<i>k^hâ</i> ‘CLF:split.piece’) <i>t^ha?-ka</i> ‘one half’; (<i>t^ha?</i> ‘CLF:split.piece’) <i>na?-ká</i> ‘other side’; (<i>na?</i> ‘CLF:side/bank’) <i>t^hân-ka</i> ‘other side of face’; (<i>t^hân</i> ‘face’) <i>c^hâm-kâ</i> ‘other side’; (<i>c^hâm</i> ‘side of chest’) <i>t^hê-kâ</i> ‘one of the sides of roof’; (<i>t^hê</i> ‘???’) <i>mâ-ká</i> ‘front side’; (<i>mâ</i> ‘front’)
<i>-ku?</i>	‘up the stream’	<i>k^hú-ku?</i> ‘up the stream’; (<i>k^hú</i> ‘CLF:stream’)
<i>-mù</i>	‘down the river’	<i>k^hú-mù</i> ‘down the stream’; (<i>k^hú</i> ‘CLF:stream’)
<i>-k^hìŋ</i>	‘down the hill’	<i>lâm-k^hìŋ</i> ‘down the road/hill’; (<i>lâm</i> ‘road’)
<i>-t^hɣ?</i>	‘up the hill’	<i>lâm-t^hɣ?</i> ‘up the hill/road’;

4.3.4 Plural Suffix *-hɣ*

The suffix *-hɣ* indicates plurality in the reference of a noun. The plural suffix is atonal in that it copies the pitch of the noun root. Nouns are not obligatorily marked for number. Nouns may have plural reference even without being marked with the plural suffix *-hɣ*. The plural suffix follows all other noun suffixes described above when they co-occur.

- (326) *i-c^hù* *i-c^hà-hɣ* *te?* *l-at*
1SG-grandchild 1SG-child-PL listen IMP-2PL
‘My children listen.’ [SNR-15-1.70]

- (327) *miʔ-hɣ* *bə* *irə* *mə* *imə* *bà* *a-vín* *vɣ*
 person-PL DEF that ABL then REST NMLZ-return come
 ‘People returned from there then only.’ [SNR-8-1.50]

The plural marker is also found on pronouns like the demonstrative pronouns, such as *arəhɣ* ‘these’, *irəhɣ* ‘those’. It also occurs on nominalized nouns, as shown in (328).

- (328) *ʒəsuʔ* *kámə* *a-dí* *ʒùn-tí-hɣ* *nɣ* *ɲà* *kuʔ* *t-aʔ*
 Jesus ERG 3-back chase-NMLZ-PL LOC say give PST-3
 ‘Jesus told his followers.’ [MOV-4-1.268]

4.3.5 Simulative Suffix *-rɣ*

The suffix *-rɣ* adds the sense that something is like the referent of the base noun in looks or some other way, exemplified in (329) through (331). This suffix is also realized as a particle through reduplication, *rɣrɣ*, as shown in (332).

- (329) *ʒékə* *bə* *a-tʰân* *ví* *tʰân-rɣ* *kámə* *ɲé* *a*
 now FOC 3-face monkey face-SIM ERG win 3
 ‘Now the monkey face (people) will win.’ [SNR-15-1.27]

- (330) *ʒékə* *nîrúm-rɣ* *nà*
 now 1PL.EXCL-SIM PFV
 ‘Now like us.’ [SNR-8-1.7]

- (331) *irə-rɣ* *rɣdûŋ* *tísú* *nâm* *nɣ* *vín* *vɣ*
 that-SIM God with LOC return come
 ‘Like that return to God.’ [MOV-4-1.250]

- (332) *rɣkʰuʔ* *ikə* *vəkŋî* *rip* *rɣrɣ* *ibə*
 top there wild.pig nest like that
- vikrə* *hwé* *cʰí* *t-ə* *ɲà*
 quickly build DUR PST-3 hearsay
 ‘(He) built something like the nest of a wild pig up there.’ [SNR-11-1.38]

CHAPTER V

NOUN PHRASE

This chapter deals with the structure of the noun phrase. The types of elements and their relative position with respect to the head noun and with respect to each other are outlined and illustrated in §5.1 based on the attested data. Then each of the individual elements of the NP is discussed in detail in §5.2. I start out with the possible candidates for the head position of an NP in §5.2.1, and then talk about the various modifying elements of the NP such as the definite article (in §5.2.3), the quantifiers (in §5.2.4), the demonstrative modifiers (in §5.2.5), the interrogative modifiers (in §5.2.6), the numeral modifiers (in §5.2.7), the PCT modifiers (in §5.2.8), the noun/NP modifiers (in §5.2.9), and the relative clause (in §5.2.10). The case post-positions, like the ergative, locative, ablative, dative, etc. are discussed in §5.2.11. Finally, §5.3 describes co-ordinated NP's.

5.1 Structure of the Hakhun NP

The positions of the elements of an NP in Hakhun are presented in Table 84. In this schema, the head of the NP goes in position 0. Note that four of the NP elements, i.e. the demonstratives, numerals, quantifiers, and the property concept terms (PCT), may occur either preceding the head or following the head of the NP. However, there are some important things to note. First, there are differences in the forms of these elements which correspond to whether they precede or follow the head. For instance, demonstratives are usually found in their long form and without the definite marker *bə* when they precede the head noun (see §3.5.8 on demonstratives). We find *a-* prefixed PCT's (PCT1) and compound PCT's (PCT3) either preceding or

following the head noun, but we find bare PCT's (PCT2) only following the head noun. Moreover, there is strong tendency for elements like the numerals to follow the head noun, though they are found either preceding or following. Also notice that α -prefixed PCT's (PCT1) and the numerals can change their order, indicated with dashed lines between PCT1 and Numeral in the schema, when they follow the head noun.

Table 84: Hakhun NP structure

-2	-1	0	1	2	3	4	5
Demonstrative	PCT1	Head	PCT1	Numeral	Case	Definite	Focus
Numeral	PCT3		PCT3 PCT2	Quantifier	Demonstrative		
Quantifiers	Noun						
Relative Clause Interrogative words							

In the following sub-sections, I illustrate the position of each NP element with respect to the head noun and with respect to each other. These sections are organized according to the position classes presented in the schema above. Moreover, the opposite positions (such as -1 and 1, and -2 and 2) are discussed in the same sub-section since they often involve the “same” elements. For instance, the positions -1 and 1 involve the PCT's, the positions -2 and 2 involve the numerals and the quantifiers. More detailed discussion of each element of the NP is provided in a subsequent section §5.2.

5.1.1 Elements in the First Positions

The elements in position -1 and 1 are illustrated in this section. The elements which occur in these positions are (i) PCT's, (ii) nouns/NP, (iii) relative clauses (RC), and (iv) interrogative words.

We have seen previously in §3.2 that the property concept terms are found in two forms: *a-* prefixed form and bare form, and they have different distributions.

Moreover, there are also compound PCT's consisting of a noun root and a PCT root.

All of these different forms of the PCT's modify nouns. The *a-* prefixed PCT's

mostly precede the head noun, though they are also found occasionally following the

head noun. In example (333), the *a-* prefixed PCT *dûŋ* 'big' precedes the head noun

hók^hám 'king'. In example (334), the *a-* prefixed PCT *dûŋ* follows the head noun

c^hipk^hərâ 'ant'.

- (333) *[a-dûŋ hók^hám hə] tûŋ ku? k-ì bə*
 NMLZ-big king DAT tax give PRES-1PL DEF
- tîsû tərâ lâm nʻ k^hʻʻ? k-ə le*
 God law path LOC right PRES-3 Q
- 'Is it right in God's law to give tax to the big king (emperor)?' [MOV-3-1.249]

- (334) *[c^hipk^hərâ a-dûŋ] ke? t^hik t-ə bə*
 ant NMLZ-big go CAUS PST-3 when
- 'When (they) sent big ants.....' [SNR-7-1.43]

Some compound PCT's are found preceding the head noun and some are found following the head noun. There are not enough instances of these compound PCT's to see any tendency in their order relative to the head noun. In example (335),

the compound PCT *p^hô^sân* ‘beautiful’ follows the head noun *təhja?* ‘girl’, and in example (336) the compound PCT *sanma?* ‘bad’ precedes the head noun *dx?sum* ‘work’.

(335) [*təhja?* *p^hô^sân* *m^h-t^hə*] *sit* *lx?-mə*
 girl beautiful CLF-one marry NF-1SG-NF
 ‘(I) will marry a beautiful girl, and then....’ [SCN-5-6.1]

(336) *arə* *mi?* *rikhe?* *rô* [*sânma?* *dx?sum*] *ləpk^hì*
 this person kill PURP bad work see

tə *m-ɣ?*
 PST NEG-1SG
 ‘In order to kill this person, (I) did not see any bad work (done by this man).’
 [MOV-4-1.68]

The bare PCT’s always follow the head noun. In example (337), the bare PCT *sân* ‘good’ follows the head noun *ha?* ‘soil’.

(337) *a-lî* *p^hât^hət^hə* *bə* [*ha?* *sân* *nɣ*] *zà* *k-a?*
 3-seed some DEF soil good LOC fall PRES-3
 ‘Some seeds fall on good soil.’ [MOV-2-1.142]

Modifying nouns always precede the head noun as shown in example (338), where the proper noun *c^hù^hnù* ‘Chunyu’ occurs preceding the head noun *ha?* ‘land’.

See §5.2.9 for more discussion on modifying nouns and noun phrases.

(338) [*c^hù^hnù* *ha?* *nɣ*] *kà* *t-i?* *bə* *c^hù^hnù* *mì*
 PN land LOC go PST-1PL DEF PN ADD

ləp *ván* *m-i?*
 get cut NEG-1PL
 ‘When (we) went to Chunyu’s place, we did not get to kill Chunyu (people) either.’ [SNR-15-1.7]

Relative clauses (RC) are mostly headless relative clauses in Hakhun, though rarely the head noun is overtly mentioned following the RC. See §5.2.10 for detailed discussion on relative clauses. In example (339), the RC in the bracket precedes the head noun *và* ‘person’.

- (339) *[ŋà iru? p^hʔ t^hŋ]* *và ibá a kámá*
 1SG like.that eat NMLZ person that this ERG
t^həm dʔ t-a?
 FOC COP PST-3
 ‘The person who would have eaten me like that was this one.’ [SNR-9-8.9]

Interrogative words are also found preceding the head noun, as shown in example (340) where the interrogative pronoun *hwé* ‘who’ is found preceding the noun *sâmla* ‘image’, and *mún* ‘name’.

- (340) *ará kûmpô-p^hâ kə [hwé sâmla], [hwé mún] nî*
 this coin-round LOC who image who name Q
 ‘Whose face, whose name is on this coin?’ [MOV-3-1.252]

Note RCs and Interrogative words are not found to cooccur with any other NP elements.

5.1.2 Elements in the Second Positions

The elements in positions -2 and 2 are illustrated in this section. There are three elements which occur in position -2: (i) demonstratives, (ii) numerals, and (iii) quantifiers, and there are two elements which occur in position 2: (i) numerals, and (ii) quantifiers. Note that numerals and quantifiers can occur either in -2 or 2. The demonstratives, on the other hand, are found wither in -2 or in 3.

Examples (341) and (342) illustrate pre-head **demonstrative** modifier preceding a PCT and a modifying NP respectively. In example (341), the demonstrative *abá* ‘this’ precedes the PCT *asân* ‘good’, which precedes the head noun *zapri* ‘word/message/news’. In example (342), the demonstrative *ibá* ‘that’ precedes the modifying NP *ac^hac^húŋ* ‘his shirt’, which precedes the head noun *dap* ‘pocket’.

(341) [*abá a-sân zapri*] *luk va? twè t-a?*
 this NMLZ-good word PN ABL take PST-3
 ‘These good words are taken from Luke.’ [MOV-1-1.136]

(342) [*ibá a-c^hac^húŋ dap va?*] *ibá sìm kùm ibá*
 that 3-shirt pocket ABL that salt.piece that

vikrə twè ku? t-ə ŋà
 quickly take give PST-3 hearsay
 ‘(He) took out the piece of salt from the pocket of his shirt and gave it (to them).’ [SNR-11-1.25]

The **numerals** have a strong tendency to occur in post-head position, rather than in pre-head position. In the pre-head position, numerals are found preceding the PCT’s and the modifying nouns, and in the post-head position they are found following the PCT’s. In example (343), the numeral *ic^h vàni* ‘twelve’ precedes modifying NP *zêsu?* ‘Jesus’, which precedes the head noun *c^hàŋà* ‘follower’. In example (344), the numeral *mât^h* ‘one’ follows the PCT *p^hôsân* ‘beautiful’, which in turn follows the head noun *təhja?* ‘girl’.

(343) [*ic^h và-ni zêsu? c^hàŋà*] *kə va?] atī-và*
 ten CLF-two Jesus follower LOC ABL 3SG-MAS

mì nó t-a?
 ADD be.part PST-3
 ‘He was a part of the twelve disciples of Jesus.’ [MOV-3-1.309]

(344) [*təhja? p^hôsân m̂t^hə*] *sit l-x?-mə ...*
 girl beautiful CLF-one marry NF-1SG-NF
 ‘(I) will marry a beautiful girl and then...’ [SCN-5-6.1]

Note that the order between the post-head PCT1 and the Numeral may vary, as illustrated below. In example (345), the *a-* prefixed PCT *dûŋ* ‘big’ follows the numeral *m̂t^hə* ‘one’, which in turn follows the head *mi?* ‘person’.

(345) *d̂ a kámí i-t^hx? n̂ [mi? m̂t^hə a-dûŋ]*
 however 1SG-over LOC person CLF-one NMLZ-big

v̂ r-a
 come PROX.NON.PST-3
 ‘However, a person greater than me is coming.’ [MOV-1-1.172]

The **quantifiers** are also found either in pre-head or in post-head position. In pre-head position, they can precede the PCT’s and the modifying nouns, and in the post-head position they can follow the PCT’s. In example (346), the quantifier *t^húmlà* ‘all’ precedes the PCT *sânma?* ‘bad’, which in turn precedes the head noun *zapri* ‘matter’. In example (347), the quantifier *ĥŋk^hótí* ‘some’ follows the PCT *sân* ‘good’, which in turn follows the head noun *mi?* ‘person’.

(346) *imá [t^húmlà sâmma? zapri] iru? d̂*
 then all bad matter like.that happen

imá nu?rúm vuk v̂
 if 2PL safe come
 ‘When all the bad things happen like that, you will be saved.’ [BT-57-4.4]

- (347) [mi? sãn hîŋk^hótî] vɣ̣ t^hə r-a
 person good some come PROX.PST PROX.NON.PST-3
 ‘Some good people came.’ [Elic-7-118.1]

5.1.3 Elements in the Third Position

The elements in position 3 are illustrated in this section. The elements found in this position are the case postpositions and the demonstratives. The demonstratives and the case markers have not been found to co-occur in the database.

Examples (348) and (349) illustrate **demonstratives** occurring following numerals and quantifiers respectively. In example (348), the demonstrative *ibá* ‘that’ occurs following the numeral *k^hû^he?* ‘one head’, which occur following the head noun *k^hû* ‘head’. In example (349), the demonstrative *ibá* ‘that’ follows the quantifier *bî* ‘all’, which in turn follows the head noun *zùbê* ‘ghost’.

- (348) *imá* [k^hû k^hû-t^he? *ibá*] k^hàkâ ha?-c^hà nɣ̣
 then head CLF-one that half place-DIM LOC

k^hàkâ ha?-ŋù nɣ̣ *iru?* p^hàn t-i?
 half place-AUG LOC like.that share PST-1PL
 ‘Then, that one head, one half for the small village and the other half for the big village, (we) divided like that.’ [SNR-15-1.107]

- (349) [zùbê bî *ibá*] vɣ̣ lə ŋâme?
 ghost all that come NF NF

ibá pí vɣ̣ t-ə ŋà
 that carry come PST-3 hearsay
 ‘All the ghosts came and carried him away (to their place).’ [SNR-8-1.10]

Examples (350) and (351) illustrate **case markers** following numerals and quantifiers respectively. In example (350), the ergative marker *kámá* occurs following

the numeral *vàt^hə* ‘one person’, which in turn occurs following the head noun *ac^hàŋà* ‘his followers’. In example (351), the locative *nɣ́* follows the quantifier *t^húmlà* ‘all’, which in turn follows the head noun *nuʔrûm* ‘you (pl)’.

(350) [*a-c^hàŋà* *và-t^hə* *kámá*] *sɣ́-p^hɣ?* *a*
 3-follower CLF-one ERG sell-eat 3
 ‘One of the followers will betray (him).’ [MOV-1-1.58]

(351) *t^hɣ-và* *kámá* [*nuʔrûm* *t^húmlà* *nɣ́*] *kúmló*
 Satan-MAS ERG 2PL all LOC tempt

ɲoʔ *k-aʔ*
 want PRES-3
 ‘Satan wants to tempt you all.’ [MOV-3-1.291]

5.1.4 Element in the Fourth Position

The elements in position 4 are illustrated in this section. There is only one element in this position, the **definite marker**. It has been attested following the case postpositions as illustrated in the following examples. In example (352), the definite marker *bə* follows the ergative marker *kámá*. In example (353), the definite marker *bə* follows the locative marker *nɣ́*.

(352) [*ví* *kámá* *bə*] *kəp* *m-aʔ* *nà*
 monkey ERG DEF get NEG-3 PFV
 ‘The monkey did not get (the drum).’ [SNR-7-1.56]

(353) [*t^hím* *mûŋ* *k^hûn* *nɣ́* *bə*] *puŋ* *zà* *vɣ̀*
 pond inside under LOC DEF SS fall come

t-ə *ŋà*
 PST-3 hearsay
 ‘(The sister) fell into the pond “pung” (making a “pung” noise).’ [SNR-12-1.29]

5.1.5 Elements in the Fifth Position

The elements which occur at the phrase final position are the **focus particles** like the additive *mì* ‘also’, restrictive *bà* ‘only’, and the replacive *t^həm* ‘contrast’. In example (354), the additive occurs following the definite marker *bə*, and in (355) it occurs following the demonstrative *ibə* ‘that’.

(354) [*arə mi? bə mì*] *ʒəsu? nām nʻ dʻ t-a?*
this person DEF ADD Jesus with LOC COP PST-3
‘This man was also with Jesus.’ [MOV-4-1.18]

(355) [*irə a-c^hà-hʻ ibə mì*] *pî m-a? nà*
that 3-child-PL that ADD alive NEG-3 PFV
‘Those children were also not alive.’ [SNR-9-6.13]

5.2 Elements of an NP

The previous section, §5.1, has introduced all the modifying elements found in the NP and the order in which these elements occur relative to the head noun as well as relative to each other. In this section, I discuss the morphosyntactic properties of each element, including the head, in more detail. I start with the head in the following sub-section.

5.2.1 The Head of NP

Different kinds of lexical, phrasal, and clausal elements may function as the head of an NP, besides the usual head – the noun. In §5.2.3 through §5.2.10, I discuss noun heads and their modification by various elements. In this section, I look at elements other than nouns which function as the head of a NP.

5.2.1.1 Numeral Heads

Numerals, prefixed with classifiers, can be used anaphorically as NP's by themselves, such that they may function as arguments. In example (356), the numeral *m̂tʰə* 'one' refers to a prophet in this context, and it is being used as the S argument of the verb *v̂* 'come'. Note there are no other elements in that NP. In example (357), the numeral *m̂tʰə* 'one' refers to a mat in that context, and it is being used as the P argument of the verb *r̂* 'want'. Note again, there are no other elements in that NP.

- (356) *zon kámá i-dî n̂ [m̂tʰə] v̂ r-a*
 PN ERG 1SG-back LOC CLF-one come PROX.NON.PST-3
- ŋâ t-ə bə iká le ahé-tí v̂*
 say PST-3 DEF here or other-person come
- bám túŋ k-ì*
 wait sit PRES-1PL
 'John (said) that there is one (prophet) coming after him, is (he) here or are we waiting for another one.' [MOV-2-1.122]

- (357) *imá [m̂tʰə] le? lí r̂ k-a? ŋâ*
 then CLF-one again more need PRES-3 say
- l-ə-mə há m̂cʰa-tʰə le? cán ku? t-a?*
 NF-3-NF mat CLF-DIM-one again spread give PST-3
 'Needing one more (mat), (they) spread a small mat again.' [SNR-9-8.30]

5.2.1.2 PCT Heads

Property concept terms also function as arguments by themselves in their *a*-prefixed form. In example (358), the *a*-prefixed PCT *adûŋ* 'big' is functioning as the object argument of the verb *kəp* 'get'. In example (359), two PCT's *sânma?* 'bad' and

(360) *dʂ a kámí [ɲà nʂ suk-heʔ-tí bə] mǎmá*
 however 1SG LOC show-keep-NMLZ DEF a.lot

cámná a
 suffer 3

‘However, the one who will betray me will suffer a lot.’

(361) [*nʂ a-cʰín tʰɪŋ mʂ-tʰə]* *túŋ k-aʔ*
 2SG NMLZ-ask NMLZ CLF-one EXIST PRES-3
 ‘There is one thing that I need to ask you.’ [SNR-9-1.1]

Examples (362) and (363) illustrate clauses with finite verbs functioning as the head of an NP. In example (362), the clause inside the brackets consists of the verb *kuʔ* ‘give’ marked with the inflected present tense operator *ki*, its Theme argument *túŋ* ‘tax’, and its Recipient argument *adúŋ hókʰám hə* ‘to the big king’. The whole clause is then marked with the definite marker *bə* and functions as the S argument of the verb *kʰɿʔ* ‘be right’. In example (363), the clause inside the brackets consists of the locative predicate *aká* ‘here’ followed by the copula *dʂ* ‘be’, the inflected present tense operator *ki*, and the subject NP *nîrûm* ‘we exclusive’. The whole clause is then marked with the definite marker *bə* and functions as the S argument of the verb *sân* ‘be good’.

(362) [*a-dúŋ hókʰám hə túŋ kuʔ k-ì]* *bə*
 NMLZ-big king DAT tax give PRES-1PL DEF

tîsû tərâ lâm nʂ kʰɿʔ k-ə le
 God law path LOC right PRES-3 Q

‘Is it right in God’s law to give tax to the big king?’ [MOV-3-1.294]

- (363) *[nîrûm aká d̥ k-ì] bə báté*
 1PL.EXCL here COP PRES-1PL DEF how.much
- sân k-ə nî*
 be.good PRES-3 Q
 ‘How great is it that we are here?’ [MOV-2-1.246]

5.2.2 Unmodified Head

Pronouns and Proper Names are the categories which usually function as the sole member of an NP. However, we do also find common nouns as the sole members of an NP. These NP’s are usually indefinite or non-referential. In example (364), the object argument of the verbs *kəp* ‘get’ consists of only the noun *mi?* ‘person’. The context of this sentence is that a family of ghosts finds a coffin floating on the river, and when they open it they find a man inside it. Thus, in this context the human character is new to the discourse. In example (365), the subject NP of the verb *túŋ* ‘sit’, namely *mi?* ‘person’, and the object NP of the verb *hwé* ‘build’, namely *tap* ‘hut’, consist of just the nouns. In this context, both these nouns are non-referential since they are not referring to any specific people or hut. Similarly, in (366) the NP consisting of *càm* ‘rice’ is non-referential. In example (367), the P argument of the verb *p^hŋ* ‘wear’ consist of the noun *c^heka?*, and it has indefinite reference in this context.

- (364) *mi? d̥ l-ə-mə ei mi? kəp t-i?*
 person COP NF-3-NF EXCLAM person get PST-1PL
- mi? kəp t-i? ŋâ l-ə-mə*
 person get PST-1PL say NF-3-NF
 ‘That being a man, (they shouted), “(We) got a man, (we) got a man”.’
 [SNR-11-1.17]

(365) *cèdà* *ibá* *ɲé* *l-iʔ-mə* *miʔ* *tún* *rô*
 clear.field that finish NF-1PL-NF person sit PURP

tap *hwé* *k-ì*
 hut build PRES-1PL
 ‘After finishing clearing the field, (we) build hut for people to sit.’ [SNR-1-1.6]

(366) *càm* *tòà-tí* *kámá* *càm* *pwé* *c^haʔ* *c^hí*
 rice EXIST-NMLZ ERG rice cook eat DUR
 ‘Those who had rice ate rice.’ [SNR-13-1.24]

(367) *c^hêkaʔ* *tə-p^hɣ* *mɣ* *k-ɣ* *o*
 bangle PERM-wear first PRES-1SG EXCLAM
 ‘Let me wear bangles first.’ [SNR-12-1.28]

5.2.3 Definite Article

The form of the definite article is *beʔ* when it is stressed and *bə* when it is unstressed. The reduced form *bə* is produced with variable pitch, which is the same as the pitch of the preceding lexical item. Thus, it is atonal. The behavior of the definite article varies across types and functions of NP’s. Thus, we will be looking at different kinds of NP’s and different functions of those NP’s in a clause.

5.2.3.1 On Pronouns

Among the personal pronouns, the definite article commonly occurs with the first person singular and the second person singular pronoun when they function as the A or S argument. It is not very common with other pronouns and it is also not usually found with first person singular and the second person singular pronoun when they function as the P argument. Thus, on pronouns the definite *bə* looks like a subject

marker. See §8.4.1 for a discussion on alignment. Table 85 shows the frequency of *bə* with different pronouns in different grammatical functions.

Table 85: Definite *bə* on pronouns

	A	S	P	Total tokens of ASP
1SG	52	8	0	116
1PL (incl/excl)	2	6	0	44
2SG	41	12	0	97
2PL	1	1	0	25
3SG	4	8	4	54
3PL	1	0	0	29

5.2.3.2 On Demonstratives

Demonstrative pronouns which function as arguments by themselves always occur with the definite marker. In example (368), the proximal demonstrative *a* marked with the definite *bə* functions as an S argument of the verb *hûŋ p^ho? kà* ‘grow’, and in example (369), the same definite marked demonstrative functions as the P argument of the verb *bi? p^hɣ?* ‘cook and eat’ and *c^ha?* ‘eat’.

(368) *abó i-púcó va? hûŋ p^ho? kà t-a?*
 this 1SG-navel ABL appear grow go PST-3
 ‘This has grown out of my navel.’ [SNR-2-2.5]

- (369) *nî-nuk* *kámá* *p^hùm* *ný* *mì* ***abá*** *bi?* *p^hɣ?*
 1PL.EXCL-villager ERG curry LOC ADD this cook eat
- k-i,* *càm* *cup* *rô* *mì* ***abá*** *c^ha?* *k-ì*
 PRES-1PL rice eat.with PURP ADD this eat PRES-1PL
 ‘Our people cook and eat this in curry, (we) eat this with rice as well.’
 [SNR-11-1.32]

Since the demonstrative pronouns are bound forms, they must take the definite marker. However, the long distal demonstrative pronoun can take the ergative marker *kámá* instead of the definite marker when referring to human beings. Consider the following examples.

- (370) ***irá*** ***kámá*** *cà* *rì* *k-ə* *nî*
 that ERG what do PRES-3 Q
 ‘What has that one done?’ [MOV-4-1.63]
- (371) ***irá*** ***kámá*** *a-c^hùc^ha?* *rì* *r-u*
 that ERG NMLZ-deceive AUX INV.NON.PST-2SG
 ‘He will deceive (you).’ [MOV-3-1.250]

5.2.3.3 On Nouns

The definite article is also attested on proper names. There are seventeen instances of the proper noun *zêsu?* ‘Jesus’ being marked with *bə* in the database.

- (372) ***zêsu?*** ***bə*** *a-hìm* *ný* *kà* *l-ə-mə* *càm*
 PN DEF 3-house LOC go NF-3-NF rice
- c^ha?* *rô* *túŋ* *kà* *t-a?*
 eat PURP sit go PST-3
 ‘Jesus went to his house and sat to eat rice.’ [MOV-2-1.76]
- (373) *atî* ***kámá*** ***barabas*** ***bə*** *hap-he?* *t-a?*
 3SG ERG PN DEF open-keep PST-3
 ‘He released Barabbas (from prison).’ [MOV-4-1.100]

On common nouns, *bə* marked NP's are interpreted as definite, whereas unmarked NP's are interpreted as indefinite. Examples (374) through (379) illustrate NP's marked with *bə* which have an identifiable referent. In example (374) (b), the definite marked NP *təhja? rwéjê bə* 'the young girl' has an identifiable referent which has a prior mention in the previous sentence. In example (375), the referent of the definite marked NP *k^hi?hî bə* 'the deer' is one of the two leading characters in the story, and thus identifiable in this context. Similarly, in (376) the referent of the NP *sa?nù bə* 'the tiger' is one of two leading characters, and thus identifiable in this context. The context for example (377) is that Jesus is explaining how the soil affects the fruits that the trees bear. The referent of the NP *bə?rî bə* 'the fruit' here refers to the fruits of those seeds which grow next to thorns. Thus, it is identifiable which fruit we are talking about in this context. In example (378), the NP *mi?hɣ bə* 'the people' refers to the villagers who chased the ghosts and killed them. In example (379) the NP *ac^hàhɣ bə* 'the children' refers to the children of the tortoise, which is one the two leading characters in the story. Thus, all of these *bə* marked NP's have an identifiable referent within the given contexts.

(374) (a) *ha?súŋ mɣ-t^he? iránɣ təhja? rwéjê*
village CLF-one there girl young
'There was a young girl in a village.' [SNR-9-6.1]

(b) [*təhja? rwéjê bə*] *rɣ-tî-ŋà dɣ t-a?*
girl young DEF sky-person-FEM COP PST-3
'The young girl was a sky lady.' [SNR-9-6.2]

(375) [k^hiʔhî bə] bwê c^hwé l-ə-mə rɣ?
 deer DEF be.tired run NF-3-NF breathe
 m-aʔ-mə rí t-ə ɲà
 NEG-3-NF die PST-3 hearsay
 ‘Getting tired from running, not being able to breathe, the deer died.’
 [SNR-4-4.10]

(376) [saʔ-ɲù bə] toʔtoʔ túŋ t-aʔ
 tiger-FEM DEF SS sit PST-3
 ‘The tiger just sat there.’ [SNR-3-1.7]

(377) [bɣ̀rì bə] bárá rɣ̀ɲiʔ kə m̀ì cím m-aʔ
 fruit DEF which day LOC ADD be.ripe NEG-3
 ‘The fruits will never be ripe.’ [MOV-2-1.163]

(378) [miʔ-hɣ bə] irámá imá bà a-vín
 person-PL DEF from.there then REST NMLZ-back

vín vɣ̀
 return come
 ‘Only then the people returned from there.’ [SNR-8-1.50]

(379) [a-c^hà-hɣ bə] kwâmlâ a-ɲù bə a-túŋ túŋ
 3-child-PL DEF everywhere 3-mother DEF 3-sit RED
 ‘The children were everywhere, and the mother was just sitting there.’
 [SNR-4-6.1]

5.2.3.4 On NP’s with Quantifiers

The use of *bə* following quantifiers and numerals gives us a specific reading,

i.e. we are referring to a specific subset of a group. In example (380), the NP *ali*

p^hât^hət^hə bə ‘some of the seeds’ refers to a specific set of all the seeds. Similarly, in

(381) the NP’s *vât^hə* ‘one (person)’ each refer to the subset of the group of two human

beings.

(380) [a-lĩ p^hât^hət^hə bə] ha? sâñ nʻ
 3-seed some DEF soil good LOC

zà k-a?
 fall PRES-3

‘Some of the seeds fall on good ground.’ [MOV-2-1.142]

(381) [vâ-t^hə bə] p^harasi, [vâ-t^hə bə]
 CLF-one DEF PN CLF-one DEF

tûŋ-sí-tĩ dʻ t-a?
 tax-collect-NMLZ COP PST-3

‘One was a Pharisee, and the other was a tax collector.’ [MOV-1-1.251]

5.2.4 Quantifiers

There are four quantifying words in Hakhun which modify nouns. They are *c^hôc^hi?* ‘all’, *t^húmlà* ‘all’, *bi* ‘all’, and *hîŋk^hó* ‘some’. The use of the plural marker *-hx* on the nouns modified by these quantifiers is optional. Among these the quantifier *bî* ‘all’ is bit different. It is used only with animate nouns and it occurs only following the head noun. The rest of quantifiers are used with both animate and inanimate nouns, and they may either precede or follow the head noun. Examples (382) through (385) illustrate the quantifier *c^hôc^hi?* ‘all’. It precedes the head nouns *mi?* ‘person’ and *mi?pe? mi?rì dʻ?súm* ‘miraculous work’ in (382) and (383) respectively. It follows the head noun *hənîrûm* ‘they’ and *tùjàm c^ha?jàm c^hûŋrì bʻrì* ‘vegetables and fruits’ in (384) and (385) respectively.

(382) [c^hôc^hi? mi? kámá] irá lâm bə
 all person ERG that path DEF

líŋvó k-a?
 like PRES-3
 ‘All people like that path.’ [SCN-1-43.1]

- (383) *barnabas nî pol kámá [c^hôc^hi?] mi?pe? mi?rì*
 PN and PN ERG all miracle
dx?sum] t^hûku? t-a?
 work tell PST-3
 ‘Barnabas and Paul told (people) about all the miracles (of God).’ [BT-15-5.1]

- (384) *[hənîrûm c^hôc^hi?] t^hûn l-ə-mə mat p^hô t-a?*
 they all gather NF-3-NF case judge PST-3
 ‘They all gathered and judged the case.’ [SNR-6-4.17]

- (385) *[tù-ŋàm c^ha?-ŋàm c^hûŋrì bÿrì c^hôc^hi?]*
 yam-panicle rice-panicle RED fruit all
hùn ván l-i?-mə ...
 carry along NF-1PL-NF
 ‘(We) carry all the vegetables and fruits, and then....’ [SNR-1-1.19]

Examples (386) and (387) illustrate the quantifier *hîŋk^hó* ‘some’. It precedes the head noun *mi?hɣ* ‘people’ in (386), and follows the head noun *bÿ* ‘tree’ in (387).

- (386) *[hîŋk^hó mi?-hɣ] zudia mə antio ný kà t-a?*
 some person-PL PN ABL PN LOC go PST-3
 ‘Some people went from Judea to Antio.’ [BT-15-2.1]

- (387) *[bÿ hîŋk^hó] a-dûŋ*
 tree some NMLZ-big
 ‘Some trees are big.’ [Elic7-74.1]

Examples (388) through (392) illustrate the quantifier *t^húmlà* ‘all’. It precedes the modified nouns *mi?* ‘person’ in (388), *p^húŋ nî ŋó* ‘power’ in (389), and *múŋvàhɣ*

‘prophets’ in (390). It follows the pronouns *iráhx̣* ‘those’ in (391) and *nuʔrûm* ‘you (pl)’ in (392).

- (388) [*tʰúmlà* *miʔ*] *atí* *kámá* *cʰiʔheʔ* *k-aʔ*
all person 3SG ERG mislead PRES-3
‘He has misled all people.’ [MOV-4-1.85]
- (389) [*tʰúmlà* *pʰúŋ nî ŋó*] *r̥múŋtân* *vaʔ*
all power heaven ABL
- imá* *haʔ* *vaʔ* *ŋà* *hə* *kuʔ*
and earth ABL 1SG DAT give
‘I have been given all the power from heaven and earth.’ [MOV-4-1.201]
- (390) [*tʰúmlà* *múŋ-và-hx̣* *kámá*] *viʔ* *cʰí* *t-aʔ*
all prophet-MAS-PL ERG write DUR PST-3
‘All prophets have written (that...).’ [MOV-3-1.168]
- (391) [*iráhx̣* *tʰúmlà* *bə*] *gôcâ* *cwê* *nà*
these all DEF plan COMPL PFV
‘(I) have planned all these.’ [SCN-1-28.1]
- (392) [*nuʔrûm* *tʰúmlà*] *hakʰi*¹² *túŋ* *k-ə* *nà*
2PL all witness EXIST PRES-3 PFV
‘You all are witnesses.’ [MOV-4-1.198]

Examples (393) through (395) illustrate the quantifier *bî* ‘all’. It occurs following the head nouns *ʒùbê* ‘ghost’ in (393), *nuʔrûm* ‘you (pl)’ in (394), and *kînpîn rímtî* ‘shepherds’ in (395).

- (393) [*ʒùbê bî* *ibá*] *v̥* *lə* *ŋâ-meʔ* *ibá*
ghost all that come NF say-NF that

¹² Borrowed from Assamese *xakʰi*

pí *vɣ̣* *t-ə* *ŋâ*
 carry.on.shoulder come PST-3 hearsay
 ‘All the ghosts came, and carried (him) away (to their nest).’ [SNR-8-1.10]

(394) [*nuʔrûm* *bî*] *pʰàn* *zúk* *l-at*
 2PL all share drink IMP-2PL
 ‘You all share and drink (it).’ [MOV-3-1.262]

(395) [*kînpîn* *rîm-tî* *bî* *kámá*] *mé* *pʰùm*
 sheep tend-NMLZ all ERG cow food

pʰɣʔ *tʰîŋ* *kʰuʔ* *nɣ̣* *ləpkʰi* *kà* *t-aʔ*
 eat NMLZ top LOC see go PST-3
 ‘The shepherds went and saw (them) on the place where the cows eat food.’
 [MOV-1-1.107]

5.2.5 Demonstrative Modifiers

The demonstrative modifiers may occur either before, after, or even on both sides of the head noun. As pronominal modifiers, the demonstratives tend to occur in the long form (i.e. with *rə*) and without the definite marker *bə*. Examples (396) through (398) illustrate pronominal demonstratives. In example (396), the distal demonstrative *irə* occurs preceding the noun *tɣ̣* ‘family’, which in turn is followed by the locative *nɣ̣*. In example (397), the distal demonstrative *irə* occurs before the noun *mɣ̣* ‘body’, which in turn is followed by the definite marker *bə*. In example (398), the proximal demonstrative *arə* precedes the noun *matlám-tî* ‘avenger’.

(396) [*irə* *tɣ̣* *nɣ̣*] *ləp* *ŋâ* *kà* *m-aʔ*
 that family LOC get say go NEG-3
 ‘(They) did not get to inform that family.’ [SNR-9-8.20]

(397) [irá m̂ bə] bíŋ he? ke? nà
 that body DEF bury keep go PFV
 ‘(He) went and buried that body.’ [SNR-9-8.10]

(398) [ará mat-lám-tí] v̂ t-x? ŋá imá
 that case-search-NMLZ come PST-1SG say if
 ire? nx? juṗ t^hik an
 that PROH take.shelter CAUS 2PL
 ‘If that avenger comes, do not let him in.’ [SNR-9-8.12]

As a postnominal modifier, however, the demonstrative always occurs with the definite marker. Both the short and long demonstratives are common as postnominal modifier. Examples (399) through (402) illustrate postnominal demonstratives. In example (399) the distal demonstrative *ibá* occurs following the head noun *zùbê* ‘ghost’. In example (400), the proximal demonstrative *abá* occurs following the coordinated NP *vík^hâ nî po?ju* ‘porcupine and elephant’. In example (401), the long proximal demonstrative *arábá* follows the possessed noun *tîsû múŋtân* ‘God’s kingdom’. In example (402) the long distal demonstrative occurs following the noun *ha?k^hûn* ‘Hakhun’. Note that especially in the postnominal modification the demonstratives function more like definiteness markers, for instance in example (402), where the demonstrative does not seem to involve “pointing” at the referent.

(399) [zùbê ibá] r̂-tí zùbê
 ghost that sky-person ghost
 ‘That ghost was a sky ghost.’ [SNR-9-4.3]

(400) [vík^hâ nî po?ju] abá] zùk^hú
 porcupine and elephant-AUG this stream

k^hú-t^hə *nɣ* *rúŋ* *túŋ* *t-a?*
 CLF-one LOC gather sit PST-3
 ‘The porcupine and the elephant sat together in a stream.’ [SNR-5-1.2]

(401) [*tísú* *múŋtân* *arábá*] *nânâ* *c^hà-hɣ* *lɣ*
 God kingdom this child child-PL for
 ‘This God’s kingdom is for children.’ [MOV-3-1.127]

(402) *nɣrûm,* [*haʔk^hûn* *irábá*] *dînɣ* *mê* *dɣ* *t-a?*
 1PL.INCL Hakhun that later COM COP PST-3
 ‘We, the Hakhuns came to exist later than (others).’ [SNR-13-1.5]

Very often head nouns are also found with demonstratives on both sides. I have checked the recordings to see if the two demonstratives formed two different phonological words (with pause in between). Often there was no pause and they seemed to be part of a single phonological word. One thing to note about this dual demonstrative modification is that both demonstratives are often marked with the definite marker *bə*. Prenominal demonstratives usually lack the definite marker when there is only one demonstrative in the NP. Examples (403) through (405) illustrate dual demonstrative modifiers in a single NP. In example (403) the distal demonstrative *irə* precedes the head noun *ac^hàhɣ* ‘children’, which in turn is followed by another distal demonstrative *ibə*. Similarly, in (404) the head noun *c^ha?* ‘rice’ is both preceded and followed by the distal demonstrative *ibə*. In example (405), the noun *sìm* ‘salt’ is both preceded and followed by the proximal demonstrative *abə*.

(403) *iru?* *dɣ* *t^hik* *l-ə-mə* [*irə* *a-c^hà-hɣ*
 like.that happen CAUS NF-3-NF that 3-child-PL

ibá] *mì* *pî* *m-a?* *nà* *ròkò* *nà*
 that ADD survive NEG-3 PFV all.the.time PFV
 ‘Causing to happen like that, those children also did not survive at all.’
 [SNR-9-6.13]

(404) *iká* *a-k^hatcù* *va?* [*ibá* *c^ha?* *ibá]* *zaza zaza*
 there 3-hair ABL that rice that SS

bu? *he?* *t-ə* *ɲà*
 beat keep PST-3 hearsay
 ‘There, from his hair, (he) dropped the rice shaking (his head).’ [SNR-9-8.31]

(405) [*abá* *sìm* *abá]* *a-sân* *lí* *ɲá* *lə* *ɲá-mə*
 this salt this NMLZ-good type say NF say-NF

atî-và *bə* *ván* *p^hɣ?* *m-a?*
 3SG-MAS DEF cut eat NEG-3
 ‘Because that salt was a good kind, (they) did not cut and eat him.’ [SNR-11-1.36]

(406) [*irá* *rɣ-tî-ɲà* *irá]* *kámá* *a-mik* *i-rɣ*
 that sky-person-FEM that ERG 3-eye that-like

lwe? *p^hɣ?*
 take.out eat
 ‘That sky lady took out and ate the eye like that.’ [SNR-9-6.9]

The demonstratives also occur following clauses, where they seem more like subordinators. In this usage, they occur following a fully finite verb complex, and may be followed by a pause. They seem to add a temporal meaning of subsequence such as ‘then’. In example (407), the long distal demonstrative *irábá* occurs following the verb complex *zíp ta?* ‘slept’, and in turn is followed by a pause.

(407) *zíp* *t-a?* *irábá, (pause)* *rɣ-tî-ɲà* *irábá* *zè*
 sleep PST-3 that sky-person-FEM that iron

he?t^hù ibá vikrə t^hè ván lə ɲâ-mə
 stair that quickly set.up along NF say-NF
 ‘When (he) slept, the sky lady quickly descended the iron staircase...’
 [SNR-9-8.3]

In example (408), the short distal demonstrative *ibá* occurs following the verb

complex *t^hɣ? ta?* ‘set on fire’.

(408) *t^hɣ? t-a? ibá, lùŋ-p^hɣ̣ pê-po? t-ə*
 set.fire PST-3 that stone-round break-burst PST-3

bə c^hôc^hɪ? mi? ròkò
 DEF all person everywhere
 ‘When (they) set the stone on fire, it broke and then there were people everywhere.’ [SNR-9-10.38]

In example (409), the short proximal demonstrative *abá* occurs following the verb

complex *zàtat kà ta?* ‘went to pluck’. Another indication that these demonstratives

are following a clause, and not preceding a subsequent noun, is that the subsequent

noun may have a different demonstrative pronoun. For instance, in (409), the

demonstrative which follows a clause is proximal *abá* ‘this’, while the demonstrative

which follows the subsequent noun is distal *ibá* ‘that’. Thus, these two demonstratives

cannot be part of the same NP.

(409) *zàtat kà t-a? abá, pì-p^hɣ̣ ibá zàtat bə,*
 pluck go PST-3 this fruit.type-round that pluck when

vəkɲî rip hûmla vəkɲî rip k^hu?
 wild.pig nest exactly wild.pig nest top

nʂ *pê-pat* *ku?* *t-a?*
 LOC break-throw give PST-3
 ‘When (the squirrel) went to pluck it, when (he) plucked the Pi fruit, it fell
 right on top of the wild pig’s nest and broke it.’ [SNR-6-4.9]

5.2.6 Interrogative Words

Interrogative words also occur as modifiers to nouns. In example (410), the
 interrogative pronoun *hwé* ‘who’ modifies the noun *sâmla* ‘image’ and *mún* ‘name’.

In example (411), the interrogative pronoun *càlì* modifies the noun *súm* ‘work’. In

example (412), the question word *bárá* ‘which’ modifies the noun *ɲâ* ‘side’. In

example (413), the question word *báté* ‘how much’ modifies the noun *mí?* ‘person’.

(410) *ará* *kûmpô-p^hâ* *kə* [*hwé sâmla*], [*hwé mún*] *nî*
 this coin-round LOC who image who name Q
 ‘Whose face, whose name is on this coin?’ [MOV-3-1.252]

(411) *atî-và* *kámá* [*càlì súm*] *c^hi?he?* *t-ə* *nî*
 3SG-MAS ERG what work break.something PST-3 Q
 ‘What wrong has he done?’ [MOV-4-1.64]

(412) *nîrûm* *kámá* *c^hàm* *m-i?* [*bárá ɲâ* *va?*]
 1PL.EXCL ERG know NEG-1PL which side ABL

vɣ *t^hə* *r-a* *dɣ* *la*
 come PROX.PST PROX.NON.PST-3 happen ???
 ‘We also do not know from which side (it) came.’ [MOV-3-1.217]

(413) [*báté* *mí?*] *túŋ* *k-ì* *nî*
 how.many person live PRES-1PL Q

irá *hùm* *nʂ*
 that house LOC
 ‘How many people live in that house?’ [SNR-17-1.51]

5.2.7 Numeral Modifiers

Numeral modifiers, which are prefixed with classifiers, usually occur following the head noun. Table 86 shows the order of the three most frequent numerals in the database.

Table 86: Word order for numerals

	Pre-head	Post-head
<i>CLF:tʰə</i> ‘one’	5	44
<i>CLF:ni</i> ‘two’	0	12
<i>bəlí</i> ‘four’	0	9

Examples (414) and (415) illustrate post-head numeral modification. In example (414), the numeral *m̂tʰə* ‘one’ follows the head nouns *và* ‘person’. In example (415), the numeral *tám-bəŋâ* ‘five pieces’ modifies the preceding noun *bekun* ‘bread’, and the numeral *m̂ni* ‘two’ modifies the preceding noun *ŋa?* ‘fish’.

- (414) *sɣru* *và* *m̂tʰə* *rí* *ka?*, *zəkʰa* *và* *m̂tʰə*
 PN person CLF-one die PRES-3 PN person CLF-one
rí *k-a?*, *và-bəlí* *d̂* *k-a?*
 die PRES-3 CLF-four COP PRES-3
 ‘One Soeru person died, one Zekha person died, it is four people (in total).’
 [SNR-15-1.85]

- (415) *ŋàmə* *nîrûm* *hə* *ný* [*bekun* *tám-bəŋâ*],
 but 1PL.EXCL DAT LOC bread CLF-five
 [*ŋa?* *m̂ni*] *bà*
 fish CLF-two REST
 ‘But, we have only five breads and two fish.’ [MOV-2-1.209]

The following example illustrates pre-head numeral modification. In example (416), the numeral *tʃtʰə* ‘one family’ modifies the following noun *hìm* ‘house/family’.

- (416) *a-tʰwé* *nʃ* [*tʃtʰə* *hìm* *nʃ*] ... *təhja?*
 NMLZ-last LOC CLF-one house LOC ... girl
- mʃtʰə* *təlâ* *mʃtʰə* *a-vì* *ra*
 CLF-one boy CLF-one 3-grandmother with
- mʃ-rûm* *bà* *dʃ* *t-ə* *ŋà*
 CLF-three REST COP PST-3 hearsay
- ‘At the end (of the village), in one family there were only one boy, one girl, one grandmother, three in total.’ [SNR-9-8.18]

5.2.8 PCT Modifiers

Property concept terms may function as modifiers in an NP. They may either precede or follow the modified noun. When they precede the modified noun, they are prefixed with the nominalizer *a-* prefix. However, when they follow the modified noun, they are usually unmarked. Consider the following examples.

- (417) [*a-dûŋ* *hókʰám* *hə]* *tûŋ* *ku?* *k-ì*
 NMLZ-big king DAT tax give PRES-1PL
- bə* *tîsû* *tərâ* *lâm* *nʃ* *kʰʃ?* *k-ə* *le*
 DEF God law path LOC right PRES-3 Q
- ‘Is it right in God’s law to give tax to the big king (emperor)?’ [MOV-3-1.249]
- (418) *a-lî* *pʰâtʰətʰə* *bə* [*ha?* *sân* *nʃ*] *zà* *k-a?*
 3-seed some DEF soil good LOC fall PRES-3
- ‘Some seeds fall on good soil.’ [MOV-2-1.142]

In example (417), the *a-* prefixed PCT *dûŋ* ‘big’ precedes the modified noun *hók^hám* ‘king’, in example (418) the unmarked PCT *sân* ‘good’ follows the modified noun *ha?* ‘soil’. PCT’s are discussed in more detail in §3.2.1 and §5.1.2.

5.2.9 Noun/NP Modifiers

Nouns can directly modify another noun without any marking of dependency. Modifying nouns precede the modified nouns. The semantic relation between the referents of the two nouns can be of various kinds including possession, kinship relation and body part or part-whole relation. Examples (419) through (421) illustrate semantic relations that can be considered possessive. In example (419), the noun *ha?* ‘land’ is modified by the preceding proper noun *c^hùŋù* which refer to the community who owns the land. In example (420), the noun *hìm* ‘house’ is modified by the preceding noun *t^hʔŋù t^hʔc^hà* ‘widow and orphan’ which refer to the owners of the house. In example (421), the noun *vé* ‘net’ is modified by the preceding noun *cámôpôù* ‘spider’ which refers to one who made it.

(419) *[c^hùŋù* *ha?* *nʔ]* *kà* *t-i?* *bə* *c^hùŋù*
 PN land LOC go PST-1PL DEF PN

mì *ləp* *ván* *m-i?*
 ADD get cut NEG-1PL
 ‘When (we) went to Chunyu’s place, we did not get to kill Chunyu (people) either.’ [SNR-15-1.7]

(420) *imábá* *[t^hʔŋù t^hʔc^hà* *hìm]* *inʔ* *a-nò* *nʔ*
 then widow orphan house there 3-corner LOC

a-t^hwé *nɣ*
 3-end LOC
 ‘Then, the house of the widow and the orphan was there around the corner at the end (of the village).’ [SNR-9-8.17]

(421) [*cámôpôtì* *vè*] *bə* *raprə* *lù* *lə* *ŋâ-me?...
 spider net DEF quickly hold NF say-NF*

ibá [*mi?* *t^hân*] *nî* *iká* *tja?rə* *pat* *c^hí*
 that person face Q there quickly throw DUR

t-ə *ŋà*
 PST-3 hearsay
 ‘Holding the spider net quickly, (the ghosts) threw (the net) on the men’s face quickly.’ [SNR-8-1.48]

Examples (421) through (423) illustrate semantic relation of body to body-part. The modified noun refers to a part, and the modifying noun refers to the whole entity. In example (421) above, the noun *t^hân* ‘face’ is modified by the noun *mi?* ‘person’ which refers to the person whose face is being referred to by the modified noun. In example (422) the noun *dà* ‘leg’ is modified with the noun *k^hi?hî* ‘deer’ which refers to the animal whose part the modified noun refers to. In example (423), the noun *co?* ‘body’ is modified with the noun *tíkâ* ‘old man’, which refers to the person whose body the modified noun refers to.

(422) *ibá* [*k^hi?hî* *dà* *me?*] *nɣ?* *c^hí* *t-a?*
 then deer leg with tread DUR PST-3
 ‘Then, (they) trod (planted footprints) with deer legs.’ [SNR-13-1.41]

(423) *irá* *kámá* [*irá* *tíkâ* *co?* *nɣ*] *ibá*
 that INST that old.man body LOC that

mácì mǎrù tê k^hán
 scratch try reap
 ‘(The ghosts) tried to cut the old man’s body with that (leaf).’ [SNR-8-1.21]

Examples (424) through (429) illustrate various kinds of relations between the two nouns. In example (424) the noun *mânp^hân* ‘story’ is modified by *ha?k^hûn* ‘Hakhun’ which may refer to the people who tell the story of those that the story is about. In example (425) the noun *mún* ‘name’ is modified by the NP *c^həp^hù* ‘brothers’ which refers to the people whose name is being referred to by the modified noun. In example (426), the noun *t^hûŋ* ‘farm’ is being modified by the noun *bək^hè* ‘sweet potato’, which refers to the location where the referent of the modified noun grows. In example (427) the noun *he?t^hù* ‘staircase’ is being modified by *zè* ‘iron’ which refers to the element which the referent of the modified noun is made of. In example (428) the noun *lúvʂhʂ* ‘leaders’ is modified by the proper noun *lûŋbu?* which refers to the place name where the referents of the modified noun come from. Finally, in example (429) the instances of the noun *bʂ* ‘tree’ are modified by the nouns *ŋapk^hʔ* ‘wild banana’ and *tûmrì* ‘tree kind’ which refer to the species the referents of the modified nouns belong to.

(424) *imá [ha?k^hûn mânp^hân] bəru? ní*
 then PN story how Q
 ‘What about the Hakhun story (how does it go)?’ [SNR-13-1.2]

(425) *hənî tănî, [c^həp^hù mún bə]*
 3DL 3DL brothers name DEF

dopuŋ *dovɤ*

PN PN

‘They, the two brothers’ names were Dopung and Doveo.’ [SNR-11-1.5]

(426) *rɤŋiʔ-tʰə* *nɤ* *təhjaʔ-ŋù* *mɤ-tʰə* *[bəkʰè*
day-one LOC girl-FEM CLF-one sweet.potato

tʰuŋ *nɤ]* *bəkʰè* *hùn* *keʔ* *kà* *t-aʔ*
farm LOC sweet.potato carry go go PST-3

‘One day, a woman went to the sweet potato field to get sweet potatoes.’

[SNR-10-1.1]

(427) *rɤ-ti-ŋà* *irábá* *[zè* *heʔtʰù* *ibá]* *vikrə*
sky-person-FEM that iron staircase that quickly

tʰè *ván* *lə* *ŋâmâ*
set.up along NF NF

‘The sky lady quickly set up the iron staircase and then....’ [SNR-9-8.3]

(428) *[lùŋbuʔ* *lúvɤ-hɤ* *kámá]* *iruʔ* *ŋâ* *t-aʔ*
PN leader-PL ERG like.that say PST-3

‘The Lungbuq leaders said like that.’ [SNR-15-1.17]

(429) *irámá* *[ŋapʰkʰi* *bɤ]* *níà* *[ará* *tîmrì* *bɤ]*
then wild.banana tree and this tree.kind tree

ván *cʰí* *t-aʔ*
cut DUR PST-3

‘Then, (they) cut down the wild banana trees and the Timri trees.’ [SNR-13-1.42]

It is possible to have a string of more than two nouns within an NP, in which case the leftmost noun may modify the subsequent noun, and the modified noun (along with its modifier) in turn may modify the subsequent noun. In example (430) the noun *tîsû* ‘God’ modifies the noun *múŋtân* ‘kingdom’, restricting the number of possible referents of that noun. The NP *tîsû múŋtân* ‘God’s kingdom’ in turn modifies the following noun *tárâ* ‘law’ in the same manner.

- (430) *ʒɛsu? bə [tɪsú múŋtân tərâ] hó*
 Jesus DEF God kingdom law preach
- kʰwám t-ə nà*
 walk PST-3 PFV
 ‘Jesus preached around the words of God’s kingdom.’ [MOV-2-1.105]

Similarly, in (431), the noun *ʒùbê* ‘ghost’ modifies the noun *tɕ* ‘family’, and they in turn modify the subsequent noun *haʔsúŋ* ‘village’.

- (431) [*ʒùbê tɕ haʔsúŋ*] *mámá, mi? haʔsúŋ*
 ghost family village different human village
- bə mámá*
 DEF different
 ‘The village of the ghost family is separate, and the village of the humans is separate.’ [SNR-8-1.1]

In example (432), *təhja?* ‘girl’ is modified with *miʔlîŋ* ‘pure’, and the NP *təhja?* *miʔlîŋ* modifies the head noun *mún* ‘name’.

- (432) [*təhja? miʔlîŋ mún bə*] *meri*
 girl pure name DEF PN
 ‘The simple/virgin woman’s name was Mary.’ [MOV-1-1.78]

5.2.10 Relative Clause

In the discussion of relative clauses here, I follow the terminology described in Andrews (2007). The NP in the matrix clause whose reference is being delimited is called NP_{mat}. The associated grammatical role of the referent of the NP_{mat} inside the relative clause is called NP_{rel}.

5.2.10.1 Headless Relative Clauses

Relative clauses in Hakhun are mostly headless, i.e. they do not occur with an overt NPmat. Thus, the relative clauses by themselves function as NP's, and as such they are coded like NP's with case postpositions and other nominal elements. The structure of headless relative clauses differs based on the grammatical function of the NPrel (whether it is S/A, or P or other oblique participant within the relative clause).

5.2.10.1.1 Relativization on A and S Arguments

Relative clauses with S or A NPrel take the agentive nominalizer *-tî* on the verb of the relative clause. The NPrel function is expressed with a gap inside the relative clause. There is no relative pronoun inside the relative clause. Any other participants and adjuncts of the verb precede the verb. The relative clause is then marked either with the definite marker *bə* or the ergative *kámá*, just like an NP.

Examples (433) through (435) illustrate headless A relativization. In example (433), the relative clause inside the brackets functions as the S argument of the matrix verb *cámná* 'suffer'. As we can see there is no head noun either inside or outside the relative clause that is being modified by the relative clause. The relative clause anaphorically refers to an individual who undergoes the event of suffering. Inside the relative clause, we have the verb *sukhe?* 'betray' marked with the agent nominalizer *-tî*, and its P argument *ŋà* 'I' is marked with the locative *nʒ*. However, there is no element inside the relative clause to express the NPrel function of A of the verb 'to betray'. Thus, there is a gap in the relative clause. The NP consisting of just the relative clause is then marked with the definite marker *bə*. In example (434), two

relative clauses are coordinated with *níà* ‘and’ and they together function as the subject NP of the nominal predicate *vəkɾɿ* ‘wild pig’. The verbs of the relative clauses, *lúŋ* ‘attack’, are marked with the agentive *-tî*, and the P arguments of the verbs, *ihìm* ‘my house’ and *ipîŋ* ‘my granary’, precede the respective verbs. Both relative clauses are marked with the definite marker *bə*. Once again, there is no overt expression of the NPrel function inside the relative clauses. In example (435), the relative clause consists of the transitive verb *kʰé* ‘pour’, marked with the nominalizer *-tî*, and its object *kʰəm* ‘alcohol’. The NP consisting of just the relative clause is then marked with the ergative *kámá*, and it functions as the A argument of the matrix verb *kʰé zuk* ‘pour and drink’.

- (433) *dʂ a kəmí [ŋà nʂ suk-he?-tî bə] mámá*
 however 1SG LOC show-keep-NMLZ DEF a.lot
cámná a
 suffer 3
 ‘However, the one who will betray me will suffer a lot.’ [MOV-1.271]
- (434) *ibá, [i-hìm lúŋ-tî bə] níà [i-pîŋ*
 that 1SG-house attack-NMLZ DEF and 1SG-granary
lúŋ-tî bə] vəkɾɿ ta
 attack-NMLZ DEF wild.pig DP
 ‘The one who attacked my house and and the one who attacked my granary is the wild pig.’ [SNR-6-4.28]
- (435) *[kʰəm kʰé-tî kámá] kʰəm kʰé zuk cʰí*
 alcohol pour-NMLZ ERG alcohol pour drink DUR
 ‘Those who pour alcohol pour and drink alcohol.’ [SNR-13-1.22]

Examples (436) and (437) illustrate relativization on an S argument. In example (436), the relative clause solely consists of the intransitive verb *rik* ‘die’, which is marked with the nominalizing prefix *a-* and the agentive *-tî*. The NPrel function of the S argument is expressed as a gap. In example (437) the relative clause consists of the agentive *-tî* marked intransitive verb *ke?* ‘go’ and its locative participant preceding the verb. The NPrel function of the S argument of the verb *ke?* ‘go’ is expressed as a gap. The relative clause is then marked with the definite marker *bə*. Note that the verbs which have suppletive forms occur in the checked forms in the relative clauses (§6.2.1). Thus, we have *rik*, not *rí*, for ‘die’, and *ke?*, not *kà*, for ‘go’.

- (436) [*a-rik-tî* *bə*] *tʰɣʔnù* *irə* *təlâ-cʰà*
 NMLZ-die-NMLZ DEF widow that boy-DIM
- mɣ-tʰə* *dɣ* *t-a?*
 CLF-one COP PST-3
 The one who died was a boy of the widow.’ [MOV-2-1.114]

- (437) [*kóké* *lâm* *nɣ* *ke?-tî* *bə*] *tísú*
 winding path LOC go-NMLZ DEF God
- lâm* *nɣ* *vín* *vɣ* *r-o*
 road LOC return come PROX.NON.PST-2SG
 ‘Those who have gone on winding path, return to the path of God.’ [MOV-1-1.277]

Example (438) illustrates a relative construction where the NPrel function is a possessor. The relative clause consists of the agentive *-tî* marked copula *tóà* ‘exist’, and the preceding possessed NP *lí* ‘buffalo’. The NPrel function of the possessor is expressed as a gap. The NP consisting of just the relative clause is then marked with

the ergative marker *kámá*, and it functions as the A argument of the matrix verb *ʒweʔ*

pʰɣʔcʰaʔ ‘kill and eat’.

- (438) *irámá* [*lí* *tóà-tí* *kámá*] *lí*
 then buffalo have-NMLZ ERG buffalo
- ʒweʔ* *pʰɣʔcʰaʔ* *cʰí*
 stab eat DUR
 ‘Then, those who have buffalo killed and ate buffalo.’ [SNR-13-1.26]

5.2.10.1.2 Relativization on a P Argument

Relativization on a P argument differs from relativization on S and A arguments in that there is no agentive nominalizer on the verb in the former. We find two types of headless relative clauses for relativization on the P argument. One of them has a finite verb, while the other has a nominalized verb marked with the nominalizer *tʰíŋ*. Examples (439) through (441) illustrate relative clauses with finite verbs. In example (439), the relative clause consists of the transitive verb *ŋá* ‘say’ marked with the 3rd person argument indexed past tense operator *tə*, preceded by its ergative marked A argument *múŋvà kámá* ‘the prophet’. The NPrel function of P is expressed as a gap. The relative clause is then marked with the definite marker *bə*. In example (440), the relative clause consists of the transitive verb *sú* ‘look’ marked with the inflected non-past inverse marker *ra*, preceded by the ergative marked A argument *nuʔrúm kámá* ‘you(pl)’. The NPrel function of P argument is expressed as a gap, and the relative clause itself is marked with the definite marker *bə*. In example

(441) the relative clause consists of the transitive verb *ηέ* ‘be able to do something’

marked with the inflected negative operator *mi?*, and preceded by the ergative marked

A argument *mi? kámá*. The NPrel function of P is expressed as a gap, and the relative

clause itself is marked with the definite marker *bə*.

(439) [*múŋ-và kámá ηâ t-ə bə*] *k^hʔ k-a?*
 prophet-MAS ERG say PST-3 DEF correct PRES-3
 ‘What the prophets said is true/has become true.’ [MOV-4-1.211]

(440) [*nu?rûm kámá sú r-a bə*]
 2PL ERG look INV.NON.PST-3 DEF

a-lîŋ ...
 NMLZ-real ...
 ‘What you see (of me) is real.’ [MOV-4-1.187]

(441) [*mi? kámá ηέ m-i? bə*] *rʔdûŋ tîsû*
 person ERG be.able NEG-1PL DEF God

ηâ mə a-ηέ rì k-a?
 side ABL NMLZ-be.able AUX PRES-3
 ‘What (we) humans cannot do, can be done from God’s side.’ [MOV-3-1.87]

Examples (442) and (443) illustrate relativization on P arguments with

nominalized clauses marked with the nominalizer *t^hîŋ*. In example (442), the relative

clause consists of the ditransitive verb *c^hîŋ* ‘ask’ followed by the nominalizer *t^hîŋ*, and

the preceding theme participant *nʔ* ‘you’. The NPrel function of P is expressed as a

gap. The relative clause is then marked with the numeral ‘one’. In example (443), the

relative clause consists of the transitive verb *k^hî* ‘give birth’ followed by the

nominalizer *t^hîŋ*, and the preceding ergative marked A argument *nʔ kámá* ‘you’. The

NPrel function of the P argument is expressed as a gap. The relative clause is then marked with the definite marker *bə*.

(442) [*nɣ̌ a-cʰɪn tʰɪŋ mɣ̌-tʰə]* *túŋ k-aʔ*
 2SG NMLZ-ask NMLZ CLF-one EXIST PRES-3
 ‘There is one thing that (I) need to ask you.’ [SNR-9-1.1]

(443) [*nɣ̌ kámá kʰɪ tʰɪŋ bə]* *koʔcê*
 2SG ERG give.birth NMLZ DEF blessed

nânâ dɣ̌ a
 child COP 3
 ‘The one you will give birth to will be a blessed child.’ [MOV-1-1.91]

5.2.10.1.3 Relativization on Other Participants

There are not many examples of relativization on participants other than S, A, and P. Examples (444) and (445) illustrate relativization on a locative participant. In example (444), the relative clause consists of the verb *túŋ* ‘sit’ followed by the nominalizer *tʰɪŋ*, and the preceding S argument *zùbê tɣ̌* ‘family of ghosts’. The NPrel function of the location (i.e. where the ghosts live) is expressed as a gap. The relative clause is then marked with the definite *bə*. In example (445), the relative clause consists of the transitive verb *pʰɣʔ* ‘eat’ followed by the nominalizer *tʰɪŋ*, and the preceding A argument *mé* ‘cow’ and the P argument *pʰùm* ‘curry/food’. The NPrel function of location (where the event of eating takes place) is expressed as a gap.

(444) [*zùbê tɣ̌ túŋ tʰɪŋ bə]* *haʔ mûŋ kʰûn*
 ghost family live NMLZ DEF ground inside under

nʃ dʃ t-ə ɲà
 LOC COP PST-3 hearsay
 ‘The place where the ghost family lived was under the ground.’ [SNR-8-1.5]

(445) *kînpîn rîm-tî bî kámá [mé pʰùm*
 sheep tend-NMLZ all ERG cow food

pʰɣ? tʰɪŋ] kʰu? nʃ ləpkʰi kà t-a?
 eat NMLZ top LOC see go PST-3
 ‘The shepherds went and saw (them) on the place where the cows eat food.’
 [MOV-1-1.107]

5.2.10.2 Headed Relative Clause

A few instances of headed relative clauses are found in the database, and the relative clauses may either precede or follow the head noun. The post-head relative clauses are not restricting, but rather provide additional commentary on the preceding NP. They also appear to be in a separate constituent from the preceding NP.

5.2.10.2.1 Pre-Head

Examples (446) and (451) illustrate relative clauses which precede the head noun. In example (446), the relative clause inside the brackets precedes the head noun *và* ‘person’. The NPrel function which corresponds to the NPmat *và ibá* ‘that person’ is the A participant in the relative clause realized as a gap. The relative clause consists of the transitive verb *pʰɣ?* ‘eat’ followed by the nominalizer *tʰɪŋ*, and the preceding P argument *ɲà* ‘I’ and the adverbial *iru?* ‘like that’.

(446) *[ɲà iru? pʰɣ? tʰɪŋ] və ibá a kámá*
 1SG like.that eat NMLZ person that 3 ERG

tʰəm dʃ t-a?
 FOC COP PST-3
 ‘The person who would have eaten me like this was her/this.’ [SNR-9-8.9]

In example (447), the noun *hìm* ‘house’ is modified by the preceding relative clause in the brackets. The NPrel function which corresponds to the NPmat *hìm* ‘house’ is a locative participant. The relative clause consists of the nominalizing *a-* prefixed verb and the nominalizer *t^hîŋ*.

(447) *i-hìm bə [a-swám t^hîŋ] hìm dŋ a*
 1SG-house DEF 3-offer NMLZ house COP 3
 ‘My house will be a house for praying.’ [MOV-3-1.186]

In example (448), the noun *hâ* ‘slave’ is modified by the preceding relative clause marked with the nominalizer *t^hîŋ*. The NPrel function which corresponds to the NPmat *hâ* ‘slave’ is the subject of the verb *túŋ* ‘sit’.

(448) *nânâ irábə hâ, [dŋ? k^hîŋ nŋ túŋ t^hîŋ] hâ nî*
 child that slave hand under LOC stay NMLZ slave Q
 ‘The child is a slave, one who lives under others, right?’ [SNR-8-1.64]

In example (449), the noun *p^hî* ‘an ingredient used in alcohol’ is modified by the preceding relative clause inside the brackets, which has a finite predicated marked with the inflected present tense operator *ki*. The NPrel function which corresponds to the NPmat *p^hî* ‘alcohol ingredient’ is an instrument.

(449) *p^hî arə [k^həm zuk k-ì] p^hî nî*
 PN this alcohol drink PRES-1PL PN Q
 ‘Phi, the one which has to do with the alcohol we drink, right?’ [SNR-8-1.36]

In example (450), the noun *zùbê* ‘ghost’ is modified with the preceding relative clause inside the brackets. The NPrel function which corresponds to the NPmat *zùbê* ‘ghost’ is an A of the verb *p^hʔ* ‘eat’.

- (450) *imá inʔ zùmat nʔ zùmat nʔ irábá*
 then there ocean LOC ocean LOC that
- zùbê, [miʔ ɲàm p^hʔ-tí] zùbê*
 ghost person meat eat-NMLZ ghost
 ‘There was a ghost in the ocean, a human flesh eating ghost.’ [SNR-11-1.15]

In example (451), there are two NP’s with the same noun *ɲù*. In the first one, the noun is modified by the relative clause with the verb *k^hí* ‘give birth’, and in the second one, the noun is modified with the relative clause with the verb *rʔnʔ kwécà* ‘to nurse, take care’. Both relative clauses are marked with the nominalizer *-tí*, and the NPrel functions which correspond to the NPmat noun *ɲù* ‘mother’ in both relative clauses are the A participant of the verb *k^hí* ‘give birth’ and *rʔnʔ kwécà* ‘to nurse’.

- (451) *mə-ɲù bə koʔcê rótó,*
 2SG-mother DEF blessed happy
- [bə-k^hí-tí] ɲù, [bə-rʔnʔ kwécá-tí] ɲù*
 2SG-give.birth-NMLZ mother 2SG-nurse-NMLZ mother
 ‘Your mother is blessed and happy, the one who gave birth to you, who nursed you.’ [MOV-2-1.71]

5.2.10.2.2 Post-Head

Relative clauses can also follow the head noun. However, these relative clauses are nonrestrictive, thus in some accounts they are not considered as relative clauses (Keenan, 1985). These clauses add comments, i.e. some additional information on the referent of the preceding NP. In example (452), the relative clause inside the brackets follows the noun *ha? bə* ‘the land’ which it describes. In this context, the speaker is making the additional comment that people should be aware of that place. In example (453), the relative clauses inside the brackets follow the NP’s *ibá vùlap* ‘that feather’, and *vʔpá* ‘pig teeth’. These clauses add additional information on how these ornaments are worn by Hakhun people. In example (454), the relative clause inside the brackets follow the NP *po?rûŋ ibá* ‘that elephant tusk’, and provides additional information about the tusk, which is that it is very big.

(452) *ha? bə [cʰôcʰi? kámá cʰàm tʰîŋ bə]*
 land DEF all ERG know NMLZ DEF

təŋsəŋ ha?
 PN place

‘The place, which everyone should know about, is the Tangshang place.’

[SNR-13-1.7]

(453) *ibá vùlap [aru? pʰuk tʰîŋ bə],*
 that feather like.this wear.on.head NMLZ DEF

vʔpá [aru? pʰuk tʰîŋ] iráká va?
 pig.teeth like.this wear.on.head NMLZ there ABL

‘The feather, which we wear like this, and the pig teeth, which we wear like this, is from there.’ [SNR-11-1.54]

(454) *po?-rûŋ ibá [hù cʰà ce tʰîŋ]*
 elephant-tusk that dog child remain NMLZ

ku? *t^h-i*
 give INV.PST-1PL
 ‘(They) gave (us) an elephant tusk, which is so big that a puppy can stay in there.’ [SNR-15-1.50]

5.2.10.3 Correlatives

Another strategy of making relative clauses in Hakhun is the use of interrogative pronouns as relative pronouns inside the relative clauses, instead of a gap, and an occasional demonstrative or even another interrogative pronoun as the NPmat. See §3.5.6 for more discussion on this construction. In example (455), the person interrogative pronoun *hwé* ‘who’ functions as a relative pronoun inside the bracketed clause. It has an NPrel function of a possessor NP of a possessive non-verbal construction. In this case, there is no NPmat in the matrix, and thus the relative clause is headless. In example (456), we have the person interrogative pronoun *hwé* with the NPrel function of a P argument. This NPrel corresponds to the demonstrative NPmat *irǎ hǎ* ‘to that’.

(455) [*hwé hǎ nǝ cǎm dǝ a nǐ*] *a-p^hǎn*
 who DAT LOC rice COP 3 Q NMLZ-share

rǐ l-at
 AUX IMP-2PL
 ‘Whoever has food, share it.’ [MOV-1-1.167]

(456) *ŋǎ bǎ [hwé rán k-ǝ nǐ]*
 1SG DEF who choose PRES-1SG Q

irǎ hǎ ku? ɣ
 that DAT give 1SG
 ‘Whoever I select, I will give it to him/her.’ [MOV-1-196]

5.2.11 Case Postpositions

5.2.11.1 The Ergative/Instrument *kámá*

The case postposition *kámá* is found on both A and Instrument participants.

The use of *kámá* on A arguments, especially on pronouns, seems to be changing.

When I first started eliciting data on this in early 2010, my elderly consultant Phulim Hakhun had a strong position that its use with first person singular *ŋà* ‘I’ and second person singular *nŋ* ‘you’ A arguments is unacceptable. My young consultant Khithung Hakhun seemed to have no problem with this, even though he would be corrected on several occasions by Phulim Hakhun. Phulim’s intuition was well reflected in the spoken narratives by himself and other older people. There is not a single instance of *ŋà* ‘I’ or *nŋ* ‘you’ marked with *kámá* in the spoken narratives.

These two pronouns were mostly marked with the definite marker *bə*. However, in the conversation, and in the movie on Jesus, which include young Hakhun speakers, there are 26 instances of *ŋà* ‘I’ and 25 instances of *nŋ* ‘you’ marked with *kámá*.

Examples (457) through (459) illustrate the ergative use of *kámá*. In example (457), it occurs on the A argument *ŋà* ‘I’ of the verb *ku?* ‘give’. In example (458), it occurs on the A argument *atí* ‘3SG’ of the verb *ŋá* ‘say’. In example (459), it occurs on the A argument *mi?* ‘person’ of the verb *kəp* ‘get’.

(457) [ɲà kámá] t̄ra? hə i-pʰò kʰàkâ
 1SG ERG poor.people DAT 1SG-share half
 ku? ɣ
 give 1SG
 ‘I will give half of my share to the poor people.’ [MOV-3-1.158]

(458) [at̄ kámá bə] iru? ɲâ ku? t-ə ɲà
 3SG ERG DEF like.that say give PST-3 hearsay
 ‘He said like that.’ [SNR-8-34]

(459) iráté akʰíŋ nɣ vánkʰat ibá
 that.much time LOC fire.making.process that
 [mi? kámá] kəp t-ə ɲà
 person ERG get PST-3 hearsay
 ‘Around that time, humans got the fire making process.’ [SNR-7-1.24]

Examples (460) and (461) illustrate *kámá* on an Instrument participant. In example (460), it occurs on the participant *sìm* ‘salt’ which acts as an ‘instrument’ in the act of eating food. In example (461), it occurs on the participant *lùŋ* ‘stone’ which is used as an ‘instrument’ for hitting the referents of the P argument.

(460) n̄r̄um kámá [ará sìm kámá] cup
 1PL.EXCL ERG this salt INST eat.with
 cʰa? k-ì
 eat PRES-1PL
 ‘We eat (food) with this salt.’ [SNR-11-1.26]

(461) aráhɣ tʰúmlà kámá [lùŋ kámá]
 these all ERG stone INST
 pat r-i
 throw INV.NON.PST-1PL
 ‘All these (people) will pelt us with stones.’ [SNR-11-1.26]

5.2.11.2 The Locative *nɣ*

The postposition *nɣ* is used as a general marker of location. Its surface tone varies, and it takes whatever tone the preceding lexical item has. However, when compared to the second person singular pronoun *nɣ̂*, speakers feel that they have different underlying tones, and describe the tone of the locative as high. It is used with locative expressions to denote notion of **locative** ('in/at') or **allative** ('to X'). It is a part of the locative adverbs like *anɣ* 'here' and *inɣ* 'there'. It is also used with all relator nouns, which denote more specific locations like 'top', 'inside', 'middle', 'with', etc. (see §3.3.1 for relator nouns). It is also part of temporal expressions like *dɪnɣ* 'later', *mânɣ* 'before'. It is also often part of ablative and possessor expressions (see §5.2.11.4 and §5.2.11.6 below). Finally, it is also found on the argument referring to the addressee of speech verbs (see §8.2.2.6).

In example (462) *nɣ* is interpreted as allative, where the NP marked with *nɣ* denotes a location towards which a movement denoted by the verb *vɣ̂* 'come' takes place. In example (463), *nɣ* is interpreted as locative, where the NP marked with *nɣ* denotes a location where something is placed.

- (462) *irámá* *[hùm nɣ]* *vɣ̂* *l-ə-mə* *a-p^hù*
 then house LOC come NF-3-NF 3-elder.brother
- ibá* *tíŋlá* *k^hì* *vɣ̂* *t-a?*
 that suddenly see come PST-3
 'Then coming home, (he) saw his elder brother suddenly there.' [SNR-11-1.40]

- (463) *napiruk rŕzâ iráká zwè twè zwè twè*
 Saturday evening there gather take gather take
- rì l-ə-mə [tá-tʰə nʸ] rún he? t-a?*
 do NF-3-NF place-one LOC gather keep PST-3
 ‘On Saturday evening, (they) gather and put (the meat) together in one place.’
 [SNR-17-1.35]

Examples (464) through (466) illustrate the locative with relator nouns. In example (464), it occurs with the relator noun *kʰu?* which denotes more specific location of ‘top’ of something. In example (465), it occurs with the relator noun *tip* ‘near’, and in (466) it occurs with the comitative relative noun *nâm* ‘with’.

- (464) *a-lî pʰâtʰətʰə bə [su? kʰu? nʸ] zà k-a?*
 3-seed some DEF thorn top LOC fall PRES-3
 ‘Some seeds fall on the thorns.’ [MOV-2-1.140]

- (465) *sit ke? e [zùvê hókʰám tip nʸ]*
 take.along go 1PL region king near LOC
 ‘(We) will take (him) to the governor.’ [MOV-4-1.58]

- (466) *tʰti ŋà [mə-nâm nʸ] tʰún nʸ mî a-ke?*
 God 1SG 2SG-with LOC jail LOC ADD NMLZ-go
 ‘God, I will even go to jail with you.’ [MOV-3-1.295]

In example (467), the locative *nʸ* marks the NP *vəpʰi* ‘a bird kind’ referring to the addressee of the verb *ŋà* ‘say’. In (468), the locative *nʸ* marks the P argument *ŋù avà* ‘parents’ of the verb *tʰúnhûn* ‘respect, care’.

- (467) *iró dîmâ [vəpʰi nʸ] ŋà t-a?*
 that after bird.kind LOC say PST-3

pʰivà, nɣ̌ bə rwéʒá ha? pjaʔ-tí ...
 PN 2SG DEF always ground scratch-NMLZ
 ‘After that, (the animals) said to Vanphi, ‘Phiva, you are one who always scratches the ground.’ [SNR-6-4.86]

(468) *irámá súŋvɣ̌-ŋù irəbə [a-ŋù a-và nɣ̌]*
 then first.child-FEM that 3-mother 3-father LOC

tʰûŋhûn m-a?
 care.for NEG-3
 ‘The first daughter did not respect/care for her parents.’ [SNR-12-1.9]

5.2.11.3 The Locative *kə*

The postposition *kə* is found in locative adverbs like *akə* ‘here’ and *ikə* ‘there’. It marks the location as more ‘specific’, someplace that can be pointed at or named. Very often, the two locatives are interchangeable. This sense of more ‘specific location’ is observable in the use of the Place Interrogative Pronouns with *kə*, such as *bárəkə* ‘where’, as opposed to the Place Interrogative Pronouns with *nɣ̌* ‘where’, such as *mánɣ̌*. The expected answer for the question word with *kə* is a name of a place or some place that can be pointed at. On the other hand, the answer for the question word with the general locative *nɣ̌* can be a vague direction.

Examples (469) and (471) illustrate the locative use of *kə* on locative expressions. Example (472) illustrates *kə* on a temporal expression.

(469) *[a-tèlò kə] cap l-ə-mə*
 3-corridor LOC stand NF-3-NF
 ‘Standing at his corridor.....’ [SNR-14-1.8]

(470) *ibá mì [író t̂ hím kə va?] twè t-a?*
 that ADD that family house LOC ABL take PST-3
 ‘(They) brought that (ingredient for alcohol) also from that family.’
 [SNR-8-1.37]

(471) *[író ha?-tâm kə] hú kâ l-ə-me?.....*
 that place-flat LOC reach go NF-3-NF
 ‘Reaching that place.....’ [SNR-11-1.48]

(472) *[író r̂ŋi? kə] hik p^hân t-i?*
 that day LOC properly distribute PST-1PL
 ‘On that day, (we) distribute appropriately.’ [SNR-17-1.72]

5.2.11.4 The Ablative *va?*

The postposition *va?* functions as an ablative marker, i.e. it marks the locative expression as the source/origin of a movement or as a location one belongs to. In example (473), it marks the place ‘big Hakhun village’ as the location where the referent of the P argument, the Kitsi person, belongs to. In example (474), it marks the Place Interrogative Pronoun *mán̂* as the source/origin of a movement.

(473) *[ha?k^hûn ha?-jù va?] kitsi vâ m̂-t^hə*
 PN place-AUG ABL PN person CLF-one

mó p^hîn k-a?
 by.mistake spear PRES-3
 ‘(The Chunyu people) by mistake speared a Kitsi person who is from the big Hakhun village.’ [SNR-15-1.5]

(474) *tíŋlá k^hî l-ə-mə hei i-nâ-vâ*
 suddenly see NF-3-NF EXCLAM 1SG-younger.sibling-MAS

[mán̂ va?] nî
 where ABL Q
 ‘Seeing (him) suddenly, ‘(the older brother asked), “Hey my younger brother, where are you (coming) from?”’ [SNR-11-1.41]

Occasionally, the ablative *vaʔ* is found following the locative *nɣ*, as shown in examples (475) through (477).

- (475) [hwé tɣ hìm nɣ vaʔ] nám kà
 who family house LOC ABL borrow go
 ɣ nî
 1SG Q
 ‘From which family will I go and borrow (money)?’ [SCN-3-7.1]
- (476) [pê mûŋ nɣ vaʔ] twèheʔ l-ə-mə
 garden inside LOC ABL throw.away NF-3-NF
 ‘(They) threw (him) out of the garden and then’ [MOV-3-1.237]
- (477) [ʒordon nɣ vaʔ] vín vɣ t-ə bə
 PN LOC ABL return come PST-3 when
 ‘When (he) returned from Jordan,’ [MOV-1-185]

5.2.11.5 The Ablative *mə*

The form *mə*, which has been found as an adverbializer on PCT’s (see §3.2.1), as a part of the complementizer (see §9.1.1), and as a non-final marker on non-final clauses (see §9.3), is also found as a postposition denoting various kinds of locative notions, some of which are metaphorical. It has a strong form *meʔ*. Examples (478) through (480) illustrate more literal locative usages. In example (478), *mə* adds an ablative meaning denoting the location as the starting point. In example (479), it adds an ablative meaning in that it indicates that the leg side is the one that goes in first. In example (480), it adds a sense of ‘through’ a location.

- (478) [ʒerusalem mə] bɣ l-at
 PN ABL start IMP-2PL
 ‘Start (it) from Jerusalem.’ [MOV-4-1.195]

- (479) [a-dà ηâ mə] sɣʔ t-ə bə mî
 3-leg side ABL enter PST-3 when ADD
 hûm m-aʔ nà
 be.accurate NEG-3 PFV
 ‘When (they) entered (him) from his leg side also, it did not work.’ [SNR-8-1.17]

- (480) [rɣkʰi lâm mə] dwe vɣ̣ l-ə-mə
 PN road ABL up.slope come NF-3-NF

nɣrûm silum lâm nɣ duk t-aʔ
 1PL.INCL PN road LOC come.out PST-3
 ‘We went through the Rakhi road, and came out on the Silum road.’
 [SNR-13-1.54]

In examples (481) and (482), *mə* has a more metaphorical sense of location, for instance something being in a language in (481) and someone being in a particular mental state in (482).

- (481) morom [india ʒap meʔ], [haʔkʰûn ʒap
 PN PN language ABL PN language

mə] líŋvó ràn
 ABL PN
 ‘It is called *morom* in Indian language, and *lingvo ran* in Hakhun language.’
 [SNR-15-1.114]

- (482) [i-ràn kʰaʔ mə] mó sám heʔ t-ɣʔ
 1SG-heart bitter ABL indiscriminately cut keep PST-1SG
 ‘(I) cut (the trees) indiscriminately in anger.’ [SNR-6-4.33]

The form *mə* in examples (483) and (484) is perhaps better analyzed as the adverbializer (see §3.2.1 on adverbial use of *mə* with PCT’S and nouns). The NP’s marked with *mə* in the brackets express the manner in which the events/actions are executed in these examples.

- (483) [a-bu? mə] tukbat t^ha?do? he? t-a?
 3-neck ADV cut.off chop.off keep PST-3
 ‘(They) chopped her off by her neck.’ [SNR-9-8.7]
- (484) [m^h-t^hə m^h-t^hə mə] hu? pí v^h l-ə-mə
 CLF-one CLF-one ADV steal carry come NF-3-NF
 ‘Stealing away one by one.....’ [SNR-8-1.6]

5.2.11.6 The Dative *hə*

The postposition *hə* is found on the R arguments of ditransitive verbs, the causee of a causative construction, and the beneficiary of a benefactive construction containing the verb *ku?* ‘give’. The dative *hə* is illustrated in examples (485) through (487).

- (485) [ŋà hə] ku? r-ɣ vùlap nî
 1SG DAT give INV.NON.PST-1SG feather and
 vɣʔ-pá abe?
 pig-tooth this
 ‘Give me the feather and the pig teeth.’ [SNR-11-1.42]
- (486) [n^h hə] zo? n^h rúmbé câmcò
 2SG DAT later LOC altar table
 tə-rut t^hik e
 PERM-collect CAUS 1PL
 ‘We will let you collect the (offerings on) the altar table.’ [SNR-7-1.37]
- (487) ŋà kámá [n^h hə] nâm ku? imá n^h
 1SG ERG 2SG DAT loan give if 2SG
 kámá [ŋà hə] cəlì súm ku? r-ɣ nî
 ERG 1SG DAT what work give INV.NON.PST-1SG Q
 ‘If I give a loan to you, what will you do for me?’ [SCN-3-10.1]

with *nî* ‘and’, and they are both modified with the stressed form of the proximal demonstrative *abe?* ‘this’. In example (492), two plural NP’s *vàl̥h̥r* ‘leaders’ and *kʰəpʰùh̥r* ‘elders’ are combined with *nî* ‘and’. In example (493), the NP’s *zùbê* ‘ghost’ and *mi?* ‘person’ are combined with *nî* ‘and’ and are marked with the definite marker *bə*. In example (494), the NP’s *səŋà* ‘crab’ and *zəŋvà* ‘squirrel’ are combined with *nî* ‘and’, and they are marked with the definite *bə* as a whole. In example (495), the NP’s *zùbê cʰəpʰù* ‘ghost brothers’ and *mi? cʰəpʰù* ‘human brothers’ are combined with *nîà* ‘and’, and they are modified with the plural distal demonstrative *irəh̥x̥*. In example (496), the NP’s *víkʰà* ‘porcupine’ and *poŋnù* ‘elephant’ are combined with *nî* ‘and’, and are marked with the proximal demonstrative *abə* ‘this’ as a whole.

(491) *ai* *i-nâ,* *ŋà* *hə* *ku?* *r-x*
 EXCLAM 1SG-younger.sibling 1SG DAT give INV.NON.PST-1SG

[vùlap nî vɣ?pá abe?]
 feather and pig.teeth this
 ‘Hey brother, give me the feather and the teeth.’ [SNR-11-1.42]

(492) *[vəl̥-h̥r nî kʰəpʰù-h̥r kámá]* *a-kwám* *tʰŋ*
 leader-PL and elder-PL ERG NMLZ-surround should

ŋâmâ kʰobot aru? ku? t-a?
 COMP news like.this give PST-3
 ‘The leaders and the elders gave news that (we) should surround (the animals).’ [SNR-10-1.8]

(493) *[zùbê nî mi? bə]* *ləpkʰi-mun m-i?* *nà*
 ghost and man DEF see-RECIP NEG-1PL PFV
 ‘Ghosts and people, we do not see each other anymore.’ [SNR-8-1.58]

(494) [sè-ɲà níà zeʔ-và bə] cʰəɲù cʰəvà
 crab-FEM and squirrel-MAS DEF couple
 ‘The crab and the squirrel are a couple.’ [SNR-6-4.2]

(495) [zùbê cʰəpʰù níà miʔ cʰəpʰù iráhɣ]
 ghost brothers and man brothers those

và bəlí irábá zuʔsùŋ irábá tʰaʔrú
 person four that rat.kind that make.two.pieces

rì t-ə ɲà

do PST-3 hearsay

‘The ghost brothers and the human brothers, the four (of them), made the rat into two pieces.’ [SNR-1.10]

(496) [vɪkʰâ nî poʔ-ɲù abá] zùkʰú kʰú-tʰə
 porcupine and elephant-AUG this stream CLF-one

nɣ rúŋ túŋ t-aʔ
 LOC gather sit PST-3

‘The porcupine and the elephant were sitting together on a river.’ [SNR-5-1.2]

The coordinated NP’s can be clausal as well, as in (497), where two clauses

(underlined) are connected with *níà* ‘and’ and marked with *irábá* ‘that’ as a whole.

(497) [mərəâ ɲâ k-aʔ níà mat ɲâ k-aʔ irábá]
 sin say PRES-3 and case say PRES-3 that

tʰəruʔcʰâ dɣ m-aʔ
 small COP NEG-3

‘What is called sin and what is called case are not small (things).’ [SCN-1-45.1]

Very rarely the connective *imá*, which functions as a subordinator or clausal

connective elsewhere, is also used to combine two NP’s. In example (498), the NP in

the brackets consists of three NP’s – *avà* ‘father’, *acʰâ* ‘child’, and *asá vézǎ* ‘holy

spirit’, and the connective occurs between the last two NP’s. In example (499), the NP’s *epostohx* ‘Apostles’ and *adûŋ val̄hx* ‘big leaders’ are combined with *imá*.

(498) [*a-và* *a-c^hà* *imá* *a-sá* *vézá*] *irá* *mún* *mə*
 3-father 3-child and NMLZ-holy spirit that name ABL
 ‘... in the name of the father, the child, and the holy spirit.’ [MOV-4-1.203]

(499) [*epostol-hx* *imá* *a-dûŋ* *val̄x-hx*] *hənîrûm* *kámá*
 apostles-PL and NMLZ-big leader-PL 3PL ERG
gô^ho? *a*
 discuss 3
 ‘The Apostles and the big leaders, they will discuss (it).’ [BT-15-2.5]

CHAPTER VI

THE VERB COMPLEX

Almost all verbal categories like tense, aspect, mood, polarity, argument indexation, etc. are encoded in morphemes that are phonologically independent of the verb root(s). The term **verb complex** is used here to refer to the verb root(s) along with the phonologically independent forms which code various verbal categories. The main goal of this chapter is to discuss the structure and the elements of the verb complex. §6.1 outlines the structure of the verb complex, and §6.2 through §6.6 discuss the different classes of elements which occur in the verb complex. §6.2 describes the verb stem, which can be as simple as a single verb root, or more complex consisting of multiple verb roots as well as adverb-like elements. Other elements of the verb complex include two pre-stem negative particles, discussed in §6.3, a causative particle, discussed in §6.4, seven verbal operators inflected with argument indexes and two uninflected operators, all coding various TAM categories, discussed in §6.5, and two aspectual particles and one hearsay marker, discussed in §6.6.

I also discuss phonologically bound affixes found on verb roots. There are not very many affixes on the verb as the major verbal categories are expressed by phonologically independent particles. §6.7 describes a few prefixes and suffixes that are attached to the verb root(s) or the verb stem. The prefixes include an old nominalizer *a-*, and a permissive/causative *tə-*. The suffixes include the reciprocal *-mun*, continuous *-ru?*, and three nominalizers. §6.8 describes two special constructions which involve the verb *rì* ‘do’.

6.1 Structure of Verb Complex

The simplest verb complex in an independent clause may consist of a single verb root and a verbal operator. A more elaborate verb complex may have several additional elements. First, there may be several verb roots in a sequence, occurring next to each other in their bare forms. Some of these verb roots may contribute adverb-like meaning or more abstract grammatical meaning. Second, there may be some adverb-like elements, which are not found as individual lexical elements outside the verb complex, either preceding or following the verb root(s). Moreover, there can be a causativizer particle, aspectual particles, and a hearsay particle, besides the verbal operators. This chapter outlines the different possible shapes of the verb complex in Hakhun, and describes the individual classes of elements found in the verb complex. Figure 10 presents an outline of the verb complex.

Figure 10: Schema of the Verb Complex in Hakhun

-2	-1	0	1	2	3	4	5
Negative Particles	GR Verb, Adverbial	Root(s)	GR Verb, Adverbial	Causative	Operators	Aspect	Hearsay

In the following sections, I will talk about each of the different positions in detail. The positions -1, 0, and 1 can be considered as comprising the verb stem, since these positions involve mostly lexical elements. §6.2 deals with the elements in these three positions. §6.3 deals with the elements in position -2, the pre-stem negative particles. §6.4 deals with the causative particle in position 2. §6.5 deals with the verbal operators in position 3, and §6.6 deals with the post-operator elements in position 4 and 5.

6.2 The Verb Stem

A verb stem may consist of a single verb root, or as many as four verb roots. Besides the verb root(s), the stem may have adverb-like elements both preceding and following the verb root(s). Under the term “verb stem”, I will discuss the different possible shapes of the verb root(s) along with the modifying adverb-like elements.

6.2.1 Simple Verb Stem

The verb stem may consist of a single verb root. Most verb roots never change their form. However, there are verbs which have suppletive stem forms. So far, nineteen verbs have been attested to have suppletive stems. Examples (500) and (501) illustrate simple stems with verbs which do not have suppletive forms. The verb complex inside the brackets in (500) consists of the verb root *túŋ* ‘sit’ and the past tense operator *ta?*, which is inflected with the third person index. The verb complex inside the brackets in (501) consists of the verb root *p^hàn* ‘tell a story’ and the imperative operator *lo?*, which is inflected with second person singular index.

(500) *sa?-nù* *bə* *to?to?* [*túŋ* *t-a?*]
tiger-FEM DEF SS sit PST-3
‘The tigress just sat there (waiting for the pangolin).’ [SNR-3-1.7]

(501) *k^hi?hî* *nî* *k^hûk^hup* *bə* [*p^hàn* *l-o?*]
deer and tortoise DEF tell IMP-2SG
‘Tell the story of *Deer and Tortoise*.’ [SNR-4-1]

Out of about 270 verbs, 19 verbs have been found to have suppletive stems. One of the stems has a stop coda, while the other stem has no coda. This is the only feature consistently different between the two stems. Therefore, I call the stem with

stop codas a **checked stem** and the stem with no codas an **open stem**. The verbs with suppletive stems are given in Table 87.

Table 87: Suppletive verb stems

Checked Stem	Open Stem	Gloss
<i>cut</i>	<i>cù</i>	‘ask for something’
<i>t^hut</i>	<i>t^hù</i>	‘dig’
<i>ɲat</i>	<i>ɲî</i>	‘laugh’
<i>suk</i>	<i>sú</i>	‘watch’
<i>pik</i>	<i>pù</i>	‘fly’
<i>rik</i>	<i>rí</i>	‘die’
<i>ke?</i>	<i>kà</i>	‘go’
<i>vwe?</i>	<i>vù</i>	‘cut (jungle)’
<i>lwe?</i>	<i>lù</i>	‘catch, hold’
<i>rja?</i>	<i>rì</i>	‘buy’
<i>p^hwe?</i>	<i>p^hù</i>	‘uproot’
<i>swe?</i>	<i>sù</i>	‘roast’
<i>rwe?</i>	<i>rù</i>	‘to chirp (of birds)’
<i>ɲwe?</i>	<i>ɲù</i>	‘fry’
<i>pe?</i>	<i>pà</i>	‘grow’ (human mostly) (intr)
<i>k^hurwe?</i>	<i>k^hùrù</i>	‘snort’
<i>rwe?</i>	<i>rù</i>	‘to burn’ (of chili)
<i>miksik</i>	<i>miksù</i>	‘to hate’

<i>kwe?</i>	<i>kù</i>	‘climb’
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The two stems have distinct distributions. The checked stems are attested in a number of different constructions. First, they are found in the auxiliary construction with the auxiliary verb *rì*, as shown in (502) (see §6.8.1 on auxiliary construction). It is not possible to have the open stem *rí* ‘die’ in this construction.

- (502) *mərâ mə a-rik rì k-ì*
 sin from NMLZ-die AUX PRES-1PL
 ‘(We) die from sin.’ [MOV-4-1.234]

Second, they are found in clauses which do not contain an inflected operator, as shown in (503) and (504). Example (503) contains the uninflected operator *t^hîŋ*, which derives from a nominalizer, and example (504) has no operator at all.

- (503) *ŋâ lidu nŋ ke? t^hîŋ*
 1SG PN LOC go NMLZ
 ‘I have to go to Ledo.’ [Elicited]

- (504) *mânŋ ke? nî*
 where go Q
 ‘Where are you going?’ [Elicited]

Third, the checked stems are also found when the verbs are followed by the causative particle *t^hik*, and the benefactive serial verb *ku?*, which lexically means to ‘give’, as shown in (505) and (506). Thus, it is not possible to have the open stem *kâ* ‘go’ preceding *t^hik* ‘causative’ or *ku?* ‘give’ in these examples.

- (505) *kâ l-o? ŋâ l-ə-mə c^hipk^hərâ ke?*
 go IMP-2SG say NF-3-NF ant go

t^hik t-a?

CAUS PST-3

‘Saying, “Go!”, (the men) sent ants (to bite the monkey).’ [SNR-7-1.44]

(506) *báván iru? zap l-ə-mə dʂ imá*
insult like.that say NF-3-NF happen then

ʔke? ku? i joʔ

go give 1PL EXCLAM

‘After insulting (the fortune teller) like that, (the Kupa party) said, ‘We will go (to war for the Chunyu people)!’ [SNR-15-1.80]

Moreover, the checked stem of the verb *ke?* is also found when it functions as a grammaticalized serial verb denoting associated motion (see §6.2.2.6.2.2 for more detail). In example (507), *ke?* denotes a motion away from the speaker. Suppletive verbs other than *ke?* ‘go’ are not found as grammaticalized serial verbs.

(507) *bək^hɨŋ zəŋo t^hɨŋ kə sit ke? l-at*
down.hill PN place LOC take.along go IMP-2PL
‘Take (the Hakhun people) down the hill to Zanyo.’ [SNR-15-1.30]

Another construction where we find the checked stems is the complement clause of certain complement taking verbs like *ləpk^hi* ‘see’. In example (508) the verb *pik* ‘fly’ in the complement clause inside the bracket is in the checked form.

(508) *imá a-c^hà vā-t^hə kámá ŋà bə*
then 3-child CLF-one ERG 1SG DEF

[lâ rʂ nʂ pik] ləpk^hi t-ʂ?

eagle sky LOC fly see PST-1SG

‘Then, one child said, “I saw an eagle flying in the sky.”’ [WNR-6-1.5]

The distribution of the open stem is limited to clauses which take the finite inflected operators and which do not involve the auxiliary construction. In examples

(509) and (510), the open stems *kà* ‘go’ and *sú* ‘look’ (cf. *ke?* ‘go’, and *suk* ‘look’) are followed by the inflected present tense operator *k-ə* ‘present-3’ and the inflected imperative operator *l-o?* ‘imperative-2SG’ respectively.

(509) *mə-nâ-nù* *báká* *kà* *k-ə* *nî*
 2SG-young.sibling-FEM where go PRES-3 Q
 ‘Where has your younger sister gone?’ [SNR-12-1.37]

(510) *ará* *təhja?* *bə* *sú* *l-o?*
 this girl DEF look IMP-2SG
 ‘Look at this girl.’ [MOV-2-1.92]

Thus, the checked stems occur in more nominalized constructions like the auxiliary construction, stand-alone nominalized sentences, or complement clauses. The open stems, on the other hand, function as finite verbs of finite clauses directly marked with the inflected operators (without an intervening auxiliary verb).

6.2.2 Complex Verb Stems

It is very common for multiple verb roots or verb root(s) and adverb-like elements to function as a single predicate. For instance, in example (511) we have four independent verbs in a row without any morphological marking on any of them, and only one inflected operator at the end of the sentence.

(511) *vàn* *nʃ* [*twè* *he?* *ke?* *ku?* *t-i?*]
 fire LOC take keep go give PST-1PL
 ‘(We) throw (it) in the fire.’ [SNR-17-1.33]

There are a few ways of knowing that we are dealing with a single predication, instead of multiple predications, when we have multiple verbs. These tests are discussed in §6.2.2.1.

Certain verb roots behave like compounds in that they always occur next to each other and express idiomatic meaning. For instance, the sequence of *twè* ‘take’ and *he?* ‘keep’ expresses the meaning ‘throw away’, a meaning that can not be derived from the meaning of the individual verb roots. On the other hand, the contribution of *ke?* ‘go’ and *ku?* ‘give’ to the verb complex in (511) is transparent and can be generalized. The verb *ke?* expresses an associated motion (distal motion) and the verb *ku?* ‘give’ expresses some kind of effect (benefactive/melafactive). Some frequently encountered idiomatic sequences of verb roots are discussed in §6.2.2.2, and verbs like *ke?* ‘go’ and *ku?* ‘give’ which express more abstract and schematic meaning are discussed in §6.2.2.6.

For most verb roots, their contribution to the verb complex and their semantic relation to each other in the verb complex can be described as productive patterns. One of the productive patterns is the resultative construction, in which the initial verb expresses a resultant event and the subsequent verb expresses the event or action which leads to the resultant event in the initial verb. This pattern is described in §6.2.2.3. Another productive pattern is one where the events expressed by the verb roots form a sequence of events in an iconic order to the verb roots. This pattern is described in §6.2.2.4. The final productive pattern is one where one of the verbs expresses an adverb-like meaning that modifies the meaning of the other verb root. There are also elements which are not found as independent verbs, but they add similar adverb-like meaning to a verb root. This pattern is described in §6.2.2.5. The following section presents three tests for single predication in Hakhun.

6.2.2.1 Tests of a Single Predication

When we have multiple verbs in a row it is hard to tell whether we have multiple predications, and if so, where one ends and the other begins. Consider the following examples.

(512) *ŋà bə lâ rŋ nŋ pik ləp kʰi t-ŋ?*
 1SG ERG eagle sky LOC fly get see PST-1SG
 ‘I saw an eagle flying in the sky.’ [WNR-6-1.5]

(513) *zéká sa? kámá vícî ləp kʰi imá*
 now tiger ERG pangolin get see when

kəratrat mə rik kŋ? he? k-a?
 by.force ADV die bite keep PRES-3
 ‘Today, when a tiger sees a pangolin, it bites it to death.’ [SNR-3-1.20]

In examples (512) and (513) we have sequences of three independent verb roots followed by an inflected tense operator. Just looking at the verbs and their glosses it is hard to tell how many predications are there in these two verb complexes. It turns out that we have two predications in (512), where *pik* ‘fly’ is part of a complement clause and *ləpkʰi* is a compound verb meaning ‘see’; and just one predication in (513), where *rik* denotes the result of the action *kŋ?* ‘bite’ and *he?* adds the sense that the action has a substantial effect, such as death. There are a few formal means that help us delimit a predication. This involves morphological elements marking the boundary of the verb stems on both sides in two constructions – the auxiliary construction and the prohibitive construction. In addition, the position of certain verbs and knowledge of the possible semantic relations between the verbs can help us infer whether there are multiple predications and where the boundary is. Three tests are proposed below which show that the multiple verb roots do form a single predicate.

6.2.2.1.1 The Auxiliary Construction Test

The auxiliary construction is convenient for showing whether multiple verb roots or verb root(s) and adverb-like elements form a single predicate. The auxiliary construction, which is discussed in more detail in §6.8, involves a prefix *a-* on the verb stem and an auxiliary verb *rì* following the verb stem. Thus, the verb stem is delimited on both sides. In example (514), the lexical verb *sʻ* ‘sell’ is prefixed with *a-* on the left and is followed by the auxiliary verb *rì* on the right. The auxiliary verb is then followed by the inflected past tense operator *ta?*. Here using the syntactic criterion of replacement (of one constituent with another), we can argue that anything that can replace the lexical verb *sʻ* is a single verb stem since *sʻ* ‘sell’ is a single verb stem.

(514) *təlâ bə [a-sʻ rì t-a?]*
 boy DEF NMLZ-sell AUX PST-3
 ‘(They) sold the boy.’ [SNR-15-1.104]

It is, in fact, possible to have complex verb stems between the prefix *a-* and the auxiliary verb *rì*. Examples (515) through (519) illustrate multiple verb roots or verb root(s) and adverb-like elements occurring between the prefix *a-* and the auxiliary *rì* of the auxiliary construction. In example (515), we have two verb roots – *bwê* ‘be tired’ and *rik* ‘die’. Here, the verb *rik* ‘die’ adds a sense of intensification to the event of *bwê* ‘be tired’. In example (516), we have two verb roots – *ηé* ‘win, succeed,

finish’ and *lwe?* ‘hold’. Here, the verb *ɲé* adds a modal meaning of ‘capacity’ to denote that the agent is capable of the event in *lwe?* ‘hold’.

(515) *[a-bwê-rik rì t-i? nà]*
 NMLZ-be.tired-die AUX PST-1PL PFV
 ‘(We) were extremely tired.’ [SNR-13-1.47]

(516) *zéká ɲà bə [a-ɲé lwe? rì e]*
 now 1SG DEF NMLZ-be.able hold AUX 1PL
 ‘Now, I will be able to hold you.’ [SNR-12-1.21]

In example (517), we have the verb *sap* ‘cry’ and an adverb-like element *ròkò* ‘often, all the time’. Here, *ròkò* indicates that the event *sap* ‘cry’ takes place often or all the time.

(517) *ny-c^hà [a-sap ròkò rì k-a?]*
 1PL.INCL-child NMLZ-cry often AUX PRES-3
 ‘Our child is crying all the time.’ [SNR-6-4.6]

In example (518), we have two verb roots – *c^hwé* ‘run’ and *hwéhí* ‘pretend’. Here, *hwéhí* ‘pretend’ adds the sense that the event in the preceding verb is not real, just a pretense.

(518) *k^hûk^hup bə [a-c^hwé hwéhí rì l-ə-mə]*
 tortoise DEF NMLZ-run pretend AUX NF-3-NF

tja?rə túŋ
 quickly sit
 ‘The tortoise pretends to run and then quickly sits down.’ [SNR-4-4.6]

In example (519), we have two verb roots, *lap* ‘get’ and *k^hì* ‘see’, and they both express the meaning ‘to see’.

(519) *a-p^hja?* *d̂* *imá* *mi?* *kámá*
 NMLZ-bright COP if/when person ERG

[a-ləp k^hĩ rì k-a?]
 NMLZ-get see AUX PRES-3
 ‘When it is bright, people can see (things).’ [MOV-2-1.170]

Verbs that are not part of a single predication are left outside the auxiliary construction. Example (520) involves a non-auxiliary construction, while example (521) involves the auxiliary construction counterpart of the same sentence. Note that the verb *c^hwé* ‘run’ is left outside the auxiliary construction in (521), indicating that the verb *c^hwé* ‘run’ does not belong in the same predication. In this case, the verb *c^hwé* ‘run’ forms the predicate of the complement clause of the verb *ləpk^hĩ* ‘see’.

(520) *ŋà bə atĩ c^hwé ləp k^hĩ t-ɣ?*
 1SG DEF 3SG run get see PST-1SG
 ‘I saw him running.’ [Elicited]

(521) *ŋà bə atĩ c^hwé [a-ləp k^hĩ rì t-ɣ?]*
 1SG DEF 3SG run NMLZ-get see AUX PST-1SG
 ‘I saw him running.’ [Elicited]

6.2.2.1.2 The Prohibitive Construction Test

The prohibitive construction also helps us delimit a predication. In this construction, a prohibitive particle *nɣ?* occurs right before the verb stem and then the verb stem is followed by an inflected operator (see §6.3.2). In example (522), the verb *sap* ‘cry’ is preceded by the prohibitive *nɣ?* and followed by the operator *an* ‘2SG’.

(522) *atĩ-c^hà a-sân d̂ a, [nɣ? sap an]*
 3SG-DIM NMLZ-good COP 3 PROH cry 2PL
 ‘She will be fine. Do not cry.’ [MOV-1-1.290]

Once again, we can argue that elements that go between the prohibitive particle and the inflected operator form a single predication. In examples (523) through (527), there are multiple verb roots or verb root(s) and adverb-like elements between the prohibitive particle and the inflected operator. In example (523), we have two verb roots – *t^hù* ‘hit’ and *ku?* ‘give’, which contribute an idiomatic meaning ‘tell’.

In example (524), we have two verb roots - *vín* ‘return’ and *cù* ‘ask for something’.

Here, *vín* adds the sense of repetition to the event of *cù* ‘ask for something’.

(523) *nŕ bə hwé hə mì [nŕ? t^hù ku? o]*
 2SG DEF who DAT ADD PROH hit give 2SG
 ‘You do not tell anyone.’ [MOV-2-1.219]

(524) *ku? he? l-o?, [nŕ? vín cù o]*
 give keep IMP-2SG PROH return ask.for 2SG
 ‘Give (to people), (but) do not ask for it back.’ [MOV-2-1.52]

In example (525), we have two verb roots - *zùn* ‘chase’ and *he?* ‘keep’, and *he?* adds

an abstract sense of ‘effect’ to the event of *zùn* ‘chase’. In example (526), we have

two verb roots - *rik* ‘die’ and *he?* ‘keep’, which express an idiomatic meaning ‘kill’.

(525) *nânâ-c^hà-hŕ [nŕ? zùn he? an]*
 child-DIM-PL PROH chase keep 2PL
 ‘Don’t chase the children away.’ [MOV-3-1.126]

(526) *[nŕ? rik he? o]*
 PROH die keep 2SG
 ‘Do not murder (people).’ [MOV-3-1.75]

In example (527), we have two verb roots – *lit* ‘pass by’ and *vɿ* ‘come’. Here, *vɿ* ‘come’ adds a sense of associated motion (proximal motion, i.e. the demons moving to where they came from, underground).

(527)	<i>nîrûm</i>	<i>haʔ</i>	<i>kʰûn</i>	<i>nɿ</i>
	1PL.EXCL	ground	under	LOC
	<i>[nɿʔ lit</i>	<i>vɿ</i>	<i>tʰik</i>	<i>r-i]</i>
	PROH pass.by	come	CAUS	INV.NON.PST-1PL
	‘Do not make us go under the ground.’			[MOV-2-1.190]

6.2.2.1.3 Position and Order of Elements

The final test for whether we are dealing with a single predication comes from position and order of the verb roots or the verb root(s) and the adverb-like elements. For all five kinds of patterns of complex verb stems (i.e. idiomatic, resultative, sequential, adverbial, and grammaticalized) described below, the position and order of each element of the verb stem is fixed. Thus, for instance, the order of the two verb roots in an idiomatic complex verb stem like *ləpkʰi* ‘see’ (*ləp* ‘get’, *kʰi* ‘see’) cannot be changed. The order of the verb that denotes result and the verb that denotes the cause in a resultative expression like *riklán* ‘kill’ (*rik* ‘die’, *lán* ‘beat’) cannot be changed. The order of the verbs in sequential verb complexes like *sù pʰɿʔcʰaʔ* ‘roast and eat’ (*sù* ‘roast’, *pʰɿʔcʰaʔ* ‘eat’) cannot be changed while preserving meaning. The verb roots which contribute adverb-like meaning and the adverb-like elements have a fixed order with respect to the root whose meaning they modify. Thus, the expression *mó pù* ‘fly by mistake’ (*mó* ‘by mistake’, *pù* ‘fly’) cannot be reversed. Finally, all the grammaticalized verbs have fixed positions with respect to the verb root which

contributes the primary lexical meaning, and with respect to other grammaticalized verbs in the verb stem. Thus, the grammaticalized verb *kuʔ* ‘give’ always follows the primary lexical root and follows all other grammatical verbs in the verb complex. A change in the order of the grammaticalized verbs with respect to the lexical root indicates a different syntactic status, different from being a grammaticalized verb. Thus, for instance, as a grammaticalized verb, the root *ŋé* ‘win, succeed, finish’ precedes the root which contributes the lexical meaning. However, *ŋé* also functions as a complement taking verb, and in that function, it follows the verb root which contribute the lexical meaning and which functions as the complement of *ŋé*. Thus, in (528) the verb *ŋé* ‘finish’ is a complement taking verb with the clause in brackets functioning as the complement clause. Note that as a verb of the complement clause *vweʔ* ‘cut’ is in the checked stem form.

- (528) *irá dîmâ [pik vweʔ] ŋé t-ɣʔ*
 that after paddy.field cut finish PST-1SG
- ŋâ imá*
 say then
 ‘After that, after finishing clearing the paddy field...’ [SNR-1-1.2]

In (529) *ŋé* occurs with the same verb ‘cut’, but now it precedes the lexical verb and the lexical verb ‘cut’ is in the open stem form *vù*, because it is a finite verb followed by an inflected operator. Here, *ŋé* is functioning as a grammaticalized verb and is part of the same predication as the verb ‘cut’.

- (529) *pik* *ibá* *nâm* *ibá* [*ŋé* *vù* *l-i?-mə*]...
 paddy.field that plant.type that finish cut NF-1PL-NF
 ‘After finishing cutting the paddy field, the weeds...’ [SNR-1-1.2]

Having discussed the tests for single predication of the complex verb stems, now we look at the five different patterns of complex verb stem – idiomatic complex stem, resultative complex stems, sequential complex stems, adverbial complex stems, and complex stems with grammaticalized verbs.

6.2.2.2 Idiomatic Complex Stems

For several complex verb stems the meaning needs to be lexically specified in that the meaning of the verb stem cannot be transparently derived from the meanings of the component roots. These idiomatic complex verb stems mostly involve the roots *he?* ‘keep’, *lap* ‘get’, *tij* ‘find’, *rik* ‘die’, and *ku?* ‘give’. A list of idiomatic verb stems with the verb *he?* are given in Table 88.

Table 88: Compound Verb-Verb Stems with he? ‘keep’

Form	Lexical Gloss	Word meaning
<i>lán-he?</i>	beat-keep	kill
<i>bu?-he?</i>	beat.with.stick-keep	kill
<i>rik-he?</i>	die-keep	kill
<i>twè-he?</i>	take-keep	throw away

Besides these words, there are several other words which speakers spontaneously produced with *he?* in elicitation, suggesting that *he?* is somehow lexicalized in these words. The fact that *he?* might be more often lexicalized is also supported by the fact

that it occurs closest to the lexical root when there are multiple grammaticalized verbs in a sequence (see §6.2.2.6 for position of grammaticalized verbs). Table 89 presents a list of verbs elicited with *he?* ‘keep’. In these words, *he?* does not have much of a semantic contribution. The verbs are prefixed with *a-* as they are given in their citation form.

Table 89: he? 'keep' lexicalized with other verb roots

Form	Meaning
<i>ac^hi?-he?</i>	‘to damage’
<i>ahá-he?</i>	‘to exhale’
<i>ahɣ?-he?</i>	‘to sprinkle’
<i>ak^hɣ?-he?</i>	‘to tie’
<i>alɣ?-he?</i>	‘to forget’
<i>alit-he?</i>	‘to pass by’
<i>ama?-he?</i>	‘to lose’
<i>amó-he?</i>	‘to fail to recognize’
<i>amut-he?</i>	‘to extinguish’
<i>aɲùn-he?</i>	‘to make dirty’
<i>asut-he?</i>	‘to discard’
<i>amî-he?</i>	‘to wipe tear’
<i>apà-he?</i>	‘to broom’

The roots *ləp* ‘get’ and *tɨŋ* ‘find’ are also found in verb stems in which their semantic contribution is not obvious. These verb stems have to do with perception. Consider the words in Table 90.

Table 90: Compound Verb-Verb Stems with *ləp* ‘get’ and *tɨŋ* ‘find’

Form	Gloss	Word meaning
<i>ləp-teʔ</i>	get-hear	‘hear’
<i>ləp-kʰɨ</i>	get-see	‘see’
<i>tɨŋ-teʔ</i>	find-hear	‘hear’
<i>tɨŋ-kʰɨ</i>	find-see	‘see’

The multi-verb stems for ‘seeing’ and ‘hearing’ are more common than the roots *teʔ* ‘hear’ and *kʰɨ* ‘see’. We also get the multi-verb stems when we elicit these concepts. However, we do find the same roots *teʔ* ‘hear’ and *kʰɨ* ‘see’ by themselves as shown in (530) and (531), and there is no obvious difference in meaning between the complex verb stems and the simple verb stem counterparts.

(530) *a-pʰù* *ibá* *tɨŋlá* *kʰɨ* *vɤ̀* *t-aʔ*
 3-elder.brother that suddenly see come PST-3
 ‘The brother suddenly came and saw (his younger brother).’ [SNR-11-1.40]

(531) *imá* *a-và* *a-cʰà* *tɤ̀* *kámá* *haʔsúŋ* *nɤ̀....*
 then 3-father 3-son family ERG village LOC

kʰobot *teʔ* *tʰik* *t-aʔ*
 news hear CAUS PST-3
 ‘Then the father and son gave the news in the village.’[SNR-10-1.3]

Another set of idiomatic multi-verb stems involve the root *rik* ‘die’. In these stems, the root *rik* adds a sense of intensity. Once again, the verb forms are in their citation form with *a-* prefix. Consider the words in Table 91.

Table 91: Compound Verb-Verb Stems with *rik* ‘die’

Form	Gloss	Word meaning
<i>abwê-rik</i>	be tired-die	be very tired
<i>act-rik</i>	be scared-die	be very afraid
<i>ape?-rik</i>	be surprised-die	be very surprised
<i>arəm-rik</i>	be hungry-die	be very hungry

There are a few more frequently encountered compounds, such as *p^hʔc^ha?* ‘eat’ and *t^hùku?* ‘tell’. The former is a compound of the roots *c^ha?* ‘eat rice’ and *p^hʔ* ‘eat anything else besides rice’. The latter is a compound of *t^hù* ‘hit’ and *ku?* ‘give’.

6.2.2.3 Resultative Complex Stems

A very productive type of complex stem is the resultative stem, in which the first element, which may or may not be a verb, denotes the ‘result’ or ‘consequence’ of the event/action of the subsequent verb. This is a well-known construction in Chinese (Cheng & Huang, 1994; Li, 1990). A large set of these stems have to do with ‘killing’. There is no monomorphemic word for ‘to kill’ or ‘to murder’. Instead, the verb *rik* ‘die’ is combined with a root denoting an event/action which may lead to a death. Some of these verb stems are given in Table 92.

Table 92: Resultative Stems with rik 'die'

Form	Gloss	Word meaning
<i>arik-bu?</i>	die-beat.with.stick	beat to death
<i>arik-hap</i>	die-shoot	shoot to death
<i>arik-lán</i>	die-beat	beat to death
<i>arik-su?</i>	die-stab	stab to death
<i>arik-ván</i>	die-cut	chop to death
<i>arik-ze?</i>	die-spear	spear to death
<i>arik-kx?</i>	die-bite	bite to death
<i>arik-nx?</i>	die-tread	tread to death

Examples (532) through (535) illustrate resultative verb stems with *rik* 'die'. The verb complexes are put inside brackets.

(532) *zéká sa? kámá vícî ləpk^hì imá*
 now tiger ERG pangolin see when
kəratrat mə [rik kx? he? k-a?]
 by.force ADV die bite keep PRES-3
 'Today, when a tiger sees a pangolin, it bites it to death.' [SNR-3-1.20]

(533) *iráká bátəñî [mó rik nx? t-x?]*
 there perhaps by.mistake die tread PST-1SG
 'There perhaps (I) trod (the ghost child) to death by mistake.' [SNR-6-4.22]

(534) *irá m̂-tí và kámá c^hùjù và m̂-t^hə*
 that dead-PERSON person ERG PN person CLF-one
[rik su?]
 die stab
 'The dead person (i.e. who is dead now) stabbed a Chunyu person to death.'
 [SNR-15-1.10]

(537) *ɲà bə kásɻ? [pê bu? t-ɻ?]*
 1SG DEF door break hit PST-1SG
 ‘I broke the door.’ [Elicited]

(538) *zàtat kà t-a? abá pìpʰɻ ibá vəkɲî*
 pluck go PST-3 this fruit.type that wild.pig

rip kʰu? nɻ [pê pat ku? t-a?]
 nest on LOC break throw give PST-3
 ‘The one which was plucked, the Pi fruit, broke the wild pig’s nest. [SNR-6-4.9]

There are several verbs in which the root *ɲat* ‘hold, smash’ seems to have gotten lexicalized, such that when we elicit these concepts the root *ɲat* is invariably produced with these verbs. These verbs code events which involve bodily force, such as ‘tear’, ‘break’, ‘bend’, etc. These events could be construed as involving the process of *ɲat* ‘hold’, which leads to the events in the initial verb roots. These complex verb stems are presented in Table 94.

Table 94: Lexicalized Resultative Verb Stems

Form	Gloss	Word meaning
<i>aci?-ɲat</i>	tear-hold	‘tear’
<i>alja?-ɲat</i>	turn.over-hold	‘turn over’
<i>aŋo?-ɲat</i>	break-hold	‘break’
<i>aŋut-ɲat</i>	bend-hold	‘bend (tr)’
<i>ape?-ɲat</i>	break-hold	‘break (of rope)’
<i>apán-ɲat</i>	bend/break-hold	‘bend/break on sides’

Examples (539) through (543) illustrate more resultative verb stems. In example (539), the resultative verb stems involve the root *bwê* ‘be tired’ as denoting the result of the following event *c^hwé* ‘run’.

- (539) *k^hiʔhî bə [bwê c^hwé l-ə-mə]*
 deer DEF be.tired run NF-3-NF
- rɣ? m-aʔ-mə rí t-aʔ*
 breathe NEG-3-NF die PST-3
- ‘Being tired from running, not being able to breathe, the deer died.’ [SNR-4-4.10]

In example (540), we have two resultative stems *rik nat* ‘die hold’ and *zà bu?* ‘fall beat’. In the former, *rik* ‘die’ denotes the result of the event *nat* ‘hold’, and in the latter the verb *zà* ‘fall’ denotes the result of the event *bu?* ‘beat’.

- (540) *vî kámá sú l-ə-mə bə [rik nat]*
 monkey ERG look NF-3-NF def die smash
- [rik nat] [zà bu?] [zà bu? he?]*
 die smash fall beat fall beat keep
- ‘The monkey looked and smashed (the ants) to death, dropped them (from the tree) by beating.’ [SNR-7-1.45]

In example (541), the resultative stem consists of *tíŋ* ‘find’ which denotes the result of the event *pat* ‘throw’ a fish net. In example (542), the resultative verb stem consists of the root *p^hjâ* ‘be flat’ denoting the result and the root *bó* ‘to dance in a group’. In this context, a crab was hiding inside a big stone, the animals danced on top of that stone to punish the crab, and the crab becomes flat as a result.

(541) *co?* *ibá* *pat-ru?* *pat-ru?* *rì* *t-a?*
 fish.net that throw-CONT throw-CONT do PST-3

bà *abá* *ibá* *va?pu tʰɣlɣ?* *vikrə*
 REST this that bamboo.joint quickly

[*tíŋ* *pat* *t-ə* *ŋà*]

find throw PST-3 hearsay

‘While just throwing the fish net again and again, (the father) found this bamboo joint by throwing (the net).’ [SNR-12-1.41]

(542) *nɣ̂* *bə* *mat-ɲù* *ŋá* *l-ə-mə* [*pʰjâ* *bó*]
 2SG DEF responsible-FEM say NF-3-NF flat dance

he? *t-a?*]

keep PST-3

‘Saying, ‘You are the guilty one’, (all the animals) danced (on top of the big stone) and made (the crab) flat.’ [SNR-6-4.99]

In example (543), we have the resultative verb stem *zà bu?* ‘fall beat’ again but in a negative sentence. Note that here only the result seems to be negated, while the event of the other root is still entailed.

(543) *vəkʰâ* *kámá* [*tə-zà* *bu?* *m-a?*]
 crow ERG PERM-fall beat NEG-3
 ‘The crow could not make (the monkey) fall by beating.’ [SNR-7-1.38]

Note that in place of the root which denote the result we may also find elements which are not independent verbs. The element *nwap* seen in (544) and (545) is not attested outside the resultative stems.

(544) *cʰôcʰi?* *a-pʰo?* *a-râ* *ibá* [*nwap-do?*]
 all 3-branch 3-tree.top that piece-cut

[*nwap-ván* *k-ì*]

piece-cut PRES-1PL

‘(We) cut all the branches into pieces.’ [SNR-1-1.3]

- (545) *vɿ r-an,* [nwap-t^hù he? l-at]
 come PROX.NON.PST-2PL piece-hit keep IMP-2PL
 ‘Come. Hit (him) well.’ (Lit-Hit him to pieces/powder) [MOV-4-1.89]

6.2.2.4 Sequential Complex Stems

The semantic relation between the events of the multiple verb roots may also be that of sequence. The order of the events is the same as the order of the roots. In example (546), the verb complex consisting of *hûŋ* ‘come out’ and *p^ho?* ‘grow’ denotes the event of a tree coming out of an elephant’s navel and growing big. In example (547), the complex verb stem consisting of *twè* ‘take’ and *p^hɿ?c^ha?* ‘eat’ denotes the event of animals picking up and eating seeds in the paddy field.

- (546) *abá i-púcó va? [hûŋ p^ho? kà t-a?]*
 this 1SG-navel ABL come.out grow go PST-3
 ‘This (tree) grew out of my navel.’ [SNR-2-2.5]

- (547) *zúk nî vù kámá iná [twè p^hɿ?c^ha? a]*
 animal and bird ERG there take eat 3
 ‘Animals and birds will pick and eat (the seeds).’ [SNR-1-1.11]

In example (548) the verbs *sù* ‘roast’ and *p^hɿ?c^ha?* ‘eat’ denote a sequence of two events ‘roasting and then eating’. In example (549), the roots *lám* ‘search’ and *p^hù* ‘uproot’ denote the sequence of events of ‘finding and then uprooting’ grass.

- (548) *aru? t^hɿ? l-ə-mə [sù p^hɿ?c^ha?*
 like.this start.fire NF-3-NF roast eat
k-ì ta]
 PRES-1PL DP
 ‘Starting (fire) like this, (we) roast and eat (meat).’ [SNR-7-1.19]

- (549) *hiŋlu melu-hx* *irábá [lám p^hù he? k-ì]*
 grass-PL that search uproot keep PRES-1PL
 ‘(We) find and uproot the weed.’ [SNR-1-1.14]

In example (550), the roots *hu?* ‘steal’ and *twè* ‘take’ denote the sequence of events of ‘stealing and taking something’.

- (550) *irá* *vàndùt^hùm* *ibá* *vî* *kámá [hu? twè*
 that lit.firewood that monkey ERG steal take

vɔ̃ *t-a?*] ...
 come PST-3
 ‘The monkey stole and brought the lit firewood (from man’s house).’
 [SNR-7-1.29]

6.2.2.5 Adverbial Complex Stems

Another prominent semantic relation between the roots of a complex verb stem is analogous to the relation between a verb root and an adverb. One of the roots denotes an event, while the other verb root or element denotes a meaning that is typically associated with adverbs or adverbials, such as ‘again’, ‘back’, ‘by mistake’, etc. There are, however, only a handful verbs/elements which add this kind of meaning to another verb. Some of these precede the verb root which provides the lexical meaning, while others follow it. Table 95 presents the verb roots and other elements which add adverbial meaning to the meaning of the subsequent lexical verb. The elements *kó* ‘upward’, *cup* ‘eat along with’, *tùm* ‘exhaustively’, and *t^hûŋ* ‘attentively’ are not attested as independent verbs. They are only found as part of a complex verb stem. Table 96 presents verb roots and adverb-like elements which follow the verb root whose meaning they modify.

Table 95: Adverbials that precede a lexical verb in Complex Stems

Form	Lexical meaning	Meaning in complex verb stem
<i>mó</i>	‘to make mistake’	‘by mistake’, ‘unintentionally’, ‘indiscriminately’
<i>hík</i>	‘to suit’	‘properly’, ‘accurately’, ‘precisely’, ‘appropriately’
<i>hûm</i>	‘be right, come true’	‘precisely, accurately’
<i>rúŋ</i>	‘to gather’	‘together’, ‘jointly’
<i>vín</i>	‘to return’	‘again’, ‘back’
<i>hu?</i>	‘to steal’	‘stealthily’
<i>cup</i>		‘eat along with’
<i>kó</i>		‘upward’
<i>tùm</i>		‘exhaustively’
<i>t^hûŋ</i>		‘attentively’

Table 96: Adverbials that follow a lexical verb in Complex Stems

Form	Lexical meaning (POS)	Meaning in complex verb stem
<i>hwéhí</i>	‘pretend’ (v)	‘pretend’
<i>m’</i>		‘first, i.e. before doing something else’
<i>ròkò</i>		‘always’

Examples (551) through (560) illustrate the adverbial elements in Table 95. In example (551), the verb root *mó* adds the sense that the action *pù* ‘fly’ was

unintentional or was by mistake. In example (552), the verb root *hik* adds the sense that the action *t^ho?* ‘aim’ is done accurately or precisely.

- (551) *i-hùm* *c^{hi}l^{he}?* *l-ə-mə* *ŋa* *irə* *lɣ* *nɣ*
 1SG-house break NF-3-NF 1SG that reason LOC
- [*mó* *pù* *kà* *t-ɣ?*]
 by.mistake fly go PST-1SG
 ‘When my house was broken, I flew indiscriminately/unintentionally because of that.’ [SNR-6-4.28]

- (552) *ibá* *pa?* [[*hik* *t^ho?*] [*hik* *t^ho?*] *rì* *l-ə-mə*]....
 that spear accurately aim accurately aim do NF-3-NF
 ‘Pointing/aiming the spear accurately....’ [SNR-11-1.48]

In example (553), the verb root *hùm* indicates whether or not the event *sɣ?* ‘enter’ was accurately conducted.

- (553) *a-dà* *ibá* *ka* *k-a?*, *irəmə* *k^hûnbîŋ* *nɣ*
 3-leg that spread PRES-3 then hole.underground LOC
- [*hùm* *sɣ?* *t^hik* *m-a?*]
 properly enter CAUS NEG-3
 ‘(He) spread his legs, and then (the ghosts) could not fit (him) inside the ground hole.’ [SNR-8-1.12]

In example (554), the verb root *rúŋ* adds the sense that the event of *t^hù* ‘dig’ is done in a group. In example (555), *vín* indicates that the direction of the motion event *ke?* ‘go’ is back to a place where it started.

- (554) ... *zu?sûŋ* *kûn-t^hə* [*rúŋ* *t^hù* *t-a?*]
 ... rat.type hole-one gather dig PST-3
 ‘(They) dug a rat hole together.’ [SNR-7-1.8]

(555) *irá sìm hùn rô [vín ke? t^hik t-a?]*
 that salt carry PURP back go CAUS PST-3
 ‘(They) sent (him) back to bring the salt.’ [SNR-11-1.37]

In example (556), the verb root *hu?* adds the sense that the event *hwé* ‘build’ is done stealthily. In example (557), *cup*, which has been found only with the verb root *c^ha?* ‘eat rice’, adds the sense that there is something else to be eaten along with food.

(556) *ze? mûŋ k^hûn ný [hu? hwé l-ə-mə]*
 forest inside under LOC steal build NF-3-NF

bý bə zwe? vý r-a
 tree DEF cut come PROX.NON.PST-3
 ‘Building (houses) stealthily inside the forest, (they) are approaching by cutting the trees.’ [SNR-15-1.64]

(557) *nîrûm kámá ará sìm kámá*
 1PL.EXCL ERG this salt INST

[cup c^ha? k-ì]
 eat.with eat PRES-1PL
 ‘(We) eat (food) with this salt.’ [SNR-11-1.26]

In example (558), *kó* adds the sense that the event in *cap* ‘stand’ is upward. In example (559), *tùm* adds the sense that the event in *tap* ‘cup’ is exhaustive such that it applies to all of the conceived P participants, in this case the branches.

(558) *pítar [kó cap l-ə-mə] ŋâ t-a?*
 PN up stand NF-3-NF say PST-3
 ‘Peter stood up and said...’ [BT-15-4.3]

(559) *irábá a-tap a-k^hán rì l-ì?-mə*
 that NMLZ-cut NMLZ-reap AUX NF-1PL-NF

irámá [tùm tap t-i? nà] nê ñâ l-i?-mə.....
 then all cut PST-1PL PFV Q say NF-1PL-NF
 ‘Cutting, reaping that (i.e. branches), then when (we) have cut everything,
 then... [SNR-1-1.21]

In example (560), the element *t^hûŋ*, which seems to correspond to the initial syllable in the word *t^hûŋhûn* ‘think’, adds the sense that the action in *te?* ‘hear’ is done attentively.

(560) *imá tísû zaprì bə a-p^hat rì l-ə-mə*
 then God word DEF NMLZ-read AUX NF-3-NF

[t^hûŋ te? t-a?]
 attentively hear PST-3
 ‘Then (he) read the God’s words, (they) listened attentively.’ [MOV-4-1.273]

Note that some, but not all, of the adverbial verb roots and elements in Table 95 are also found as adverbs with the suffix *-la*, such as *hikla* ‘precisely’, *hûmla* ‘accurately’, *rúŋla* ‘together’, *kóla* ‘upward’, *tùmla* ‘exhaustively’. In example (561), *hikla* and *hûmla* modify the verb complex inside the brackets with lexical roots *t^ho?* ‘measure’ and *zip* ‘sleep’.

(561) *hikla hûmla [hûm t^ho? zip t^hik]*
 precisely accurately be.precise measure sleep CAUS
 ‘(The elder brother) made (the younger brother) sleep and fit (inside the wooden plate).’ [SNR-11-1.8]

In example (562), the adverb *rúŋla* ‘together’ modify the verb *lapk^hî* ‘see’. In example (563), the adverb *kóla* ‘upward’ modifies the verb *cap* ‘stand’.

(562) *ɲà kámá rúŋla ləpki t-ɣ?*
 1SG ERG together see PST-1SG
 ‘I saw (them) together.’ (i.e. they were together) [MOV-4-1.20]

(563) *pʰəʔkʰərâ kóla cap l-ə-mə*
 bat upward stand NF-3-NF
 ‘The bat stood up and’ [SNR-6-4.26]

In example (564), the adverb *tùmla* ‘all/exhaustively’ modifies the verb *hwàm* ‘pull’.

(564) *tùmla hwàm ván ləmə ... hu? cʰí ván*
 all pull along NF-3-NF hide DUR along
 ‘(She) pulled all (the mushrooms inside), and hid them.’ [SNR-3-1.6]

Examples (565) through (567) illustrate the verb roots and adverb-like elements which modify a preceding verb root. In example (565), the verb *hwéhi* adds the sense that the event *cʰwé* ‘run’ was not real.

(565) *kʰûkʰup bə [a-cʰwé hwéhi rì l-ə-mə]...*
 turtle DEF NMLZ-run pretend AUX NF-3-NF
 ‘The turtle pretended to run and then....’ [SNR-4-4.6]

In example (566), *mɣ* indicates that the event in the preceding verb *lik* ‘wear’ is taking place before some other event in time.

(566) *ɲaʔɲò [tə-lik mɣ k-ɣ] jo*
 necklace PERM-wear first PRES-1SG EXCLAM
 ‘Let me wear the necklace first.’ [SNR-12-1.29]

In example (567), *ròkò* is indicating that the event of *sap* ‘cry’ takes place all the time.

(567) *ɲɣ-cʰà [a-sap ròkò rì k-aʔ]*
 1SG.INCL-child NMZL-cry often AUX PRES-3
 ‘Our child is crying all the time.’ [SNR-6-4.6]

6.2.2.6 Complex Stems with Grammaticalized Verbs/Elements

Several verb roots and a few elements contribute more abstract grammatical meaning to the verb complex. These grammaticalized verbs and elements add meanings like associated motion, phasal ('start', 'end'), effect/affect, etc. These elements may co-occur with the four types of complex verb stems described above. We find the grammaticalized verbs on either side of a lexical verb root(s) in a complex verb stem, and they occur at more exterior positions in the verb stem. We may find more than one of these grammaticalized verbs/elements in a single verb stem. Figure 11 outlines the position of the grammaticalized verbs and elements with respect to the lexical root(s) and with respect to each other in a complex verb stem.

Figure 11: Positions of Grammaticalized Verbs in Complex Verb Stems

-2	-1	0	1	2	3	4
<i>le?</i> 'again'	<i>bʔ</i> 'start' <i>p^hʔ</i> 'first' <i>ŋé</i> 'finish'	Root(s)	<i>he?</i> 'keep'	<i>ke?</i> / <i>kà</i> 'go' <i>vʔ</i> 'come' <i>ván</i> 'along'	<i>ku?</i> 'give'	<i>c^h</i> 'durative'

The position 0 can be occupied by a single verb root or one of the more complex verb stems described above. The left-most position -2 is occupied by the element *le?* which denotes repetition. Position -1 is occupied by three phasal/ordinal verb roots – *bʔ* 'start', *p^hʔ* 'first', and *ŋé* 'finish'. Position 1, which is closest to the root among four positions on the right of the root, is occupied by *he?* 'keep', the most lexicalized of all grammaticalized verbs. Position 2 is occupied by deictic verbs and associative motion markers – *ke?*/*kà* 'go', *vʔ* 'come', and *ván* 'along'. Position 3 is occupied by *ku?*

‘give’ which adds benefactive/malefactive meaning. The final position 4 is occupied by durative *c^ht*. Pre-root grammaticalized verbs and elements are described in §6.2.2.6.1 and post-root grammaticalized verbs and elements are described in §6.2.2.6.2.

6.2.2.6.1 Pre-Lexical Grammaticalized Verbs/Elements

6.2.2.6.1.1 The Element *le?* ‘again’

The element *le?*, which is not an independent lexical item, marks the beginning of a verb stem, in that it always occurs at the very beginning of a verb stem. It cannot be moved around within or outside the verb stem. It can be prefixed with the usual verbal prefixes, like the permissive *tə-* shown in (568), or the prefix *a-* seen in the auxiliary construction shown in (569). This element indicates the repetition of the event/action of the lexical root(s) of the verb stem.

(568) *ʒo?* *nʃ* [*tə-le?* *cu?-mun* *e*]
 later LOC PERM-again meet-RECIP 1PL
 ‘(We) will meet again later.’ [SCN-6-21.1]

(569) *atî* *boʒat*¹³ *nʃ* [*a-le?* *ke?* *rî* *t-a?*]
 3SG market LOC NMLZ-again go AUX PST-3
 ‘He went to the market again.’ [Elicited]

The element *le?* has been found preceding grammaticalized verbs like *ŋé* ‘finish’ as shown in (570).

¹³ Borrowing from Assamese *boʒar* ‘market’

- (570) *a-k^hwap* [*le?* *ɲé* *c^huk* *he?* *l-i?-mə*]
 3-skin again finish cut keep NF-1PL-NF
 ‘After peeling the bamboo skin again...’ [SNR-16-16.1]

6.2.2.6.1.2 The Verb *bɣ* ‘start’

The element *bɣ* corresponds to an independent lexical verb meaning ‘start’.

As a grammaticalized verb, it denotes the beginning of the event named in the subsequent lexical root(s). Example (571) shows *bɣ* as a lexical verb. The verb *bɣ* also functions as a complement taking verb, and follows the complement clause (and thus the verb of the complement clause). Example (572) illustrates *bɣ* as a complement taking verb. Note that *ke?* ‘go’ is in its checked stem form, because it belongs to the complement clause. We would expect the open stem *kà* ‘go’, if it were the lexical verb of the matrix clause.

- (571) *zeruselim* *mə* [*bɣ* *l-at*]
 PN ABL start IMP-2PL
 ‘Start (preaching) from Jerusalem.’ [MOV-4-1.195]

- (572) *ɲà* [*cô* *nɣ* *ke?*] [*bɣ* *k-ɣ*]
 1SG school LOC go start PRES-1SG
 ‘I have started going to school.’ [Elicited]

As a grammaticalized verb, *bɣ* always occurs preceding the lexical verb, as shown in (573) and (574).

- (573) *iráká* *bɣ* *vérit* *t-a?*
 there start talk PST-3
 ‘At that point of time, (people) started judging (cases).’ [SNR-6-4.103]

- (574) *i-nù* *i-và* *haʔkʰún* *ɲâmâ*
 1SG-mother 1SG-father PN COMP
- iká* *bʰ* *ɲâ* *tʰ-i*
 there start say INV.PST-1PL
 ‘At that point, (the Chunyu) started calling (us) Hakhuns as parents.’
 [SNR-15-1.43]

6.2.2.6.1.3 The Element *pʰ* ‘first’

The element *pʰ* seems to have a verbal origin. It is found in the nominalized form, marked with the old nominalizer *a-*, functioning as an ordinal as in (575).

However, it is not attested functioning as a verbal predicate.

- (575) *a-pʰ* *irábá* *vəkʰâ* *keʔ* *tʰik* *t-aʔ*
 NMLZ-first that crow go CAUS PST-3
 ‘(They) sent the crow first.’ [SNR-7-1.35]

As a grammaticalized element in the complex verb stem, it adds the same meaning and indicates that the event of the subsequent lexical root(s) is the first and will be followed by other events/actions. Thus, in (576) it indicates that the speaker will tell more stories later.

- (576) *vàn* *nî* *alwám* *irá* [*pʰ* *vérit* *keʔ* *rô*]
 fire and dance that start talk go PURP
 ‘I am first going to talk about (the story of) fire and dance.’ [SNR-7-1.4]

6.2.2.6.1.4 The Verb *ɲé* ‘finish’ or ‘be able’

The element *ɲé* corresponds to the independent lexical verb *ɲé*, which translates as ‘finish’, ‘win’, ‘succeed’, ‘prevail’, etc. Example (577) illustrate *ɲé* as an independent lexical verb.

(577) *k^hûk^hup* *kámá* [*ŋé* *t-a?*]
 turtle ERG win PST-3
 ‘The turtle won (the race).’ [SNR-4-6.3]

The lexical verb *ŋé* also functions as a complement taking verb, as shown in (578). As a complement taking verb, it follows the complement clause (and thus the verb of the complement clause), and the verb of the complement clause occurs in the checked stem form, such as *vwe?* ‘cut jungle’ (as opposed to the unchecked stem *vù*).

(578) *irá* *dîmá* [*pik* *vwe?*] *ŋé* *t-ɣ?*
 that after paddy.field cut finish PST-1SG

ŋâ *imá*
 say then
 ‘After that, after finishing clearing the paddy field...’ [SNR-1-1.2]

As a grammaticalized verb, *ŋé* occurs preceding the lexical verb root(s) of the verb stem. It adds the sense of ‘completion’ or ‘capacity’ as illustrated in (579) and (580). In example (579), *ŋé* adds a sense of completion of the event coded in the following verb *vù* ‘cut jungle’. In example (580), *ŋé* adds a sense of capability on the part of men to send ants to a monkey denoted by the following causative marked verb *ke? t^hik* ‘send’.

(579) *pik* *ibá* *nâm* *ibá* [*ŋé* *vù* *l-i?-má]*...
 paddy.field that plant.type that finish cut NF-1PL-NF
 ‘After finishing cutting the paddy field, the weeds...’ [SNR-1-1.2]

(580) [*ŋé* *ke?* *t^hik* *m-a?*]
 be.able go CAUS NEG-3
 ‘(Men) could not send (the ants to bite the monkey).’ [SNR-7-1.47]

6.2.2.6.1.5 The Verb *tê* ‘try’

The element *tê* is an independent verb which function as a complement taking predicate. In example (581), the clause in the brackets functions as the complement of *tê*. It is obvious that we have two separate stems here because the initial verb *d̂* ‘happen/turn’ is causativized independently of the second verb *tê* ‘try’.

- (581) *n̂* *bə* *t̂ŝu* *təlá-ĉĥà* *d̂* *t-ɣ?* *ŋá*
 2SG DEF God boy-DIM COP PST-1SG say
- imá* [*l̂uŋ* *bə* *bekun* *d̂* *t̂ĥik*] *tê* *l-u?* *n̂*
 if stone DEF bread happenCAUS try IMP-2SG Q
 ‘If you are the son of God, try to turn the rock into bread.’ [MOV-1-1.190]

As a grammaticalized verb *tê* precedes the lexical verb root(s), and has a wider range of meaning. It may mean to try to perform the action in the following verb root. It may also mean to try something out or taste something. In examples (582) and (583), *tê* can be interpreted as adding the sense of trying to *lôpô* ‘have sex’ and *ĉĥuĉĥa?* ‘cheat’.

- (582) *irábá* *p̂ĥək̂ĥap* *aká* [*tê* *lôpô*]
 then armpit here try play
 ‘Then, (they) tried to play (have sex) at the armpit.’ [SNR-9-10.17]
- (583) [*tê* *ĉĥuĉĥa?* *t-ə*] *bə* *ĥum* *m-a?* *n̂a...*
 try cheat PST-3 DEF succeed NEG-3 PFV
 ‘When (the elder sister) tried to cheat (the younger sister), (she) could not.’
 [SNR-12-1.18]

In (584), on the other hand, *tê* adds the sense of tasting something by licking it.

(584) *a-và* *kámá* [*tê* *dr?*] *imá* *a-c^hím*
 3-father ERG taste lick then a-sweet
 ‘The father licked and tasted, and (said) “Tasty”.’ [SNR-11-1.27]

It is also possible to find both types of *tê* (as a lexical verb and as a grammaticalized verb) in the same sentence. Having two instances of *tê* ‘try’ is semantically redundant, suggesting that the preroot instance is becoming more and more grammaticalized and heading towards becoming a grammatical prefix. In examples (585), there are two instances of *tê*, one preceding the verb *súm* and the other following the same verb. The *tê* preceding the root *súm* ‘hold’ forms a complex verb stem with the root *súm* ‘hold’, and the complex verb stem, in turn, functions as the complement of the subsequent *tê* ‘try’.

(585) [[*tê* *súm*] *tê* *l-at*] *nî* *nu?rúm* *kámá*
 try hold try IMP-2PL Q 2PL ERG

c^hám *an*
 know 2PL
 ‘Try holding (my arms), and you will know (that I am real).’ [MOV-4-1.188]

In example (586), the lexical verb *vérit* ‘tell’ forms a complex verb stem with the preceding grammaticalized verb *tê* ‘try’ and the following grammaticalized verb *ku?* ‘give’, and the complex verb stem, in turn, functions as the complement of the second instance of verb *tê* ‘try’.

(586) *tísú* *múntân* *lâm* [[*tê* *vérit* *ku?*] *tê* *r-i*]
 God kingdom path try tell give try INV.NON.PST-1PL

nî

Q

‘Try and tell us about the path to God’s kingdom.’ [MOV-3-1.44]

In example (587), the element *tê* forms a complex verb stem with the following

lexical verb *t^huku?* ‘tell’, and the complex verb, in turn, forms the complement of the

subsequent verb *tê* ‘try’.

- (587) *[[tê t^huku?]* *tê r-i]* *nî dînŝ*
try tell try INV.NON.PST-1PL Q later
- hwé kámá t^hù r-u* *nî*
who ERG hit INV.NON.PST-2SG Q
‘Try to tell (us) who will hit you later.’ [MOV-4-1.45]

6.2.2.6.2 Post-Lexical Grammaticalized Verbs/Elements

6.2.2.6.2.1 The Verb *he?* ‘keep’

The element *he?* corresponds to the independent lexical verb *he?* ‘keep something somewhere’. Its lexical use is illustrated in (588), where *he?* ‘keep’ is the only verb in the initial clause of the sentence put inside the brackets.

- (588) *[dá-t^hə té he? l-i?-mə]*
month-one around keep NF-1PL-NF
- a-ruk rì k-ì*
NMLZ-burn AUX PRES-1PL
‘After keeping (chopped trees) for around a month, (we) burn (them).’
[SNR-1-1.4]

The element *he?* forms highly lexicalized multi-verb expressions with certain verbs, as shown below. Note that the meanings of these multi-verb expressions need

to be lexically specified. In (589) the multi-verb expression consisting of the intransitive verb *c^hwé* ‘run’ and the verb *he?* ‘keep’ denotes ‘driving someone away’.

In (590) the multi-verb expression consisting of the intransitive verb *rik* ‘die’ and the verb *he?* ‘keep’ denotes ‘to kill’. In example (591), the multi-verb expression

consisting of *twè* ‘take’ and *he?* ‘keep’ denotes ‘to throw something away’.

(589) *a-ɲùc^hà* [*a-c^hwé* *he?* *rì* *t-a?*]
 3-wife NMLZ-run keep AUX PST-3
 ‘(He) drove away his wife.’ [Elic-9-161]

(590) *hənîrûm* *kámá* *i-và* [*rik* *he?* *t-a?*]
 they ERG 1SG-father die keep PST-3
 ‘They killed my father.’ [Elic-9-157]

(591) *tê* *nê* [*twè* *he?* *l-o?*]
 outside LOC take keep IMP-2SG
 ‘Throw (it) away outside.’ [Elic-9-85]

The most noticeable extension of *he?* ‘keep’, which showed up even in elicitation, is found in words most of which would be typically interpreted as having a negative effect, such as ‘forget’, ‘break’, ‘damage’. Consider the following examples.

(592) *i-dɣ?* [*a-ŋo?* *he?* *rì* *t-ɣ?*]
 1SG-hand NMLZ-break keep AUX PST-1SG
 ‘My hand broke.’ [Elic-1-139]

(593) *ɲà* *lâm* [*mó* *he?* *t-ɣ?*]
 1SG road forget keep PST-1SG
 ‘I lost my way.’ [Elic-5-3]

(594) *hənîrûm* *kámá* *i-hìm* [*ruk* *he?* *t-a?*]
 they ERG 1SG-house burn keep PST-3
 ‘They burned my house.’ [Elic-9-138]

In examples (592), (593) and (594), the verbs *ŋo?* ‘break’, *mó* ‘forget’, and *ruk* ‘burn’ are all transitive and independent verbs, and it appears that the verb *he?* in these clauses is there to add the sense of the negative effect. Illustrative examples of this usage from texts are given in (595) through (598). In example (595), a bat flies inside an elephant’s nostril, driving the elephant wild. In example (596), a wild pig cuts the wild banana trees, causing a bird’s nest to break. In example (597), the effect of the resultative multi-verb expression *rik kɣ?* ‘bite to death’ is obvious. Example (598) describes how a brother tries to kill another brother. In this description, the events of tying up (*k^hɣ?* ‘tie’), as well as the event of throwing into water (*p^hú* ‘float’) are marked with the verb *he?* ‘keep’. Thus, the events in these sentences have clear negative effects leading to certain unpleasant events.

(595) *p^həʔk^hərâ* *ibá* [*mó* *pù* *he?* *l-ə-mə*].....
bat that by.mistake fly keep NF-3-NF
‘The bat flew by indiscriminately, and then’ [SNR-6-4.12]

(596) [*mó* *sám* *he?* *t-ɣ?*]
by.mistake cut keep PST-1SG
‘(I) cut (the wild banana trees) by mistake.’ [SNR-6-4.33]

(597) *zéká* *sa?* *kámá* *vícî* *ləpk^hî* *imá*
now tiger ERG pangolin see when

kəratrat *mə* [*rik* *kɣ?* *he?* *k-a?*]
by.force ADV die bite keep PRES-3
‘Now when a tiger sees a pangolin, it forcibly bites it to death.’ [SNR-3-1.20]

(598) *a-k^hú* *ŋâ* *kə* [*k^hɣ?* *he?*], *a-dâ* *ŋâ* *kə*
3-head side LOC tie keep 3-leg side LOC

[k^hʔ he? rì l-ə-mə] zù nʔ
 tie keep AUX NF-3-NF water LOC

[p^hú he? t-aʔ]
 float keep PST-3

‘Tying on the head side and tying on the leg side (of the coffin), (the elder brother) floated (his younger brother) on the water.’ [SNR-11-1.9]

There are a few cases where the negative effect is not very obvious from the context. Example (599) describes the event of uprooting grass from paddy field. This does not seem to have any obvious negative effect on anyone, except maybe to the grass. Similarly, in (600) the taking of Hakhun people up the hill does not have any obvious negative effect on anyone.

(599) *hiŋlu melu-hʔ irábá [lám p^hù he? k-ì]*
 grass-PL that search uproot keep PRES-1PL
 ‘(We) find the grass and uproot them.’ [SNR-1-1.14]

(600) *pânzɔʔ [loʔ he? keʔ l-ə-mə] ...*
 whole.night lift keep go NF-3-NF ...
 ‘Moving (the Hakhun people) up (the hill) whole night....’ [SNR-15-1.36]

6.2.2.6.2.2 The Verb *keʔ/kà* ‘go’

Both the Checked stem *keʔ* and the Open stem *kà* of the intransitive verb meaning ‘go’ are found following other bare lexical verb roots in a complex verb stem, as shown in (601) and (602). Both stem forms add a sense of ‘associated motion’ to the verb complex (see Koch, 1984; Rose, 2015 on ‘associated motion’).

(601) *inʔ [ʒuk keʔ l-oʔ]*
 there drink go IMP-2SG
 ‘Take (the tea) and drink (it) there (not here).’ [Elicited]

(602) *inʔ [ʒuk kà l-oʔ]*
 there drink go IMP-2SG
 ‘Go and drink (tea) there.’ [Elicited]

The Open stem *kà* adds directional information when it occurs with motion verbs like *c^hwé* ‘run’, *pù* ‘fly’. It indicates that the movement in these motion events is away from the speaker or from a location. In example (603), the event of flying is away from where the speaker is currently located in the narrative. In example (604) the event of *c^hwé* ‘run’ is away from the location being referred to in that context, i.e. where the pigs are currently located in the narrative. The checked stem *ke?* is not found with these motion events.

(603) *ŋà ... [mó pù kà t-ʔ?]*
 1SG ... by.mistake fly go PST-1SG
 ‘I flew inside (the elephant’s nostril) by mistake.’ [SNR-6-4.27]

(604) *ʒo? nʂ táhé nʂ [c^hwé kà a]*
 later LOC elsewhere LOC run go 3
 ‘Later (the pig) will run away elsewhere.’ [SNR-11-1.46]

With non-translational motion verbs, i.e. verbs which do not denote any displacement as part of their meaning, we find both stem forms. However, they add different senses. The Open stem *kà* may be interpreted in two ways. First, the lexical verb root preceding the verb *kà* ‘go’ denotes the event which functions as the **purpose** for the distal movement denoted by the verb *kà* ‘go’. In this case, the event of the lexical verb root is still unrealized at the time of speech. Second, the event/action in the lexical verb root preceding the verb *kà* ‘go’ is realized and it takes place at the end of the distal movement. Often, it is hard to tell apart these two interpretations in texts. In (605), it is clear that the event in *lúŋ* ‘attack’ is unrealized

as of the time of speech. Thus, ‘attacking’ can be interpreted as the purpose of the distal movement in *kà* ‘go’. On the other hand, in (606) the event of *hú* ‘reach’ is realized, and therefore cannot be interpreted as a purpose. Thus, the only interpretation is that the event in *hú* ‘reach’ takes place at the end of the distal motion in *kà* ‘go’. In contrast, in examples (607) and (608), the context does not provide any clear indication of whether the events in the lexical verb root are realized or not, and thus could be interpreted in either way.

- (605) *bêŋâ* *ibá* [*le?* *lúŋ* *kà* *e]* *ŋâ* *lə*
 other.side that again attack go 1PL say NF
- ŋâ-mə* *vù* *ibá* *vikrə* *tê*
 say-NF bird that quickly check.fortune
- kulamkan* *iká*
 PN there
 ‘Saying (we) will go to attack the other side, (we) checked fortune with a bird at Kulamkan.’ [SNR-14-1.1]

- (606) *irá* *ha?-tam* *kə* [*hú* *kà* *l-ə-me?*]
 that place-flat LOC reach go NF-3-NF
- ibá* *pa?* *hik* *tʰo?* *hik* *tʰo?* *rì* *l-ə-mə*
 that spear proper aim proper aim do NF-3-NF
 ‘Having reached that place, aiming the spear accurately...’ [SNR-11-1.48]

- (607) *sekʰu* *tʰŋ* *abá* [*lúŋ* *kà* *k-a?*]
 PN place this attack go PRES-3
 ‘They go and attack the Sekhu place.’ [SNR-15-1.81]
 ‘They go to attack the Sekhu place.’

- (608) *tʰim* *kʰu?* *nʂ* [*vat* *kà* *t-a?*]
 pond top LOC swing go PST-3
 ‘(They) went and swung over the pond.’ [SNR-12-1.30]
 ‘They went to swing over the pond.’

The Checked stem *ke?*, on the other hand, always indicates that the event in the lexical verb root is realized, and the lexical event takes place either before or simultaneously with the distal motion denoted by *ke?* ‘go’. Thus, in example (609), the events of *twè* ‘take something in hand’ and *hùn* ‘take it on one’s back’ take place first, and then the distal motion takes place. In example (610), the event of *sit* ‘take something with’ takes place first, and then the distal motion takes place. In example (611), the event of *lo?he? rì* ‘do pushing’ and the distal motion are simultaneous.

(609) *irámá nûŋ irábá [twè hùn ke?] vî kámá*
 then drum that take carry go monkey ERG
 ‘Then, the monkey took away the drum.’ [SNR-7-1.31]

(610) *herod nám nŕ [sit ke? l-at]*
 PN with LOC take.with go IMP-2PL
 ‘Take (him) away to Herod.’ [MOV-4-1.79]

(611) *irá c^hà rŕni bə [lo?he? lo?he?]*
 that child two DEF push RED

rì ke? l-ə-mə]...
 do go NF-3-NF

‘The two young men pushed (the Hakhun people) along (with them).’
 [SNR-15-1.35]

It is this notion of prior or simultaneous occurrence of the event in the lexical verb root with the distal motion that makes verbs like *rí* ‘die’ semantically incompatible with *ke?*. One cannot die and then leave, or die and leave simultaneously; hence the unacceptability of (612). On the other hand, use of *kà* is compatible because *rí* ‘die’ is not realized before the distal motion.

(612) *atî rí ke? t-a?
 3SG die go PST-3

(613) atî rí kà t-a?
 3SG die go PST-3
 ‘He went to die’
 ‘He went and died (there).’ [Elicited]

Sometimes, the checked stem *ke?* also adds the sense that the event/action of the lexical verb root(s) preceding *ke?* takes place at the end of the distal motion.

However, in contrast to (607) and (608), these examples cannot be interpreted with the lexical verb denoting a purpose. The only interpretation is that the event/action of the lexical verb takes place or will take place at the end of the distal motion. Thus in (614), the event of *bíŋ* ‘bury’ is understood as taking place at the end of the distal motion.

(614) irǎ mŋ bə [bíŋ he? ke? nà]
 that body DEF bury keep go PFV
 ‘(He) went and buried the body (there).’ [SNR-9-8.10]

Very often the sentences which have the grammaticalized *ke?* are understood to involve carrying the referent of the P argument, irrespective of whether the event of the lexical verb takes place before the distal movement or will take place after the distal movement. Thus, in (614) it is understood that the agent carried the dead body to a distal location and buried it. Similarly, in example (615) it is understood that the Chunyu people took the head, although there is no verb indicating that. In example (616), eating takes place elsewhere (not here) and involves carrying children to that distal place. Thus, it seems the sense of ‘carrying’ is part of this construction and this meaning component is contributed by *ke?*.

(615) *atí-và bə c^hùjù kámá [pê t^ha? ke? t-a?]*
 3SG-MAS DEF PN ERG break cut.int.piece go PST-3
 ‘The Chunyu people chopped off and took (his head).’ [SNR-15-1.11]

(616) *oi zùbê tɣ kámá [ma? p^hɣ? ke? k-a?]*
 EXCLAM ghost family ERG all eat go PRES-3

nânâ-hɣ

child-PL

‘Hey, the ghosts have taken and eaten all the children.’ [SNR-8-1.27]

It is possible to find the both stem forms of the verb ‘go’ in a sequence in the order seen in the following examples. In these examples, the stem *ke?* indicates that the event/action in the preceding lexical verb will take place at the end of a distal motion, and the stem *kâ* ‘go’ indicates the distal motion take place for the purpose of the event in the lexical verb. In example (617), *ke?* indicates that the event in *hùn* ‘carry on back’ will take place at the end of the distal motion (from home to field) and *kâ* indicates that the purpose of the motion is to ‘carry something on back’. In example (618), *ke?* indicates that the event/action of *c^hín* ‘asking for something’ will take place at the end of the distal motion (from home to girl’s parent’s house), *kâ* indicates that the movement is for the purpose of *c^hín* ‘asking for something’.

(617) *rɣŋiɔ-t^hə nɣ təhjaɔ-jù mɣ-t^hə bək^hè t^húŋ nɣ*
 day-one LOC girl-FEM CLF-one sweet.potato field LOC
bək^hè [hùn ke? kâ t-a?]
 sweet.potato carry go go PST-3
 ‘One day, a woman went to the sweet potato field to fetch sweet potatoes.’
 [SNR-10-1.1]

(618) *mə-cʰà* [*cʰín* *ke?* *kà* *r-ɣ*] *ta*
 2SG-child ask.for go go PROX.NON.PST-1SG DP
 ‘(I) have come to ask for your daughter (in marriage).’ [SCN-1-1.1]

An extension of ‘distal motion’ is seen in the domain of time. Thus, the stems *kà/ke?* also denote that time has elapsed since the event in the preceding lexical verb took place. The stem *kà* in (619) indicates that it has been long time since the event of *ma?* ‘lose something’. Similarly, in (620) *ke?* indicates that it has been long time since the event *ma?* ‘die/lose’.

(619) *và-bəlí,* *vàntʰù* *tʰù-rúm,* *pəzín* *ròkò*
 CLF-four gun CLF-three gun.type all

iru? [*ma?* *kà* *t-a?*]
 like.that lose go PST-3
 ‘Four people, three guns, all Panzing guns, were lost like that.’ [SNR-15-1.86]

(620) *a-tèlò* *kə* *cap* *l-ə-mə* [*a-ma?* *ke?*]
 3-floor LOC stand NF-3-NF NMLZ-lose go

và *nî*
 person Q
 ‘Standing on the bamboo floor, the person who passed away (said).....’
 [SNR-14-1.8]

Another extension of the function of the verb ‘go’ is seen when it is used with PCT’s. In examples (621) and (622), *kà* ‘go’ occurs with the PCT *dûŋ* ‘be big’ and *hûŋ pʰo?* ‘appear and grow’ respectively and indicates an increase in size. Clearly, there is no physical movement from one location to another in these sentences. Rather they involve change in size of a tree from small to big.

(621) *bɣ̌-jù* *bə* *irə* *si?* *va?*
 tree-AUG DEF that feces from

[dũŋ kà t-a?]
 big go PST-3
 ‘The big tree grew big out of that feces.’ [SNR-2-2.18]

(622) *abá* *i-púcó* *va?* *[hũŋ pʰo? kà t-a?]*
 this 1SG-navel ABL appear grow go PST-3
 ‘This (big tree) grew out of my navel.’ [SNR-2-2.5]

A final meaning extension observed for *kà* ‘go’ is to indicate that the event/action of the preceding verb is unintentional or unplanned, as in (623), where a wild pig unintentionally cuts down wild banana trees. Similarly, in (624) two people happen to meet each other on the road without any prior intention.

(623) *ɲap̄kʰĩ* *ɲap̄kʰâm* *bə* *[sám he? kà t-a?]*
 wild.banana RED DEF cut keep go PST-3

vəkŋĩ *kámá*
 wild.pig ERG
 ‘The wild pig cut the wild banana trees unintentionally.’ [SNR-6-4.10]

(624) *và-tʰe?* *mì* *a-hìm* *va?* *kà,*
 CLF-one ADD 3-house ABL go

và-tʰe? *mì* *a-hìm* *va?* *kà,*
 CLF-one ADD 3-house ABL go

lâm nɣ *[rũŋ* *cu?-mun* *kà t-a?]*
 road LOC gather meet-RECIP go PST-3

‘One person came out of his house, another person came out of his house, they came across each other on the road.’ [SNR-7-1.7]

6.2.2.6.2.3 The Verb *vɔ̃* ‘come’

In complex verb stems, the verb *vɔ̃* ‘come’ primarily adds a sense of proximal motion. With motion verbs, like *kʰwám* ‘walk’ in (625), *vɔ̃* ‘come’ indicates that the motion is towards the speaker or a location that is taken as the point of reference.

- (625) *imábá kutkut [le? kʰwám vɔ̃ ku?]*
 then SS again walk come give
 ‘Then, (the pangolin) comes back walking with a “kutkut” sound.’ [SNR-3-1.17]

With the non-motion verbs, the event of the verb root(s) may precede, be simultaneous with, or follow the proximal motion. In example (626), the event of *ze?* ‘cut’ and *vɔ̃* ‘come’ are simultaneous (i.e. cut and come simultaneously). In example (627), the event of *hu?* ‘steal’ precedes the proximal motion (i.e. steal and then come). In example (628), the event *sú* ‘watch’ follows the proximal motion (i.e. come and then look).

- (626) *ze? mûŋ kʰûn nɔ́ hu? hwé l-ə-mə*
 forest inside under LOC steal build NF-3-NF

bɔ̃ bə [zwe? vɔ̃ r-a]
 tree DEF cut come PROX.NON.PST-3
 ‘Building (houses) stealthily inside the forest, they are approaching by cutting the trees.’ [SNR-15-1.64]

- (627) *irá vándùtʰúm ibá vɪ kámá*
 that lit.firewood that monkey ERG

[hu? twè vɔ̃] t-ə ŋà hìm va?
 steal take come PST-3 hearsay house ABL
 ‘The monkey stole the lit firewood from house.’ [SNR-7-1.29]

- (628) *ahwé* *[sú vɣ̣ r-an]*
 situation watch come PROX.NON.PST-2PL
 ‘Come look at this situation.’ [SNR-10-1.5]

One semantic shift of *vɣ̣* ‘come’ is that it can indicate a change of state, which may be considered positive or negative. In (629), the verb *vɣ̣* ‘come’ indicates that there is a change in state to that denoted by the preceding PCT *sân* ‘good’. In example (630) the verb *vɣ̣* ‘come’ indicates a change of state to the state of being *dàkò* ‘crippled’ and *mikdo?* ‘blind’.

- (629) *irá hatɲù jìɲɲù bɣ̣ bə ...*
 that tree.kind tree.kind tree DEF

mámá [sân vɣ̣ k-a?]
 a.lot be.good come PRES-3
 ‘The Hatnyu Nginyu tree grew very well.’ [SNR-2-2.11]

- (630) *imá [a-dàkò vɣ̣] imá níà [a-mikdo?*
 then 3-crippled come if and 3-blind

vɣ̣] imá mà miksù l-u? o
 come if NEG hate IMP-2SG EXCLAM
 ‘You would not hate her, if she becomes crippled or blind, would you?’
 [SCN-1-19.1]

6.2.2.6.2.4 The Element *ván* ‘along with’

The element *ván* is not attested as an independent lexical verb. It is always found following another lexical verb root in a complex stem. The contribution of *ván* is very similar to that of *vɣ̣* as a grammaticalized element in a complex stem. It adds a sense of proximal motion. However, on top of that it also has the sense of ‘carrying

something along’, just like the stem *ke?* discussed above. In example (631), the lexical verb *twè* indicates that the agents took something, and *ván* indicates that the agents moved along with what they took. This movement is towards their own houses (i.e. the deictic center). In example (632), *rí ván* ‘buy along’ indicates that the agent bought a TV and then moved along with it towards the deictic center (i.e. home). Similarly, in (633), *hùn* denotes putting something on someone’s back and *ván* indicates that the agent(s) moved along with whatever was put on the back towards a deictic center. In example (634), *sít* denotes taking someone with oneself and *ván* indicates moving along with that someone towards a deictic center.

- (631) *zùbê t̂ hə n̂ t^ha?kâ, mi? t̂ hə*
ghost family DAT LOC half person family DAT
n̂ t^ha?kâ [twè ván t-a?]
LOC half take along PST-3
‘The ghost’s family took one half, and the men’s family took one half.’
[SNR-7-1.11]

- (632) *i-p^hù kámá t̂ivi [rì ván t^h-a]*
1SG-elder.brother ERG TV buy along PROX.PST-3
‘The elder brother bought and brought a TV.’ [Elic-9-226]

- (633) *tù-nàm c^ha?-nàm c^hùŋrì b̂r̂rì c^hôc^hi?*
yam-panicle rice-panicle RED fruit all
[hùn ván l-i?-mə] ...
carry along NF-1PL-NF
‘Bringing all the new vegetables and fruits....’ [SNR-1-1.19]

- (634) *eh! a-t^hân v̂i t^hân m̂ŋm̂ ĉaró*
EXCLAM 3-face monkey face like why

[*sit ván ku? t-at ní*
 take.someone along give PST-2PL Q
 ‘Eh! They look like monkeys. Why did you bring them along?’ [SNR-15-1.24]

Sometimes, the event of the lexical verb is interpreted as taking place after the proximal motion carrying something. In example (635), the Chunyu people moved towards the speaker’s tribe/location bringing one man and one woman along, and at the end of that motion they give the man and woman to the Hakhun people.

(635) *mi? abá təhja? m̂-t^he? təlá m̂-t^he?*
 person this girl CLF-one boy CLF-one

[*ku? ván k-a?*
 give along PRES-3
 ‘(The Chunyu people) brought and gave people, one man, one woman.’
 [SNR-15-1.101]

An interesting extension of *ván* ‘along’ is to mean move along a path as shown in (636). In example (636), there is no sense of carrying anything to anywhere. Rather there is the event *v̂* ‘come’, and what *ván* ‘carry’ adds here is the sense that that the event of ‘coming’ is along a river.

(636) *tirap zù-ẑ [v̂ ván l-ə-mə]*
 PN water-along come along NF-3-NF

aná ará kaŋk^hu ha?
 there that PN place
 ‘Coming along the Tirap river, there is the Kangkhu place.’ [SNR-13-1.46]

A final extension of *ván* is to denote that something has been taking place for a long time (since sometime in the past), as illustrated in (637). It describes the custom of dividing newly harvested crops among several shareholders and then

consuming one's own share. The element *ván* indicates that it has been going on like this from past time.

- (637) *c^hôc^hi?* *danda* *hik* *t^ho?* *l-i?-mə*
 all divide precisely measure NF-1PL-NF
- bə* [*p^hɣ?c^ha?* *ván* *k-ì*]
 DEF eat along PRES-1PL
 'After dividing all (the food items) by measuring precisely, (we) have been eating since the past (like this).' [SNR-1-1.26]

6.2.2.6.2.5 The Verb *ku?* 'give'

The verb *ku?* means 'to give' as an independent verb. As a grammaticalized verb, the verb *ku?* 'give' indicates that the event/action of the preceding verb has a certain effect on some participant, either positive or negative. A clear case of this interpretation is found with the event of saying, as in (638). The context is that a man named Kepa insults a person saying that his legs are bent enough to catch a wedding pig. In this context, the verb *ku?* indicates that the event/action of the verb *ŋâ* 'say' is supposed to have a certain strong effect. Similarly, in (639) the speech event denoted by *ŋâ* 'say' preceding the verb *ku?* is conceived of as having a strong effect, in this context in that the speech enables the elephant to finally kill the pangolin.

- (638) [*bə-dà* *ró* *vək* *t^hap* *t^hŋ]*
 2SG-leg wedding pig catch NMLZ
- kepa* *kámá* *iru?* [*ŋâ* *ku?* *t-a?*]
 PN ERG like.that say give PST-3
 'Your legs are (wide enough) to catch a wedding pig', Kepa said like that.
 [SNR-15-1.79]

- (639) *vù kámá íbá ḅ̀r me? ḅ̀m-lja? rân-lja?*
 bird ERG that tree from back.side-turn belly.side-turn
- ḅ̀m-lja? rân-lja? [ŋâ ku? t-a?]*
 back.side-turn belly.side-turn say give PST-3
 ‘The bird from the tree said, ‘(turn the pangolin) on its back and then on its belly again and again (and hit it to kill it).’ [SNR-3-1.18]

Besides the use with speech events, similar effects can be seen with other events. In example (640), *ku?* indicates that the event of the preceding lexical verb *hut* ‘cover’ has a positive effect on the crops, as birds can no longer eat them. In example (641), the verb *ku?* ‘give’ indicates that the event *vín ṿ̀r* ‘return’ of a pangolin has a negative effect on the participant elephant, who is trying to kill the pangolin by throwing it away.

- (640) *zèhùn kámá [hut ku? t^hŋ] ...*
 hoe INST cover give should
 ‘(We) should cover (the seeds with ground) with a hoe.’ [SNR-1-1.10]
- (641) *ʒ̣́ʒ̣́ [vín ṿ̀r ku?]*
 contrast return come give
 ‘Contrary (to the thought that he would be dead), (the pangolin) came back.
 [SNR-3-1.12]

Another related extension of *ku?* is to denote that the event in the preceding lexical verb is done ‘to the benefit or detriment’ of someone or something. In example (642), the verb *ku?* ‘give’ indicates that the event of *zàn* ‘spreading the mat’ is done for someone else, namely an old man, so that he can spread the vegetables on it. Similarly, in (643) *ku?* ‘give’ preceding the verb *p^hàn* ‘tell a story’ indicates that the telling of story is done to the benefit (in this context) of the speakers (so that they can

record it or enjoy it). In (644), the Chunyu community seeks help from several different communities to fight the Vakka community. The verb *ku?* ‘give’ indicates that other people fought for the Chunyu (not for themselves).

(642) *hàm ibá vikrə [ʒàn ku? t-ə] ɲà*
 mat that quickly spread give PST-3 hearsay
 ‘(They) spread the mat quickly for (the old man to spread the vegetables).’
 [NR-8-6.27]

(643) *abá [pʰàn ku? k-ì], i-hja?, ibá abe?*
 that tell give PRES-1PL 1SG-nephew that this
 ‘The story (I) have told (you) is this, my nephew.’ [SNR-15-1.121]

(644) *[ɲé ku? tə m-a?] və?ka? abe?*
 win give PST NEG-3 PN this
 ‘(They) could not defeat the Vakka people (for the Chunyu).’ [SNR-15-1.15]

6.2.2.6.2.6 The Element *cʰɪ* ‘durative’

The element *cʰɪ* has not been found as an independent verb. The most common interpretation of complex verb stems with *cʰɪ* is that the effect or product of the event/action denoted by lexical verb root(s) continues to exist beyond the time of the occurrence of the event.

In example (645) the context is that a younger brother plans to take revenge on his older brother and builds a trap that looks like a pig nest. Here the element *cʰɪ* indicates that the product of *hwé* ‘build’ (i.e. the pig nest looking trap), is kept for later use. Later in the story, the younger brother says that he has seen a pig nest that he kept for his elder brother to hunt. Thus, in (646) the element *cʰɪ* indicates that the object of *ləpkʰi* ‘see’ (i.e. the pig nest) has been kept for later use. Thus, it continues

to exist at the time of speech. The context for (647) is that one tribe leaves deer foot marks (and other signs) on the ground in order to give the impression to other tribes that that ground has been used by animals (and men). Thus, *c^hí* indicates that the product of *nɣ?* ‘tread’ (i.e. foot prints) were left for others to discover later.

(645) *rɣk^hu?* *iká* *vəkŋî* *rip* *rɣrɣ* *ibá* *vikrə*
 top there wild.pig nest like that quickly

[*hwé c^hí t-ə ŋà*]

build DUR PST-3 hearsay

‘Up (the mountain) there (the younger brother) built something like a wild pig nest.’ [SNR-11-1.38]

(646) *p^hín* *t^hŋ* *ŋà* *bə* *t^hənî* *lâm* *nɣ* *mì*
 spear NMLZ 1SG DEF while.ago road LOC ADD

[*ləpk^hì c^hí t-ɣ? nà*]

see DUR PST-1SG PFV

‘I have seen (reserved) something a while ago that we can kill.’ [SNR-11-1.43]

(647) *ibá* *k^hi?hî* *dà* *me?* [*nɣ?* *c^hí* *t-a?*]
 that deer leg ABL tread DUR PST-3
 ‘(They) trod with deer legs (to leave deer foot marks on the ground).’
 [SNR-13-1.41]

One frequent use of *c^hí* is in the context of leaving an order, instruction, or advice for someone to follow later. In example (648), an old man leaves an instruction for an old woman and her grandchildren that they should not come outside their den until the *vasik* bird starts chirping. The *c^hí* here indicates that the product of the event *ŋà* ‘say’ (i.e. the order) is left for later to be followed by the addressee. Similarly, examples (649) and (650) have reference to what has been said or written down for posterity in the Bible. In example (649), *c^hí* indicates that the product of *ŋà* ‘say’ still

persists at the time of speech although it was told long time ago. In example (650), *c^hí* indicates that what has been written about what people will call Jesus in the past still holds at the time of speech.

(648) *vəsik mə rwê mə rwê kásx?*
bird.type NEG chirp NEG chirp door

nɣ? hap an, aru? [ŋâ c^hí t-a?]
PROH open 2PL like.this say DUR PST-3

‘(The old man) said, ‘Do not open the door until the Vasik bird chirps.’
[SNR-9-10.7]

(649) *tîsû kámá [ŋâ c^hí t-a?] a-sá təlâ-c^hà*
God ERG say DUR PST-3 NMLZ-holy boy-DIM

bə a-rik rì a
DEF NMLZ-die AUX 3

‘God has said that the Holy Child will die.’ [MOV-3-1.270]

(650) *tîsû zəp nɣ [vi? c^hí t-a?]*
God word LOC write DUR PST-3

mi?-hɣ kámá mərâ mi? ŋâmâ t^hûŋhûn t-a?
person-PL ERG sin person COMP think PST-3

‘It is written in God’s message that people will think (him) to be a sinner.’
[MOV-3-1.303]

With intransitive verbs like *túŋ* ‘sit/stay’, *c^hí* adds a sense of persistence or duration over time.

(651) *kaŋk^hu ha? iráká [túŋ c^hí t-a?]*
PN land there live DUR PST-3

‘(The Hakhun people) lived at Kangkhu (for sometime).’ [SNR-13-1.46]

(652) *imá nîrûm iráká anap alû [túŋ c^hí t-i?]*
then 1PL.EXCL there day far sit DUR PST-1PL

‘Then, we stayed there for many days.’ [BT-16-6.4]

6.3 Pre-Stem Particles

There are two pre-stem negative particles, listed in Table 97. The negative particle *mà* is found only in a few constructions. Negation is usually marked with one of the inflected operators that follow the verb stem (see §6.5.1.4). The particle *nɣʔ* is a prohibitive particle.

Table 97: Prefixes and Particles on Verb Stems

Prefixes & Particles	Gloss
<i>mà</i>	Negative
<i>nɣʔ</i>	Prohibitive

6.3.1 Preverbal Negative Particle *mà*

Sentences are usually negated using an inflected negative operator following a verb stem. However, in certain paradigms sentences can also be negated using a preverbal negative particle *mà*. This kind of negation is possible only in three paradigms – the present tense paradigm with the operator *kə*, the non-past proximal/inverse paradigm with the operator *rə*, and the third person imperative with the imperative operator *lə*.

Examples (653) through (655) illustrate the occurrence of the preverbal negative particle *mà* in the present tense paradigm with the inflected operator *kə*. The

negative with *mà* adds a sense of perfectivity, and the progressive particle *tətùŋ* is often used in this construction.

(653) *ŋà càm [mà c^haʔ k-ɣ̣]*
 1SG rice NEG eat PRES-1SG
 ‘I haven’t eaten rice.’ [Elic-2-62.1]

(654) *atî-và [mà hú k-aʔ]*
 3SG-MAS NEG reach PRES-3
 ‘He hasn’t arrived yet.’ [Elic-3-10.1]

(655) *nɣrùm zù [mà swé k-ì tətùŋ]*
 1PL.INCL water NEG bathe PRES-1PL PROG
 ‘We have not taken bath yet.’ [Elic-7-158.1]

Examples (656) and (657) illustrate the negative particle in the non-past proximal/inverse paradigm with the operator *rə*. These sentences also have the sense of perfectivity.

(656) *atî kámá ŋà [mà ləpk^hì r-ɣ̣]*
 3SG ERG 1SG NEG see INV.NON.PST-1SG
 ‘He has not seen me yet.’ [Elicited]

(657) *nuʔrùm kámá ŋà [mà ləpk^hì r-a]*
 2PL ERG 1SG NEG see INV.NON.PST-3
 ‘You have not seen me yet.’ [Elicited]

Subordinate clauses negated with the negative particle *mà* often occur as temporal adverbial clauses with the sense of ‘until/before the event in the subordinate clause takes place’. In example (658), the clause inside the square brackets contains the negative particle *mà* before the lexical verb *zúk* ‘drink’. The bracketed clause specifies the time when the small boy reaches home. In example (659), the clause inside the brackets contains the negative particle *mà* before the lexical verb *vɣ̣*

‘come’. The bracketed clause specifies the time when the addressee should strengthen his brothers. In example (660), the bracketed clause with the negative particle *mà* before the verb *rwê* ‘chirp’ specifies the time when the addressee should open the door. Note that there is no inflected operator in the clause following the verb *rwê* ‘chirp’.

(658) [*a-nùvâ* *ləp^hùŋ* *mà* *ʒuk* *k-a?*] *iká*
 3-parents lunch NEG drink PRES-3 there

ʒála *ləp* *vʒ*
 quickly get come

‘Before the owners finish their lunch, (the boy) quickly arrives (home).’

[SNR-8-1.67]

(659) [*ì-nâm* *nʒ* *mà* *vʒ* *r-u*], *nʒ*
 1SG-with LOC NEG come PROX.NON.PST-2SG 2SG

mə-p^hù *mə-nâ-hʒ* *raʔrùŋ t^hik* *l-o?*
 2SG-elder.brother 2SG-younger.sibling-PL strong CAUS IMP-2SG

‘Before coming with me, you strengthen your brothers.’ [MOV-3-1.294]

(660) [*vəsik* *mà* *rwê*, *mà* *rwê*] *kásʒ?*
 bird.type NEG chirp NEG chirp door

nʒ? *hap* *an*
 PROH open 2PL

‘Until the *vasik* bird chirps, do not open the door.’ [SNR-9-10.7]

Examples (661) and (662) illustrate the occurrence of the preverbal negative particle *mà* in clauses with the imperative operator *lə*. The attested sentences all seem to have a sense of request or exhortation not to do the event/action in the following verb stem. These expressions certainly seem politer than the prohibitive construction,

discussed in the following section. The context in (661) and (662) is that the father of a girl is requesting her boyfriend not to defame or hate her ever.

- (661) *sê^hwé* *nɣ́* *vérit* [*mà* *hûŋ*
 last LOC matter NEG come.out

kà *l-a]* *o*
 go IMP-3 EXCLAM
 ‘Do not let things come out at the end (which may defame my daughter).’
 [SCN-1-38.1]

- (662) *imá* *a-dàkò* *vɣ̀* *imá* *níà* *a-mikdo?*
 then 3-lame come if and 3-blind

vɣ̀ *imá* [*mà* *miksù* *l-u?* *o*
 come if NEG hate IMP-2SG EXCLAM
 ‘You would not hate her, if she becomes crippled or blind, would you?’
 [SCN-1-19.1]

6.3.2 Prohibitive *nɣ?*

The prohibitive particle occurs preceding the verb stem and is found in two paradigms. It primarily occurs with the zero-operator paradigm in which the argument indexes occur without being attached to a tense/aspect operator. However, it is also found with non-past proximal/inverse operator *rə*. Rarely it is also found in clauses which have no inflected operator at all. In example (663), the prohibitive *nɣ?* precedes the lexical verb *húhá* ‘worry’, and the verb is followed by the zero-operator inflected with the second person plural index *an*. In example (664), the prohibitive *nɣ?* precedes the verb root *ɣwénám* ‘insult’, and the verb stem is followed by the non-past proximal/inverse operator *rə*. In example (665), there is no overt inflected

operator following the verb *tan* ‘make noise’. (also see §8.5.3.4 for prohibitive construction).

- (663) *i-c^hù-hɣ* *níà* *târûm* *c^hə̀vì-hɣ*
 1SG-grandchild-PL and 2PL grandmother.grandchild-PL
- [nɣʔ hùhá an]*
 PROH worry 2PL
 ‘My grandchildren, you grandmother and the grandchildren, do not worry.’
 [SNR-9-8.25]

- (664) *[nɣʔ zwénám r-ɣ]*
 PROH insult INV.NON.PST-1SG
 ‘Do not insult (me).’ [SNR-4-2.3]

- (665) *[nɣʔ tán], [nɣʔ tán],*
 PROH make.noise PROH make.noise
- anɣ vérit rì k-ɣ*
 here talk AUX PRES-1SG
 ‘Don’t make noise, don’t make noise. I am talking here.’ [SNR-15-1.94]

6.4 Causative Particle *t^hik*

The causative element *t^hik* adds the sense of making or causing somebody to do something and introduces an additional participant (the causer) in the clause, as illustrated below. This element is not an independent lexical item. In examples (666) and (667), we have a non-auxiliary construction. In (666), the causativizer *t^hik* follows the verb stem *k^hwám* ‘walk’, and precedes the inflected past tense operator *taʔ*. Note that the verb stem consists of the intransitive verb *k^hwám* ‘walk’, but there are two clausal participants in the clause – *tânî* ‘they two’ and *kâm* ‘middle man’. In

example (667), the causativizer *t^hik* occurs following the complex stem *cup c^ha?* ‘eat with something’, and is followed by the inflected past tense operator *ta?*. The event here is understood to have a causer, which are the parents of the ghost children.

(666) *tânî bə kâm [k^hwám t^hik t-a?]*
 3DL DEF middle.man walk CAUS PST-3
 ‘They sent a middle man (to each other).’ [SNR-5-1.6]

(667) *[a-c^hà hə bə] [ibá càm ibá] [i kómá]*
 3-child DAT DEF that rice that that INST

[cup c^ha? t^hik t-a? ηà]
 eat.with eat CAUS PST-3 hearsay
 ‘(The ghost family) feed their child rice with that (i.e. salt).’ [SNR-11-1.29]

Examples (668) and (669) illustrate the causativizer in the auxiliary construction. In example (668), the causativizer *t^hik* occurs following the auxiliary verb *rì* and is followed by the inflected proximal/inverse operator *ri*. In example (669), the causativizer is preceded by the auxiliary *rì* and is followed by inflected proximal/inverse operator *rɣ*.

(668) *dɣ imá akâm alâm nɣ [a-vwám rì]*
 then faith 2SG NMLZ-increase AUX

t^hik r-i]
 CAUS INV.NON.PST-1PL
 ‘Then, make our faith grow.’ [MOV-3-1.29]

(669) *ηà mî [a-vɣ rì t^hik r-ɣ]*
 1SG ADD NMLZ-come AUX CAUS PROX.NON.PST-1SG
 ‘I will also let (him) come.’ [MOV-3-1.130]

6.5 Verbal Operators

Verbal operators are a set of particles that verbal clauses usually have following the verb stem. However, it is not unusual to come across sentences in connected speech which do not have any of the operators described here. In example (670), the sentence ends with the grammaticalized verb *ku?* ‘give’. In example (671), the sentence ends with the grammaticalized verb *v̂* ‘come’; and in (672) (a) and (b), the sentences end with the lexical verb *lôpô* ‘play’.

(670) *imábá kutkut [le? k^hwám v̂ ku?]*
 then SS again walk come give
 ‘Then (the pangolin) comes back crawling.’ [SNR-3-1.17]

(671) *kásɣ? tja?rə sɣ? l-ə-mə [hu? túŋ v̂]*
 door quickly close NF-3-NF hide sit come
 ‘(The ghost family) quickly closed the door and hid (inside the hole).’
 [SNR-8-1.26]

(672) (a) *k^hùpù n̂ [tê lôpô]*
 nostril LOC try play
 ‘(They) tried to have sex at the nostril.’

(b) *dàkap n̂ [tê lôpô]*
 knee.back LOC try play
 ‘(They) tried to have sex at the back of the knee.’

(c) *an̂ lôpô t^hŋ ŋâləmə c^hàm m-a?*
 here play should COMP know NEG-3
 ‘(They) did not know that (they) should have sex here.’ [SNR-9-10.20]

Outside connected speech, sentences with verbal predicates are considered unacceptable if they do not have an operator. An exception to this is a few verbs such

as *c^hàm* ‘know’, *ro?* ‘know how to’, and *ke?* ‘go’. With present time interpretation, these verbs can be used without an operator.

(673) *atî v̄r̄ ηâmâ a-c^hàm*
 3SG come COMP NMLZ-know
 ‘I know that he will come.’ [Elic-9-35.1]

(674) *atî-và h̄im hwé a-ro?*
 3SG-MAS house build NMLZ-know
 ‘He knows how to build a house.’ [Elic-10-17.1]

(675) *m̄án̄ȳ ke? n̄î*
 where go Q
 ‘Where are (you) going?’ [Elic-6-17.1]

There are seven verbal operators which are inflected with argument indexes, discussed in §6.5.1, and two verbal operators which are not inflected with the argument indexes, discussed in §6.5.2. Argument indexes are separately discussed in Chapter VII.

6.5.1 Inflected Operators

The inflected operators code various kinds of grammatical information. They are listed in Table 98 along with their functions. An inflected operator consists of a single consonant which combines with the argument indexes to form an inflected operator, as shown in the third column of Table 98. Note that the operators are not prefixes, nor are the argument indexes suffixes. They just both combine to form a phonologically independent grammatical element which DeLancey (2015) calls an “agreement word”. The hyphens are there just to indicate the place of the morpheme in the grammatical agreement word. Also note that some operators take indexes with

a stop coda, while others take indexes with no coda or with sonorous coda. See §7.3 for complete paradigms of the inflected verbal operators.

Table 98: Inflected Verbal Operators

Operators	Gloss	Indexed with 1SG index
<i>k-</i>	Present tense	<i>k-ɣ̣</i>
<i>t-</i>	Past tense	<i>t-ɣʔ</i>
<i>zero-</i>	Future tense	<i>zero-ɣ</i>
<i>m-</i>	Negation	<i>m-ɣʔ</i>
<i>r-</i>	Non-past proximal/inverse	<i>r-ɣ</i>
<i>t^h-</i>	Past proximal/inverse	<i>t^h-ɣ</i>
<i>l-</i>	Imperative/non-final	<i>l-ɣʔ</i>

Some of these operators co-occur. There are four possible co-occurrences, illustrated in examples (676) through (679). Note that only the final operator is inflected for indexation in the sequence, while others occur with a reduced invariant schwa. In example (676), the verb *twè* ‘take’ is followed by the past tense operator *tə* and the inflected negative operator *mɣʔ*. In example (677), the verb *kà* ‘go’ is inflected with the non-past proximal/inverse marker *rə* and the inflected negative operator *mɣʔ*. In example (678), the verb *kuʔ* ‘give’ is followed by the past proximal/inverse operator *t^hə* and the non-past proximal/inverse operator *rə* and the inflected negative operator *mɣʔ*. In example (679), the verb *vɣ̣* ‘come’ is followed by the past proximal/inverse operator *t^h-* and the inflected non-past proximal/inverse operator *ra*.

(676) *ɲà bə cəlì mì [twè tə m-ɣʔ]*
 1SG DEF what ADD take PST NEG-1SG
 ‘I did not take anything.’ [SCN-2-8.1]

(677) *[kà rə m-ɣʔ] ará dîmə*
 go PROX.NON.PST NEG-1SG this after
 ‘I will not come (again) after this time.’ [SCN-2-18.2]

(678) *nɣ kámá dà swé rô zù mì*
 2SG ERG leg wash PURP water ADD

[kuʔ tʰə rə m-ɣʔ]
 give INV.PST INV.NON.PST NEG-1SG
 ‘You did not even give me water to wash (my) feet.’ [MOV-2-1.94]

(679) *dînɣ samari vâ mɣ-tʰə*
 later PN person CLF-one

[vɣ tʰə r-a]
 come PROX.PST PROX.NON.PST-3
 ‘Later a Samaritan person came (along the road).’ [MOV-3-1.117]

Except for these four combinations, no other combinations of the inflected operators are possible. In the following sub-sections, the range of functions/distributions of the inflected operators are described.

6.5.1.1 The Present Operator *k-*

The operator *k-* primarily codes an event as simultaneous with the time of utterance, as shown in the example below.

(680) *i-ɲà i-dɣʔ [zɔʔ k-ɣ nà]*
 1SG-elder.sister 1SG-hand be.tired PRES-1SG PFV
 ‘Sister, my hands have gotten weak.’ [SNR-12-1.25]

In (680), the hands getting weak is simultaneous with the time of speech. This operator also codes events which are habitual in the sense that they take place on regular basis, as in (681), where the speaker is describing the process of planting rice.

(681) (a) *a-bɣ̃* *kə* *bə* *pik* *[vù* *k-ì]*
 NMLZ-start LOC DEF paddy.field cut PRES-1PL
 ‘At first, we cut the paddy field.’ [SNR-1-1.1]

(b) *imá* *bɣ̃* *[zwe?* *k-ì]*
 then tree cut PRES-1PL
 ‘Then, we cut the trees.’ [SNR-1-1.2]

A large number of events coded by this operator can be considered as timeless in that they do not refer to any particular event in the discourse world, rather describe events which are shared knowledge in a community, as in (682) and (683).

(682) *nɣ-nuk* *kámá* *zùbê* *p^hôsân* *[ŋâ* *k-ì]*
 1PL.INCL-villager ERG ghost beautiful call PRES-1PL

irábe?

that

‘Our villagers call them (i.e. beautiful girls) *Zube Phosan*.’ [SNR-9-6.6]

(683) *nîrûm* *kámá* *ará* *sîm* *kámá*
 1PL.EXCL ERG this salt INST

[cup *c^ha?* *k-ì]*
 eat.with eat PRES-1PL
 ‘We eat (food) with this salt.’ [SNR-11-1.26]

6.5.1.2 The Past Operator *t-*

The operator *t-* has reference to past time, indicating that the event of the verb complex took place in the past, before the time of speech.

(684) *i-ŋù* *mi?* *mɣ̃-ni* *ro?-mun*
 1SG-mother person CLF-two fight-RECIP

[lɔpk^hì *t-ɣ?*
 see PST-1SG
 ‘Mother, I saw two men fighting.’ [WNR-2-1.3]

(685) *abá* *i-bɣ̃* *ŋâmâ* [*ŋâ t-a?*]
 this 1SG-tree COMP say PST-3
 ‘(The elephant) said, “This is my tree.”’ [SNR-2-2.6]

It also codes events which were true in the past, but are no longer, as in (686).

(686) *tîvâ* *nɣ̃* *mi?* *hù* *imá* *vək-hɣ̃* *rúŋla*
 past LOC person dog and pig-PL together

 [*túŋ t-a?*]
 live PST-3
 ‘In the past, men, dogs, and pigs used to live together.’ [WNR-7-1.1]

6.5.1.3 The Zero Operator

Lack of an overt operator, i.e. when the argument indexes occur by themselves, is interpreted as a future event. In example (687), the verb *cu?mun* ‘meet each other’ is followed by the first person plural argument index *e*, which is not attached to any overt operator. In example (688), the verb stem *kâ* ‘go’ is followed by the second person argument index *u*, which is not attached to any overt operator, and the verb *ɣùn* ‘follow’ is followed by the first person singular argument index *ɣ̃*, which is also not attached to any overt operator. In example (689), the verb stem *c^hwé kâ* ‘run away’ is followed by the third person argument index *a*.

(687) *ɣo?* *nɣ̃* [*tə-le?* *cu?-mun* *e*]
 later LOC later-again meet-RECIP 1PL
 ‘We will meet each other again later.’ [SCN-6-21.1]

(688) *nɣ̃* *mánɣ̃* [*kâ* *u*] *kə* *mì*
 2SG where go 2SG LOC ADD

ɲà mə-dĩ [zùn ɣ]
 1SG 2SG-back follow 1SG
 ‘Wherever you will go, I will follow you.’ [MOV-2-1.196]

(689) *ʒoʔ nɣ táhé nɣ [cʰwé kà a]*
 later LOC elsewhere LOC run go 3
 ‘(The pig) will run away elsewhere later.’ [SNR-11-1.46]

Another construction where we find the zero operator is the prohibitive. In example (690), the verb *sap* ‘cry’ is preceded by the prohibitive particle *nɣʔ* and followed by the argument index *an*, which is not attached to any overt operator. In example (691), the verb stem *vín cù* ‘ask back’ is preceded by the prohibitive particle *nɣʔ* and followed by the argument index *o*, which is also attached to any overt operator.

(690) *atĩ-cʰà a-sân dɣ a, [nɣʔ sap an]*
 3SG-DIM NMLZ-good COP 3 PROH cry 2PL
 ‘She will be fine. Do not cry.’ [MOV-1-1.290]

(691) *kuʔ heʔ l-oʔ, [nɣʔ vín cù o]*
 give keep IMP-2SG PROH return ask.for 2SG
 ‘Give (to people), (but) do not ask for it back.’ [MOV-2-1.52]

6.5.1.4 The Negative Operator *m-*

The operator *m-* marks negation. A sentence negated with *m-* can be interpreted as having any of the three possible time references – present, past, or future, though past reference can be overtly marked with the operator *t-* before the negative operator. In example (692), we have reference to a past time, as indicated by the past tense marker in the subordinate clause. However, there is no past tense marker in the negated matrix clause. Example (693) is talking about a future or

hypothetical world in which property cannot be destroyed. However, there is no future marker. Example (694) is a ‘habitual’ statement that can be considered as universal truth.

- (692) *c^hùŋù ha? nʂ kà t-i? bə c^hùŋù*
 PN land LOC go PST-1PL DEF PN
mì [ləp ván m-i?]
 ADD get cut NEG-1PL
 ‘(We) went to Chuny’s place, (but we) did not get to cut any Chunyu person.’
 [SNR-15-1.7]

- (693) *cârám kámá mì [ŋé bùn p^hʂ? m-a?]*
 rust ERG ADD be.able dust eat NEG-3
 ‘The rust will also not be able to turn (your property) into dust.’ [MOV-3-1.52]

- (694) *mikdo? kámá mikdo? làlà [ŋé]*
 blind ERG blind as.well be.able
sit ke? m-a?]
 take.with go NEG-3
 ‘A blind person cannot lead another blind person.’ [MOV-2-1.66]

The negative operator can co-occur with the past tense operator *t-*, the non-past proximal/inverse *r-*, and the past proximal/inverse operator, as shown in (676) through (678) above.

6.5.1.5 The Non-Past Proximal/Inverse Operator *r-*

The operator *r-* may code either a proximal motion towards the deictic center or an inverse configuration. A verb with this operator can be interpreted as expressing either a present or a future event. A past event is overtly marked with the past proximal/inverse operator *t^h-* preceding the operator *r-*. In example (695), the operator

r- occurs following the intransitive deictic motion verb *vʔ* ‘come’ and indicates that the motion is towards the speaker. Example (696) involves an associated motion, taking and leaving a place; the operator *r-* indicates this motion to be towards the speakers. In example (697), the operator *r-* occurs with the transitive verb *ŋâ* ‘say’, and marks the configuration as inverse (i.e. a second-person A argument is acting on a first-person P argument) (see §7.4.1 on inverse marking). In example (698), the event is overtly marked as past with the *tʰ-*, the past tense counterpart of *r-*.

(695) *dʂ a kámí i-tʰʔ? nʔ mi? mʔ-tʰə a-dûŋ*
 however 1SG-over LOC person CLF-one NMLZ-big
 [*vʔ r-a*]
 come PROX.NON.PST-3
 ‘However, a person greater than me will come.’ [MOV-1-1.172]

(696) *izúŋ, sè-ŋà [twè ke? r-u nà]*
 ready crab-FEM take go PROX.NON.PST-2SG PFV
 ‘(We are) ready. Crab, bring (the money).’ [SNR-6-4.62]

(697) *nu?rúm kámá ŋà nʔ mì [ŋâ r-a]*
 2PL ERG 1SG LOC ADD say INV.NON.PST-3
 ‘You will also tell me.’ [MOV-1-1.226]

(698) *irə lâm mə rúm-và [kà tʰə r-a]*
 that road ABL priest-MAS go PROX.PST PROX.NON.PST-3
 ‘A priest came along that road.’ [MOV-3-1.113]

The operator *r-* can co-occur with the negative operator *m-*, as shown in (699) and (700).

(699) [*kà rə m-ʔ? arə dîmə*]
 go PROX.NON.PST NEG-1SG this after
 ‘I will not come (again) after this time.’ [SCN-2-18.2]

- (700) *nɣ̌ kámá dà swé rô zù mì*
 2SG ERG leg wash PURP water ADD
[ku? tʰə rə m-ɣʔ]
 give INV.PST INV.NON.PST NEG-1SG
 ‘You did not even give me water to wash legs.’ [MOV-2-1.94]

The operator *r-* may also function as an imperative marker in clauses that involve proximal motion or an inverse configuration with present time reference.

- (701) *anɣ̌ [vɣ̌ r-o]*
 here come PROX.NON.PST-2SG
 ‘Come here!’ [Elic-1-9.1]

- (702) *ŋà hə càm mêtʰe? [zó ku? r-ɣ]*
 1SG DAT rice little extra give INV.NON.PST-1SG
 ‘Bring me some more rice.’ [Elic-2-3-7.1]

6.5.1.6 The Past Proximal/Inverse Operator *tʰ-*

The operator *tʰ-* also codes either a proximal motion or an inverse configuration, with past time reference. For coding past proximal events that involve the deictic verbs *vɣ̌* ‘come’ and *kà* ‘go’, we find both the operator *tʰ-* and *r-*, as we have seen in (698) above and (703) below.

- (703) *a-sân mə [vɣ̌ tʰə r-ɣ]*
 NMLZ-good ADV come PST PROX-1SG
 ‘I arrived safely.’ [Elic-1-118.1]

However, there are also instances found in the database where only the operator *tʰ-* is found coding past time reference with the deictic verbs, as shown in (704).

- (704) *imá sêmik-rɣ̌ pʰja? vɣ̌ tʰ-a*
 then sun-SIM light come PROX.PST-3
 ‘Then sun like light came.’ [MOV-4-1.168]

However, when the events involve associated motion, the operator *r-* is not required. The operator *t^h-* by itself codes past proximal motion, as illustrated below. In example (705), the operator *t^h-* by itself indicates that there was a proximal motion towards the speaker of people carrying a dead body. Similarly, in (706), the operator indicates that the agent bought a TV and moved towards the speaker at home.

(705) *hənîrûm kámá mi? a-rikmê kè ný*
 3PL ERG human 3-deadbody stretcher LOC
 [*pí ke? t^h-a*]
 carry.on.shoulder go PROX.PST-3
 ‘They were carrying a dead body with a stretcher on their shoulder.’
 [MOV-2-1.113]

(706) *i-p^hù kámá tivi [rì ván t^h-a]*
 1SG-elder.brother ERG TV buy along PROX.PST-3
 ‘My brother bought and brought a TV.’ [Elic-9-226.1]

The operator *t^hə* also codes inverse configuration all by itself (i.e. without the operator *r-*) in affirmative sentences, as shown in (707) and (708). In example (707), third person participants act on (‘insult’) first person participants, and this inverse configuration is marked with the operator *t^h-*. In (708), a third person participant (i.e. faith) acts (‘heal’) on a second person participant, and this inverse configuration is marked with *t^h-*.

(707) *zékábá a-t^hân vî t^hân-rê kámá*
 now 3-face monkey face-SIM ERG

ηέ *a* *ηâmê aru?* [*báván* *zap* *t^h-i*]
 win 3 COMP like.this insult speak INV.PST-1PL
 ‘‘Now the monkey faced people will win (the battle)’’, like this (they) insulted
 (us).’ [SNR-15-1.27]

(708) *mə-kâmlâm* *kámó* [*mʻ* *t^hik* *t^h-u*]
 2SG-faith ERG cure CAUS INV.PST-2SG
 ‘Your faith has healed (you).’ [MOV-3-1.139]

However, when the sentences involve negation, both the operator *t^h-* and *r-* are required both for associated motion events and inverse configuration marking with past time reference. Example (709) involves negation of an event, which involves both an associated motion (‘carry away’) and an inverse configuration (i.e. third person participants (ghosts) act on the first-person participant). Here we find both the operators *t^h-* and *r-* occurring with the negative operator. Example (710) is a negated sentence with inverse configuration (i.e. second person plural participants acting on a first person singular participant) with past time reference. Here also we find both the operators *t^h-* and *r-* with the negative operator *m-*. Example (711) is also a negated sentence with inverse configuration (second person singular participant acting on first person singular participant) with past time reference. The two operators *t^h-* and *r-* occur preceding the negative operator *m-*.

(709) [*ηέ* *pí* *ván* *t^hə* *rə* *m-ʻ?*]
 be.able carry along PROX.PST PROX.NON.PST NEG-1SG
 ‘(The ghosts) were not able to carry (me) away.’ [SNR-8-1.29]

(710) *dʻ a kámí* [*lù* *t^hə* *rə* *m-a?*]
 however hold INV.PST INV.NON.PST NEG-3
 ‘However, (you plural) did not catch (me).’ [MOV-4-1.10]

- (711) *túŋ* *vɣ̣* *r-o* *[ŋá* *tʰə*
 sit come PROX.NON.PST-2SG say INV.PST
rə *m-rʔ]*
 INV.NON.PST NEG-1SG
 ‘(You) did not say to (me), “come and sit”.’ [MOV-2-1.96]

6.5.1.7 The Imperative/Non-Final Operator *l-*

The operator *l-* is found in imperative sentences as well as in non-final clauses in chained clauses. Example (712) illustrates a second person imperative construction, where the verb *pʰàn* ‘tell’ is followed by the inflected imperative/non-final operator *lo?*. Example (713) illustrates a third person imperative where the verb stem *cup* *cʰa?* is prefixed with the permissive/causative prefix *tə-* and followed by the inflected imperative/non-final operator *la* (also see §8.5.3 on on imperative construction).

- (712) *kʰiʔhî* *nî* *kʰûkʰup* *bə* *[pʰàn l-o?]*
 deer and turtle DEF tell IMP-2SG
 ‘Tell (us) the (story of) deer and turtle.’ [SNR-4-1.1]

- (713) *eh* *a* *kámá* *[tə-cup cʰa?* *l-a]*
 EXCLAM this INST PERM-eat.with eat IMP-3
 ‘Let (them) eat (food) with this.’ [SNR-11-1.26]

As a non-final operator, the inflected operator *l-* occurs in chained clauses following a verb stem, and is marked with the suffix *-mə* (see §5.2.11.5 for other functions of this morpheme). In example (714) the non-final clause is put inside the brackets, where the verb *ŋé* ‘finish’ is followed by the non-final operator inflected with the first person singular argument index and suffixed with *-mə*. In example

(715), the non-final clause consists of an auxiliary construction with the lexical verb *c^hwé* ‘run’. The inflected imperative/non-final operator occurs following the auxiliary verb *rì*. (See §9.3 for a description of non-final clauses).

(714) *[cèdà ìbá ñé l-i?-mə]*
 clear.burned.trees that finish NF-1PL-NF

mi? túŋ rô tap hwé k-ì
 person sit PURP hut build PRES-1PL

‘After finishing clearing burned trees, we build huts for people to sit.’
 [SNR-1-1.6]

(715) *k^hûk^hup bə [a-c^hwé hwéhi rì l-ə-mə]*
 turtle DEF NMLZ-run pretend AUX NF-3-NF

tja?rə túŋ
 quickly sit

‘The turtle would pretend to run, and then quickly sit.’ [SNR-4-4.6]

6.5.2 Uninflected Operators

In certain constructions, we find uninflected elements, such as *t^hŋ* ‘nominalizer’ and *cwê* ‘completive’, instead of the inflected operators described in the previous section.

6.5.2.1 Operator *t^hŋ*

The operator *t^hŋ* functions as a nominalizer elsewhere (see §6.7.2.4).

Nominalized clauses are commonly found functioning as independent sentences in Tibeto-Burman (DeLancey, 2011a; Genetti, 2011). I will continue to gloss it as a nominalizer even in these independent sentences for consistency. As a verbal operator, it has the same distribution as the inflected operators. It occurs following the

verb stem and the auxiliary verb (if any), and may be followed by aspectual particles and the hearsay marker. Sentences with the operator *t^hɪŋ* express a sense of obligation or necessity. The context for (716) is that the speaker is describing the process of planting rice seeds. Here he describes the event of covering rice seeds with soil as necessary in order to save the seeds from birds. The first verb complex is a non-auxiliary construction, where the operator *t^hɪŋ* occurs following the verb stem *hut ku?* ‘cover’, and the second verb complex is an auxiliary construction, where the operator *t^hɪŋ* occurs following the auxiliary verb *rì*. The context for (717) is that a crab is convicted of causing the death of a ghost’s child, and all the animal kingdom is demanding that she pay the price for it. Here the operator *t^hɪŋ* is preceded by the verb stem *ku?* and followed by the perfective particle *nà*.

(716) *zèhùn kámá [hut ku? t^hɪŋ],*
 tool.type INST cover give NMLZ
[a-hut rì t^hɪŋ]
 NMLZ-cover AUX NMLZ
 ‘(We) should cover (the rice) with trowel, (we) should cover (them).’
 [SNR-1-1.10]

(717) *nê bə [ku? t^hɪŋ nà]*
 2SG DEF give NMLZ PFV
 ‘You must give (compensation).’ [SNR-6-4.49]

6.5.2.2 Operator *cwê*

Another element that we find instead of an inflected operator is *cwê*, which adds a sense of completeness. It frequently occurs with the perfective particle *nà*. This

element may be related to the lexical item *cwê*, which means ‘easy’, ‘ready’, and is found in expression *hwécwê* ‘ready made’.

(718) *t^húmlà* [*go cwê nà*]
 all plan COMPL PFV
 ‘I have already planned everything.’ [SCN-1-31.1]

(719) *lùŋ kásɣ? bə* [*hap cwê nà*] *dɣ t-a?*
 stone door DEF open COMPL PFV COP PST-3
 ‘The stone door was already open.’ [MOV-4-1.157]

6.6 Post-Operator Elements

A few elements occur following the verbal operators described above. These include two aspectual elements, perfective *nà* and progressive *tətúŋ*, and one hearsay marker *ŋà*.

6.6.1 Aspectual Elements

6.6.1.1 Perfective *nà*

The particle *nà* seems like a perfective aspect marker which primarily bounds events and situations. It occurs with the inflected as well as non-inflected verbal operators. It is found in both non-verbal and verbal clauses.

In clauses that express a state, the particle *nà* adds a sense of ‘change of state’, as illustrated in (720) through (724). The events in these examples are states like ‘be tired’, ‘not exist’, ‘be open’, ‘be able to see’, and ‘be a father’. The particle *nà* indicates that these states did not exist before and now have come to exist. Thus, in

example (720), it is implied that the speakers were not tired before. In (721), it is implied that the Jesus's dead body was there inside the cave. In (722), it is implied that the door was closed before. In example (723), the prior state that humans can see ghosts ceases to exist and the new current state comes into being. In (724), it is implied that the participant was not a father before. In example (725), a woman was ill, but she becomes well.

(720) *a-bwê-rik* *rì* *t-i?* ***nà***,
 NMLZ-be.tired-die AUX PST-1PL PFV

mungam *k^hwám* *t-i?* ***nà***
 a.lot walk PST-1PL PFV
 ‘(We) got very tired, and we walked a lot.’ [SNR-13-1.47]

(721) *txti tîsû* *mê* *bə* *ahù* ***nà*** *dê* *t-a?*
 God body DEF NEG.EXIST PFV COP PST-3
 ‘God’s dead body was no longer there.’ [MOV-4-1.165]

(722) *lùŋ* *kásɣ?* *bə* *hap* *cwê* ***nà*** *dê* *t-a?*
 stone door DEF open COMPL PFV COP PST-3
 ‘The stone door was open.’ [MOV-4-1.157]

(723) *irə* *dîmə* *ləpk^hɨ* *m-a?* ***nà*** *zùbê* *a*
 that after see NEG-3 PFV ghost DP
 ‘After that (man) can no longer see ghosts.’ [SNR-8-1.55]

(724) *atî-và* *bə* *a-và* ***nà***
 3SG-MAS DEF 3-father PFV
 ‘He has become a father.’ [Elicited]

(725) *sú* *l-at,* *atî-nù* *a-sân* ***nà***
 look IMP-2PL 3SG-FEM NMLZ-good PFV
 ‘Look, she has become well.’ [MOV-3-1.54]

With events that involve processes or activities, the particle *nà* delimits or bounds these events. Thus, they are no longer interpreted as continuous, which

otherwise is a possible interpretation for the three tenses (present, past and future). Thus, in example (720), the process of *k^hwám* ‘walk’ is viewed as a bounded event that has taken place over a period of time. Here it is not possible to refer to the continuity of the event of ‘walking’. Similarly, (726) *láp^hĩ* ‘see’ is interpreted as a bounded process, in the sense of coming into contact with people, over a period of time extending upto the time of speech. In example (727), the process of *c^hwé* ‘run’ is viewed as a bounded event, a race, and is no longer susceptible to a progressive interpretation.

(726) *aʒaʔ-nù* *láp^hĩ* *k-ì* *nà* *irá-r̥* *miʔ* *a*
 many-AUG see PRES-1PL PFV that-SIM person DP
 ‘(We) have seen many people like those.’ [MOV-3-1.192]

(727) *kà* *r-o* *k^hĩʔhĩ* *tweʔ-mun*
 go PROX.NON.PST-2SG deer compete-RECIP

c^hwé *i* *nà*
 run 1PL PFV
 ‘Come, Deer. We will compete running with each other.’ [SNR-4-4.4]

Example (728) illustrates *nà* with events which are intrinsically liminal or bounded, such as *hũŋ* ‘appear’, *pũŋ* ‘sprout’.

(728) *irá* *dĩmə* *c^haʔ* *a-hũŋ* *a-pũŋ* *rì* *k-ə* *nà*
 that after rice NMLZ-appear NMLZ-sprout AUX PRES-3 PFV
 ‘After that the rice sprouts.’ [SNR-1-1.16]

6.6.1.2 Progressive *tətũŋ*

The element *tətũŋ* indicates that the event is ongoing. The event may be a state or a process. Thus, we find *tətũŋ* in verbal as well as non-verbal clauses.

Examples (729) and (730) illustrate *tətûŋ* in non-verbal clauses which express states, like ‘being in Jerusalem’, and ‘to exist’.

(729) *atî-và zerusolim nŕ tətûŋ*
 3SG-MAS PN LOC PROG
 ‘He is still in Jerusalem.’ [MOV-4-1.78]

(730) *zéká mì nŕ bə súm tʰŋ pʰân-tʰə tóà tətûŋ*
 now ADD 2SG DEF work NMLZ CLF-one EXIST PROG
 ‘There is still one thing for you to do.’ [MOV-3-1.78]

In examples (731) and (732), *tətûŋ* occurs with the telic event of *cʰaʔ* ‘eat’, and *tətûŋ* indicates that the event of ‘eating’ or ‘not eating’ is ongoing.

(731) *atî càm cʰaʔ k-ə tətûŋ*
 3SG rice eat PRES-3 PROG
 ‘He is still eating rice.’ [Elicited]

(732) *atî càm cʰaʔ m-aʔ tətûŋ*
 3SG rice eat NEG-3 PROG
 ‘He has not eaten rice yet.’ [Elicited]

6.6.2 Reportative/Hearsay *ŋà*

The element *ŋà* corresponds to the speech verb *ŋá* ‘say’, but with a different tone. As a hearsay or reportative marker, it comes at the very end of a sentence and indicates that the statement in the clause is hearsay, something that the speaker heard from others and is merely reporting. It is very common in folk tales, because they are something that the speaker learns from others and reports to the hearer(s). The meaning of the hearsay marker is not usually added in the free translation in the illustrative examples in the rest of this work.

(733) *a-và kámá c^hín t-ə ɲà*
 3-father ERG ask PST-3 hearsay
 ‘The father asked (the elder daughter), it is said.’ [SNR-12-1.34]

(734) *ibá sìmkùm ibá vikrə twè ku? t-ə ɲà*
 that salt.piece that quickly take give PST-3 hearsay
 ‘(He) quickly took and gave the piece of salt (to the ghosts), it is said.’
 [SNR-11-1.25]

6.7 Affixes and Particles

There are two prefixes which occur on the first element of the verb stem. One of these prefixes, *a-*, is an old nominalizer. The other prefix, *tə-*, is a permissive/causative marker. There are five suffixes/particles – reciprocal marker *-mun*, continuous marker *-ru?*, agent nominalizer *-tî*, nominalizer *t^hîŋ*, and nominalizer *-lî*.

6.7.1 Prefixes

6.7.1.1 The Prefix *a-*

The *a-* prefix seems to be an old derivational morpheme which derives nominals (nouns and their modifiers out of verbs). It is produced with high pitch like all other prefixes. This prefix is readily noticeable because all verbs and PCT’s take this prefix when they are uttered in isolation (i.e. the citation form).

<i>a-c^hín</i>	‘to ask’	<i>a-hɣ̃</i>	‘brave’
<i>a-c^hwé</i>	‘to run’	<i>a-dûŋ</i>	‘big’
<i>a-he?</i>	‘to keep’	<i>a-c^hîm</i>	‘sweet, tasty’
<i>a-hí</i>	‘to learn’	<i>a-sô</i>	‘red’

One of the constructions in which we find the *a-* prefix obligatorily is the auxiliary construction (see §6.8.1). The *a-* prefix is attached to the leftmost element of the verb stem in the auxiliary construction and the verb stem is followed by the auxiliary verb *rì*, which in turn is followed by a verbal operator. In example (735), the verb stem consists of the grammaticalized verb *ηέ* ‘be able’ and the lexical verb root *lwe?* ‘hold’. The prefix *a-* is attached to the element on the left, i.e. on *ηέ* ‘be able’. The verb stem then is followed by the auxiliary verb *rì*, which is then followed by the first person plural argument index *e*.

(735) *zéká ηà bə [a-ηέ lwe? rì e]*
 now 1SG DEF NMLZ-be.able hold AUX 1PL
 ‘Now I will be able to hold you.’ [SNR-12-1.21]

In example (736) the verb stem consists of the lexical verb root *sap* ‘cry’ and the adverbial element *ròkò* ‘all’. The prefix *a-* occurs on the element on the left, i.e. the lexical verb root *sap* ‘carry’. The stem is then followed by the auxiliary verb *rì*, which is in turn followed by the inflected present tense operator *ka?*.

(736) *nɣ-c^hà [a-sap ròkò rì k-a?]*
 1PL.INCL-child NMLZ-cry often AUX PRES-3
 ‘Our child cries all the time.’ [SNR-6-4.6]

In example (737), the verb stem consists of the verb root *ruk* ‘burn’. The stem is prefixed with *a-* and followed by the auxiliary verb *rì*, which is in turn followed by the inflected present tense operator *ki*.

(737) *dá-tʰə* *té* *heʔ* *l-iʔ-mə*
 month-one around keep NF-1PL-NF

[*a-ruk* *rì* *k-i*]

nmzl-burn AUX PRES-1PL

‘After keeping (the branches) for around a month, we burn (them).’

[SNR-1-1.4]

Traces of the nominal use of *a-* prefixed verbs are found in certain fixed (temporal) expressions, such as the one in (738). The temporal expression consists of the independent verb *bʰə* ‘to start’, prefixed with *a-* and followed by the locative postposition *kə*.

(738) *a-bʰə* *kə* *bə* *pik* *vù* *k-i*
 NMLZ-start LOC DEF paddy.field cut PRES-1PL
 ‘At first, we cut the paddy field.’ [SNR-1-1.1]

The prefix *a-* is also found in nominalized constructions, which may either function as independent sentences or as nominal modifiers or as arguments within another clause. In example (739), the verbs *buʔ* ‘beat’ and *veʔ* ‘slap’ are nominalized with the nominalizer *tʰiŋ* and prefixed with *a-*. The nominalized clause then functions as a noun marked with the locative *nʰə*. In the same sentence, the lexically main verb stem *hú* ‘reach’ is marked with the prefix *a-*.

(739) [a-bu? a-ve? t^hɪŋ] nʃ mì [a-hú ke?]
 NMLZ-beat NMLZ-slap NMLZ LOC ADD NMLZ-reach go
 ‘It will even lead to a fight.’ [SCN-2-9.5]

In example (740), the verb *swam* ‘offer’ is marked with the nominalizer *t^hɪŋ* and is prefixed with *a-*. The nominalized verb then modifies the noun *hìm* ‘house’.

(740) i-hìm bə [a-swám t^hɪŋ hìm] dʒ a
 1SG-house DEF NMLZ-offer NMLZ house COP 3
 ‘My house will be a house of offering (praying).’ [MOV-3-1.186]

In example (741), the verb *rikhe?* ‘kill’ is also nominalized with *t^hɪŋ* and prefixed with *a-*. The nominalized clause functions as the complement clause of the verb ‘order’.

(741) ... zêsu? bə [a-rikhe? t^hɪŋ] ŋâmâ
 ... Jesus DEF NMLZ-kill NMLZ COMP
 ‘(ordered) that Jesus should be killed.’ [MOV-4-1.98]

The verb *c^hàm*, when prefixed with *a-*, can function as the predicate without any inflected operator following, as in (742).

(742) zêsu? kámá anappʒ? [a-c^hàm nâ]
 Jesus ERG day NMLZ-know PFV
 ‘Jesus knew about that day.’ [MOV-3-1.314]

Thus, the nominalizer prefix *a-* is found in nominalized constructions, along with other nominalizers like *t^hɪŋ* or by itself.

Finally, the prefix *a-* is also found on PCT’s when they function as pre-nominal modifiers and predicates. See §3.2 and §5.2.8 for discussion on PCT’s.

6.7.1.2 Permissive/Causative Prefix *tə-*

The causative/permissive *tə-* is prefixed to the left-most element of the verb complex, which may be the verb root, a grammaticalized verb, or an adverb-like element. It is produced with high pitch like other prefixes. Examples (743) and (744) illustrate the permissive use of the prefix *tə-*. In example (743), the prefix occurs on the leftmost element *hik*, a verb that adds adverbial meaning of ‘properly’ to the root *c^him* ‘wear’. Here *tə-* indicates that the speaker is making a request to allow her to wear the clothes first.

(743)	<i>i-k^hat</i>	<i>[tə-hik</i>	<i>c^him</i>	<i>mɣ</i>	<i>k-ɣ]</i>	<i>o</i>
	1SG-clothe	PERM-properly	wear	first	PRES-1SG	EXCLAM
	‘Let me wear my clothes properly first.’					[SNR-12-1.29]

In example (744), the prefix *tə-* occurs on the leftmost element *ha* ‘take out’, which is the lexical verb root in the stem. The context here is that a crab hides in a hole under a rock and when other animals ask her to come out, she pretends to be taking out precious objects and asks others to let her do that.

(744)	<i>lik</i>	<i>cûŋ</i>	<i>[tə-há</i>	<i>mɣ</i>	<i>k-ɣ]</i>	<i>jo</i>
	ornament	bag	PERM-take.out	first	PRES-1SG	EXCLAM
	‘Let me take out the bag of ornaments first (from the hole).’					[SNR-6-4.61]

Note that the verb complex indexes the causee or the participant who asks for permission. Thus, in both examples the speaker (i.e. first person singular argument) who is asking for permission is indexed on the verb.

The prefix *tə-* has a causative meaning in the following examples. In (745), ants have been instructed by men to bite a monkey and make him fall from a tree.

(745) *nɔ̃ bə lɔʔlu? mə pʰũŋkʰý k-à iká*
 2SG DEF bite ABL shiver PRES-3 then

[tə-zà he? l-a] ŋâ-mə iru?
 PERM-fall keep IMP-3 say-NF like.that

ke? tʰik t-a?
 go CAUS PST-3

‘‘When (the monkey) will shiver at your bite, make him fall’’, saying like that (they) sent him (to attack the monkey).’ [SNR-7-1.49]

Similarly, in (746) a monkey has been instructed by other animals to poke a hole under a big stone with its tail and make a crab, which is hiding inside, come out of the hole.

(746) *bə-mu mu-lu so? l-o?, [tə-kà*
 2SG-tail tail-long enter IMP-2SG PERM-go

r-a], se-nà [tə-kà r-a]
 PROX.NON.PST-3 crab-FEM PERM-go PROX.NON.PST-3

‘Khokhi, you poke (the hole), make the crab come out (to us).’ [SNR-7-4.74]

Note that both (745) and (746) involve third person imperative (see §8.5.3 for discussion on imperatives).

The following example could be interpreted either as causative or permissive, where a human being asks a couple of ghosts to feed their child food with salt.

(747) *a kámá [tə-cup cʰa? l-a],*
 this INST PERM-eat.with.sth eat IMP-3

nîrûm kámá ará sîm kámá
 1PL.ex ERG this salt INST

cup cʰa? k-ì...
 eat.with.sth eat PRES-1PL

‘Let/ask (them) to eat with this (salt). We (exclusive) eat (food) with this salt.’ [SNR-11-1.26]

Another usage of the prefix *tə-*, which seems somewhat unrelated to the permissive/causative meaning, is to add the sense of ‘later’. Note that the sentences in (748) and (749) do not involve a permission or causation. The context in (748) is that one brother invites another brother for hunting a bird at some place. The context in (749) is that a crab is convicted of a crime and now needs to pay a fine, called *Sim* and *Nyam*. The crab agrees to pay the fine in (749).

(748) *ibá nînap sənap [tə-hap kà e]*
 that few.days.later later-kill go 1PL
 ‘We will go and kill (the bird) in a few days.’ [SNR-11-1.44]

(749) *sîm t^həm [tə-ku? ɾ],*
 property FOC later-give 1SG

ɲàm t^həm [tə-ku? ɾ]
 property FOC later-give 1SG

‘I will give Sim, I will give Nyam (contrary to the expectation that she wouldn’t pay the fine).’ [SNR-6-4.51]

6.7.2 Suffixes

6.7.2.1 Reciprocal Marker *-mun*

The suffix *-mun* indicates that the event in the lexical verb root is reciprocal, such that the participants perform the action on each other. The pitch on this suffix is variable, and comes out as the same pitch as the preceding lexical item. Examples (750) through (753) illustrate the reciprocal suffix. In example (750), the suffix *-mun* is attached to the root verb *cu?* ‘meet’, which is preceded by the element *rúŋ* ‘to gather’ and followed by the associated motion verb *kà* ‘go’.

(750) ... *lâm nɣ [rúŋ cuʔ-mun kà t-aʔ]*
 ... road LOC gather meet-RECIP go PST-3
 ‘They met each other together on the road.’ [SNR-7-1.7]

In example (751), the reciprocal suffix is on the verb *roʔ* ‘fight’, which functions as the predicate of the complement clause of the verb *ləpkʰi* ‘see’. The participants of the event *roʔ* ‘fight’ are coded as a single NP modified with the numeral two *miʔ mɣni* ‘two men’.

(751) *miʔ mɣ-ni [roʔ-mun]ləpkʰi t-aʔ*
 person CLF-two fight-RECIP see PST-3
 ‘(The child) saw two men fighting.’ [WNR-2-1.2]

In example (752), the suffix is attached to a resultative stem *rik ván* ‘cut to death’, and the participants are coded with the reciprocal pronoun *didi* ‘self’ modified with the third person plural possessive *hənî*.

(752) *ʒéká hənî dini [rik ván-mun a]*
 now 3PL self die cut-RECIP 3
 ‘Now they will kill each other.’ [SNR-15-1.33]

In example (753), the reciprocal suffix is on the compound *ləpkʰi* ‘see’ and the participants *ʒùbê* ‘ghost’ and *miʔ* ‘human’ are coded as a coordinated NP, connected with *nî* ‘and’.

(753) *ʒùbê nî miʔ bə [ləpkʰi-mun m-iʔ nà]*
 ghost and human DEF see-RECIP NEG-1PL PFV
 ‘Ghosts and humans, we do not see each other any more.’ [SNR-8-1.58]

rì t-aʔ]
do PST-3
‘(The humans) dug the ghost hole for a long time.’ [SNR-8-1.32]

In examples (756) and (757), the *-ruʔ* marked verb root is not repeated. Here, the suffix adds a sense of ‘always’. Thus, in (756), it indicates that the person always carries salt with him, and in (757) it indicates that God always loves people no matter what.

(756) *ibá sìmkùm ibá a-làmp^hùŋ cup rô*
that salt.piece that 3-tiffin eat.with PURP

[hùn-ruʔ rì t-aʔ]
carry-CONT do PST-3
‘(He) always carried a piece of salt (in his pocket) to eat with tiffin.’
[SNR-11-1.25]

(757) *rŷdùŋ tîsû kámá miʔ nŷ zéká húlà*
God ERG human LOC now till

[lúŋvó-ruʔ rì r-i]
love-CONT do INV.NON.PST-1PL
‘God loves (we) humans till now.’ [MOV-1-1.18]

6.7.2.3 Agent Nominalizer *-tî*

We have seen the suffix *-tî* on nouns, where it adds the sense of ‘dweller’ or ‘owner’, as in *rŷ-tî* ‘person from sky’ (*rŷ* ‘sky’) (see §4.3.3). When it is suffixed to a verb, it refers to the agent of the action/event denoted by the verb. This suffix has a falling tone. In example (758), the verb *lúŋ* ‘attack’ is suffixed with *-tî*, which then functions as the head noun of the subject NP of the non-verbal predicate clause. The NP refers to the agent of the verb *lúŋ* ‘attack’, i.e. the attackers.

- (758) *[i-pîŋ lúŋ-tî bə] vəkŋî ta*
 1SG-nest attack-NMLZ DEF wild.pig DP
 ‘The one who attacked my house was the wild pig.’ [SNR-6-4.28]

This kind of agent nominalization is a productive manner of creating headless relative clauses, see §5.2.10.1.1 on relative clauses with *-tî*.

6.7.2.4 Nominalizer *-t^hîŋ*

We have seen clauses marked with *t^hîŋ* functioning as independent sentences in §6.5.2.1. The verb nominalized with *t^hîŋ* has a wide range of referent types, and thus is more general than the agentive *-tî*. The nominalized expression may refer to the patient of the verb, as in *c^ha? t^hîŋ* ‘food’ (*c^ha?* ‘eat’), or the location associated with the verb, as in *zîp t^hîŋ* ‘bed’ (*zîp* ‘sleep’), or the instrument as in *hup t^hîŋ* ‘the cover’ (*hup* ‘to cover’), and so on. This nominalizer may have derived from the lexical item *t^hîŋ* ‘place’, as in *i-t^hîŋ* ‘my place’ in (759).

- (759) *i-t^hîŋ lúŋ ləmə ...*
 1SG-place attack NF-3-NF ...
 ‘(They) attacked my place, and then....’ [SNR-6-4.27]

Often the nominalized verb is also prefixed with the nominalizer *a-*. In example (760), the verb *p^hŋ?c^ha?* ‘eat’ is prefixed with *a-* and followed by *t^hîŋ*. The nominalized verb is then marked with the definite marker *bə*, and it functions as the

subject NP of the negative existential clause marked with the copula *ahù*. The

nominalized expression refers to the patients of the verb, i.e. ‘food’.

- (760) *[a-p^hʔc^haʔ t^hɪŋ bə]* *ahù* *ŋâ* *t-aʔ* *ŋà*
 NMLZ-eat NMLZ DEF NEG.EXIST say PST-3 hearsay
- iró təlâ-c^hâ kəmeʔ*
 that boy-DIM ERG
 ‘The boy said that there was no food.’ [SNR-9-6.22]

In example (761), the verb *p^huk* ‘wear headgear’ is followed by the nominalizer *t^hɪŋ*

and marked with the definite article *bə*. The nominalized expression refers to the

object of the verb, i.e. the headgear, and functions as the subject NP of the ablative predicate clause.

- (761) *ibá vùlap aruʔ [p^huk t^hɪŋ bə]*
 that feather like.this wear NMLZ DEF
- vʔ-pá aruʔ [p^huk t^hɪŋ] iráká vaʔ*
 pig-tooth like.this wear NMLZ there ABL
 ‘The feather, the thing we wear like this, the pig teeth, the thing we wear like this, is from there.’ [SNR-11-1.54]

In example (762), the verb *hup* ‘cover’ is followed by the nominalizer *t^hɪŋ*, and the

nominalized expression is marked with the instrumental *kámá*. The nominalized

expression refers to the cover with which a coffin was closed.

- (762) *a-p^hù kámá [a-hup t^hɪŋ kámá]*
 3-elder.brother ERG NMLZ-cover NMLZ INST
- tjaʔrə hup la ŋâmâ.....*
 quickly cover NF NF
 ‘The elder brother quickly covered (the coffin) with the cover, and then.....’
 [SNR-11-1.9]

Nominalization with *t^hŋ* is a productive manner of creating relationalization on non-subject arguments, see §5.2.10.1.2 and §5.2.10.1.3.

6.7.2.5 Nominalizer *-lî*

The suffix *-lî* is also found on nouns (see §4.3.3), where it refers to the kind or class of the entity denoted by the noun, as in *mi?-lî* ‘human kind’ (*mi?* ‘person’). This suffix may have derived from the noun *lî* ‘seed’. When it nominalizes verbs, it refers to the kind or class of the agents which perform the event denoted by the verb. Thus, the nominalized expressions are non-referential.

- (763) [*cŷ hùn-lî dŷ a kámí*
 fine carry-NMLZ COP 3 even.if
nŷ bə hùn l-o?
 2SG DEF carry IMP-2SG
 ‘Even if (you) have to become a bearer of fine, you bear (the fine).’
 [SNR-6-4.46]

In example (764), the nominalized verb *k^hwám* ‘walk’ has a finite negative operator, and the nominalized expression functions as a non-verbal predicate.

- (764) [*ro? k^hwám m-a?-lî, bŷhù k^hŋn nŷ túŋ k-o?*
 know walk NEG-3-NMLZ bush under LOC live PRES-2SG
 ‘(You) are one who does not know how to walk. (You) live under the bush.’
 [SNR-4-2.3]

In example (765), the nominalized verb *rik* ‘die’ has the uninflected operator *t^hŋ* ‘should’, and the nominalized expression modifies the noun *dx?súm* ‘work’.

- (765) *arə mi? kámə [a-rik t^hŋ-lî dx?súm*
 this person ERG NMLZ-die should-NMLZ work

càlì m̀ s̀úm t̀ m-a?
 what ADD do PST NEG-3
 ‘This person has not done any work which deserves death.’ [MOV-4-1.91]

6.8 The *r̀* ‘do’ Constructions

There are two constructions in which we find the independent lexical verb *r̀* ‘do’ following another lexical verb root. In one of these constructions, the verb *r̀* does not add much lexical meaning to the construction. All relevant meaning is contributed by the preceding lexical verb stem. I call this construction the auxiliary construction. In the second construction, the verb *r̀* can be translated as adding the meaning of ‘doing an act’, because the preceding lexical stem describes vivid actions or repetitions of action as ongoing at the time of speech. These two constructions are described below. Examples (766) and (767) illustrate *r̀* as an independent lexical verb. Note that it is the only verb in the verb complexes in these examples.

(766) *n̂ c̀ [r̀ k-ù] n̂*
 2SG what do PRES-2 Q
 ‘What are you doing?’ [Elicited]

(767) *v̀n arábá aru? [r̀ l-i?-m̀]*
 fire this like.this do NF-1PL-NF

t^hʔ k-ì
 light.fire PRES-1PL
 ‘We do like this, and start the fire.’ [SNR-7-1.17]

6.8.1 The Auxiliary Construction

The auxiliary construction has two additional elements in the verb complex – a prefix *a-* on the lexical verb stem and the auxiliary verb *r̀* following the

nominalized verb stem. Elements such as the causative particle *t^hik*, the verbal operators, the aspectual particles and the hearsay marker follow the auxiliary verb. Example (768) illustrates the simplest form of the auxiliary construction, which consists of the lexical verb *sɣ* ‘sell’ prefixed with *a-*, followed by the auxiliary verb *rì*, which in turn is followed by the past tense inflected operator *ta?*.

(768) *təlâ bə [a-sɣ rì t-a?]*
 boy DEF NMLZ-sell AUX PST-3
 ‘(They) sold the boy.’ [SNR-15-1.104]

Figure 12 outlines the complete structure of the auxiliary construction. It is divided into two main parts – the lexical verb and the auxiliary verb. The lexical verb is prefixed with *a-* and can be followed by focus particles, such as *bâ* ‘only’. The lexical verb stem can be a single verb root or any of the complex verb stems described above.

Figure 12: Structure of the auxiliary construction

Lexical Verb			Auxiliary Verb					
Prefix a-	Verb stem	Focus	Prefix tə-	AUX	Causative, GR Verb	Operators	Aspect	Hearsay

The auxiliary verb can be prefixed with the permissive/causative *tə-*. We may have the causative particle *t^hik* and three of the grammaticalized verbs described above (in §6.2.2.6.2) – the associative motion verbs *vɣ* ‘come’, *ke?/kà* ‘go’, and *ku?* ‘give’ – between the auxiliary verb and the operators. Then, the operators may be followed by the aspectual and hearsay markers, described in §6.6.

Examples (769) through (775) illustrate various kinds of lexical verb complexes that we may find in the auxiliary construction. In example (769), we have a compound lexical verb *ləpk^hi* ‘see’ (*ləp* ‘get’, *k^hi* ‘see’). In example (770), we have a resultative complex verb stem *rikk^hán* ‘slit to death’ (*rik* ‘die’, *k^hán* ‘reap, slice, slit’).

(769) *a-p^hja?* *dʂ* *imá* *mi?* *kámá*
 NMLZ-bright COP if/when person ERG

[*a-ləpk^hi* *rì* *k-a?*]
 NMLZ-see AUX PRES-3
 ‘When it is bright, people can see (things).’ [MOV-2-1.170]

(770) *dʂhat* *c^hat* *l-ə-mə* *a-c^hà*
 small.knife take.out NF-3-NF 3-child

[*a-rik* *k^hán* *rì* *ɣ]* *ŋá* *t-ə* *bə*
 NMLZ-die slit AUX 1SG say PST-3 when
 ‘When he took out the small knife and said, ‘I slit and kill my child...’
 [MOV-1-1.33]

In example (771), we have an adverbial complex verb stem where the root *hu?* ‘steal/hide’ is modifying the other verb root *tún* ‘sit/stay’. Similarly, in (772) the verb root *vín* ‘return’ modifies the other verb root *ke?* ‘go’. Note that there is a tendency to reduplicate the verb root which contributes the adverb-like meaning. But, this is not a grammatical requirement, as we see there is no reduplication of *vín* ‘return’ in (773).

Also, note that we have the additive focus particle *bà* following the verb stems and preceding the auxiliary verb in (771) and (772).

(771) *irá* *c^həvì-hɣ* *irá* *mún* *va?* *rúnkɣ*
 that grandmother.grandchild-PL that inside from root

k^hûn irá [a-hu? hu? túŋ bà rì t-a?]
 under that NMLZ-hide hide sit REST AUX PST-3
 ‘The grandmother and her grandchildren stayed hidden under the ground
 where the bamboo root was.’ [SNR-9-10.8]

(772) *[a-vín vín ke? bà tə-rì l-a]*
 NMLZ-return return go REST CAUS-AUX IMP-3
 ‘Just let him go back.’ [SNR-9-8.13]

(773) *i-mún mə mə-rwéhúŋ le ma?he? k-o?*
 1SG-name ABL 2SG-life ??? lose PRES-2SG

[a-vín túŋ rì o]
 NMLZ-return find AUX 2SG
 ‘Those who would lose your life in my name, will find (it) back.’ [MOV-2-1.230]

In example (774), we have a grammaticalized verb *ŋé* ‘succeed, finish’ contributing the modal meaning of capacity to the verb complex.

(774) *zéká ŋà bə [a-ŋé lwe? rì e]*
 now 1SG DEF NMLZ-be.able hold AUX 1PL
 ‘Now, I will be able to hold you.’ [SNR-12-1.21]

The lexical verb can also consist of co-ordinated verb stems. In example (775), two *a-*prefixed verbs *adádúŋ* ‘trust’ and *ate?* ‘hear’ are coordinated with *níà* ‘and’.

(775) *a-bŋ nŋ bə [a-dádúŋ níà a-te?*
 NMLZ-start LOC DEF NMLZ-trust and NMLZ-hear

rì t-a?]
 AUX PST-3
 ‘At first, (they) trusted and listened (to God).’ [MOV-1-1.9]

At least one verb is known not to take the prefix *a-* in the auxiliary construction, namely *vérit* ‘discuss, talk’, as shown in (776).

(776) *nɣʔ tán anɣ [vérit rì k-ɣ]*
 PROH shout here talk AUX PRES-1SG
 ‘Do not shout. I am talking here.’ [SNR-15-1.94]

Examples (777) through (782) illustrate the different types of elements we find on and following the auxiliary verb in the verb complex. In example (777), we have the permissive/causative prefix *tə-* on the auxiliary verb.

(777) [*a-vín* *vín keʔ bà tə-rì l-a]*
 NMLZ-return return go REST CAUS-AUX IMP-3
 ‘Just let him go back.’ [SNR-9-8.13]

In example (778), we have the causative particle *t^hik* following the auxiliary verb and before the inflected inverse operator *rì*.

(778) *dɣ imá akâm alâm nɣ [a-vwám rì*
 then faith 2SG NMLZ-increase AUX

t^hik r-i]
 CAUS INV.NON.PST-1PL
 ‘Then you make (our) faith increase.’ [MOV-3-1.29]

In examples (779) and (780), we have the grammaticalized associated motion verbs *vɣ* ‘come’ and *keʔ* ‘go’ following the auxiliary verb and preceding the uninflected operator *t^hɨŋ*. Also note that we have the aspectual marker *nâ* following the verbal operator.

(779) *tù jê c^haʔ jê irá bá [a-k^hán rì*
 yam new rice new that NMLZ-reap AUX

vɣ t^hɨŋ nâ]
 come should PFV
 ‘(We) should go and reap the new vegetables and rice.’ [SNR-1-1.20]

(780) *[vérit rì ke?] ñâmâ bà kà l-ɣ?-mə*
 talk AUX go think-NF REST go NF-1SG-NF
 ‘Thinking (I) would come and just talk, (I) came and’ [SCN-2-6.4]

In example (781), we have the grammaticalized verb *ku?* ‘give’ denoting ‘benefactive/melafactive’ meaning, following the auxiliary verb.

(781) *ra?bu? l-o?, kásɣ? [a-hap rì*
 knock IMP-2SG door NMLZ-open AUX

ku? r-u]
 give INV.NON.PST-2SG
 ‘Knock, (and) the door will be opened for (you).’ [MOV-3-1.3]

Example (782) illustrates the auxiliary construction in the non-final clause, where the auxiliary verb is followed by the inflected non-final operator.

(782) *imá tîsû zaprì bə [a-p^hat rì l-ə-mə]*
 then God word DEF NMLZ-read AUX NF-3-NF

t^hûŋ te? t-a?
 attentively listen PST-3
 ‘Then (they) read the God’s words, and listened to (it) attentively.’ [MOV-4-1.273]

All verb lexemes seem able to occur in the auxiliary construction. No restriction on any verb has been attested yet. However, the function of the auxiliary construction is not clear, though a few things can be noted about this construction. First, it has been observed, both in elicitation and spontaneous text, that intransitive verbs tend to occur in the auxiliary construction more often, while transitive verbs tend to occur in the non-auxiliary counterpart. Second, depending on the event type we get different and conflicting interpretations of the auxiliary construction. With certain events, we get a habitual reading of the auxiliary construction. Thus, while in (783) getting fish is interpreted as overlapping with the speech event, in (784) getting

fish is interpreted as a habitual event, something usually true but not necessarily at the time of speech. This is a very common interpretation.

(783) *ŋà* *ŋaʔ* *kəp* *k-ɣ̣*
 1SG fish get PRES-1SG
 ‘I have got fish/I am getting fish.’ [Elicited]

(784) *ŋà* *ŋaʔ* *a-kəp* *rì* *k-ɣ̣*
 1SG fish NMLZ-get AUX PRES-1SG
 ‘I (usually) get fish.’ [Elicited]

Events which are inherently habitual or are universal truths, such as the sun rising in the east, seem odd in the auxiliary construction. According to my consultants, such events can be expressed in the auxiliary construction only when the addressee did not know that it was a universal truth or an inherently habitual event. Thus, for such events, the non-auxiliary construction is used, as in (785) and (786).

(785) *sêmik* *bə* *séhûŋ* *ŋâ* *nɣ̣* [*hûŋ* *k-aʔ*]
 sun DEF east side LOC come.out PRES-3
 ‘The sun rises in the east.’ [Elicited]

(786) *k^{hi}tuŋ* *và* *bə* *vanruk* *nɣ̣* [*túŋ* *k-aʔ*]
 PN father DEF PN LOC live PRES-3
 ‘Khithung’s father lives in Vanruk.’ [Elicited]

The verb *túŋ* in (786) is polysemous, meaning ‘live’ as well as ‘sit’. When this verb is in the auxiliary construction, only a non-habitual meaning is possible. In (787) the verb *túŋ* can be interpreted only as ‘sit’, not ‘live’.

(787) *atî* *a-túŋ* *rì* *k-aʔ*
 3SG NMLZ-sit AUX PRES-3
 ‘He is sitting.’ (as I speak) [Elicitation-28-2-2017-PH/NH]

Thus, in (787) we have an event which overlaps with the time of speech, an interpretation which contradicts the interpretation of (784).

6.8.2 The Continuous Construction

This construction consists of a reduplicated verb stem followed by the verb *rì* ‘do’. The verb stem is usually suffixed with the continuous suffix *-ru?*. This construction expresses a sense of repetition or continuity of an event. In example (788), the verbs *to?* ‘jump’ and *c^hwé* ‘run’ are suffixed with *-ru?*, and then reduplicated multiple times, to express a more vivid image of the event of the elephant jumping and running. In example (789), the verb stem *tù^hab* ‘clip into peices’ is reduplicated, and the sentence indicates that the clipping was iterative.

(788) *po?-jù* *bə* [*to?-ru?* *to?-ru?* *c^hwé-ru?*
 elephant-AUG DEF jump-CONT jump-CONT run-CONT

c^hwé-ru? *to?-ru?* *to?-ru?*] *rì* *l-ə-mə*
 run-CONT jump-CONT jump-CONT do NF-3-NF

zùbê *c^hà* *k^hû* *lú* *nr?* *t-a?* *ŋámâ*
 ghost child head have.hole tread PST-3 QUOT
 ‘While jumping and running to and fro, the elephant tread and broke the ghost child’s head.’ [SNR-6-4.13]

(789) *irə* [*mù* *ibə* *tù-t^hap* *tù-t^hap* *aru?*]
 then tail that piece-clip piece-clip like.this

rì *t-a?*
 do PST-3
 ‘Then, (the crab) kept clipping the tail like this.’ [SNR-6-4.81]

CHAPTER VII

ARGUMENT INDEXATION

The verb complex in Hakhun indexes one of the core arguments of a clause primarily based on which argument is higher in a **person hierarchy**, an argument indexation pattern commonly known as hierarchical argument indexation. The indexation codes both person and number of the relevant argument, except for third person arguments for which there is no number distinction. Argument indexation is found in a significant number of Tibeto-Burman languages, across different subgroups, such as Qiangic, West Himalayan, East Bodish, Kuki-Chin, and Bodo-Konyak-Jinghpaw (DeLancey 1989, 2010, 2011b; Jacquesson 2001; Morey 2011a; van Driem 1993), including hierarchical agreement in some branches (DeLancey 2017; Jacques 2010; Lapolla 2010). While suffixal argument indexation is predominant, certain languages in the rGyalrongic, Nung, Eastern Kiranti, and Kuki-Chin subgroup have prefixal as well as suffixal indexes (DeLancey, 2011c). Certain Northern Chin languages like Tiddim or Tedim and Sizang or Siyin have both a prefixal and a suffixal paradigm (DeLancey, 2010).

In certain branches, the postverbal argument indexes occur directly on the verb as a suffix, such as in Trung (Nungish), Sunwar (Kiranti), etc. In other branches, the postverbal argument indexes forms a separate word along with certain TAM morphemes, as in Jinghpaw, Nocte, and Hakhun. These words are called ‘sentence-final words’ in Dai and Diehl (2003), and ‘agreement words’ in DeLancey (2013). I call them ‘inflected operators’ because they are part of a finite predicate.

Another interesting feature of Hakhun, associated with argument indexation, is inverse marking, which is also found in some of the related languages, such as

Rgyalrong (Jacques 2010), Chepang (Thompson 1990), and Nocte (DeLancey 1981).

This marker codes an argument configuration where the P argument is higher in the person hierarchy than the A argument, and the P argument is indexed on the verb.

There are two sets of argument indexes – one set consists of checked syllables and the other consists of open syllables or syllables with sonorous coda. The distribution of these two sets is largely conditioned by the choice of the inflected operator. Argument indexation is illustrated with intransitive verb stems in §7.1. The two sets of argument indexes are presented in §7.2. Then, we look at the indexation paradigms of each of the seven inflected operators in §7.3. I discuss argument indexation patterns in transitive/ditransitive clauses in §7.4. The most typical argument indexation pattern is the hierarchical one, in which the argument which is higher in person hierarchy is indexed on the verb complex irrespective of their grammatical relation. Thus, a first-person argument outranks a second person argument and gets indexed on the verb complex, and a second person argument outranks a third person argument and gets indexed on the verb complex. The verb complex also codes a clause as inverse when the indexed argument is not a subject. Thus, the verb complex keeps track of which argument is higher in the person hierarchy and whether the indexed argument is subject or not. Hierarchical argument indexation and inverse marking are discussed in detail in §7.4.1. I also briefly discuss non-hierarchical argument indexation in §7.4.2, and compare the argument indexation system of Hakhun with that of Nocte in §7.5.

7.1 Illustrating Argument Indexation with Intransitive Clauses

In this section, I briefly illustrate the existence of argument indexation in Hakhun using intransitive clauses. Since these clauses have only one core participant,

the verb invariably indexes the only core participant, namely the S argument. In examples (790) and (791) the verb complexes index the first person singular S argument *ŋà* ‘I’ and a first person plural S argument with the particles *ʁ* ‘1SG’ and *e* ‘1PL’ following the verb roots *rí* ‘die’ and *kà* ‘go’ respectively.

(790) *ŋà mə-nâm nʁ rí ʁ*
 1SG 2SG-with LOC die 1SG
 ‘I will die with you....’ [MOV-4-1.35]

(791) *vʁ? c^haʔk^hû tuk kà e*
 pig plate carve go 1PL
 ‘(We) will go to carve a plate for pig (to eat food).’ [SNR-11-1.6]

In examples (792) and (793), the verb complexes index a second person singular S argument of the imperative sentence and the second person plural argument *nuʔrûm* with the particles *o* ‘2SG’ and *an* ‘2PL’ following the verbs *sap* ‘cry’ and *kà* ‘go’, respectively.

(792) *nʁ? sap o*
 PROH cry 2SG
 ‘Do not cry.’ [SNR-11-1.24]

(793) *nuʔrûm bára ha? kə kà an nî*
 2PL which place LOC go 2PL Q
 ‘Which place will you go to?’ [BT-38-2.14]

Unlike the first and second person argument indexes, there is no number distinction in the indexation of third person arguments, and therefore, both third person singular and the third person plural S arguments are marked with the same index *a* ‘3’ following the verbs *kà* ‘go’ and *hûŋ* ‘appear’ in (794) and (795) respectively.

(794) *ʒoʔ nɣ táhé nɣ c^hwé kà a*
 later LOC other.place LOC run go 3
 ‘Later (the pig) will run away elsewhere.’ [SNR-11-1.46]

(795) *imá múŋsərap-hɣ húŋ a*
 then false.prophet-PL appear 3
 ‘Then false prophets will appear.’ [BT-76-30.1]

7.2 The Argument Indexes

Two sets of argument indexes can be posited, each set being largely associated with specific verbal operators. One of these sets, given in Table 99, either has no coda or has a sonorous coda. The other set in Table 100 has stop codas. We will call the first set **Sonorous argument indexes**, and the second set **Checked argument indexes**.

Table 99: Sonorous argument indexes

	Singular	Plural
1st person	<i>ɣ</i>	<i>e/i</i>
2nd person	<i>o / u</i>	<i>an</i>
3rd person	<i>a</i>	

Table 100: Checked argument indexes

	Singular	Plural
1 st person	<i>ɣʔ</i>	<i>iʔ</i>
2 nd person	<i>oʔ / uʔ</i>	<i>at</i>
3 rd person	<i>aʔ</i>	

In general, the Sonorous argument indexes are found with the zero-operator, the present tense operator *k-*, non-past proximal/inverse operator *r-*, and the past proximal/inverse operator *t^h-*. The Checked argument indexes are found with the past tense operator *t-*, the negative operator *m-*, and the imperative/non-final operator *l-*. However, there are few exceptions. We find prominent glottal stops on the second person singular and the third person inflected form of the present tense operator *k-* (see §7.3.2). Second, we see no glottal stops when the third person inflected past tense operator *t-* is followed by other verbal elements such as the aspectual particles or the hearsay marker *ŋà* (see §7.3.3 below). Finally, there is no glottal stop on the third person inflected form of the imperative/non-final operator *l-* (see §7.3.7).

Moreover, within each set of the argument indexes there is some variation in the form of the argument indexes. In the Sonorous argument indexes, the first person plural index has two forms *i* and *e*. The form *e* is found only when the indexation particle is sentence final, i.e. no other verbal or sentential elements follow it. Otherwise, the form *i* is used, as shown in (796) and (797).

(796) *vʁʔ c^haʔk^hû tuk kâ e*
 pig plate curve go 1PL
 ‘(We) will go to curve a plate for pig (to eat food).’ [SNR-11-1.6]

(797) *báté ʒwè k^hán i nî*
 how.much gather reap 1PL Q
 ‘How much crop will we reap and gather....’ [SNR-1-1.21]

The second person singular argument index also has two different forms in both sets - one with *o* (henceforth *o*-form) and the other with *u* (henceforth *u*-form). The *o*-form is found when the indexation particle is sentence final, otherwise the *u*-form is found. An exception to this is the proximal/inverse operators *r*- and *t^h*-, which take only the *u*-forms. See section §7.3.5 for more details.

- (798) *ah* *cà* *va?* *c^hwé* *u* *nî*
 EXCLAM what ABL run 2SG Q
 ‘How will you run?’ [SNR-4-2.4]
- (799) *càlì* *hùn* *ván* *t^h-u* *nî*
 what carry along PROX.PST-2SG Q
 ‘What did you bring (with you)?’ [Elic-1-113]

In the following section, I present the indexation paradigms of each inflectional operator.

7.3 Indexation Paradigms

The main objective of this section is to present all inflected forms of each inflected operator, whose functions have been described in §6.5.1. The illustrative examples are not controlled for valence, thus, we may have intransitive, transitive, or ditransitive sentences.

7.3.1 Paradigm of the Zero Operator

In this paradigm, there is no overt operator to which the argument indexes are attached. Instead, the argument indexes occur on their own following the verb stem. The zero operator or the lack of an overt operator indicates a future event, which contrasts with all other overt operators. The argument indexes in this paradigm are all

sonorous. The indexation particles usually have high pitch, though they have a distinct falling contour following a verb with the falling tone. Tone is not marked on zero operators since it is variable. There is no glottal constriction involved. The inflected forms of the zero-operator are given in Table 101.

Table 101: Indexation paradigm of the zero operator

	Singular	Plural
1 st person	<i>ɾ</i>	<i>e/i</i>
2 nd person	<i>o/u</i>	<i>an</i>
3 rd person	<i>a</i>	

Examples (790) through (795) above illustrate the forms of the zero operator.

7.3.2 Paradigm of the Present Operator *k-*

The present tense operator is usually inflected with the Sonorous Argument indexes. However, there are glottal stops in the second person singular and third person form when they are not followed by any other verbal or sentential grammatical elements, such as aspectual particles, the hearsay particle, or the question particles. The inflected forms of the present tense operator are distinctly low pitched with glottal constriction. The forms of the present tense operator are given in Table 102.

*Table 102: Indexation paradigm for present tense operator *k-**

	Singular	Plural
1 st person	<i>kɿ</i>	<i>kì</i>
2 nd person	<i>kòʔ / kù</i>	<i>kàn</i>
3 rd person	<i>kàʔ</i>	

Examples (800) and (801) illustrate the first person inflected forms of the present tense operator *k-*. In (800), the S argument of the verb *c^hwé* ‘run’ is *ɲà* ‘I’, and we see the present tense operator *k-* inflected with the first person index *-ɣ*. In (801), the A argument is a first-person plural argument, and the present tense operator *k-* is inflected with the first person plural index *-i*.

(800) *ɲà* *lik* *c^hwé* *k-ɣ*
 1SG FOC run PRES-1SG
 ‘It is me who runs (faster).’ [SNR-4-2.4]

(801) *mi?* *túŋ* *rô* *tap* *hwé* *k-i*
 person sit PURP hut build PRES-1PL
 ‘(We) build huts for people to rest.’ [SNR-1-1.6]

Examples (803) through (804) illustrate the second person forms of the present tense operator *k-*. In Example (802) the S argument of the verb *túŋ* ‘sit’ is a second person singular participant referring to a tortoise. We see the *o*-form of the second person singular index because the operator is clause final. In example (803), we see the *u*-form of the second person singular index because it is followed by the question particle *nî*. The context for (804) is that two human brothers eat meat raw, and two ghost brothers ask them why they are eating the meat raw. Here the S argument is a second person plural participant referring to the human brothers. The present tense operator *k-* is inflected with the second person plural Sonorous argument index *-an*.

(802) *bɣhù* *k^hûn* *nɣ* *túŋ* *k-o?*
 bush under LOC sit PRES-2SG
 ‘(You) live under the bush.’ [SNR-4-2.3]

(803) *sɛ̀nà* *ité* *le* *b̄aru?* *gân*
 PN that.much ??? how difficult
v̄ɣ̄ *k-ù* *nî*
 come PRES-2SG Q
 ‘Senya, how come you are taking so long to come out?’ [SNR-6-4.68]

(804) *iru?* *càrò* *pʰɣ?* *k-àn* *nî*
 like.that why eat PRES-2PL Q
 ‘Why are you (pl) eating like that?’ [SNR-7-1.15]

Examples (805) and (806) illustrate the third person inflected forms of the present tense operator *k-*. In (805), the A argument is a singular NP *sa?* ‘tiger’ and we have the present tense operator inflected with the third person index *-a*. Note that there is no glottal stop on the inflected present tense operator *kà* in (805), because it is followed by another clause final element, and the vowel is reduced to a schwa. In (806), the S argument is a plural NP *zúkrip vùrip* ‘animals and birds’ and we have the present tense operator inflected with the checked third person index *-a?*, because it is clause final.

(805) *zéká* *sa?* *kámá* *vícî* *l̄əpkʰi*
 today tiger ERG pangolin see

imá *kɣ?* *k-ə* *ɲà*
 when bite PRES-3 hearsay
 ‘Today when a tiger sees a pangolin, it bites it.’ [SNR-3-1.19]

(806) *irá* *a-pʰo?* *a-râ* *kə* *mì* *zúkrip vùrip*
 that 3-branch 3-tree.top LOC ADD wild.animals.birds

tʰjá *v̄ɣ̄* *k-a?*
 gather come PRES-3
 ‘Animals and birds come and gather on the branches.’ [SNR-2-2.12]

7.3.3 Paradigm of the Past Tense Operator *t-*

The past tense operator is usually inflected with checked argument indexes. Only the third person form loses the glottal stop when the operator is followed by other grammatical elements such as the aspectual, hearsay or question particles. The inflected forms of the past tense operator are given in Table 103.

Table 103: Indexation paradigm for past tense operator *t-*

	Singular	Plural
1 st person	<i>tʁ?</i>	<i>tí?</i>
2 nd person	<i>to?</i> / <i>tu?</i>	<i>tat</i>
3 rd person	<i>ta(?)</i>	

Examples (807) and (808) illustrate the first-person forms of the past tense operator *t-*. In example (807), the A argument is a first person singular participant referring to a wild pig in the narrative. The past tense operator inflected with the first person checked index *-ʁ?*. In example (808), the A argument is a first person plural participant referring to the Hakhun community in a war narrative. Here we have the past tense operator inflected with the first person plural checked index *-í?*.

(807) *i-ràn* *k^ha?* *mə* *mó* *sám* *he?* *t-ʁ?*
 1SG-heart bitter ADV by.mistake cut keep PST-1SG
 ‘(I) cut (the banana trees) unintentionally out of anger.’ [SNR-6-4.34]

(808) *luŋk^ho* *t^hŋ* *abá* *lúŋ* *ku?* *t-í?*
 PN place this attack give PST-1PL
 ‘(We) attacked Lungkho.’ [SNR-15-1.42]

Examples (809) and (810) illustrate the second person forms of the past tense operator *t*-. In example (809), the A argument is the second person singular pronoun *nɣ̌* ‘you’ marked with the definite marker *bə*. Here we have the past tense operator *t*-inflected with the second person checked index *-oʔ*. In example (810), the context is that the leaders of a tribe called Chunyu bring Hakhun people go to fight for them against the Vakka people. The Chunyu soldiers make fun of the Hakhun people saying that they look like monkeys and they won’t be able to fight. The A argument of the verb *sit* ‘bring’ is a second person plural participant referring to the Chunyu leaders. Here we have the past tense operator *t*-inflected with the second person plural checked index *-at*.

(809) *poʔ-nù* *nɣ̌* *bə* *mə-mù* *bê* *t^hwám*
 elephant-AUG 2SG DEF 2SG-tail hair send

heʔ *t-oʔ*
 keep PST-2SG
 ‘Elephant, you have sent (me) your tail hair.’ [SNR-5-1.8]

(810) *a-t^hân* *vî* *t^hân* *mɣ̌mɣ̌*,
 3-face monkey face like

càró *sit* *ván* *kuʔ* *t-at* *nî*
 why bring along give PST-2PL Q
 ‘Their faces are like monkey faces. Why did (you) bring (them)?’ [SNR-15-1.24]

In example (811), we find the *u*-form of the second person singular index, as the operator is followed by the question particle *nî*.

- (811) *sè-nà* *nɣ̌* *bə* *zeʔ-và* *nɣ̌* *cà* *kʰú* *nɣ̌*
 crab-FEM 2SG DEF squirrel-MAS LOC what reason LOC
- ŋâ* *t-uʔ* *nî* *pì-pʰɣ̌* *zàtat* *kà* *l-oʔ*
 say PST-2SG Q fruit.type-round pluck go IMP-2SG
- ŋâmâ* *aruʔ*
 COMP like.that
 ‘Crab, why did you say to the squirrel, ‘Go pluck a Pi fruit?’ [SNR-6-4.43]

Examples (812) and (813) illustrate the third person form of the past tense operator *t-*. In example (812), the A argument is a third person participant referring to a husband who kills his wife because she is a spirit in the guise of a woman, who eats all of their own children. Here we have the past tense operator *t-* inflected with the third person checked index *-aʔ*. In (813) we have a third person plural A referring to two human brothers and two ghost brothers who go hunting. Note here the third person index on the operator *t-* has no glottal stop as the operator is followed by the hearsay marker *ŋà*.

- (812) *a-buʔ* *mə* *tukbat* *tʰaʔ-doʔ* *heʔ* *t-aʔ*
 3-neck ABL chop.off make.piece-cut keep PST-3
 ‘(The husband) chopped off the head (of his wife, the sky lady).’ [SNR-9-8.7]

- (813) *zuʔsûŋ* *bə* *mɣ̌-tʰə* *bà* *kəp* *t-ə* *ŋà*
 rat.kind DEF CLF-one REST get PST-3 hearsay
 ‘(They) found only one rat.’ [SNR-7-1.9]

7.3.4 Paradigm of the Negative Operator *m-*

The negative operator *m-* is always inflected with checked argument indexes.

The inflected forms of the negative operator are given in Table 104.

Table 104: Indexation paradigm for the negative operator *m-*

	Singular	Plural
1 st person	<i>mɣ?</i>	<i>mi?</i>
2 nd person	<i>mo? / mu?</i>	<i>mat</i>
3 rd person	<i>ma?</i>	

Examples (814) and (815) illustrate the first-person forms of the negative operator. In example (814), the A argument of the verb *c^hàm* ‘know’ is *ɲà* ‘I’. Here the negative operator *m-* is inflected with the checked first person singular index *-ɣ?*. In example (815), the verb complex indexes the P argument of the verb *ləp ván* ‘get to kill’, which is a first person plural participant referring to Hakhun people who are telling the story. Here we have the negative operator *m-* inflected with the checked first person plural index *-i?*.

(814) *ɲà bə irá zaga bə k^hɣ? c^hàm m-ɣ?*
 1SG DEF that place DEF exactly know NEG-1SG
 ‘I do not know that place exactly.’ [SNR-8-6.92]

(815) *imá c^hùɲù kámá mì ləp ván rə m-i?*
 then PN ERG ADD get cut INV.NON.PST NEG-1PL
 ‘Then, the Chunyu people also do not get to cut (us).’ [SNR-14-1.8]

Examples (816) through (818) illustrate the second person forms of the negative operator. In example (816), the verb *súm* ‘work’ indexes the A argument *nɣ* ‘you’, and the negative operator is inflected with the checked second person singular index *-o?*. In example (816), the intransitive verb *kà* ‘go’ indexes *nɣ* ‘you’, and the

negative operator is inflected with the *u*-form of the checked second person singular index *-u?* as it is followed by the question particle *nê*. Example (818) is from Book of Acts, chapter 15, where some people were teaching the laws of Moses. Here the verb *k^hán* ‘cut’ (circumcise) is indexing a second person plural participant referring to the believers who are being taught the laws of Moses. Here the negative operator is inflected with the checked second person plural index *-at*.

(816) *nê a-ʒô, dɣʔsúm súm tə m-o?*
 2SG NMLZ-lazy work work PST NEG-2SG
 ‘You are lazy, (you) do not work.’ [WNR-5-1.9]

(817) *nê guhati nʔ kà m-u? nê*
 2SG PN LOC go NEG-2SG Q
 ‘Are you not going to Guwahati?’ [Elicited]

(818) *ibá k^hwè k^hán m-at dʔ imá nuʔrûm*
 that skin cut NEG-2PL happen if 2PL

bəruʔ kámí hʔpʔ m-at dʔ a
 in.no.way rescue NEG-2PL happen 3
 ‘If you do not circumcise, there is no way you will be saved.’ [BT-15-2.2]

Examples (819) and (820) illustrate the third person form of the negative operator. In example (819), the verb *təʒà bu?* ‘drop’ has a third person singular A argument *vək^hâ* ‘crow’, and the negative operator is inflected with the checked third person index *-a?*. In example (820), the verb *ləpk^hî* ‘see’ has a third person plural A argument *hənîrûm* ‘they’, and the negative operator is inflected with the checked third person index *-a?*. Note that the glottal stop on the third person inflected form of the

negative operator does not disappear even when it is followed by other grammatical particles like the perfective *nà*, as shown in (821).

(819) *vək^hâ* *kámá* *tə-zà* *bu?* *m-a?*
crow ERG PERM-fall hit NEG-3
‘The crow could not drop (the fire from the tree).’ [SNR-7-1.37]

(820) *hənîrûm* *kámá* *a-su?* *rì* *k-a?*,
3PL ERG NMLZ-look AUX PRES-3

ɲàmà *ləpk^hî* *m-a?*
but see NEG-3
‘They look at it, but they do not see it.’ [BT-36-2.20]

(821) *atî-và* *bə* *kwék^hû* *mûŋ* *nʻ* *nà*, *bəru? mî*
3SG-MAS DEF coffin inside LOC PFV however

ŋé *hûŋ* *kà* *m-a?* *nà* *iru?*
be.able come.out go NEG-3 PFV like.that
‘He is now inside the coffin. (He) could not get out anyhow.’ [SNR-10-1.13]

7.3.5 Paradigm of the Non-Past Proximal/Inverse Operator *r-*

The operator *r-* is inflected with only sonorous argument indexes. The pitch is usually high following the level tone verbs. There are no glottal constrictions involved. However, a distinct fall in the pitch is noticed when this operator follows a verb with a falling tone. Tone is not marked on this operator since it is variable. The inflected forms of the operator *r-* are given in Table 105.

Examples (822) and (823) illustrate the first person inflected forms of the operator *r-*. In example (822), the S argument of the verb *vʻ* is *ŋâ* ‘I’, and the operator *r-* is inflected with the sonorous first person index *-ʻ*. In example (823), the verb *p^hê*

ku? te? ‘tell’ indexes the R argument referring to the listeners of a story. Thus, the operator *r-* is inflected with the first person plural index *-i*.

Table 105: Indexation paradigm for the non-past proximal/inverse operator *r-*

	Singular	Plural
1 st person	<i>rɣ</i>	<i>ri</i>
2 nd person	<i>ro / ru</i>	<i>ran</i>
3 rd person	<i>ra</i>	

(822) *ei i-c^hù-hɣ ηà vɣ̣ r-ɣ*
 hey 1SG-grandchild-PL 1SG come PROX.NON.PST-1SG
 ‘Hey, my grandchildren, I have come (to you).’ [SNR-8-6.20]

(823) *irá lùŋ p^huk zè p^huk ηâ k-a? iná ibá*
 that stone burst iron burst say PRES-3 there that

mêc^hât^hə le? p^hê ku? tê r-i nî
 little again tell give try INV.NON.PST-1PL Q
 ‘Can you tell us the story called ‘Stone burst open, Iron burst open’ again a
 little bit?’ [SNR-8-1.2]

Examples (824) through (828) illustrate the second person forms of the operator *r-*. We have seen with other operators above that the distribution of the two forms of the second person singular index (the *o*-form and the *u*-form) varies depending on the position of the inflected operator. We find the *o*-form when the operator is clause final. Otherwise, we find the *u*-form. However, with the operator *r-*, this kind of change in form due to position is seen only when the operator *r-* occurs with the deictic verbs like *vɣ̣* ‘come’ and *kâ* ‘go’, as illustrated in (824) and (825).

Thus, we see the *o*-form in (824) because the operator is clause final, and the *u*-form in (825) because the operator is followed by the question particle *nî*. However, if the operator *r*- codes proximal motion with associated motion verbs (not deictic motion) as in (826), or if it codes inverse configuration as in (827), we find only the *u*-form irrespective of the position of the operator. In example (826), we have associated motion ‘taking someone along’, and we find the *u*-form on the operator *r*- though it is clause final, instead of the *o*-form, unlike in (824). In example (827), we have an inverse configuration (third person agent acting on second person singular participant) and the verb indexes second person singular P argument. Here the operator *r*- is inflected with *-u* though it is clause final. In example (828), the S argument of the verb *vɣ̣* ‘come’ is a second person plural participant referring to two brothers, and the operator *r*- is inflected with the second person plural index *-an*.

(824) *kà r-o, kʰiʔhî, tweʔ-mun*
 go PROX.NON.PST-2SG deer compete-RECIP

cʰwé i nà
 run 1PL PFV
 ‘Come, Deer! We will compete in running.’ [SNR-4-4.4]

(825) *ai i-tî vɣ̣ r-u nî*
 hey 1SG-grandfather come PROX.NON.PST-2SG Q
 ‘Hey grandfather, are (you) coming to us?’ [SNR-8-6.20]

(826) *bə-cʰà sit ván r-u*
 2SG-child take.with along PROX.NON.PST-2SG
 ‘Bring your child.’ [MOV-2-1.260]

(827) *irá kámá a-c^húc^ha? rì r-u*
 that ERG 3-deceive AUX INV.NON.PST-2SG
 ‘He will deceive (you).’ [MOV-3-1.250]

(828) *imá v̘ r-an v̘ r-an*
 then come PROX.NON.PST-2PL come PROX.NON.PST-2PL
 ‘Then, (the ghosts said), “Come! Come!”.’ [SNR-7-1.17]

Example (829) illustrates the third person indexation form of the operator *r-*.

In this example, the S argument for the verb *v̘* ‘come’ is a third person plural participant referring to a tribe called *Vakka*. The proximal operator *r-* is inflected with the sonorous third person index *-a*.

(829) *ze? mûŋ k^hûn n̘ hu? hwé l-ə-mə*
 forest inside under LOC steal build NF-3-NF

b̘ bə ʒwe? v̘ r-a
 tree DEF cut come PROX.NON.PST-3
 ‘(They) are secretly building (houses) in the middle of the forest, and approaching towards us cutting trees.’ [SNR-14-1.64]

7.3.6 Paradigm of the Past-Proximal/Inverse Operator *t^h-*

The operator *t^h-* is also inflected with the sonorous argument indexes. The inflected forms of the operator *t^h-* usually have a high pitch, although it is distinctly falling when it follows a verb root which has a falling tone. There is no glottal constriction on the inflected forms of this operator. Tone is not marked since it is variable. Also note that the *o*-form of the second person singular index is not found with *t^h-*. The inflected forms are given in Table 106.

Table 106: Indexation paradigm for past-proximal/inverse operator t^h -

	Singular	Plural
1 st person	$t^h\gamma$	t^hi
2 nd person	t^hu	t^han
3 rd person	t^ha	

Examples (830) and (831) illustrate the first-person indexed forms of the operator t^h -.

In example (830), a third person participant $ze?va$ ‘squirrel’ is acting (attacking) on a first person singular participant. The verb indexes the first person singular P argument, and thus the operator t^h - is inflected with the first person singular index $-\gamma$.

In example (831), a third person participant is acting ($tú\eta$ t^hik ‘made to sit’) on another first person plural participant referring to the Hakhun community. The verb indexes the P argument, and the operator t^h - is marked with the first person plural index $-i$.

- (830) *i-him* *i-pú\eta* *lú\eta-tí* *irábá* *ze?-vá*
 1SG-house 1SG-nest attack-NMLZ that squirrel-MAS
- kámá* *lú\eta* *t^h-\gamma* *ta*
 ERG attack INV.PST-1SG DP
- ‘The one who attacked my house, the squirrel attacked (my house).’
 [SNR-6-4.34]

- (831) *c^hù\etaù* *nuk-\etaù* *po* *ná* ... *tú\eta* *t^hik* *t^h-i*
 PN village-AUG hall LOC sit CAUS INV.PST-1PL
- ‘(The Chunyu people) made/let (us) sit at the Chunyu village community hall.’
 [SNR-15-1.23]

Examples (832) and (833) illustrate the second person indexation forms of the operator t^h -. In example (832), the verb *ku?* ‘give’ indexes the R argument, which is a second person singular argument, and therefore the operator t^h - is inflected with the second person singular index *-u*. In example (833), the verb *tɨŋkʰi* ‘see’ indexes the second person plural P participant *nu?rɨm* ‘you (pl)’; the operator t^h - is inflected with second person plural index *-an*.

(832) *hwé kámá ʒap rɨŋkʰ* *ku?* t^h -*u* *nɨ*
 who ERG speak right give INV.PST-2SG Q
 ‘Who gave you right to speak (these things)?’ [MOV-3-1.211]

(833) *atɨ kámá nu?rɨm* *nɨ* *tɨŋkʰi* t^h -*an*
 3SG ERG 2PL LOC see INV.PST-2PL
 ‘S/he saw you (pl).’ [Elic-2-551]

In example (834), the intransitive deictic verb *vɨ* ‘come’ indexes the S argument *pʰja?* ‘light’ and the operator t^h - is inflected with the third person index *-a*.

(834) *imá sɛmik-rɨ* *pʰja?* *vɨ* t^h -*a*
 then sun-SIM light come PROX.PST-3
 ‘Then sun like light came.’ [MOV-4-1.168]

7.3.7 Paradigm of Imperative/Non-Final Operator *l*-

The operator *l*- is inflected with checked argument indexes except for the third person inflection, where we see the Sonorous argument index. There is no glottal constriction on the third person inflected form. The inflectional forms of the operator *l*- are given in Table 107.

Table 107: Indexation paradigm for imperative/non-final operator *l-*

	Singular	Plural
1 st person	<i>lɣ?</i>	<i>li?</i>
2 nd person	<i>lo?/lu?</i>	<i>lat</i>
3 rd person	<i>la</i>	

Examples (835) and (836) illustrate the first-person forms of the operator *l-* functioning as a non-final marker. In example (835) the verb *ɲâ* ‘think’ in the non-final clause indexes a first person singular A argument with the form *l-ɣ?* of the non-final operator. In example (836) the verb *ɲâ* ‘say/think’ indexes a first person plural A argument with with the form *l-i?* of the non-final operator.

- (835) *câ* *dɣ* *k-ɣ* *bá* *ɲâ* *l-ɣ?-mə*
 what happen PRES-1SG DUB think NF-1SG-NF
- to?* *t-ɣ?*
 jump PST-1SG
 ‘Thinking what is happening, (I) jumped.’ [SNR-6-4.21]

- (836) *zuk* *nî* *vù* *kámá* *iná* *twè* *p^hɣ?c^ha?*
 animal and bird ERG there take eat
- a* *ɲâ* *l-i?-mə* *a-hut* *rì* *k-ì*
 3 say NF-1PL-NF NMLZ-cover AUX PRES-1PL
 ‘Thinking the animals and birds with take and eat (the rice), we cover (them with ground).’ [SNR-1-1.11]

Examples (837) and (838) illustrate the second person forms of the operator *l-* functioning as an imperative marker. In example (837), the verb *p^hàn* ‘tell’ indexes

the second person singular A argument which refers to the addressee with the form *l-o?* of the non-final operator. In example (838), the addressees are plural, and therefore we have the form *l-at* of the non-final operator.

(837) *k^hi?hî* *nî* *k^hûk^hup* *bə* *p^hàn* *l-o?*
 deer and tortoise DEF tell IMP-2SG
 ‘Tell the story of *Deer and Tortoise*.’ [SNR-4-1.1]

(838) *i-hja?* *aró* *sərá-và* *te?* *l-at*
 1SG-nephew this sir-MAS hear IMP-2PL
 ‘My nephew, and this Sir, listen!’ [SNR-15-1.1]

Example (839) illustrates third person inflected for of the operator *l-* functioning as an imperative marker. Here the verb *cup c^ha?* ‘eat along with’ is prefixed the causative/permissive *tə-*, and the verb indexes the causee, which is a third person participant referring the children of a ghost family (see §8.5.3 for a discussion of this imperative construction, and §6.7.1.2 for a discussion of the causative/permissive prefix *tə-*). Here the operator *l-* inflected with the third person sonorous index *-a*.

(839) *eh* *a* *kámá* *tə-cup* *c^ha?* *l-a*
 EXCLAM this INST PERM-eat.with eat IMP-3
 ‘Let (them) eat (food) with this.’ [SNR-11-1.26]

7.4 Argument Indexation Patterns

We have seen argument indexation in intransitive clauses in §7.1, where the verb complex indexes the S argument. The argument indexation in transitive and

ditransitive clauses is bit more complex. The most typical argument indexation pattern in both transitive and ditransitive clauses is one where a participant higher in the ‘person hierarchy’ is indexed on the verb, irrespective of its grammatical relation, with certain exceptions in the local domain, i.e. when both participants are first or second person. Thus, by and large a first-person participant is indexed over a second person participant, and second person participant is indexed over a third person participant. However, under certain pragmatic situations the subject of a (di-)transitive clause can be indexed irrespective of its person and number. It is still not clear what pragmatic factors are at work behind the preference of subject indexation over hierarchical argument indexation pattern. Certain pragmatic effects are discussed, especially in configurations which involve a speech act participant acting on another speech act participant, in Heath (1991, 1998). Moreover, in a (di-)transitive clause with an inverse configuration (i.e. when the agent is lower on the person hierarchy than the patient), the verb takes an inverse marker when it indexes a non-agent participant (namely patient, theme, or recipient). We will discuss the hierarchical argument indexation pattern first, and then talk about the non-hierarchical subject argument indexation pattern.

7.4.1 Hierarchical Argument Indexation & Inverse Marking

In the hierarchical argument indexation pattern, the argument higher in the **person hierarchy** is indexed on the verb complex, irrespective of its grammatical relation to the verb. In this indexation pattern, first person outranks second person, and second person outranks third person (in both numbers). I will discuss the hierarchical argument indexation pattern of different argument configurations using the semantic domains of **Local**, **Non-local**, and **Mixed** (Jacques & Antonov 2014),

outlined in Table 108. In the local domain, the relevant participants involved in the (di-)transitive clause are the speech act participants (i.e. first person and second person participants). In the non-local domain, the relevant participants involved in the (di-)transitive clause are all third person participants. In the mixed domain, the participants of the transitive clause include both a speech act participant (either first or second) and a third person participant.

Table 108: Three domains of the transitive paradigm

	1	2	3
1		1 -> 2	1 -> 3
2	2 -> 1		2 -> 3
3	3 -> 1	3 -> 2	3 -> 3

Hierarchical argument indexation is not possible in non-final clauses marked with the non-final operator *l-*. No matter what the participant configuration is, the verb in the non-final clause always indexes the A or the S argument. Thus, in example (840), the verb *ləpkʰi* ‘see’ can index only the third person A argument on the verb complex with the reduced schwa attached to the non-final operator *l-*. It cannot index the first-person P argument, as shown in (841).

(840) *atî* *ŋà* *ləpkʰi* *l-ə-mə* *cʰwé* *t-a?*
 3SG 1SG see NF-3-NF run PST-3
 ‘He saw me and then ran away.’ [Elicited]

(841) **atî* *ŋà* *ləpkʰi* *l-ɾ?-mə* *cʰwé* *t-a?*
 3SG 1SG see NF-1SG-NF run PST-3
 ‘He saw me and then ran away.’

In the following sections, I will illustrate all the configurations of the arguments in different domains. I start with the configurations in the mixed domain because that domain illustrates the hierarchical argument indexation pattern most clearly.

7.4.1.1 The Mixed Domain

In this domain, one of the relevant arguments is a speech act participant, either first person or second person participant, and the other is a third person participant. In this configuration, the verb typically indexes the speech act participant over the third person participant, and the verb takes an inverse marker when the speech act participant is not the A argument. The argument indexes along with the inverse marker in appropriate configurations are presented in Table 109. I am using the Sonorous Argument indexes along with the non-past inverse operator *r-* for this illustration.

Table 109: Mixed Domain of the transitive paradigm

	1sg	1pl	2sg	2pl	3sg	3pl
1sg					- <i>ɣ</i>	- <i>ɣ</i>
1pl					- <i>i</i>	- <i>i</i>
2sg					- <i>o</i>	- <i>o</i>
2pl					- <i>an</i>	- <i>an</i>
3sg	<i>r-ɣ</i>	<i>r-i</i>	<i>r-u</i>	<i>r-an</i>		
3pl	<i>r-ɣ</i>	<i>r-i</i>	<i>r-u</i>	<i>r-an</i>		

There are eight distinct configurations in the mixed domain of the transitive paradigm.

I divide these configurations into Direct configurations and Inverse configurations,

and discuss all the configurations under each of these two configurations. I will illustrate each individual configuration with the most frequent operators.

7.4.1.1.1 Direct Configurations in Mixed Domain

In this section, I illustrate the direct configurations in the mixed domain of the transitive paradigm. All these configurations involve a speech act participant (first or second person) acting on a non-speech act participant (third person participant). Since there is no number distinction in the third person index, I will treat them as one indexation category, and gloss the third person index simply as ‘3’.

7.4.1.1.1.1 Configuration 1: 1SG -> 3

This configuration involves a first person singular A participant and a third person singular or plural P or R participant. The only possible verbal indexation in this configuration is to index the first person singular argument. Thus, the verb complexes have the first-person index *-ɣ*. Examples (842) through (846) illustrate a first person singular participant acting on a third person participant, and verb indexing the first-person A argument. Example (842) illustrates the indexation of the first person singular subject index without any inflectional operator, example (843) with the present tense operator *k-*, (844) with the past tense operator *t-*, (845) with the negative operator *m-*, and (846) with non-final operator *l-*.

(842) *a-mik* *lwe?* *p^hɣ?* *ɣ*
 3-eye take.out eat 1SG
 ‘(I) will take out the eye and eat it.’ [SNR-9-8.5]

(843) *ɲà* *bə* *le* *ʒapla* *le* *p^hɲ* *k-ɣ*
 1SG DEF DP quickly DP spear PRES-1SG
 ‘As I quickly spear (the pig)’ [SNR-11-1.47]

(844) ηὰ βὰ μό sám he? t-γ?
 1SG DEF ... by.mistake cut keep PST-1SG
 ‘I cut (the tree) by mistake.’ [SNR-6-4.34]

(845) irá zaga βὰ k^hγ? c^hàm m-γ?
 that place DEF exactly know NEG-1SG
 ‘(I) do not know that place exactly.’ [SNR-9-10.45]

(846) ηὰ βὰ mi?cî káηâ ný va? twè l-γ?-mə
 1SG DEF dirt LOC ABL take NF-1SG-NF

*i-cwámhwé rô ηâ
 1SG-dress.up PURP think
 ‘Thinking I will dress up myself, I brought (the necklace) from the dirt.’
 [SNR-12-1.17]*

7.4.1.1.1.2 Configuration 2: 1PL -> 3

This configuration involves a first person plural A argument and a third person singular or plural P or R participant. The only possible verbal indexation in this configuration is the first person plural subject. Example (847) illustrates the index without any inflectional operator, (848) with the present tense operator *k-*, (849) with the past tense operator *t-*, (850) with the negative operator *m-*, and (851) with non-final operator *l-*.

(847) imá lùη vikrə k^hî ηâmâ
 then stone quickly give.birth then
 lùη bəru? mî k^hî e
 stone how ADD born 1PL
 ‘Having given birth to a stone, (they wondered), “How could we give birth to a stone?”
 [SNR-9-10.31]

(848) vàn hûη l-ə-mə aru? t^hγ? l-ə-mə
 fire come.out NF-3-NF like.this set.fire NF-3-NF

sù *p^hʔc^ha?* *k-ì* *ta*
 roast eat PRES-1PL DP
 ‘When the fire appears, starts like this, we roast and eat (the meat).’
 [SNR-7-1.19]

(849) *a-pe?-rik* *a-húhá,* *lùŋ* *bəru?*
 NMLZ-surprised-die NMLZ-worry stone how

k^hî *t-i?* *nî*
 born PST-1PL Q
 ‘They were very surprised, worried, “How did we give birth to a stone?”’
 [SNR-9-10.33]

(850) *ibá* *po?-rûŋ* *hù* *c^hà* *ce* *t^hîŋ*
 that elephant-tusk dog child enter NMLZ

ku? *t^h-i* *bə* *ibá* *no?* *tə* *m-i?*
 give INV.PST-1PL DEF that like PST NEG-1PL
 ‘We did not like the elephant horn (i.e. tusk) they gave us, which was so big that a puppy could enter inside it.’ [SNR-15-1.68]

(851) *vàn* *aru?* *t^hʔ?* *l-i?-mə*
 fire like.this start.fire NF-1PL-NF

aru? *swe?* *p^hʔc^ha?* *t^hîŋ*
 like.this roast eat should
 ‘Starting the fire like this, we should roast and eat (meat) like this.’
 [SNR-7-1.20]

7.4.1.1.1.3 Configuration 3: 2SG -> 3

This configuration involves a second person singular A participant and a third person singular or plural P or R participant. The only possible verbal indexation in this configuration is the second person singular argument. Example (852) illustrates the argument index with the present tense operator *k-*, (853) with the past tense operator *t-*, (854) with the negative operator *m-*, and (855) with non-final operator *l-*.

(852) *k^hô-và* *n^h* *hə* *ʒoʔ* *n^h* *hûmla* *le*
 monkey.type-MAS 2SG DAT later LOC well DP

soʔ *k-oʔ* *vínph^hâ* *tə-k^hxʔ* *kuʔ* *e*
 put PRES-2SG decorative.item PERM-tie give 1PL
 ‘Hey Khova monkey, if you put (your tail in the hole) well, we will let you have *Vunpha* tied (on your head).’ [SNR-6-4.75]

(853) *n^h* *bə* *i-c^hâ* *k^hû* *càró*
 2SG DEF 1SG-child head why

lú *n^hxʔ* *t-uʔ* *nî*
 hole tread PST-2SG Q
 ‘Why did you tread and break my child’s head?’ [SNR-6-4.18]

(854) *n^h* *bə* *atî-và* *tíjkh^h* *tə* *m-oʔ*
 2SG DEF 3SG-MAS see PST NEG-2SG
 ‘You did not see him.’ [Elic-2-532]

(855) *n^h* *pjaʔ* *l-uʔ-mə* *irá* *ɲâmâ*
 2SG scratch NF-2SG-NF that then

lú *t^hû* *l-oʔ*
 deep dig IMP-2SG
 ‘You scratch (the ground), and that way dig deep.’ [SNR-6-4.87]

7.4.1.1.1.4 Configuration 4: 2PL -> 3

This configuration involves a second person plural A participant and a third person singular or plural P or R participant. The only possible verbal indexation in this configuration is the second person plural argument. Example (856) illustrates the argument index with the zero operator, (857) with the present tense operator *k-*, (858) with the past tense operator *t-*, (859) with the negative operator *m-*, and (860) with non-final operator *l-*.

- (856) *kásʏ?* *nʏ?* *hap* ***an***
door PROH open 2PL
‘Do not open the door.’ [SNR-9-10.6]
- (857) *nuʔrûm* *kámá* *rʔdûŋ tísû* *nʏ*
2PL ERG God LOC

abá *símté* *k-àn*
this test PRES-2PL
‘You (pl) are testing the God.’ [BT-15-4.10]
- (858) *tʰanī* *rʔŋi?* *càlì* *ləpkʰī* *t-at* *nî*
while.ago day what see PST-2PL Q
‘What did (you) see today a while ago?’ [WNR-6-1.3]
- (859) *nuʔrûm* *kámá* *atî-và* *túŋkʰī* *tə* *m-at*
2PL ERG 3SG-MAS see PST NEG-2PL
‘You (pl) did not see him.’ [Elic-2-542]
- (860) *eh* *arábá* *tʰʏ?* *l-at-mə* *aru?* *rì*
EXCLAM this set.fire NF-2PL-NF like.this do

l-at-mə *pʰʏ?cʰa?* *l-at*
NF-2PL-NF eat IMP-2PL
‘You (pl) start (the fire), by doing like this, and then eat (the meat).’
[SNR-7-1.23]

7.4.1.1.2 The Inverse Configurations

The configurations in this section all involve a third person A argument acting on a speech act participant P argument. Once again, I will not distinguish between third person singular and third person plural A arguments since there is no number distinction for the third person indexation on the verb. Since these are inverse configurations, we find only the inverse operators – *r-* and *tʰ-*; we do not find the zero operator, the present tense operator *k-*, the past tense operator *t-*, or the non-final operator *l-* in these configurations.

7.4.1.1.2.1 Configuration 5: 3 -> 1sg

This configuration involves a third person singular or plural A argument and a first person singular P or R argument. The verb indexes the P or R argument. Example (861) illustrates these configuration with the non-past inverse operator *r-*. Example (862) illustrates this configuration with the past inverse operator *t^h-*. Example (863) illustrates this configuration with the negative operator *m-*, which is preceded by the inverse operator(s).

(861) *ηà hənîrûm kámá rikhe? r-γ*
 1SG 3PL ERG kill INV.NON.PST-1SG
 ‘They will kill me.’ [MOV-2-1.221]

(862) ... *tîsû kámá ηà rán t^h-γ*
 ... God ERG 1SG choose INV.PST-1SG
 ‘God chose me (for preaching).’ [MOV-1-1.215]

(863) *ηà mî iru? pí t^h-γ bə*
 1SG ADD like.that carry.on.shoulder INV.PST-1SG when

pí ván t^hə rə m-γ?
 carry.on.shoulder along INV. PST INV.NON.PST NEG-1SG
 ‘(They) carried me too, (but they) could not carry me away.’ [SNR-8-1.29]

7.4.1.1.2.2 Configuration 6: 3 -> 1PL

This configuration involves a third person singular or plural A participant and a first person plural P or R participant. The verb indexes the P or R argument. Example (864) illustrates this configuration with the non-past inverse operator *r-*. Example (865) illustrates this configuration with the past inverse operator *t^h-*.

Example (866) illustrates this configuration with the negative operator *m-* preceded by the non-past inverse operator *r-*.

(864) ... *imábə r̥d̥úŋ t̥s̥ú kámá máncán r-i*
 ... then God ERG show.mercy INV.NON.PST-1PL
 ‘.. then God will show us mercy.’ [MOV-4-1.254]

(865) *zékábá a-t^hân vî t^hân-r̥ kámá ηé a*
 now 3-face monkey face-SIM ERG win 3

ηâmâ aru? báván zəp t^h-i
 COMP like.this insult speak INV.PST-1PL
 ‘‘Now these monkey faced people will win (the war)’’, like this (they) insulted (us).’ [SNR-15-1.27]

(866) *z̥ésu? kámá n̥r̥úm he?c^hí rə m-i? bātənî*
 Jesus ERG 1PL.INCL leave INV.NON.PST NEG-1PL perhaps
 ‘Jesus is not going to leave us, is he?’ [MOV-1-1.245]

7.4.1.1.2.3 Configuration 7: 3 -> 2SG

This configuration involves a third person singular or plural A argument and a second person singular P or R argument. The verb indexes the P or the R argument.

Example (867) illustrates this configuration with the non-past inverse operator *r-*.

Example (868) illustrates this configuration with the past inverse operator *t^h-*.

Example (869) illustrates this configuration with the negative operator *m-*, preceded by the non-past inverse operator *r-*.

(867) *irá kámá a-c^hùc^ha? r̥ r-u*
 that ERG NMLZ-deceive AUX INV.NON.PST-2SG
 ‘He will deceive you.’ [MOV-3-1.250]

(868) *mə-kâmlâm* *kámá* *mý* *t^hik* *t^h-u*
 2SG-faith ERG cure CAUS INV.PST-2SG
 ‘Your faith cured (you).’ [MOV-3-1.139]

(869) *hwé* *kámá* *mì* *vut* *rə* *m-u?* *nê*
 who ERG ADD betray INV.NON.PST NEG-2SG Q
 ‘No one will be able to betray (you).’ [MOV-3-1.289]

7.4.1.1.2.4 Configuration 8: 3 -> 2PL

This configuration involves a third person singular or plural A participant and a second person plural P or R participant. The verb indexes the P or the R argument and indexes it on the verb complex.

(870) *nê* *nî* *mə-c^hà-hx* *rikhe?* *r-an*
 2SG and 2SG-child-PL kill INV.NON.PST-2PL
 ‘(They) will kill you and your children.’ [MOV-3-1.182]

(871) *t^hûrhûn* *l-at* *atî* *kámá* *galili* *ný* *dê* *t-ə*
 remember IMP-2PL 3SG ERG PN LOC COP PST-3

kə *càlì* *ηâ* *ku?* *t^h-an* *nî*
 LOC what say give INV.PST-2PL Q
 ‘Remember what he said (to you), when he was in Galilee.’ [MOV-1.161]

(872) *asâncù* *l-at* *nu?rûm* *a-kúmló* *kámá*
 pray IMP-2PL 2PL 3-temptation ERG

ηé *rə* *m-at* *rô*
 win INV.NON.PST NEG-2PL PURP
 ‘Pray so that temptation cannot win over you.’ [MOV-3-1.312]

7.4.1.2 Local Domain

In the configurations in the local domain, both the relevant participants are speech act participants. Argument indexation in this domain is bit more complex. We find argument indexes that may not correspond individually to any of the two relevant participants of the clause. Thus, in the configuration 1SG > 2SG, the verb takes a first

person plural index, and in configuration 1SG > 2PL, the verb usually takes a third person index. However, we do find inverse marking when second person participants act on first person participants. The argument indexes for each configuration are listed in Table 110. The configurations are discussed under Direct and Inverse configurations in §7.4.1.2.1 and §7.4.1.2.2 below.

Table 110: Local Domain of the Transitive Paradigm

	1SG	1PL	2SG	2PL
1SG			<i>-i/e</i>	<i>-i/e; -a</i>
1PL			<i>-i</i>	<i>-i</i>
2SG	<i>r-ɣ</i>	<i>r-i</i>		
2PL	<i>r-a; r-ɣ</i>	<i>r-i</i>		

7.4.1.2.1 Direct Configurations

The configurations discussed in this section all involve a first-person A participant and second person P or R participant.

7.4.1.2.1.1 Configuration 9: 1SG > 2SG

This configuration involves a first person singular A participant and a second person singular P or R participant. The most common index in this configuration is the first person plural index. Example (873) illustrates this configuration with the zero operator. Example (874) illustrates this configuration with the present tense operator *k-*. Example (875) illustrates this configuration with the past tense operator *t-*.

Example (876) illustrates this configuration with the non-final operator *l-*.

- (873) *ɲà bə a-ɲé lwe? rì e*
 1SG DEF NMLZ-be.able hold AUX 1PL
 ‘I will be able to hold you.’ [SNR-12-1.21]
- (874) *ɲà kámá kaʔkʰám ku? k-ì*
 1SG ERG promise give PRES-1PL
 ‘I promise you.’ [MOV-4-1.143]
- (875) *mərâ tʰúmlà hoʔku? t-i? nà*
 sin all forgive PST-1PL PFV
 ‘I forgave you of all your sins.’ [MOV-2-1.103]
- (876) ... *kà l-ɣʔ-mə vérit l-iʔ-mə imá bà*
 ... go NF-1SG-NF talk NF-1PL-NF then REST
- vín vɣ t-ɣʔ*
 return come PST-1SG
 ‘(I) came, and then talked (with you), and then left immediately.’
 [SCN-2-6.4]

7.4.1.2.1.2 Configuration 10: 1SG -> 2PL

This configuration involves a first person singular A participant and a second person plural P or R participant. The most common index in this configuration is the third person index *a*. Example (877) illustrates this configuration with the zero-operator inflected with the third person index *a*. Example (878) illustrates this configuration with the present tense operator *k-* inflected with the third person index *aʔ*. Example (879) illustrates this configuration with the negative operator *m-* inflected with the third person index *-aʔ*. Example (880) illustrate this configuration with the past tense operator *t-* inflected with first person plural index *-iʔ*. It is not clear yet what pragmatic factors condition the choice of the argument indexes in this configuration.

(877) *ɲà kámá mì nuʔrûm hə ɪru? ku? a*
 1SG ERG ADD 2PL DAT like.that give 3
 ‘I will give you (pl) too (the same right).’ [MOV-3-1.286]

(878) *ɲà kámá zéká a-c^hín ɲo? k-a? ...*
 1SG ERG now NMLZ-ask want PRES-3
 ‘I want to ask you (pl) now...’ [MOV-3-1.212]

(879) *ɲà nuʔrûm bu? m-a?*
 1SG 2PL beat NEG-3
 ‘I will not beat you (pl).’ [Elicited]

The first person plural index *-i/e* also seems common, as shown in (880).

(880) *ɲà bə nuʔrûm nʔ ləpk^hi t-i?*
 1SG DEF 2PL LOC see PST-1PL
 ‘I saw you (pl).’ [Elic-2-511]

7.4.1.2.1.3 Configuration 11: 1PL -> 2SG

This configuration involves a first person plural A participant and a second person singular P or R participant. The verb complex indexes the A participant.

Example (881) illustrates this configuration with zero operator. Example (882)

illustrates this configuration with the present tense operator *k-*. Example (883)

illustrates this configuration with the past tense operator *t-*. Example (884) illustrates

this configuration with the negative operator *m-*. Example (885) illustrates this

configuration with the non-final operator *l-*.

(881) *zéhé mì nʔ zalam i nê*
 other.day ADD 2SG look.for 1PL Q
 ‘Will we ever look for you?’ [SNR-15-1.78]

- (882) *nîrûm kámá nê zéká ləpkʰi k-ì*
 1PL.EXCL ERG 2SG now see PRES-1PL
 ‘We can see you now.’ [Elicited]
- (883) *nîrûm kámá nê ləpkʰi t-i?*
 1PL.EXCL ERG 2SG see PST-1PL
 ‘We saw you.’ [Elicited]
- (884) *nê bə lám m-i?*
 2SG DEF look.for NEG-1PL
 ‘(We) are not looking for you.’ [SNR-15-1.79]
- (885) *nîrûm kámá nê ləpkʰi l-i?-mə cʰwé t-i?*
 1PL.EXCL ERG 2SG see NF-1PL-NF run PST-1PL
 ‘We saw you and ran away.’ [Elicited]

7.4.1.2.1.4 Configuration 12: 1PL -> 2PL

This configuration involves a first person plural A participant and a second person plural P or R argument. The verb complex indexes the A argument. All the verbal operators in examples (886) through (890) are inflected with the first-person argument indexes.

- (886) *nîrûm kámá nu?rûm bu? e*
 1PL.EXCL ERG 2PL beat 1PL
 ‘We will beat you (PL).’ [Elicited]
- (887) *nîrûm kámá nu?rûm hə zudas*
 1PL.EXCL ERG 2PL DAT PN
- nî silas tʰwám he? ku? k-ì*
 and PN send keep give PRES-1PL
 ‘We are sending Judas and Silas to you (PL).’ [BT-15-10.5]
- (888) *nîrûm kámá nu?rûm ləpkʰi t-i?*
 we ERG 2PL see PST-1PL
 ‘We saw you (PL).’ [Elic-2-519]

(889) *nîrûm kámá nuʔrûm bu? m-i?*
 1PL.EXCL ERG 2PL beat NEG-1PL
 ‘We will not beat you (PL).’ [Elicited]

(890) *nîrûm kámá nuʔrûm ləpkʰi l-i?-mə*
 1PL.EXCL ERG 2PL see NF-1PL-NF

cʰwé t-i?
 run PST-1PL
 ‘We saw you (PL) and ran away.’ [Elicited]

7.4.1.2.2 Inverse Configurations

The configurations in this section involve a second person A and a first-person P or R participant.

7.4.1.2.2.1 Configuration 13: 2SG -> 1SG

This configuration involves a second person singular A participant and a first person singular P or R argument. The verb indexes the P or the R argument. Example (891) illustrates the non-past inverse operator *r-* inflected with the first-person index γ . Example (892) illustrates the past inverse operator *t^h-* inflected with the first-person index γ . Example (893) illustrates the negative operator *m-* inflected with the first person index $\gamma?$, and preceded by the non-past inverse operator *r-*.

(891) *a-sân sərâ ηâmâ càró rám r-γ nî*
 NMLZ-good sir COMP why call INV.NON.PST-1SG Q
 ‘Why are (you (SG)) calling (me) ‘Good Sir?’’ [MOV-3-1.72]

(892) *nʰ kámá ηà rwéʒý bu? t^h-γ*
 2SG ERG 1SG always beat INV.PST-1SG
 ‘You used to beat me always.’ [Elicited]

(893) *nɔ̃ bə ɲé lù rə m-ɔ?* ...
 2SG DEF be.able hold INV.NON.PST NEG-1SG
 ‘You will not be able to hold me...’ [SNR-12-1.20]

7.4.1.2.2.2 Configuration 14: 2SG -> 1PL

This configuration involves a second person singular A participant and a first person plural P or R participant. The verb indexes the P or the R argument. Example (894) illustrates this configuration with the non-past inverse operator *r-*, which is inflected with the first-person index. Example (895) shows this configuration with the past inverse operator *t^h-*, inflected with the first-person index. Example (896) illustrates this configuration with the negative operator *m-*, which is inflected with the first-person index and preceded by the non-past inverse operator *r-*.

(894) *ibá mɛc^hàt^hə p^hàn ku? r-i*
 that little.bit tell give INV.NON.PST-1PL
 ‘Tell us that (story) little bit.’ [SNR-13-1.3]

(895) *c^hùɲù nɔ̃ bə mi? mɔ̃-ni ku? t^h-i*
 PN 2SG DEF person CLF-two give PST-1PL
 ‘Chunyu people, you gave (us) two people.’ [SNR-15-1.108]

(896) *nɔ̃ kámá nîrûm bu? rə m-i?*
 2SG ERG 1PL beat INV.NON.PST NEG-1PL
 ‘You will not beat us.’ [Elicited]

7.4.1.2.2.3 Configuration 15: 2PL -> 1SG

This configuration involves a second person plural A participant and a first person singular P or R participant. The verb may index the first-person P or R participant. It may also have a third person singular indexation. Examples (897) and (898) illustrates the non-past inverse operator *r-*, inflected with first person singular

index in the former and with third person index in the later. Example (899) illustrates the past inverse operator t^h - in this configuration inflected with the first-person index.

Example (900) illustrates the negative operator m - inflected with the third person index a . It is not clear if there is any clear preference between the two argument indexes, and if there is any kind of pragmatic condition on their choice.

(897) *nuʔrûm kámá ñà buʔ r-ɣ*
 2PL ERG 1SG beat INV.NON.PST-1SG
 ‘You will beat me.’ [Elicited]

(898) *nuʔrûm kámá ñà lán r-a*
 2PL ERG 1SG beat INV.NON.PST-3
 ‘You (pl) hit me.’ [Elicited]

(899) *nuʔrûm kámá ñà rwéʒɣ lán t^h-ɣ*
 2PL ERG 1SG always beat INV.PST-1SG
 ‘You used to beat me always.’ [Elicited]

(900) *nuʔrûm kámá ñà rwéʒɣ lán rə m-aʔ*
 2PL ERG 1SG always beat INV.NON.PST NEG-3
 ‘You do not beat me always.’ [Elicited]

7.4.1.2.2.4 Configuration 16: 2PL > 1PL

This configuration involves a second person plural A participant and a first person plural P or R participant. The verb may index the first person plural P or R participant. Example (901) illustrates this configuration with the non-past inverse operator r -, inflected with the first person plural index i -, indexing the P argument.

Example (902) illustrates this configuration with the past inverse operator t^h -,

inflected with the first person plural index i -, indexing the P argument. Example (903)

illustrates this configuration with the negative operator *m-*, which is preceded by the non-past inverse operator *r-*.

(901) *nuʔrûm* *kámá* *nîrûm* *c^hàm* *r-i*
 2PL ERG 1PL.EXCL know INV.NON.PST-1PL
 ‘You know us.’ [Elicited]

(902) *nuʔrûm* *kámá* *nîrûm* *ləpk^hì* *t^h-i*
 2PL ERG 1PL.EXCL see INV.PST-1PL
 ‘You saw us.’ [Elicited]

(903) *nuʔrûm* *kámá* *nîrûm* *lán* *rə* *m-i?*
 2PL ERG 1PL.EXCL beat INV.NON.PST NEG-1PL
 ‘You do not always beat us.’ [Elicited]

7.4.1.3 Non-Local Domain

In the non-local domain, all the relevant participants are third person participants. Unlike in the other two domains, there is no inverse marking in the non-local domain. The verb always takes the third person index *-a*. Example (904) illustrates a non-local configuration with a third person A (‘animals and birds’) acting (‘eat’) on another third person P (‘seeds’) participant. Here we have the zero operator with the third person index *a*. Example (905) illustrates a third person A participant (‘tiger’) acting (‘bite’) on another third person P participant (‘pangolin’) with the present tense operator *k-* inflected with the third person index *-a*. Example (906) illustrates another sentence with a third person singular A acting on another third person singular P participant with the past tense operator *t-*. Example (907) illustrates a third person plural A participant referring to a family of ghosts acting on a third person singular P participant (‘he’) with the negative operator *m-* inflected with the

third person index *-a?*. Finally, example (908) illustrates a third person participant ('family of ghosts') acting on another third person participant ('door') with the non-final operator *l-* inflected with the third person index *-a*.

(904) *zuk nî vù kámá iná twè p^hʔc^ha? a ...*
 animal and bird ERG there take eat 3
 'Animals and birds will eat (the seeds).' [SNR-1-1.11]

(905) *zéká sa? kámá vícî ləpk^hî*
 today tiger ERG pangolin see

imá kʔ k-ə ŋà
 when bite PRES-3 hearsay
 'Today when a tiger sees a pangolin, it bites it.' [SNR-3-1.20]

(906) *k^hi?hî kámá k^hûk^hup zwénám t-a?*
 deer ERG tortoise insult PST-3
 'A deer insulted a tortoise.' [SNR-4-2.2]

(907) ... *atî-và bə ván p^hʔ m-a?*
 ... 3SG-MAS DEF cut eat NEG-3
 '(The ghosts) did not kill and eat him.' [SNR-11-1.36]

(908) *imá zùbê tʔ bə vʔ l-ə-mə kásʔ*
 then ghost family DEF come NF-3-NF door

tja?rə sʔ l-ə-mə hu? túŋ vʔ
 quickly close NF-3-NF hide sit come
 'The ghost family came, quickly closed the door, and stayed hidden.'
 [SNR-8-1.26]

7.4.1.4 Summary of the Hierarchical Argument Indexation Pattern

In the mixed domain, where one of the relevant participants is a speech-act participant and the other participant is a third person participant, the verb complex always indexes the speech-act participant irrespective of its grammatical relation.

When the speech-act participant is the A participant, the verb complex indexes the A

and takes one of the non-inverse operators (zero, present *k*-, past *t*-, non-final *l*-).

When the speech-act participant is the P participant, the verb complex indexes the P and allows only the inverse operators *r*- and *t^h*- in the verb complex. Of course, the negative operator *m*- can occur in both configuration types.

In the local domain, where the relevant participants are speech-act participants, the situation is slightly more complex with respect to the argument indexation. In three of the configurations (1SG > 2SG, 1SG > 2PL, 2PL > 1SG), the argument indexation is irregular in the sense that the verb complex may not formally index any of the participants involved in these configurations. Thus, in 1SG > 2SG, we usually have a first person plural index. In 1SG > 2PL, we usually have a third person index. In 2PL > 1SG also a third person index is occasionally found. However, it is clear that we still have hierarchical indexation in the local domain, because when the A participant is lower in hierarchy than the P or R, and we index either the P or a participant other than the A or P (instead index a third person participant for instance), we have to have one of the inverse operators and cannot have any other.

There is much going on in the non-local domain, where the relevant participants are all third person participants. The inverse operators are not allowed in these configurations and the argument index is always the third person singular *a*.

7.4.2 Non-Hierarchical Indexation Pattern

In the previous section, we have seen a tendency for the verb of a clause to index the participant which is higher in a person hierarchy where the first-person participants outrank the second person participants, and the second person participants

outrank the third person participants. However, there are exceptions to this tendency, and they seem to be pragmatically motivated. There is also a syntactic constraint prohibiting hierarchical argument indexation in non-final clauses.

One general exception comes from the use of the inverse configurations to achieve certain pragmatic effects by choosing between the indexation of A and the indexation of P. The indexation of A and the indexation of P carries different pragmatic effects. One such pragmatic effect is whether the P participant is conceived as considerably affected by the event or not. The indexation of the P participant carries the sense that the P participant is affected, and indexation of the A participant cancels that sense. Thus, example (909) entails that the P participant ‘I’ is affected by the event of ‘beating’ and it is a serious matter. On the other hand, in (910) the event of ‘beating’ is somehow trivial, and mundane. According to my major informant PH, one context where (909) would be appropriate is if the event is still fresh to the mind of the speaker, and there may be an urge to take revenge or the speaker is still upset. That context does not apply to (910). However, I have never come across a non-hierarchical argument indexation in the inverse configurations in the natural texts I have collected.

(909) *atî kámá ñà lán t^h-ɣ*
 3SG ERG 1SG beat INV.PST-1SG
 ‘He beat me.’ (upset emotional stance) [Elicited]

(910) *atî kámá ñà lán t-a?*
 3SG ERG 1SG beat PST-3
 ‘He beat me.’ (neutral emotional stance) [Elicited]

One kind of effect associated with the choice of the index in certain inverse configurations in the local domain is politeness. Thus, in the configuration 2PL > 1SG, the act of not indexing any of the participants and instead indexing a third person

index is considered polite in (911). Example (911) will be used in a situation where the old man actually sees hope that his children will take care of him. On the other hand, example (912) would indicate that the old man is not so hopeful.

(911) *nuʔrûm* *ɲà* *nʃ* *sú* *r-a*
 2PL 1SG LOC look.after INV.NON.PST-3
 ‘You will (I am hopeful) take care of me (when I am too old).’ [Elicited]

(912) *nuʔrûm* *ɲà* *nʃ* *sú* *r-ɣ*
 2PL 1SG LOC look.after INV.NON.PST-1SG
 ‘You will (maybe) take care of me (when I am too old).’ [Elicited]

A syntactic constraint on hierarchical argument indexation comes into play in chained clauses, marked with the non-final operator *l-*. Irrespective of the configuration types, the A participant is always indexed on the verb of the non-final clauses. In example (913) we have an inverse configuration (2SG > 1SG) in the chained clause inside the brackets; however, it is the A participant (2SG) which is indexed on the verb complex. In example (914), we have an inverse configuration (3SG > 1SG), however, the third person A participant is indexed on verb in the non-final clause inside the brackets with the third person index *ə* (reduced form of *a*). Indexation of the first-person P argument here is not possible as shown in (916). In example (915), we have an inverse configuration (3SG > 2SG), however, the third person A participant is indexed on the verb complex in the non-final clause and the non-final *l-* is marked with the third person index *-ə*. Again, indexation of the higher P argument is not possible as shown in (917).

(913) [*máncán* *l-uʔ-mə*] *ɲà* *twè* *pí* *r-ɣ*
 show.mercy NF-2SG-NF 1SG take carry INV.NON.PST-1SG
 ‘Kindly, take me on (your shoulder).’ [MOV-2-1.131]

(914) [atî ηà ləpkʰi l-ə-mə] cʰwé t-a?
 3SG 1SG see NF-3-NF run PST-3
 ‘He saw me and then ran away.’ [Elicited]

(915) [atî bə nʂ bu? l-ə-mə] cʰwé t-a?
 3SG DEF 2SG beat NF-3-NF run PST-3
 ‘He beat you and ran away.’ [Elicited]

(916) [*atî ηà ləpkʰi l-ɣ?-mə] cʰwé t-a?
 3SG 1SG see NF-1SG-NF run PST-3

(917) [*atî nʂ bu? l-u?-mə] cʰwé t-a?
 3SG 2SG beat NF-2SG-NF run PST-3

7.5 Comparison with Nocte

In this section, I briefly compare the argument indexes and the argument indexation system between Hakhun and Nocte, two very closely related speech varieties. The data on Nocte comes from (DeLancey, 2011b; Rahman, 2016). The similarity between these two speech varieties is inspectionally obvious. Compare two equivalent sentences in these two speech varieties in (918) and (919).

(918) ¹ηaa ka t-ak (Nocte)
 1SG go PST-1SG
 ‘I went.’

(919) ηà kà t-ɣ? (Hakhun)
 1SG go PST-1SG
 ‘I went.’

Note that they have the same form for the past tense, *t-*, and very similar first person singular indexes. Hakhun and Nocte share most of the verbal operators, present in Table 111. DeLancey (2011) notes that these operators are remnants of old (auxiliary)

verbs, which have become phonologically reduced, such as Tibeto-Burman **ra*

‘come’ > proximal *r-*.

Table 111: Inflected Operators in Nocte and Hakhun

Categories	Nocte	Hakhun
Past	<i>t-</i>	<i>t-</i>
Past Inverse	<i>th-</i> (inverse)	<i>th-</i> (inverse)
Present	<i>k-</i>	<i>k-</i>
Non-past Inverse	<i>h-</i> (inverse)	<i>r-</i> (inverse)
Negation	<i>m-</i>	<i>m-</i>
Proximal motion	<i>r-</i>	<i>r-</i>
Imperative	zero	<i>l-</i>
Future	zero	zero

One major development in Hakhun is a new inverse marker for non-past tenses.

While Nocte has the same inverse marker *h-* for both past and non-past, Hakhun has

h- for past and *r-* for non-past, which is an extension in function of the proximal *r-* in

Hakhun. Another notable difference is in the imperative. There is no operator in

Nocte for imperative, while Hakhun uses *l-*.

The argument indexes are also almost the same, though Hakhun has undergone some changes that Nocte has not, as shown in Table 112. For instance, the velar nasal codas are variable in Hakhun, and are not produced in normal speech. The velar nasal on the first person singular index has completely disappeared, but is still

preserved in Nocte. Another sound change which is affecting the indexation paradigm is $k > ʔ$. The voiceless velar stop and the glottal stop are merging, and Hakhun no longer has a velar stop in the indexation paradigm.

Table 112: Nocte and Hakhun Argument indexes

	Nocte	Hakhun
1SG	- <i>ʌŋ</i> - <i>ʌk</i>	- <i>ɣ</i> - <i>ɣʔ</i>
1PL	- <i>ɛ</i> - <i>iʔ</i>	<i>e</i> - <i>i/iʔ</i>
2SG	- <i>ɔʔ</i>	- <i>o/oʔ</i> - <i>u/uʔ</i>
2PL	- <i>ʌn</i> - <i>ɛt</i>	- <i>ʌn</i> - <i>ʌt</i>
3	- <i>a/aʔ</i>	- <i>a/aʔ</i>

Finally, both speech varieties have hierarchical argument indexation. In a transitive clause, the verb indexes the argument which is higher in the ‘person hierarchy’ irrespective of its grammatical relation. Moreover, both languages code the inverse configuration when the verb indexes a non-subject argument. Examples (920) and (921) illustrate hierarchical argument indexation in Nocte. Note that in both sentences the verb indexes the first person singular argument, although it has different grammatical roles in these sentences, subject in (920) and object in (921). We have an inverse configuration in (921) and the verb indexes a non-subject argument, and therefore the verb takes the inverse marker *h-*.

- (920) ¹ηαα-¹μϵ ¹?λ¹te-²ηλη *vaat* ¹λη
 I-ERG s/he-OBJ beat 1SG
 ‘I beat him.’
- (921) ¹?λ¹te-¹μϵ ¹ηαα-²ηλη *vaat* ¹h-λη
 s/he-ERG I-OBJ beat INV-1SG
 ‘He beats me.’

Examples (922) and (923) illustrate the equivalent sentences in Hakhun, and we see the same pattern. The verb indexes the first person argument in both sentences, though it has different grammatical relations in them, and we have an inverse marker *r-* in (923) to code the inverse configuration of the sentence.

- (922) ηὰ βθ ατῖ λάν *k-γ?*
 1SG DEF 3SG beat PRES-1SG
 ‘I beat him.’ [Elicited]
- (923) ατῖ κάμó ηὰ λάν *r-γ*
 3SG ERG 1SG beat INV.NON.PST-1SG
 ‘He beats me.’ [Elicited]

CHAPTER VIII

SIMPLE CLAUSE

This chapter primarily describes simple clauses in terms of their clause structure and their locutionary forces. I have divided the discussion of the structure of simple clauses into two parts – the structure of non-verbal clauses and the structure of verbal clauses based on the type of predicate. The non-verbal predicates are characterized by a NP, a PCT or a postpositional phrase predicate, and they code a wide range of semantic notions, such as equation, proper-inclusion, property concept, location, possession, existence, and so on. The non-verbal clauses largely employ two strategies, which I call Nominal and Locational, to encode these notions. While the Nominal strategy is used to code all semantic notions coded by non-verbal clauses with some restrictions in coding possession and existence, the Locational strategy is mainly used to code possession and existence. The non-verbal clauses are discussed in §8.1. The verbal clauses, which are characterized by a verbal predicate, are described in §8.2. Here I describe the usual intransitive, transitive, and ditransitive verbal clause types. Besides these, I describe some verbal clauses which somehow deviate from the intransitive/transitive/ditransitive verbal clause types under the heading of middle-like constructions. These constructions include constructions that express weather conditions, emotions and sensations, reflexive and reciprocal events, perception-cognition-utterance events, and so on. §8.3 briefly discusses two valence alternation processes – causativization and reciprocalization.

Another major component of this chapter is the discussion of argument alignment based on overt coding properties. I discuss both Subject alignment and Object alignment in §8.4. The final major component of this chapter is the description of three major speech act types, declarative, interrogative, and imperative, in §8.5.

8.1 Non-Verbal Predicate Clauses

The Non-verbal predicate clauses involve a predicate which is either an NP, a PCT, or a postpositional phrase. Depending on the clause type, tense, polarity, and pragmatic emphasis, non-verbal clauses may have an overt copula. There are four copulas in Hakhun – equative *dʂ*, positive existential/possessive *tóà*, negative existential/possessive *ahù*, and existential/possessive *túŋ*. The copulas *dʂ* and *túŋ* are verbal in that they take inflected operators, and synchronically correspond to the lexical verbs *dʂ* ‘happen, become’ and *túŋ* ‘sit’ respectively. In contrast, the copulas *tóà* and *ahù* are not verbal in that they never take verbal operators. The copula *tóà* also historically comes from *túŋ* ‘sit’, which has lost the velar nasal coda and has some old morphology *a* on it. It appears that the language has grammaticalized *túŋ* ‘sit’ twice to code existence/possession, presumably because the older instance *tóà* no longer can code tense/mood distinctions.

A wide range of semantic distinctions are encoded through non-verbal predication. These include proper-inclusion, equation, property concept, location, existence, possession, quantity, similarity, and so on. Hakhun basically employs two strategies for encoding all non-verbal predicates, and the specific semantic distinctions are coded by the phrasal category of the predicate (e.g. NP, PCT, Postpositional phrase, etc.). I call these two strategies as **Nominal strategy** and **Locational strategy** following Stassen (1997), and discuss each individual semantic type encoded by these two strategies in §8.1.1 and §8.1.2 below.

8.1.1 The Nominal Strategy

The nominal strategy is characterized by the use of the equative copula *dɔ̃*, and its optionality in clauses which express a present affirmative proposition. Overt mention of the copula in such clauses has a sense of contrast. A wide range of semantic notions are encoded through this strategy, which include equation, proper inclusion, property concept, location (including source), quantity, and similarity, in all tenses and in both polarities. This strategy can also encode possession in the affirmative in all three tenses. This strategy can also encode existence in the affirmative in the past and future tenses (but not in the present tense). Thus, the nominal strategy is used to encode all semantic notions, with some restrictions in encoding possession and existence.

8.1.1.1 Equative and Proper Inclusion Predicates

The notion of equation and proper inclusion are expressed by a simple juxtaposition of the subject NP and the predicate NP in a present affirmative clause, as illustrated in examples (924) through (926). In example (924) the subject NP *haʔ mún* ‘name of a place’ is juxtaposed with the predicate NP *ʒaŋo* ‘Zanyo’. In example (925), the subject NP *sɛŋà bə* ‘the crab’ is juxtaposed with the predicate NP *aŋù* ‘mother’. In example (926) the coordinated subject NP *sɛŋà ní ʒeʔvà bə* ‘the crab and the squirrel’ is juxtaposed with the compound NP *cʰəŋù cʰəvà* ‘couple’.

- (924) *haʔ mún ʒaŋo*
place name PN
‘The name of the place is Zanyo.’ [SNR-15-1.31]

(925) *sè-ŋà* *bə* *a-ŋù*
 crab-FEM DEF 3-mother
 ‘The crab is the mother.’ [SNR-6-4.3]

(926) *sè-ŋà* *nî* *zeʔ-và* *bə* *cʰəŋù cʰəvə*
 crab-FEM and squirrel-MAS DEF couple
 ‘The crab and the squirrel are a couple.’ [SNR-6-4.2]

An overt expression of the copula *dʒ* followed by the present tense operator indicates emphasis or contrast. The sentence in (927) can be used when correcting someone’s assumption that the individual referred to here is not a friend of mine.

(927) *atî-và* *i-pʰîná* *dʒ* *k-aʔ*
 3SG-MAS 1SG-friend COP PRES-3
 ‘He is my friend.’ [Elic-6-20]

Examples (928) through (930) illustrate future, past, and negative equative/proper inclusion clauses. Example (928) illustrates a future equative/proper inclusion clause. The subject NP is *lívʒ íbá* ‘that leader’, and the predicate NP is *mat* *và* ‘responsible person’. The predicate NP is followed by the copula *dʒ*, and the future tense marker zero-operator inflected with index *a* ‘3’.

(928) *irá* *lívʒ* *íbá* *mat-và* *dʒ* *a*
 then leader that responsible-MAS COP 3
 ‘Then, the leader will be responsible (for defeat).’ [SNR-15-1.25]

Example (929) illustrates a past proper inclusion clause. Here the subject NP is *abraham bə* ‘Abraham’, and the predicate NP is *miʔlîŋ mʒtʰə* ‘a simple person’. The predicate NP is followed by the copula *dʒ* and the past tense operator *taʔ*.

(929) *abraham* *bə* *miʔliŋ* *mɣ̌-tʰə* *dɣ̌* *t-aʔ*
 PN DEF simple.person CLF-one COP PST-3
 ‘Abraham was a pure man.’ [MOV-1-1.25]

Example (930) (b) illustrates a negative equational/proper inclusion clause. Here the subject NP is *ŋà bə* ‘I’, and the predicate is an NP referring to the attacker of the speaker’s granary mentioned in (930) (a). This clause is marked with the copula *dɣ̌* followed by the inflected negative operator *m-ɣʔ*.

(930) (a) *i-piŋ* *liŋ-ti* *bə* *vəkŋi* *ta,*
 1SG-granary attack-NMLZ DEF wild.pig DP
 ‘The attacker of my granary was the wild pig.’ [SNR-6-4.28]

(b) *ŋà* *bə* *dɣ̌* *m-ɣʔ*
 1SG DEF COP NEG-1SG
 ‘I am not the one.’ [NR-6-4.29]

Note that in the past tense the equative/proper inclusion clause may look just like a verbal clause in that the past operator can directly follow the predicate NP without an intervening copula, as in (931). In (931) there is no copula between the preposed predicate NP *keʔpa* and the past tense operator *taʔ*.

(931) *keʔpa* *t-aʔ* *a-mún* *bə*
 PN PST-3 3-name DEF
 ‘His name was Keqpa.’ [SNR-14-1.9]

8.1.1.2 Property Concept Predicates

Property concept predicates take a PCT nominalized with *a-* as the predicate.

The subject NP and the PCT are simply juxtaposed in the affirmative present tense. In example (932), the subject NP *hatŋù bɣ̌ irábá* ‘the banyan tree’ and the predicate PCT

adûŋ pânt^hùm ‘biggest’ are juxtaposed. In example (933), the subject NP *vùc^hà bə*

‘the young bird’ and the predicate PCT *arânc^hà* ‘very small’ are juxtaposed.

(932) *hatjù* *bÿ* *irábá* *a-dûŋ* *pânt^hùm*
 banyan tree that NMLZ-big SPLT
 ‘The banyan tree is the biggest of all.’ [SNR-2-2.4]

(933) *vù-c^hà* *bə* *a-rân-c^hà*
 bird-DIM DEF NMLZ-small-DIM
 ‘The little bird is very small.’ [SNR-2-2.1]

Overt use of the copula *dÿ* followed by the inflected present tense operator indicates emphasis or contrast. Thus, (934) is an acceptable sentence in a context where there is an assumption that the individual referred to is not good in character.

(934) *atî-và* *a-sân* *dÿ* *k-a?*
 3SG-MAS NMLZ-good COP PRES-3
 ‘He is good.’ [Elic-6-46]

Examples (935) through (936) illustrate property concept predicates in other tenses and in the negative. Example (935) illustrates a future property concept predicate clause. Here the subject NP is *atîc^hà* ‘she’ and the predicate PCT is *asân* ‘good’. The predicate is followed by the copula *dÿ* along with the future tense marking zero operator indexed with *a* ‘3’. Example (936) illustrates a past property concept predicate clause. The subject NP is *bÿ* ‘tree’ and the predicate PCT is *adûŋ* ‘big’. The predicate is followed by the copula *dÿ* along with the inflected past tense operator *ta?*.

(935) *atî-c^hà* *a-sân* *d̂x̂* *a*
 3SG-DIM NMLZ-good COP 3
 ‘She will be fine.’ [MOV-1-1.289]

(936) *b̂x̂* *a-dûŋ* *d̂x̂* *t-a?*
 tree NMLZ-big COP PST-3
 ‘The tree was big.’ [Elic-6-48]

Example (937) expresses a negative proposition, and the predicate *adûŋ* ‘big’ is

followed by the copula *d̂x̂* along with the inflected negative operator *ma?*.

(937) *b̂x̂* *a-dûŋ* *d̂x̂* *m-a?*
 tree NMLZ-big COP NEG-3
 ‘The tree is not big.’ [Elic-6-50]

However, the past tense operator may follow the adjectival predicate directly without an intervening copula *d̂x̂*, as shown in (938).

(938) *vəkŋî* *n̂x̂* *mì* *a-sá* *t-u?* *nà*
 wild.pig 2SG ADD NMLZ-clean PST-2SG PFV
 ‘Wild pig, you are also clean (not guilty).’ [SNR-6-4.35]

8.1.1.3 Quantity Predicates

Quantity predicates take numerals and quantifiers as the predicate. The subject NP and the predicate numeral are juxtaposed in the affirmative present tense form, as in example (939). There is no copula in the sentence.

(939) *nî* *bəlí*
 1PL.INCL four
 ‘We are four (in our family).’ [Elicited]

The copula *d̂x̂* is added when inflected operators are used to code past or negative propositions, as in (940), (941) and (942).

(940) *nî* *bəlí* *dŷ* *t-i?*
 1PL.EXCL four COP PST-1PL
 ‘we were four (in our family).’ [Elicited]

(941) *mi?* *aʒa?-ɲù* *dŷ* *t-a?*
 person lot-AUG COP PST-3
 ‘The people were many.’ [Elicited]

(942) *mi?* *aʒa?-ɲù* *dŷ* *m-a?*
 person lot-AUG COP NEG-3
 ‘People are not many.’ [Elicited]

8.1.1.4 Simulative Predicates

The simulative predicates express a similarity between the denotatum of the subject NP with that of the predicate NP. The predicate NP is marked with one of two reduplicated simulative particles - *mŷmŷ* and *rŷrŷ*. The particle *mŷmŷ* is also found as a reflexive pronoun (see §8.2.2.3), and the particle *rŷrŷ* in its non-reduplicated form is found as simulative suffix (see §4.3.5). It is still not clear what the difference is between these two particles. The subject NP and the simulative predicate are simply juxtaposed in the affirmative present tense. In example (943), the subject NP is *atîɲù* ‘she’ and the simulative predicate NP *talâ rŷrŷ* ‘boy like’ are juxtaposed. In example (944) the subject NP *atîvâ* ‘he’ and the simulative predicate NP is *vək rŷrŷ* ‘pig like’ are juxtaposed.

(943) *atî-ɲù* *talâ* *rŷrŷ*
 3SG-FEM boy like
 ‘She is like a man.’ [Elicited]

(944) *atî-vâ* *vək* *rŷrŷ*
 3SG-MAS pig like
 ‘He is like a pig.’ [Elicited]

In the following examples, the predicate NP's are followed by the particle *m̂m̂*. In example (945), the subject NP is *câkù bə* 'the citrus' and the simulative predicate NP is *pòlùp^h m̂m̂* 'ball like'. In example (946), the subject NP is *n̂* 'you' and the predicate NP is *ivà m̂m̂* 'father like'. In example (947), *atîvâ* 'he' is the subject NP and *kraiŝ m̂m̂* 'Christ like' is the predicate. In example (948), *at^hân* 'their face' is the subject NP and *vî t^hân m̂m̂* 'like monkey face' is the predicate NP.

(945) *câkù* *bə* *pòlù-p^h* *m̂m̂*
citrus DEF ball-round like
'Citrus is like a ball.' [Elicited]

(946) *n̂* *i-và* *m̂m̂*
2SG 1SG-father like
'You are like my father.' [Elicited]

(947) *atî-vâ* *kraiŝ* *m̂m̂*
3SG-MAS god like
'He is like a god.' [Elicited]

(948) *a-t^hân* *vî* *t^hân* *m̂m̂*
3-face monkey face like
'Their faces are like monkey faces.' [SNR-15-1.24]

Example (949) illustrates simulative predicate in the past tense.

(949) *atî-vâ* *kraiŝ* *m̂m̂* *d̂* *t-a?*
3SG-MAS god like COP PST-3
'He was like a god.' [Elicited]

8.1.1.5 Ablative Predicates

Ablative predicate clauses take an ablative postpositional phrase marked with *va?* ‘from’ as the predicate, and denotes the source origin of the denotatum of the subject NP. In the affirmative present tense, the subject NP and the ablative predicate are simply juxtaposed. In example (950), the subject NP is *nɣrûm bə* ‘we (inclusive)’, and the rest is the ablative predicate marked with *va?*. In example (951), the subject NP is put inside the bracket and the rest is the ablative predicate.

(950) *nɣrûm bə irá lùŋ p^huk zè p^huk kə va?*
 1PL.INCL DEF that stone burst iron burst LOC ABL
 ‘We (humans) are from (born out of) the incident of ‘Stone burst open and Iron burst open’.’ [SNR-9-10.42]

(951) [*tələ tələ pînà rêvə nî rê dɣ*
 boy boy hatred and animosity happen
kà k-ì bə] irá tá kə va?
 go PRES-1PL DEF that place LOC ABL
 ‘Hatred and animosity between men is from that place.’ [SNR-11-1.55]

The copula *dɣ* is overtly used when emphasis is involved as in (952). In example (952) (b), the subject NP is an NP referring to the animosity in the world mentioned in the previous sentence in (952) (a). The ablative predicate is *iráká va?* ‘from there’, which refers to a fight between two brothers over a woman. The predicate is followed by the copula *dɣ* and the present tense operator *ka?*.

(952) (a) *iráká va? arábá mûŋká rêpîn*
 there ABL this world animosity

ŋá k-ì bə
 say PRES-1PL DEF
 ‘What we call animosity in the world is from there.’

(b) *iráká va? dʒ k-a?*
 there ABL COP PRES-3
 ‘(It) is from there.’ [SNR-11-1.56]

Example (953) illustrates a past ablative predicate clause. In example (953), the subject NP is an NP referring to a tree and the predicate is *bəpúćó va?* ‘from your navel’. The predicate is followed by the copula *dʒ* and the past tense operator *ta?*.

(953) *bə-púćó va? le dʒ t-a?*
 2SG-navel ABL DP COP PST-3
 ‘(The tree) was from your navel....’ [SNR-2-2.8]

8.1.1.6 Dative-Ablative Predicates

The Dative-ablative predicate clause takes a postpositional phrase marked with both the dative *hə* and the ablative *va?* postposition as the predicate. This clause type expresses possession or belonging. In the affirmative present tense, the subject NP and the dative-ablative predicate are simply juxtaposed. In example (954), the subject NP is *abá* ‘this’ and the dative-ablative predicate is *ŋà hə va?* ‘to me’. In example (955), the subject NP is *ibá* ‘that’ and the dative-ablative predicate is *k^{hi}t^{hu}ŋ hə va?* ‘to Khithung’.

(954) *abá ŋà hə va?*
 this 1SG DAT ABL
 ‘This is mine.’ [Elicited]

(955) *ibá kʰitʰuŋ hə vaʔ*
 that PN DAT ABL
 ‘That is Khithung’s.’ [Elicited]

Examples (956) and (957) illustrate past and future dative-ablative predicate clauses. In example (956) the predicate *ŋà hə vaʔ* ‘to me’ is followed by the copula *dʒ* and the past tense operator *taʔ*, and in (957) the predicate *ŋà hə vaʔ* ‘to me’ is followed by the copula *dʒ* and future tense zero operator *a* ‘3’.

(956) *abá ŋà hə vaʔ dʒ t-aʔ*
 this 1SG DAT ABL COP PST-3
 ‘This was mine.’ [Elicited]

(957) *abá ŋà hə vaʔ dʒ a*
 this 1SG DAT ABL COP 3
 ‘This will be mine.’ [Elicited]

8.1.1.7 Locative Predicates

Locative predicate clauses take a locative postpositional phrase marked with *nʒ* ‘LOC’ as the predicate. In the affirmative present tense, locative predicate clauses may be encoded using either the Nominal or the Locational strategy (see §8.1.2.3 below for the Locational strategy). But, in other tenses and in the negative, locative predicates are coded only through the Nominal strategy. Thus, in examples (958), (959) and (960), which express affirmative present tense, the subject NP and the locative predicate are simply juxtaposed. In example (958), the subject NP is *mobail bə* ‘the mobile phone’ and the locative predicate is *câmcò kʰuʔ nʒ* ‘on top of the table’. In example (959), the subject NP is *ɲù* ‘my mother’ and the locative predicate

is *càm pwé hìm nʻ* ‘in the kitchen’. In example (960), the subject NP is *ivà* ‘my father’ and the predicate is *nàt^hûŋ nʻ* ‘in the paddy field’.

(958) *mobail bə câmcò k^huʔ nʻ*
 mobile DEF table head LOC
 ‘The mobile is on the table.’ [Elicited]

(959) *i-ŋù càm pwé hìm nʻ*
 1SG-mother rice cook house LOC
 ‘My mother is in the kitchen.’ [Elicited]

(960) *i-và nàt^hûŋ nʻ*
 1SG-father paddy.field LOC
 ‘My father is in the paddy field.’ [Elicited]

Examples (961) through (963) illustrate negative, future, and past locative predicate clauses. Example (961) illustrates a negative locative predicate clause, and the locative predicate *càm pwé hìm nʻ* ‘in the kitchen’ is followed by the copula *dʻ* and the inflected negative operator *maʔ*. Example (962) illustrates a future locative predicate clause, and the locative predicate *tîsû múŋtân nʻ* ‘at God’s kingdom’ is followed by the copula *dʻ* and the zero operator with index *a*. Example (963) illustrates a past locative predicate clause, and the locative predicate *haʔ mûŋ k^hûn nʻ* ‘under the ground’ is followed by the copula *dʻ* and the past tense operator *tə*.

(961) *i-ŋù càm pwé hìm nʻ dʻ m-aʔ*
 1SG-mother rice cook house LOC COP NEG-3
 ‘My mother is not in the kitchen.’ [Elicited]

(962) *nuʔ-sìm nuʔ-ŋàm bə tîsû múŋtân*
 2PL-property 2PL-property DEF God kingdom

nʕ dʕ a
 LOC COP 3

‘Your property will be in God’s kingdom.’ [MOV-3-1.49]

(963) *ʒùbê tʕ túŋ tʰŋ bə ha? múŋ*
 ghost family stay NMLZ DEF ground inside

kʰûn nʕ dʕ t-ə ŋà

under LOC COP PST-3 hearsay

‘The ghost family’s living place was under the ground.’ [SNR-8-1.5]

8.1.1.8 Possessive Predicates

Two possessive constructions can be distinguished based on how the possessor is encoded. In one construction, the possessor looks like a nominal modifier in that when we have pronominal possessors, it occurs as a possessive prefix on the possessed noun (not as an independent pronoun). This construction uses the Locational strategy in all tenses and in both polarity. This construction will be discussed under Locational strategies below (§8.1.2.1). In the other construction, the possessor is encoded as a dative-locative postpositional phrase. This construction can be encoded using either of the two strategies in the affirmative. In the negative, however, this construction is also encoded using the Locational strategy (see §8.1.2.1). Here I discuss the affirmative possessive clauses of the second type (i.e. where the possessor is coded as a dative-locative phrase).

In the affirmative present tense, the dative-locative marked possessor and the possessed NP can be simply juxtaposed, as shown in examples (964) through (966). In example (964), the possessor NP is *nîrûm* ‘we (exclusive)’ marked with the postpositions *hə* ‘dative’ and *nʕ* ‘locative’, and the rest is the possessed NP.

- (964) *ɲàmà* *nîrûm* *hə* *nʻ* *bekun* *tám-bəŋá*,
 but 1PL.EXCL DAT LOC bread CLF-five
- ŋaʔ* *mʻ-ni* *bà*
 fish CLF-two REST
 ‘But, we have only five pieces of bread and two fish.’ [MOV-2-1.209]

In example (965) the possessor is *nɣrûm* ‘we (inclusive)’ marked with the postpositions *hə* ‘dative’ and *nʻ* ‘locative’, and the rest of the sentence is the possessed NP headed by *nap iruk* ‘six days’.

- (965) *nɣrûm* *hə* *nʻ* *ləpán-tʰə* *nʻ* *dxʔsúm*
 1PL.INCL DAT LOC week-one LOC work
- súm* *rô* *nap* *iruk*
 work PURP day six
 ‘We have six days a week for work.’ [MOV-3-1.63]

In example (966), the possessor is *atîvâ* ‘he’ marked with *hə* ‘dative’ and *nʻ* ‘locative’, and the possessed NP is *vîŋkʰô* ‘strainer’. None of these three sentences has a copula.

- (966) *atî-vâ* *hə* *nʻ* *vîŋkʰô*
 3SG-MAS DAT LOC strainer
 ‘He has a strainer (for separating good from bad).’ [MOV-1-1.176]

Examples (967) through (969) illustrate this possessive construction in the past and future tenses. Examples (967) and (968) illustrate a past possessive clause. In example (967), the possessor is *hù* *hə* *nʻ* ‘to the dog’ and the possessed NP is *arûŋ* ‘horn’. The possessed NP is followed by the copula *dʻ* and the past tense operator *tə*.

(967) *hù hə nɣ̌ a-rũŋ dǯ t-ə ŋà*
 dog DAT LOC 3-horn COP PST-3 hearsay
 ‘Dog had horns.’ [WNR-7-1.2]

In example (968), the possessor is *vâŋvâ hə nɣ̌* ‘to the king’ and the possessed NP is *ac^hà mɣ̌ni* ‘two children’. The possessed NP is followed by the equative copula *dǯ* and the past tense operator *tə*.

(968) *tîvâ nɣ̌ vâŋvâ hə nɣ̌ a-c^hà mɣ̌-ni*
 long.ago LOC king DAT LOC 3-child CLF-two

dǯ t-ə ŋà
 COP PST-3 hearsay
 ‘In the past, a king had two children.’ [WNR-6-1.1]

Example (969) illustrates a future possessive clause. The possessor is *hwé hə nɣ̌* ‘to whom’ and the possessed NP is *càm* ‘rice’, which is followed by the copula *dǯ* and the zero operator with index *a* ‘3’.

(969) *hwé hə nɣ̌ cà m dǯ a nî*
 who DAT LOC rice COP 3 Q

a-p^hân rì l-at
 NMLZ-share AUX IMP-2PL
 ‘Whoever will have rice, share it.’ [MOV-1-1.162]

8.1.1.9 Existential Predicates

Existential predicate clauses mostly use the Locational strategy. The only case of existential predicate clauses using the Nominal strategy is seen in the affirmative past tense, as shown in (970) and (971). In example (970), the existential clause inside the brackets consists of the locative expression *inɣ̌* ‘there’, the subject NP *mi?*,

followed by the copula *dʃ* and the past tense operator *taʔ*. In example (971), the existential clause inside the brackets consists of the subject NP *miʔ mʃtʰə* ‘one person’, followed by the copula *dʃ* and the past tense operator *taʔ*.

(970) *vikrə sʉ t-ə bə [inʃ miʔ dʃ t-aʔ]*
 quickly look PST-3 when there person COP PST-3
 ‘When (they) quickly looked (inside the coffin), there was a man there.’
 [SNR-11-1.17]

(971) *[miʔ mʃtʰə dʃ t-aʔ] pē nʃ sábiʔrì*
 person CLF-one COP PST-3 garden LOC grapes
líkâ-tí
 grow-NMLZ
 ‘There was a man who grew grapes in the garden.’ [MOV-3-1.219]

Even when there is no overt copula and past tense marker, the existential clauses are interpreted as referring to a past state (unlike the non-verbal clauses discussed so far within the Nominal strategy), as shown in (972) and (973). The existential expression in (972) consists only of the subject NP *miʔ tʃ tʃtʰeʔ* ‘one human family’. In example (973), the existential clause consists of the locative *inʃ zùmat nʃ* ‘there, at the end of the river’ and the subject NP *zùbê* ‘ghost’.

(972) *miʔ tʃ tʃtʰeʔ*
 person family CLF-one
 ‘There was one family of men.’ [SNR-12-1.2]

(973) *imá inʃ zùmat nʃ irábá zùbê*
 then there end.of.river LOC that ghost
 ‘There was a ghost at the end of the river.’ [SNR-11-1.14]

8.1.2 The Locational Strategy

The Locational strategy is characterized by the use of one of the three existential/possessive copulas in all tenses. These copulas are the positive existential/possessive copula *tóà*, the negative existential/possessive copula *ahù*, and the existential/possessive copula *túŋ*. The copulas *tóà* and *ahù* are non-verbal and do not allow a verbal operator to follow immediately. One way of indicating temporal distinctions is to use the equative copula *dŋ*, which is verbal and allows the verbal operators, in addition to the existential copulas. The other strategy for indicating temporal distinctions is to use the newly grammaticalized copula *túŋ*, which is verbal and allows the verbal operators (including the negative operator to indicate negation). Thus, we have two old locational strategies which have lost the ability to code temporal distinctions, and two distinct innovative strategies to carry out that function. The Locational strategy is primarily used for expressing possession, and existence to some extent. It is marginally used for location (i.e. only in affirmative present tense).

8.1.2.1 Possessive Predicates

There are two kinds of possessive predicate clause types which code the possessor differently. One of them codes the possessor like a nominal modifier, the other codes the possessor as a dative-locative postpositional phrase. The former is called Possessive 1 and the latter Possessive 2. It is the Possessive 1 which uses the Locational strategy most consistently of all clause types which use that strategy. The Possessive 2 clause types also use the Nominal strategy discussed in §8.1.1.8.

Moreover, the Possessive 1 clause type is attested only with the old copulas *tóà* and *ahù*, but not with the new copula *túŋ*.

8.1.2.1.1 Possessive 1

In this possessive construction, the possessor formally looks like a nominal modifier in that when we have a pronominal possessor, it is expressed as a possessive prefix on the possessed noun, not as an independent pronoun argument (see §3.5.2 on possessive prefixes). When the possessor is an NP, it precedes the possessed NP, and there is no morphological marking on either NP (which is typical of NP's with noun modifiers). Examples (974) through (977) illustrate present tense possessive clauses.

In example (974), the first person singular possessor *i-* is prefixed on the noun *c^hà* *tàlá* 'boy child', and the NP is followed by the existential copula *tóà*.

(974)	<i>i-c^hà</i>	<i>tàlá</i>	<i>tóà</i>
	1SG-child	boy	EXIST
	'I have a boy.'		[Elic-1-172]

In example (975), the second person singular possessor is prefixed on the noun *và* 'father', and the NP is followed by the copula *tóà*. In example (976), the possessor noun *k^hít^huŋ* 'Khithung' precedes the possessed noun *likkà* 'pen', which in turn is followed by the copula *tóà*.

(975)	<i>bà-và</i>	<i>tóà</i>
	2SG-father	EXIST
	'You have a father.'	

[Elic-8-5]

(976) *k^hit^huŋ* *likkà* *tóà*
 PN pen EXIST
 ‘Khithung has a pen.’ [Elicited]

In example (977), the initial clause illustrates an affirmative possessive clause, and the subsequent clause illustrates a negative possessive clause. The possessor NP’s in both clauses consist of the numeral *vàt^hə* ‘one person’ with anaphoric reference to two brothers. The possessed nouns in both clauses are *ɲùc^hà* ‘wife’, followed by the positive copula *tóà* in the first clause and the negative copula *ahù* in the second clause.

(977) [*và-t^hə* *ɲùc^hà* *tóà*], [*và-t^hə* *ɲùc^hà* *ahù*]
 CLF-one wife EXIST CLF-one wife NEG.EXIST
 ‘One has a wife, the other does not have a wife.’ [SNR-11-1.3]

The equative copula *d̥ɣ* along with operators is used to express a non-present possession, as shown in (978) and (979).

(978) *i-likkà* *tóà* *d̥ɣ* *t-a?*
 1SG-pen EXIST COP PST-3
 ‘I had a pen.’ [Elicited]

(979) *i-likkà* *tóà* *d̥ɣ* *a*
 1SG-pen EXIST COP 3
 ‘I will have a pen.’ [Elicited]

8.1.2.1.2 Possessive 2

In this possessive clause, the possessor is coded as a dative-locative postpositional phrase, which precedes the possessed NP. The possessed NP is then followed by one of the existential/possessive copulas. Examples (980) and (981)

illustrate affirmative possessive clause. In example (980), the possessor *ηὰ* ‘I’ is marked with dative *hə* and locative *nʻ*. The possessor NP is followed by the possessed NP *vàn* ‘fire’, which in turn is followed by the positive existential copula *tóà*. In example (981), the possessor NP is *mərâ miʔ* ‘sinner’ marked with post positions *hə* ‘dative’ and *nʻ* ‘locative’. The possessed noun is *λίγνó* ‘love’, which is followed by the copula *tóà*.

(980) *ηὰ* *hə* *nʻ* *vàn* *tóà*
 1SG DAT LOC fire EXIST
 ‘I have fire.’ [SNR-7-1.16]

(981) *mərâ miʔ* *hə* *nʻ* *mì* *λίγνó* *tóà* ...
 sin person DAT LOC ADD love EXIST
 ‘Even the sinners have love (for those who love them).’ [MOV-2-1.43]

The lack of possession is indicated by the negative existential copula *ahù*. In example (982), the first possessive clause expresses lack of possession with the negative copula *ahù*, following the possessed noun *α-γνùc^hà* ‘wife’, while the second possessive clause expresses affirmative possession with the copula *tóà* following the possessed noun *α-γνùc^hà* ‘wife’. Example (983) also expresses lack of possession with the copula *ahù*. following the possessed noun *α-ρίηκγ* ‘right’.

(982) [*α-π^hù-và* *hə* *nʻ* *α-γνùc^hà* *ahù*],
 3-elder.brother-MAS DAT LOC 3-wife NEG.EXIST

[*α-νâ-và* *hə* *nʻ* *α-γνùc^hà*
 3-younger.sibling-MAS DAT LOC 3-wife

tóà dʒ t-a?
 EXIST COP PST-3
 ‘The elder brother did not have a wife, the younger brother had a wife.’
 [SNR-11-1.4]

(983) *dʒ a kámí hənîrûm hə nʒ a-rîŋkʒ ahù*
 however 3PL DAT LOC 3-right NEG.EXIST
 ‘However, they do not have any right.’ [MOV-2-1.157]

Sometimes the possessor is marked only with the locative *nʒ*, in which case the possessive clause looks identical with the existential clauses. In example (984), the possessor NP *vézá* ‘spirit’ is marked only with the locative *nʒ*. Similarly, in (985) the possessor *mə-dʒ?* ‘your hand’, which stands for the addressee, is marked only with the locative *nʒ*.

(984) *vézá nʒ hən ŋəm ahù,*
 spirit LOC flesh meat NEG.EXIST
 ‘Spirits do not have flesh.’ [MOV-4-1.189]]

(985) *mə-dʒ? nʒ ləplum tóà le*
 2SG-hand LOC food EXIST or

ŋunp^ha tóà nî
 property EXIST Q
 ‘Do you have food and property?’ [SCN-1-25.1]

One way of expressing temporal/mood distinctions in this possessive clause type is to use the equational copula *dʒ* along with verbal operators following the existential copula. We have already seen an expression of past possession in the second clause of example (982) above, where the copula *tóà* is followed by the copula *dʒ*, which is then followed by the inflected past tense operator *ta?*. In example (986)

as well the existential copula *tóà* is followed by the equational copula *d̂*, which in turn is followed by the non-inflectional verbal operator *t^hîŋ* indicating obligation.

- (986) *imá sìm^hû tóà d̂ t^hîŋ,*
 then ancestral.property EXIST COP should
d̂m̂ tóà d̂ t^hîŋ
 weapon EXIST COP should
 ‘Then, (you) should/must have ancestral property, and weapons.’ [SCN-1-27.1]

The other way of expressing temporal/modd distinctions is to use the verbal copula *túŋ* instead of the old non-verbal copulas *tóà* or *ahù*, as illustrated in (987) and (988). In example (987), the possessed NP *cà* ‘what’ is followed by the verbal copula *túŋ*, which is followed by the inflected present tense operator *kə*. In example (988), the possessed NP *kûmpô* ‘money’ is followed by the verbal copula *túŋ*, which is followed by the future marker zero operator indexed with *a* ‘3’.

- (987) [*n̂ hə n̂ cà túŋ kə n̂*] *ibá ŝ*
 2SG DAT LOC what EXIST PRES-3 Q that sell
l-u?-mə cámsə?-t̂ hə ku? l-o?
 NF-2SG-NF poor-person DAT give IMP-2SG
 ‘Whatever you have, sell it and give (the money) to the poor.’ [MOV-3-1.79]
- (988) *zéká [nu?rúm hə n̂ kûmpô túŋ a]*
 now 2PL DAT LOC money EXIST 3
d̂ imá hùn ke? l-at
 then carry go IMP-2PL
 ‘If you have money, go and get it.’ [MOV-3-1.301]

8.1.2.2 Existential Predicates

Existential clauses consist of an optional locative participant followed by the NP the existence of whose referent is being predicated. The NP is then followed by one of the existential/possessive copulas. The use of the positive affirmative copula *tóà* is attested only in the present tense. The other tenses seem to employ the Nominal strategy instead (see §8.1.1.9). In the negative, however, we find only the negative existential copula *ahù*. Moreover, it seems the old copulas can be replaced by the new copula *tùŋ* in all tenses. Examples (989) and (990) illustrate positive existential clauses. In example (989), we have the clause initial locative participant *iránŋ* ‘there’, the subject NP *haʔsúŋ* ‘village’, and the existential copula *tóà*. In example (990), we have the subject NP *pê* ‘farm’ followed by the copula *tóà*.

(989) *iránŋ* *haʔsúŋ* *tóà*
 there village COP
 ‘There is a village there.’ [MOV-2-1.205]

(990) *pê* *mì* *tóà*
 farm ADD EXIST
 ‘There is also a farm (there).’ [MOV-2-1.206]

It is possible to have both the existential copula *tóà* and the equational copula *dŋ*. However, their cooccurrence indicates a possibility of existence, not a statement of existence, as in (991).

(991) *kùŋ* *nŋ* *saʔ* *tóà* *dŋ* *k-aʔ*
 mountain LOC tiger EXIST COP PRES-3
 ‘There may be tiger in the mountain.’ [Elic-6-40]

Examples (992) and (993) illustrate negative existential clauses. The negative existential clause in (992) consists of the NP *càlì mi?* ‘whatever man’ and the negative copula *ahù*. In example (993), we have a locative participant *nîrûm ha? nʻ* ‘at our place’ followed by the negative existential copula *ahù*. The subject NP here refers to salt.

(992) *càlì mi? ahù*
 what man NEG.EXIST
 ‘There is no one what so ever.’ [SNR-9-10.12]

(993) ... *nîrûm ha? nʻ ahù*
 ... 1PL.EXCL place LOC NEG.EXIST
 ‘There is none (no salt) at our place.’ [SNR-11-1.35]

Examples (994) and (995) illustrate use of the verbal copula *túŋ*. In example (994), the existential clause consists of the nominalized clause inside the brackets functioning as the subject NP and the verbal copula *túŋ* followed by the inflected present tense operator *ka?*. In example (995), the existential clause consists of the subject NP *mi? nuk ha?súŋ mʻtʰə* ‘one village of men’ and the existential copula *túŋ*, followed by the inflected past tense operator *ta?*.

(994) [*nʻ bə a-cʰín tʰŋ mʻtʰə*] *túŋ k-a?*
 2SG DEF NMLZ-ask NMLZ CLF-one EXIST PRES-3
 ‘There is one thing (I) should ask you.’ [SNR-9-1.1]

(995) *mi? nuk ha?súŋ mʻtʰə túŋ l-ə-mə*
 person village village CLF-one EXIST NF-3-NF

<i>túŋ</i>	<i>t-aʔ</i>	<i>ak^híŋ</i>	<i>ité</i>	<i>nʔ</i>	
EXIST	PST-3	time	that.much	LOC	
‘There was a village of men at that time.’					[SNR-9-4.2]

8.1.2.3 Locative Predicates

The locative predicate clause uses the Locational strategy only in the affirmative present tense. All other tenses and the negative employs the Nominal strategy (see §8.1.1.7). Examples (996) and (997) illustrate locative predicates with the positive existential/possessive copula *tóà*. In example (996), the subject NP *ará-rʔ* ‘like this one’ is followed by the locative predicate *nuʔ-haʔ nʔ*, which is then followed by the copula *tóà*. In example (997), the subject NP *asá tálâ-c^hà bə* ‘the holy child’ is followed by the locative predicate inside the brackets, which is then followed by the copula *tóà*.

(996)	<i>ará-rʔ</i>	<i>nuʔ-haʔ</i>	<i>nʔ</i>	<i>tóà</i>	<i>ŋù</i>	<i>nê</i>
	this-SIM	2PL-place	LOC	EXIST	a.lot	Q
	‘Is there a lot like this (salt) at your place?’					[SNR-11-1.30]

(997)	<i>a-sá</i>	<i>tálâ-c^hà</i>	<i>bə</i>	<i>[rʔdúŋ tísú</i>	<i>túŋ</i>	<i>t^híŋ</i>
	NMLZ-holy	boy-DIM	DEF	God	sit	NMLZ
	<i>dxʔlá</i>	<i>ŋâ</i>	<i>nʔ]</i>	<i>tóà</i>		
	right.hand	side	LOC	EXIST		
	‘The Holy Child is on the right of where God sits.’					[MOV-4-1.54]

8.2 Verbal Predicate Clause

This section describes the structure of simple verbal clauses. §8.2.1 describes intransitive clauses, which are characterized by having a semantically intransitive verb and the possibility of having one unmarked overt core argument. §8.2.3 describes transitive clauses, which are characterized by having a semantically

transitive verb and the possibility of having two overt core arguments – one marked with the ergative *kámá* and the other unmarked. §8.2.4 describes ditransitive clauses, which are characterized by having a semantically ditransitive verb and the possibility of having three overt core arguments – one marked with the ergative *kámá*, one marked with dative *hə*, and one unmarked. §8.2.2 describes six different constructions: (i) weather condition construction, (ii) sensation-emotion, (iii) reflexive construction, (iv) reciprocal construction, (v) the ‘need’ construction, and (iv) perception-cognition-utterance construction. These constructions are distinct from the usual intransitive and transitive clauses in one way or another.

8.2.1 The Intransitive Verbal Clause

An intransitive verbal clause is characterized by the possibility of having one overt core argument, which is called the S argument. The S argument is usually unmarked for case, though we do find the definite *bə* on pronouns, looking suspiciously like a case marker in that it is restricted to A and S, and not common with P (see §5.2.3.1 for its distribution). The S argument is indexed on the verb complex when there is an inflected operator following the verb. The verb usually comes at the end of the clause.

Examples (998) through (1000) illustrate pronominal S arguments. In example (998), the S argument is the unmarked pronoun *nîrîm* ‘we (exclusive)’ which is indexed on the verb complex with *-i?*. In example (999), the S argument is the pronoun *nŕ* ‘2SG’ marked with the definite/nominative *bə*. In example (1000), the S

argument is the third person singular pronoun *atîvâ* ‘he’ indexed on the verb complex with *-aʔ*.

(998) *[nîrûm]* *irá* *haʔ* *vaʔ* *zùkùm*
 1PL.EXCL that place ABL beach

nʃ *kà* *t-iʔ*
 LOC go PST-1PL
 ‘From that place, we went to the beach.’ [BT-16-6.5]

(999) *imá* *[nʃ bə]* *zerusalim* *nʃ* *rik* *tʰiŋ*
 then 2SG DEF PN LOC die NMLZ
 ‘Then you will die in Jeruselim.’ [MOV-2-1.244]

(1000) *imá* *[atî-và]* *zeruzalem* *nʃ* *vín* *vʃ* *t-aʔ*
 then 3SG-MAS PN LOC return come PST-3
 ‘Then, he returned to Jerusalem.’ [BT-13-1.22]

Examples (1001) through (1007) illustrate various kinds of NP’s functioning as the S argument of intransitive clause. In example (1001), we have an unmodified noun consisting of *hîmtî* ‘wife’ functioning as the S argument. Other elements of the clause are the locative adverbial phrase *bè nʃ* ‘to the field’, and the intransitive verb *kà* ‘go’ with third person indexed past tense operator *taʔ*. In example (1002), we have a definite marked S argument *hù bə* ‘the dog’, followed by a temporal adverbial *pukŋam* ‘whole day’, the intransitive verb *zîp* ‘sleep’ in its auxiliary form (i.e. prefixed with *a-* and followed by the auxiliary *rî*), with the past tense operator *tə*.

(1001) *kəp* *l-ə-mə* *[hîm-tî* *bè* *nʃ* *kà* *t-aʔ]*
 get NF-3-NF house-person field LOC go PST-3
 ‘Having got (the fire), the wife went to the field.’ [SNR-7-1.25]

(1002) *hù bə pukɲam a-ʒip rì t-ə ɲà*
 dog DEF whole.day NMLZ-sleep AUX PST-3 hearsay
 ‘The dog slept whole day.’ [WNR-5-1.3]

Examples (1003) and (1004) illustrate NP’s with possessor modifiers *nɣc^hà* ‘our

child’ and *mənâɲù* ‘your sister’ functioning as the S arguments of the verbs *sap* ‘cry’

and *kà* ‘go’ respectively.

(1003) [*nɣ-c^hà*] *a-sap* *ròkò* *rì* *k-a?*
 1PL.INCL-child NMLZ-cry often AUX PRES-3
 ‘Our child is crying all the time.’ [SNR-6-4.6]

(1004) [*mə-nâ-ɲù*] *báká* *kà* *k-ə* *nî*
 2SG-younger.sibling-FEM where go PRES-3 Q
 ‘Where has your sister gone?’ [SNR-12-1.37]

Examples (1005) and (1006) illustrate S arguments consisting of nouns modified with

various kinds of modifiers, such as numeral *mɣt^hə* ‘one’ and quantifier *hîɲk^hó* ‘some’.

(1005) [*sɣru və* *mɣ-t^hə*] *rí* *k-a?*
 PN person CLF-one die PRES-3
 ‘One Swru person dies (in the war).’ [SNR-15-1.85]

(1006) [*hîɲk^hó* *mi?-hɣ*] *ʒudia mə* *antio*
 some person-PL PN from PN

nɣ *kà* *t-a?*
 LOC go PST-3
 ‘Some people went from Judea to Antio.’ [BT-15-2.1]

Example (1007) illustrates an S argument consisting of a coordinated NP, *pol nî*

barnabas ‘Paul and Barnabas’. None of these S arguments is case marked.

(1007) *irámá* [*pol* *nî* *barnabas*] *zu* *no?hìm* *va?*
 then PN and PN PN church ABL
vín *vÿ* *t-a?*
 return come PST-3
 ‘Then, Paul and Barnabas returned from the Church.’ [BT-13-2.36]

It is very frequently true that the S argument is not overtly expressed with a lexical NP or a free pronoun. However, it is usually indexed on the verb complex, and its reference is inferred from the discourse. In example (1008), there is a locative participant *c^hùjù* *ha? nÿ* ‘to Chunyu’s place’ followed by the intransitive verb *kà* ‘go’ and the inflected past tense operator *t-i?*. However, there is no overt lexical or free pronoun S argument. Looking at the argument indexation, we know that it is a first person plural argument and the context tells us that it refers to the Hakhun tribe, one of whose members was telling the story.

(1008) ... *c^hùjù* *ha?* *nÿ* *kà* *t-i?*
 ... PN place LOC go PST-1PL
 ‘(We) went to Chunyu’s place.’ [SNR-15-1.6]

In example (1009), the relevant intransitive clause is the final clause inside the brackets. It has only the verb *túj* ‘sit’ followed by the inflected present tense operator *ki*. Looking at the verb index, we can tell that the argument is a first person plural argument. In this context, the reference is to the speaker himself along with his community.

(1009) *tap* *hwé* *l-i?-mə* [*túj* *k-ì*]
 hut build NF-1PL-NF sit PRES-1PL
 ‘After building the hut, (we) sit (there).’ [SNR-1-1.7]

In example (1010), there is a temporal expression *ʒoʔ nɣʻ* ‘later’, a locative expression *táhé nɣʻ* ‘elsewhere’, and the verb complex *c^hwé kà a* ‘will run away’. There is no lexical or free pronominal overt S argument, but the index tells us that it is a third person participant. In this context, the referent is a wild pig.

(1010) *ʒoʔ nɣʻ táhé nɣʻ c^hwé kà a*
 later LOC elsewhere LOC run go 3
 ‘Later (the pig) will run away elsewhere.’ [SNR-11-1.46]

Property concept terms can be grammatically coded as intransitive verbs. In example (1011), the intransitive clauses with PCT’s are bracketed. The first intransitive clause consists of the S argument *ɲà* ‘I’ and the PCT *dûŋ* ‘big’ in the auxiliary construction (i.e. prefixed with *a-* and followed by the auxiliary verb *rì*) followed by the inflected present tense operator *kɣ̣̈*. The second clause consists of an S argument, anaphorically referring to the same S argument as in the first intransitive clause, and the PCT *lû* ‘tall’ in its auxiliary form followed by the inflected present tense operator *kɣ̣̈*.

(1011) *imá [ɲà a-dûŋ rì kɣ̣̈], [a-lû*
 then 1SG NMLZ-big AUX PRES-1SG NMLZ-tall

rì kɣ̣̈] ɲâ-mə lûŋ nɣʻ? dɣ̣̈ m-aʔ
 AUX PRES-3 think-NF break tread happen NEG-3
 ‘It is not the case that I trod (the ghost child) thinking that I am big, I am tall.’
 [SNR-6-4.20]

In example (1012) the intransitive clause consists of the S argument *ɲà* ‘I’ and the PCT *dûŋ* ‘big’, followed by the inflected present tense operator *kɣ̣̈*.

- (1012) *[mûŋkâha? nɣ̌ ñà bà dũŋ k-ɣ̌] ñâ-mə*
 world LOC 1SG REST big PRES-1SG think-NF
- twézù pànt^hùm*
 big SPLT
 ‘Thinking, “Only I am big in the world, the biggest”.’ [SNR-2-2.2]

In example (1013), the intransitive clause consists of the S argument *ap^ho? arâ* ‘the branches’ and the PCT *sân* ‘be good’, followed by the present tense operator *ka?*.

- (1013) *a-p^ho? a-râ mì mámá sân k-a?*
 3-branch 3-tree.top ADD a.lot be.good PRES-3
 ‘The branches (of the trees) are very good (i.e. grew very well).’ [SNR-2-2.11]

8.2.2 Middle-Like Constructions

The clauses discussed in the following sub-sections somehow do not fit either in the category of intransitive clauses or in the category of transitive clauses. These constructions involve the semantic domains of middle (see Kemmer, 1993) and perception-cognition-utterance (see Givon, 2001b: 41).

8.2.2.1 The Weather Condition Construction

Clauses that code weather conditions are grammatically intransitive, although they are distinct in certain ways from those discussed in §8.2.1. These clauses have an NP followed by a verb which takes a finite inflected operator. Note that the NP’s are some kind of compound, which have *rɣ̌* ‘sky’ as the first component. The second components of the NP’s are repeated as the verb in these clauses. In example (1014), the NP is *rɣ̌pe?* ‘rain’ and the verb *pe?* ‘to rain’, which is then followed by the inflected present tense operator *ka?*. In example (1015), the NP is *rɣ̌mî* ‘sun shine’

and the verb is *mî* ‘to shine’, which is then followed by the inflected present tense operator *ka?*. In example (1016), the NP is *r̂ki?* ‘cold’ and the verb is *ki?* ‘be cold’, which is then followed by the inflected present tense operator *ka?*.

(1014) *r̂pe?* *pe?* *k-a?*
 rain rain PRES-3
 ‘It is raining.’ [Elic-105]

(1015) *r̂mî* *mî* *k-a?*
 sun.shine shine PRES-3
 ‘It is sunny.’ [Elic-2-106]

(1016) *zéká* *r̂ki?* *ki?* *k-a?*
 today cold be.cold PRES-3
 ‘It is cold today.’ [Elic-1-35]

Sometimes there is no lexical or free pronominal S argument at all, as in

(1017).

(1017) *zéká r̂ŋi?* *alín* *k^hâm* *k-a?*
 today lot burn PRES-3
 ‘It is very hot today.’ [Elic-3-2]

8.2.2.2 The Sensation-Emotion Construction

Clauses that denote feeling and emotion events consist of an NP denoting the experiencer and a complex predicate denoting the physical sensation or emotion. These predicates consist of two predicational elements each of which contributes to a joint predication. The first element of these complex predicates is a noun and the second element is a verb. The verbs in this construction come from two different classes. One set of these verbs is similar to the verbs in the Weather Condition Construction, in that the verb is partly a repetition of the preceding noun, as in (1018)

and (1019). In example (1018), the experiencer NP is *ŋà* ‘I’, which is unmarked. The complex predicate consists of the noun *rʔkiʔ* ‘cold’ and the verb *kiʔ* ‘feel cold’. The predicate is then followed by the inflected present tense operator *k-ʔ*. In example (1019), the experiencer is *ŋà* ‘I’, and the complex predicate consists of *kʰâmlê* ‘thirst’, which consists of *kʰẫm* ‘drinking water’ and *lê* ‘be thirsty’, and the verb *lê* ‘be thirsty’. The predicate is then followed by the inflected present tense operator *k-ʔ*.

(1018)	<i>ŋà</i>	<i>rʔkiʔ</i>	<i>kiʔ</i>	<i>k-ʔ</i>
	1SG	cold	feel.cold	PRES-1SG
	‘I am feeling cold.’		[Elic-2-69]	

(1019)	<i>ŋà</i>	<i>kʰâmlê</i>	<i>lê</i>	<i>k-ʔ</i>
	1SG	thirst	be.thirsty	PRES-1SG
	‘I am thirsty.’		[Elic-2-72]	

The other set of verbs found in the complex predicate consists of verbs which can function independently of the preceding noun as ordinary simple intransitive verbs. In example (1020), the experiencer is *ŋà* ‘I’ and the complex predicate is *rʔlûm kʰâm*, which consists of the noun *rʔlûm* ‘sweat’ and the verb *kʰâm* ‘burn’. The predicate is then followed by the inflected present tense operator *k-ʔ*. In example (1021), the experiencer is *ŋà* ‘I’ and the complex predicate is made up of the possessed form of the noun *ràn* ‘heart’ and stative verb *kʰaʔ* ‘be angry’, which elsewhere means ‘be bitter’. The predicate is then followed by the inflected present tense operator *kaʔ*.

(1020) *ŋà r̄l̄l̄m k^hâm k-ÿ*
 1SG sweat feel.hot PRES-1SG
 ‘I am feeling hot.’ [Elic-6-2]

(1021) *ŋà i-ràn k^ha? k-a?*
 1SG 1SG-heart bitter PRES-3
 ‘I am angry.’ [Elic-4-41]

Both verbs *k^hâm* ‘feel hot’ and *k^ha?* ‘be angry’ can be used without the nominal component of the complex predicate, as ordinary intransitive verbs, as shown in (1022) and (1023).

(1022) *ŋà a-k^hâm rì k-ÿ*
 1SG NMLZ-burn AUX PRES-1SG
 ‘I am feeling hot.’ [Elicited]

(1023) *imá k^hôk^hî ibá a-k^ha? rì t-a?*
 then monkey.kind that NMLZ-be.bitter AUX PST-3
 ‘Then, the monkey got angry.’ [SNR-6-4.82]

The noun in the complex predicate can be separated from the verb by inserting an adverb like *alíŋ* ‘a lot’. In example (1024), the experiencer is *hənîrûm* ‘they’ and the stimulus is coded as a locative, *atîvâ n̄* ‘at him’. The complex predicate consists of the noun *ràn* ‘heart’ and the verb *k^ha?* ‘be angry’ modified by *alíŋ* ‘a lot’.

(1024) *hənîrûm atî-vâ n̄ ràn alíŋ k^ha? t-a?*
 3PL 3SG-MAS LOC heart lot bitter PST-3
 ‘They got very angry at him.’ [BT-7-28]

Other emotion events like being shy or happy are coded only as an intransitive verbal clause as shown below.

- (1025) *atî-ɲù* *a-rísí* *rì* *k-a?*
 3SG-FEM NMLZ-be.shy AUX PRES-3
 ‘She is being shy.’ [Elic-3-11]
- (1026) *tânî* *bə* *a-rótó* *rì* *t-a?*
 3DL DEF NMLZ-be.happy AUX PST-3
 ‘They two were very happy.’ [SNR-3-1.4]
- (1027) *hənîrûm* *t^húmla* *a-dûŋ* *rótó* *t-a?*
 3PL all NMLZ-big happy PST-3
 ‘They all became very happy.’ [BT-15-3.3]

Another class of events which are expressed through this construction involve bodily function events. In example (1028), the complex predicate consists of the possessive marked noun *sâli?* ‘urine’ and the verb *hûŋ* meaning ‘to come out’ or ‘appear’. In example (1029), the complex predicate consists of the noun *rɔ̀lûm* ‘sweat’ and the verb *hûŋ* ‘to come out, appear’. Note that in both examples, there is only third person argument indexation, although there is first person singular agent/experiencer reference.

- (1028) *i-sâli?* *hûŋ* *k-a?*
 1SG-urinate come.out PRES-3
 ‘I need to urinate.’ [Elic-2-219]
- (1029) *rɔ̀lûm* *hûŋ* *k-a?*
 sweat come.out PRES-3
 ‘I am sweating.’ [Elic-3-19]

8.2.2.3 Reflexive Construction

Reflexive clauses have an unusual argument structure. Reflexive clauses involve the reflexive pronoun *mɔ̀mɔ̀* ‘self’ prefixed with a possessive prefix, which is co-referential with the subject NP. What seems unusual is the fact that the subject NP

and the reflexive pronoun seem to form a single NP. First, the ergative *kámá* follows both the subject NP and the reflexive pronoun, as shown in (1030) and (1031).

(1030) *atî-và* *a-m̂m̂* *kámá* *hap* *t-a?*
 3SG-MAS 3SG-self ERG kill PST-3
 ‘He killed himself.’ [Elicited]

(1031) *ηà* *i-m̂m̂* *kámá* *ván* *t-γ?*
 1SG 1SG-self ERG cut PST-1SG
 ‘I cut myself.’ [Elicited]

Marking only the subject NP with *kámá* results in a different interpretation, as shown below, where the reflexive pronoun does not refer to Jesus, but to what he was talking about.

(1032) *zêsu?* *kámá* *a-m̂m̂* *n̂* *ηà* *t-a?*
 Jesus ERG 3-self LOC say PST-3
 ‘Jesus talked about himself.’ [MOV-1-1.230]

Moreover, examples (1030) and (1031) are ambiguous in that the P participant can be interpreted as co-referential to the subject participant, or as a different participant altogether. Thus, (1030) could mean ‘He himself killed X’, suggesting that he did not take any help from others in performing the event. The non-co-referential participant can be overtly expressed as shown below.

(1033) *i-him* *bə* *ηà* *i-m̂m̂* *kámá* *hwé* *t-γ?*
 1SG-house DEF 1SG 1SG-self ERG build PST-1SG
 ‘I built the house myself.’ [Elicited]

Very often there is no separate subject NP, only the possessed reflexive pronoun, as shown below. In example (1034), we have the reflexive pronoun *m̂m̂* prefixed with the second person singular possessive prefix *mə-* as the sole argument

of the transitive verb *vuk* ‘save’. In example (1035), we have the reflexive pronoun *m̂m̂* prefixed with third person possessive prefix *a-* as the sole argument of the transitive verb *vuk* ‘save’.

(1034) *mə-m̂m̂* *vuk* *l-o?*
 2SG-self save IMP-2SG
 ‘Save yourself.’ [MOV-4-1.123]

(1035) *a-m̂m̂* *ŋé* *vuk* *m-a?* *nê*
 3-self be.able save NEG-3 Q
 ‘Can he not save himself?’ [MOV-4-1.122]

In an example like (1033), the reflexive pronoun is not coding the patient argument. It is there for emphasis or contrast. This function of the reflexive pronoun can be seen with intransitive verbs as well, as illustrated in (1036) through (1038).

(1036) *ŋà* *i-m̂m̂* *kà* *t-x?*
 1SG 1SG-self go PST-1SG
 ‘I went myself.’ (nobody told me, I did it at my will)

(1037) *atî-và* *a-m̂m̂* *kwé* *t-a?*
 3SG-MAS 3-self fall PST-3
 ‘He fell down himself.’ (nobody pushed him, it was an accident)

(1038) *gari*¹⁴ *a-m̂m̂* *c^hwé* *kà* *t-a?*
 car 3-self run go PST-3
 The car went by itself. (nobody drove it, it was accidental)

8.2.2.4 Reciprocal Construction

We find three different types of argument structure for clauses that code events as reciprocal. In one type of structure, the participants of the reciprocal event are coded with a single NP. The single NP is either plural, compound, or coordination

¹⁴ Borrowed from Assamese *gari* ‘vehicle’

of two NP's, and the verb is suffixed with the reciprocal suffix *-mun*. In example (1039), the clause consists of the single NP *n̄r̄r̄m* 'we (inclusive)' and the transitive verb *c^hu?* 'meet' marked with the reciprocal suffix *-mun*. In example (1040), the clause consists of the single coordinated NP *pú n̄ mi?* 'snake and man' and the transitive verb *ro?* 'fight' marked with the reciprocal suffix *-mun*. In example (1041), the clause consists of the single NP *c^həp^hù m̄ni* 'two brothers' and the transitive verb *dé* 'argue' marked with the reciprocal suffix *-mun*.

(1039) *n̄r̄r̄m* *rúŋla* *c^hu?-mun* *l-i?-mə*
 1PL.INCL together meet-RECIP NF-1PL-NF
 'We will meet together and then....' [BT-15-10.3]

(1040) *pú* *n̄* *mi?* *ro?-mun* *t-ə* *ŋà*
 snake and person fight-RECIP PST-3 hearsay
 'Snake and man fought with each other.' [WNR-8-1.1]

(1041) *c^həp^hù* *m̄ni* *aru?* *dé-mun* *t-a?*
 brothers CLF-two like.this argue-RECIP PST-3
 'The two brothers argued like this with each other.' [SNR-13-1.18]

The verbs in the above examples code naturally reciprocal meaning, such as 'meeting', 'fighting', 'arguing'. Verbs which do not code naturally reciprocal meanings also can occur in the reciprocal construction. In examples (1042) and (1043), we have the verbs *miksik* 'be jealous/hate' and *ván* 'cut' marked with the reciprocal suffix *-mun*. These verbs are not inherently reciprocal.

(1042) *dopuŋ* *dovɣ* *cʰəpʰù* *miksik-mun* *t-a?*
 PN PN brothers be.jealous-RECIP PST-3
 ‘Dopung and Dovaw were jealous of each other.’ [SNR-11-1.56]

(1043) *zéká* *hənî* *didi* *rik* *ván-mun* *a*
 now 3PL each.other die cut-RECIP 3
 ‘Now they will kill each other.’ [SNR-15-1.33]

In the second type of structure, one set of participants is coded as an A argument and the other is coded as a comitative participant. In example (1044), we have a coordinated NP *pol nî barnabas* ‘Paul and Barnabas’ marked with the ergative *kámá*, and another NP *hənîrûm* ‘they’ marked with the comitative *nâm* ‘with’ and the locative *ný*. The verb *dé* ‘argue’ is suffixed with *-mun*. In example (1045), one set of participants is coded as unmarked NP *cʰəpʰù cʰəná* ‘brothers’, and the other set of participants are coded with another NP *haʔkʰiŋ haʔtʰɣ?* *cʰəpʰù cʰəná* ‘brothers up the hill and down the hill’, marked with the comitative *nâm* along with the locative *ný*.

(1044) *pol* *nî* *barnabas* *kámá* *hənîrûm* *nâm* *ný*
 PN and PN ERG 3PL with LOC

a-rùŋ *kámkám* *mə* *dé-mun* *t-a?*
 NMLZ-strong very ADV argue-RECIP PST-3
 ‘Paul and Barnabas argued very strongly with them (the followers).’ [BT-15-2.3]

(1045) *cʰəpʰù cʰəná* *haʔkʰiŋ* *haʔtʰɣ?* *cʰəpʰù cʰəná* *nâm*
 brothers down.the.hill up.the.hill brothers with

ný *a-roʔ-mun* *rì* *t-a?*
 LOC NMLZ-fight-RECIP AUX PST-3
 ‘At that time, brothers fought with neighbouring brothers (living) up the hill and down the hill.’ [SNR-13-1.16]

The third type of structure involves a reciprocal pronoun – *didi* ‘each other’, preceded by a possessor modifier. In example (1046), there are two NP’s - *nîrûm* ‘we’ and the reflexive pronoun *didi* ‘each other’ prefixed with first person plural possessive *nî-* prefixed. The verb *c^hàm* ‘know’ is marked with the reciprocal suffix *-mun*. In example (1047), there is only the reciprocal pronoun *didi* preceded by the third person plural possessive prefix *hənî*, and the verb is suffixed with *-mun*.

(1046) *nîrûm* *nî-didi* *c^hàm-mun* *t-i?*
 1PL.EXCL 1PL.EXCL-self know-RECIP PST-1PL
 ‘We knew each other.’ [Elic-]

(1047) *zéká* *hənî* *didi* *rik* *ván-mun* *a*
 now 3PL each.other die cut-RECIP 3
 ‘Now they will kill each other.’ [SNR-15-1.33]

8.2.2.5 The ‘Need’ Construction

The clause with the verb *ra* ‘need/want’ deviates from clauses with other transitive verbs, in that it takes an **experiencer subject** argument marked with the dative *hə*, while the P argument remains unmarked. The verb usually takes the third person index *a*. In example (1048), the experiencer argument is *ηà* ‘I’ marked with *hə*, and the P argument is *zù* ‘water’. In example (1049), the experiencer argument is the first person plural pronoun *nîrûm* ‘we (exclusive)’ marked with *hə*. In example (1050), the experiencer argument is the first-person pronoun *ηà* ‘I’ marked with *hə*.

(1048) *ɲà hə zù râ k-a?*
 1SG DAT water need PRES-3
 ‘I need water.’ [Elic-9-196.1]

(1049) *zêsu?, zéká nirûm hə râ k-a?*
 Jesus now 1PL.EXCL DAT need PRES-3
 ‘Jesus, we need (your teaching).’ [MOV-2-1.70]

(1050) *ibe? a-ku? bà rì r-x, zékábá*
 that NMLZ-give REST AUX INV.NON.PST-1SG now

ɲà hə râ k-a?
 1SG DAT need PRES-3
 ‘Just give that (to me). Now I need (it).’ [SCN-3-43.1]

Note that the verb *ra* indexes a third person argument with *a/a?*. It is possible to index the experiencer argument. In that case, the sentence would indicate that the experiencer argument desperately needs the referent of the P argument. Thus, example (1048) with a first person index would be used in a context where there is scarcity of water and the experiencer argument does not have access to water.

8.2.2.6 The Perception-Cognition-Utterance (PCU) Construction

The PCT construction involves a semantically transitive verb, but syntactically deviates from a transitive clause in that the patient/addressee participant is coded as a locative, not as a P argument which is unmarked for any case. The verbs attested in this construction include perception verbs such as *sú* ‘look’, speech verbs such as *ɲâ* ‘say’, and cognition verbs like *t^hûɲhûn* ‘respect’, *kâmlâm* ‘believe’, etc. The perception, cognition, and utterance verbs are known to form semantic classes, relevant for various kinds of grammatical organization of languages (see Givon, 2001b: 41). Another verb attested in this construction is *t^hû* ‘hit’ which does not

belong to this class. Examples (1051) through (1056) illustrate the PCU construction.

In example (1051), the stimulus participant *pik* ‘field’ of the verb *sú* ‘look’ is marked with *nɣ̣*.

- (1051) *c^ha?* *ibábá* *báté* *k^hit* *t^hɨŋ* *nɨ*, *irábá*
 rice that how.much plant should Q that
- [pik nɣ̣]* *sú* *l-iʔ-mə* *k^hit* *k-ì*
 field LOC look NF-1PL-NF plant PRES-1PL
 ‘As for how much rice we should plant, we look at the field and plant
 (accordingly).’ [SNR-1-1.9]

In example (1052), the addressee participant *vəp^hɨ* ‘bird kind’ of the verb *ŋá* ‘say’ is marked with *nɣ̣*.

- (1052) *irá* *dɨmə* *[vəp^hɨ nɣ̣]* *ŋá* *t-a?*, *ʔ^hɨvà*,
 that after bird.kind LOC say PST-3 PN
- nɣ̣* *bə* *rwézá* *ha?* *pjaʔ-tɨ ...*
 2SG DEF always ground scratch-NMLZ
 ‘After that, (the animals) said to Vanphi, ‘Phiva, you are one who always
 scratches ground.’ [SNR-6-4.86]

In example (1053), the entity of respect *avà* ‘the father’ of the verb *t^hɨŋhɨn* ‘respect’ is marked with *nɣ̣*. In example (1054), the entity being tested *rɣ̣dɨŋ tɨsɨ* ‘God’ of the verb *símté* ‘test’ is marked with *nɣ̣*.

- (1053) *irámá* *súŋvɣ̣-ŋù* *irábá* *[a-ŋù*
 then first.child-FEM that 3-mother
- a-và* *nɣ̣]* *t^hɨŋhɨn* *m-a?*
 3-father LOC respect NEG-3
 ‘The first daughter did not respect/worship her parents.’ [SNR-12-1.9]

(1054) *nuʔrûm kámá [rʔdûŋ tísû nʔ]*
 2PL ERG God LOC
abá símté k-àn
 this test PRES-2PL
 ‘You are testing God.’ [BT-15-4.10]

In example (1055), the entity of belief *rʔdûŋ tísû* ‘God’ of the verb *kâmlâm* ‘believe’ is marked with *nʔ*. In example (1056), the object of worship *rʔdûŋ tísû* ‘God’ of the verb *noʔ* ‘worship’ is marked with *nʔ*.

(1055) *zéká hənî kámá [rʔdûŋ tísû nʔ]*
 now 3PL ERG God LOC

kâmlâm t-aʔ
 believe PST-3
 ‘Now, they believed in God.’ [BT-16-12.8]

(1056) *atî-ŋù kámá [rʔdûŋ tísû nʔ]*
 3SG-FEM ERG God LOC

noʔ t-aʔ
 worship PST-3
 ‘She worshiped God.’ [BT-16-6.9]

In example (1057), the patient participant *atʰənkʰuʔ* ‘chest’ of the verb *tʰù* ‘hit’ is marked with *kə*.

(1057) *a-rân ŋâ nʔ ljaʔ-la ŋat-la ŋâmâ bə*
 3-belly.side side LOC turn-ADV hold-ADV QUOT DEF

[a-tʰənkʰuʔ kə] pepe tʰù t-aʔ
 3-chest LOC SS hit PST-3
 ‘Turning (the pangolin) to its belly side, holding it, hit on its chest making a “pepe” sound.’ [SNR-3-1.19]

8.2.3 The Transitive Clause

A transitive clause has the possibility of having two overt nominal or pronominal core arguments - A and P. There seems to be a split in the case marking of the A argument. In the speech of my older speakers, such as Phulim Hakhun, the first person singular and the second person singular A arguments are marked with the definite *bə*, and all other arguments are marked with the ergative *kámá*. Thus, there are zero instances of *ŋà* 'I' and *nŋ* 'you (sg)' being marked with *kámá* in the narratives spoken by the older consultants. My younger consultants, such as Khithung and Nokrap, seem to neutralize this distinction by using the ergative with all A arguments. The frequency of the pronominal A arguments in my database with the ergative *kámá*, the definite/nominative *bə*, and without any marking is given in Table 113. One thing obvious in the table is that pronominal A arguments are rarely unmarked. Second, first person singular and second person singular A arguments tend to have the definite *bə*, instead of the ergative *kámá*. In fact, all the instances of these two A arguments with *kámá* come from younger consultants (in conversations and in the movie). In contrast, other pronominal A arguments tend to take the ergative *kámá* more often than the definite *bə*. The P argument is unmarked by any case postposition. The transitive verb usually follows the two arguments. One of the two core arguments is indexed on the verb complex. Usually, the participant which is higher on person hierarchy is indexed on the verb irrespective of its grammatical relation (see Chapter VII on Argument indexation).

Table 113: Distribution of Pronominal A arguments

Pronouns	A with <i>kámá</i>	A with <i>bə</i>	A unmarked
<i>ɲà</i> ‘1SG’	26	52	3
<i>nɣ</i> ‘2SG’	24	41	2
<i>nîrûm</i> ‘1PL.EXCL’	16	2	2
<i>nɣrûm</i> ‘1PL.INCL’	6	0	1
<i>nuʔrûm</i> ‘2PL’	10	1	1
<i>atî</i> ‘3SG’	26	1	1
<i>hənîrûm/târûm</i> ‘3PL’	18	1	3

Examples (1058) through (1063) illustrate transitive sentences in which the A arguments are personal pronouns. In example (1058), the A argument is the first person singular pronoun *ɲà* ‘1SG’ marked with the definite/nominative *bə*. The P argument *bɣrî c^hà*, *arî c^hà* ‘small fruit, small seed’ is unmarked for case.

(1058) [*ɲà bə*] *bɣrî-c^hà* *a-rî-c^hà*
 1SG DEF fruit-DIM 3-seed-DIM
p^hɣ? *t-ɣ?*
 eat PST-1SG
 ‘I ate a small fruit, a small seed.’ [SNR-2-2.9]

In example (1059), the A argument is the second person singular pronoun *nɣ* ‘you’ marked with the definite/nominative *bə*. The P argument is the unmarked NP *ic^hà k^hû* ‘my child’s head’.

(1059) *po?* [*nɣ bə*] *i-c^hà* *k^hû* *càró*
 elephant 2SG DEF 1SG-child head why

lùŋ nɣʔ t-uʔ nî
 break tread PST-2SG Q
 ‘Elephant, why did you tread and break my child’s head.’ [SNR-6-4.18]

In example (1060) the A argument is the first person plural pronoun *nîrûm* ‘we (exclusive)’ marked with the ergative *kámá*. In example (1061), the A argument is the second person plural pronoun *nuʔrûm*, and it is marked with the ergative postposition *kámá*. The P argument is the unmarked NP *avukvwamtî tîsû* ‘savior God’.

(1060) [*niurm kámá*] *ará sîm kámá cup*
 1PL.EXCL ERG this salt INST eat.with

c^haʔ k-ì
 eat PRES-1PL
 ‘We eat (food) with this salt.’ [SNR-11-1.26]

(1061) [*nuʔrûm kámá*] *avukvwamtî tîsû c^hàm*
 2PL ERG saviour God know

c^hí tə m-at
 DUR PST NEG-2PL
 ‘You did not recognize the saviour God.’ [MOV-3-1.184]

In example (1062) the A argument is a third person singular pronoun *atîvâ* ‘he’ marked with case postposition *kámá*, and the P argument is an unmarked coordinated NP consisting of proper names *barnabas nî sol* ‘Barnabas and Saul’.

(1062) *imá [atî-và kámá] barnabas nî sol bə*
 then 3SG-MAS ERG PN and PN DEF

rám keʔ t^hik t-aʔ
 call go CAUS PST-3
 ‘Then, he summoned Barnabas and Saul.’ [BT-13-1.12]

In example (1063) the A argument is a third person plural pronoun *hənîrûm* ‘they’ marked with the ergative postposition *kámá*, and the P argument is an unmarked NP *rùrý asân* ‘good message’.

(1063)	<i>iráný</i>	<i>[hənîrûm</i>	<i>kámá]</i>	<i>rùrý</i>
	there	3PL	ERG	message
	<i>a-sân</i>	<i>hó</i>	<i>t-a?</i>	
	NMLZ-good	preach	PST-3	
	‘There they preached the good message.’			[BT-14-1.7]

Examples (1064) through (1066) illustrate transitive clauses in which the A arguments are headed by nouns. In example (1064), the A argument is the NP *k^hi?hî* ‘deer’ marked with the ergative postposition *kámá*. The P argument is the unmarked NP *k^hûk^hup* ‘tortoise’.

(1064)	<i>[k^hi?hî</i>	<i>kámá]</i>	<i>k^hûk^hup</i>	<i>zwénám</i>	<i>t-a?</i>
	deer	ERG	tortoise	insult	PST-3
	‘A deer insulted a tortoise.’			[SNR-4-2.2]	

In example (1065), the A argument is a nominalized/relativized clause *càm tóàtî* ‘those who have rice’, marked with the ergative postposition *kámá*. The P argument is the unmarked NP *càm* ‘rice’.

(1065)	<i>[càm tóà-tî</i>	<i>kámá]</i>	<i>càm</i>	<i>pwé</i>	<i>c^ha?</i>	<i>c^hí</i>
	rice	EXIST-NMLZ	ERG	rice	cook	eat
	‘Those who have rice, they cook and eat rice.’					[SNR-13-1.24]

In example (1066), the A argument is a proper name *dopuŋ* ‘Dopung’, marked with the ergative postposition *kámá*. The P argument is an unmarked NP *sìmkùm ibá* ‘that piece of salt’.

(1066) *imábá [dopuŋ kámá] sìmkùm ibá*
 then PN ERG ... salt.piece that

.... *hùn-ru? rì t-a?*
 carry-CONT do PST-3

‘Then, Dopung carried that piece of salt (in his pocket to eat with rice).’
 [SNR-11-1.25]

Very often the lexical or free pronominal arguments are omitted, and the references are retrieved from the discourse context. In example (1067) there are no lexical/free pronominal A arguments in either clause for the verbs *ku?* ‘give’ and *ván* ‘cut’. It is understood from the previous discourse that the A argument refers to the group of people called Chunyu. In example (1068), there is no lexical/free pronominal P argument for the verb *twè p^hʔc^ha?* ‘take and eat’. It is understood to be referring to seeds from the context.

(1067) *ku? ván l-ə-mə təhja? bə a-ván*
 give along NF-3-NF girl DEF NMLZ-cut

rì t-a?
 AUX PST-3

‘Having (they_i) brought (a man and a woman), (they_j) cut the woman.’
 [SNR-15-1.103]

(1068) *zúk nî vù kámá iná twè p^hʔc^ha? a*
 animal and bird ERG there take eat 3
 ‘Animals and birds will take and eat (the rice).’ [SNR-1-1.11]

When full NP's or free pronouns are used, the most common word order is APV, as we have seen in all the examples above. However, the orders PAV, PVA, and AVP are also attested. In examples (1069) through (1071), we see the order PAV.

	P		A		V		
(1069)	<i>atî-và</i>		<i>bə</i>	<i>c^hùŋù</i>	<i>kámá</i>	<i>pét^ha?</i>	<i>ke?</i> <i>t-a?</i>
	3SG-MAS		DEF	PN	ERG	chop.off	go PST-3
	'The Chunyu tribe chopped him off.'				[SNR-15-1.11]		

	P		A			V	
(1070)	<i>atî</i>	<i>bə</i>	<i>t^húmlà</i>	<i>kámá</i>	<i>múŋ-và</i>	<i>ŋâmâ</i>	<i>c^hàm</i> <i>k-a?</i>
	3SG	DEF	all	ERG	priest-MAS	COMP	know PRES-3
	'Everyone knows him as a prophet.'				[MOV-3-1.216]		

	P		A		V	
(1071)	<i>t^húmlà</i>		<i>mi?</i>	<i>atî</i>	<i>kámá</i>	<i>c^hi?he?</i> <i>k-a?</i>
	all		people	3SG	ERG	deceive PRES-3
	'He has deceived all the people.'				[MOV-4-1.85]	

Examples (1072) through (1074) illustrate the order PVA. Note that the ergative marker is found in its stressed form *káme?* in this order. Moreover, a particle *a* is often found following the ergative marked A argument in this order.

	P	V		A	
(1072)	<i>ŋà</i>	<i>a-zùn</i>	<i>rì</i>	<i>r-ɣ</i>	<i>i-p^hù</i>
	1SG	NMLZ-chase	AUX	non.PST.inv-1SG	1SG-elder.brother

<i>káme?</i>	<i>a</i>
ERG	DP
'My elder brother will chase me away.'	
	[SNR-12-1.36]

	P				V	
(1073)	<i>aró</i>	<i>vùlap</i>	<i>nîà</i>	<i>vɣ?pá</i>	<i>ibá</i>	<i>líŋvó</i> <i>t-ə</i>
	this	feather	and	pig.teeth	that	like PST-3

		A	
<i>ŋà</i>	<i>a-p^hù</i>	<i>káme?</i>	
hearsay	3-elder.brother	ERG	
'The elder brother liked the feather and the pig teeth.'			[SNR-11-1.41]

	P			V		
(1074)	<i>ɲap^hɪ ɲap^hâ^m</i>	<i>ibə</i>	<i>sám</i>	<i>he?</i>	<i>kà</i>	<i>t-a?</i>
	wild.banana.tree	that	cut	keep	go	PST-3

	A	
	<i>vəkɪ̃</i>	<i>kéme?</i>
	wild.pig	ERG
	‘The wild pig cut the wild banana trees.’ [SNR-6-4.10]	

Examples (1075) and (1076) illustrate sentences where the P argument is postposed and occurs following the verb. Once again note that we have the particle *a* following the postposed P argument.

(1075)	<i>are?</i>	<i>c^hùɲù</i>	<i>nuk-ɲù</i>	<i>po</i>	<i>nʻ</i>	...
	this	PN	village-AUG	hall	LOC	
	V		P			
	<i>túɲ</i>	<i>t^hik</i>	<i>t^h-i</i>	<i>haʔk^hún</i>	<i>a</i>	
	sit	CAUS	INV.PST-1PL	PN	DP	
	‘(The Chunyu people) let the Hakhun people sit at the community hall.’ [SNR-15-1.23]					

		V			P	
(1076)	<i>irə</i>	<i>d̩mə</i>	<i>ləp^hɪ</i>	<i>ma?</i>	<i>nà</i>	<i>zùbê</i>
	that	after	see	NEG-3	PFV	ghost
	‘After that (men) do not see the ghosts anymore.’ [SNR-8-1.55]					

8.2.4 The Ditransitive Clause

Ditransitive clauses are characterized by the possibility of having three lexically expressed core arguments. The A argument is marked with the ergative postposition *kámə*, or the definite/nominative *bə*. The R argument is marked with the dative *hə*, and the T argument remains unmarked. However, it is very rare to have all the three participants lexically mentioned in a sentence. The verb indexes whichever argument is higher in the person hierarchy among A, T, and R. In example (1077), the

A argument is *poʔnù* ‘elephant’ marked with the ergative *kámá*, the T argument is the unmarked NP *amù bê* ‘tail hair’, and the R argument is *vík^hâ* ‘porcupine’ marked with the dative *hə*. The ditransitive event here is *t^hwám kuʔ* ‘send something to someone’.

A			T		
(1077)	<i>poʔ-nù</i>	<i>kámá</i>	...	<i>a-mù</i>	<i>bê</i> <i>ibá</i>
	elephant-AUG	ERG	..	3-tail	hair that
	R		V		
	<i>vík^hâ</i>	<i>hə</i>	<i>t^hwám</i>	<i>kuʔ</i>	<i>t-aʔ</i>
	porcupine	DAT	send	give	PST-3
	‘The elephant sent her tail hair to the porcupine.’ [SNR-5-1.7]				

In example (1078), the A argument is the second person singular addressee (of the command), the T argument is *cʔ* ‘fine’, and the R argument is *zùbê tʔ* ‘ghost family’ marked with *hə*. The ditransitive event here is *hùn* ‘carry’, which in this context means ‘paying a fine to someone’. Here the verb indexes the second person A argument.

	R		T	V	
(1078)	<i>zùbê</i>	<i>tʔ</i>	<i>hə</i>	<i>cʔ</i>	<i>hùn</i> <i>l-oʔ</i>
	ghost	family	DAT	fine	carry IMP-2SG
	‘Pay the fine to the ghost family.’ [SNR-6-4.48]				

In example (1079), the A argument is again the second person singular addressee, the T argument is *p^hânt^hət^hə* ‘some (miracle)’, and the R argument is *ŋà* ‘1SG’ marked with *hə*. The ditransitive event is *suk kuʔ* ‘show something to someone’. The verb

indexes the R argument, the highest participant in the clause, and the alignment is marked as inverse with the non-past inverse operator *r-*.

	T		R			V	
(1079)	<i>p^hânt^hat^hə</i>		<i>ŋà</i>	<i>hə</i>	<i>mì</i>	<i>suk</i>	<i>ku?</i> <i>r-ɣ</i>
	some		1SG	DAT	ADD	show	give INV.NON.PST-1SG
	'Show me some (miracle) too.'					[MOV-4-1.83]	

The order of the constituents is variable. We have the T argument preceding the R argument in (1077) and (1079), and the opposite order in (1078). While both T and R precede the verb in the above examples, the T follows the verb in (1080) below. Note that the postposed P argument contains the stressed form *abe?* 'this' of the proximal demonstrative modifier. In example (1081), the R argument follows the verb.

		R		V			P
(1080)		<i>ŋà</i>	<i>hə</i>	<i>ku?</i>	<i>r-ɣ</i>		<i>[vùlap</i> <i>nî</i>
		1SG	DAT	give	INV.NON.PST-1SG		feather and
		<i>vɣ?-pá</i>		<i>abe?</i>]			
		pig-tooth		this			
		'Give me the feather and the pig teeth.'					[SNR-11-1.42]

	T		V		R
(1081)	<i>a-p^hɣ?c^ha?</i>	<i>t^hîŋ</i>	<i>ku?</i>	<i>l-at</i>	<i>atî-c^hà</i> <i>hə</i>
	NMLZ-eat	NMLZ	give	IMP-2PL	3SG-DIM DAT
	'Give food to her.'				[MOV-1-1.293]

8.3 Valence Changing Processes

There is one valence increasing process, i.e. causativization with the particle *t^hik*, and one valence decreasing process, i.e. the reciprocalization with the suffix -

mun. The following two sections describe how these processes affect the argument structure of the verbs.

8.3.1 Analytical Causativization with *t^hik*

The function of the causative particle *t^hik* has been discussed in §6.4. Here I mainly look at the argument structure of causativized clauses with this particle. The causative particle follows the verb stem, and increases the valence of the verb stem by one, by adding a causer. Thus, an otherwise intransitive verb stem can take two core arguments, and an otherwise transitive verb stem can take three core arguments, when marked with the causative particle.

Examples (1082) through (1085) illustrate causativized intransitive verbs. In example (1082), the intransitive verb *túŋ* ‘sit’ is marked with *t^hik*. This sentence is understood to have a causer referring to a community called Chunyu, and the causee *haʔk^hûn* ‘Hakhun’ is postposed. Since the speaker associates himself with the causee, we have an inverse configuration (i.e. 3PL > 1PL), where the verb indexes higher participant, the causee marked with *-i* ‘1PL’, and marked with configuration as inverse with the past inverse marker *t^h-*.

(1082)	<i>ibá</i>	<i>porip</i>	<i>nʃ</i>	<i>túŋ</i>	<i>t^hik</i>	<i>t^h-i</i>	<i>haʔk^hûn</i>	<i>a</i>
	that	hall	LOC	sit	CAUS	INV.PST-1PL	PN	DP
	‘(The Chunyu people) let (we) Hakhun people sit at the hall.’							[SNR-15-1.23]

In example (1083), the intransitive verb *ke?* ‘go’ is marked with *t^hik*. This sentence is understood to have a causer referring to humans (as opposed to ghosts), and the causee is *irábá vək^hâ* ‘that crow’.

(1083) *a-p^hŋ* *irábá vək^hâ* *ke?* *t^hik* *t-a?*
 NMLZ-first that crow go CAUS PST-3
 ‘At first, (they) sent the crow.’ [SNR-7-1.35]

In example (1084), the intransitive verb *vŋ* ‘come’ is marked with *t^hik*. The causer is understood to be the addressee (second person plural participant), and the causee is *ibá* ‘that’ referring to an old man.

(1084) *ibá* *nŋ?* *vŋ* *t^hik* *an*
 that PROH come CAUS 2PL
 ‘Do not let him come.’ [SNR-9-4.4]

In example (1085), the intransitive verb *hûŋ* ‘come out/appear’ is marked with *t^hik*.

The causer *nŋ* ‘you’ is coded as an ergative argument with *kámá*, and the causee is an unmarked indefinite expression *mŋt^hət^hə* ‘someone’.

(1085) *nŋ* *kámá* *mi?* *t^húŋ* *va?* *mŋt^hət^hə*
 2SG ERG person jail ABL someone

a-hûŋ *t^hik* *t^hŋ*
 NMLZ-come.out CAUS NMLZ
 ‘You are supposed to release someone from the jail.’ [MOV-4-1.93]

Examples (1086) and (1088) illustrate causativized transitive verbs. These clauses have the argument structure of a ditransitive verb. The causer is coded as A and the causee is coded as the R argument marked with the dative *hə*, while the P

argument of the transitive verb remains unmarked. In example (1086), the transitive verb *c^ha?* ‘eat’ is marked with the causative particle *t^hik*. The causer is understood to be a third person participant referring to a ghost family. The causee *ac^hâ* ‘child’ is marked with the dative *hə*, and the P argument of the transitive verb *ibá càm ibá* ‘that rice’ is unmarked.

(1086) *a-c^hâ* *hə* *bə* *ibá* *càm* *ibá* *i* *kámá*
 3-child DAT DEF that rice that that INST

cup *c^ha?* *t^hik* *t-ə* *ŋà*
 eat.with eat CAUS PST-3 hearsay
 ‘(They) made their child eat rice with that (salt).’ [SNR-11-1.29]

In example (1087), the transitive verb *rut* ‘collect’ is marked with the causative *t^hik* (as well as with the causative/permissive prefix *tə-*). The causer is understood to be the speakers, and the causee is the addressee *nŋ* ‘you’ marked with the dative *hə*. The P argument of the transitive verb is the unmarked NP *rúmbé càmçò* ‘altar table’.

(1087) *nŋ* *hə* *ʒo?* *nŋ* *rúmbé* *càmçò*
 2SG DAT later LOC altar table

tə-rut *t^hik* *e*
 PERM-collect CAUS 1PL
 ‘(We) will let you collect (the offerings on) the altar table later.’ [SNR-7-1.37]

In example (1088), the transitive verb *lap* ‘get’ is marked with the causative *t^hik*. The causer is represented with the interrogative pronoun *hwé* marked with the ergative

kámá, the causee *mi?* ‘people’ is marked with the dative *hə*, and the P argument of the transitive verb is the unmarked NP *mərâ* ‘sin’.

(1088) *hwé kámá mi? hə mərâ ləp t^hik a nî*
 who ERG people DAT sin get CAUS 3 Q
 ‘Who will make people get sin?’ [MOV-3-1.32]

8.3.2 Reciprocal Construction with *-mun*

The reciprocal suffix *-mun* has been discussed in §6.7.2.1, and the reciprocal construction has been discussed in §8.2.2.4. Here I will briefly talk about the argument structure of the reciprocal construction. The reciprocal suffix occurs on transitive verb roots/stems and decreases the valence of the construction by one. The way in which the valence is reduced is that the participants of the transitive event are coded with a single NP. In example (1089), we have the transitive verb *c^hu?* ‘meet’ marked with the reciprocal suffix *-mun*. But the participants of this event are coded as a single NP with the first person plural NP *nɣrûm* ‘we (inclusive)’.

(1089) *nɣrûm rúŋla c^hu?-mun l-i?-mə*
 1PL.INCL together meet-RECIP NF-1PL-NF
 ‘We will meet together and then.....’ [BT-15-10.3]

In example (1090), we have the transitive verb *ləpk^hi* ‘see’ marked with the reciprocal suffix *-mun*. The participants of this event are coded as a coordinated NP *zùbê nî mi?* *bə* ‘ghosts and men’.

(1090) *zùbê nî mi? bə ləpkʰi-mun m-i? nà*
ghost and human DEF see-RECIP NEG-1PL PFV
‘The ghosts and humans, we do not see each other any more.’ [SNR-11-1.56]

8.4 Argument Alignment Patterns

In this section, I discuss how the core arguments of intransitive, transitive, and ditransitive clauses are aligned, mainly in terms of overt coding properties (primarily case marking). Certain key constructions, such as clausal coordination and passivization, which provide crucial evidence for alignment patterns in other languages, do not exist in Hakhun. Though there is clause chaining construction, it does not provide strong evidence for one or the other kind of alignment pattern (see §9.3).

8.4.1 Subject Alignment

Here we will look at the alignment of the participant roles S, A, and P arguments. Of the three overt coding properties, case marking, word order, and argument indexation, only case marking is useful in defining the subject alignment pattern. The word order is highly variable, and therefore, is not useful in defining subject alignment. The argument indexation is not determined by the grammatical relation of the core participants, except in the non-final clauses. It is determined by person hierarchy. Therefore, it is also not helpful in defining the subject alignment in final/main clauses. According to the case marking of the three core arguments S, A, and P, there seems to be a **split alignment**, especially in the speech of the older speakers. As we have seen in §8.2.3, A arguments tend to have different case markers depending on their person and number. The first and second person singular A argument tend to be marked with the definite/nominative *bə*, while rest of the A

arguments tend to be marked with the ergative *kəmə*. Thus, the alignment for first and second person singular arguments can be described as **Nominative-Accusative**, while the alignment for the rest of the arguments is **Ergative-Absolutive**. However, this split is being neutralized in the speech of the young generation, where we see only the Ergative-Absolutive alignment.

Examples (1091) and (1092) illustrate a Nominative-Accusative alignment, and (1093) and (1094) illustrate an Ergative-Absolutive alignment. We have second person singular S and A argument in the first pair, and both are marked with the definite/nominative *bə*.

S						
(1091)	<i>imá</i>	<i>[nɔ̂ bə]</i>	<i>zerusalim</i>	<i>nɔ̂</i>	<i>rik</i>	<i>tʰɪŋ</i>
	then	2SG	DEF	PN	LOC	die
	‘Then you will die in Jerusalem.’			[MOV-2-1.244]		
A						
P						
(1092)	<i>poʔ</i>	<i>[nɔ̂ bə]</i>	<i>[i-cʰà</i>	<i>kʰũ]</i>	<i>càró</i>	
	elephant	2SG	DEF	1SG-child	head	why
	<i>lùŋ</i>	<i>nɔ̂ʔ</i>	<i>t-uʔ</i>	<i>nĩ</i>		
	break	tread	PST-2SG	Q		
	‘Elephant, why did you tread and break my child’s head?’					[SNR-6-4.18]

In the following pair, on the other hand, we have a nominal S argument and second person plural A argument. Note the A argument is marked distinctly with the ergative *kámə*, while the S and P arguments are both unmarked.

S						
(1093)	<i>nɔ̂-cʰà</i>	<i>a-sap</i>	<i>ròkò</i>	<i>rì</i>	<i>k-aʔ</i>	
	1PL.INCL-child	NMLZ-cry	often	AUX	PRES-3	
	‘Our child is frequently crying.’					[SNR-6-4.6]

	A		P					
(1094)	<i>nuʔrũm</i>	<i>kámá</i>	<i>avukvwamti</i>	<i>tĩsũ</i>	<i>c^hàm</i>	<i>c^hĩ</i>	<i>tə</i>	<i>m-at</i>
	2PL	ERG	saviour	God	know	DUR	PST	NEG-2PL
	‘You did not recognize the saviour God.’				[MOV-3-1.184]			

Argument indexation in non-final clauses is useful for alignment purposes in that it is sensitive to the grammatical relation of the arguments. Thus, the non-final verbs in the non-final clauses can index only the S or A argument. It cannot index the P argument. Thus, in non-final clauses the argument indexation defines a **Nominative-Accusative** alignment pattern. In examples (1095) and (1096), the verb indexes the third person A arguments over first and second person P arguments. Examples (1097) and (1098) show that indexation of the P argument in the non-final clause is not possible.

(1095)	<i>[atĩ</i>	<i>ŋà</i>	<i>ləpk^hĩ</i>	<i>l-ə-mə]</i>	<i>c^hwé</i>	<i>t-a?</i>
	3SG	1SG	see	NF-3-NF	run	PST-3
	‘He saw me and then ran away.’				[Elicited]	

(1096)	<i>[atĩ</i>	<i>bə</i>	<i>nŋ</i>	<i>bu?</i>	<i>l-ə-mə]</i>	<i>c^hwé</i>	<i>t-a?</i>
	3SG	DEF	2SG	beat	NF-3-NF	run	PST-3
	‘He beat you and ran away.’				[Elicited]		

(1097)	<i>[*atĩ</i>	<i>ŋà</i>	<i>ləpk^hĩ</i>	<i>l-ŋ?-mə]</i>	<i>c^hwé</i>	<i>t-a?</i>
	3SG	1SG	see	NF-1SG-NF	run	PST-3

(1098)	<i>[*atĩ</i>	<i>nŋ</i>	<i>bu?</i>	<i>l-u?-mə]</i>	<i>c^hwé</i>	<i>t-a?</i>
	3SG	2SG	beat	NF-2SG-NF	run	PST-3

8.4.2 Object Alignment

Here I will talk only about case marking of object arguments – P, T, and R. Processes like Passivization do not exist in Hakhun. With respect to case marking we have an **Indirective** alignment, i.e. the P argument of a transitive clause and the T argument of a ditransitive clause are treated alike (see Velupillai, 2012: 244). Both P

and T remain unmarked, whereas the R argument is marked with the dative *hə*. The P argument *k^hûk^hup* ‘tortoise’ in (1099) and the T argument *amù bê* ‘tail hair’ in (1100) are both unmarked. The R argument *vîk^hâ* ‘porcupine’ in (1100), on the other hand, is marked with *hə*.

	A		P		V	
(1099)	<i>k^hi?hî</i>	<i>kámá</i>	<i>k^hûk^hup</i>	<i>zwénám</i>	<i>t-a?</i>	
	deer	ERG	tortoise	insult	PST-3	
	‘A deer insulted a tortoise.’		[SNR-4-2.2]			
	A			T		
(1100)	<i>po?-jù</i>	<i>kámá</i>	...	<i>a-mù bê</i>	<i>ibá</i>	
	elephant-AUG	ERG	..	3-tail hair	that	
	R		V			
	<i>vîk^hâ</i>	<i>hə</i>	<i>t^hwám</i>	<i>ku?</i>	<i>t-a?</i>	
	porcupine	DAT	send	give	PST-3	
	‘The elephant sent her tail hair to the porcupine.’		[SNR-5-1.7]			

However, there are certain verbs which take P arguments marked with the locative *nǎ* or *kə*. These are mainly speech and perception verbs (see §8.2.2.6).

8.5 Speech Act Types

This section describes the major speech act distinctions coded in Hakhun sentences. §8.5.1 describes declarative sentences, which are typically used for making statements. §8.5.2 describes three different kinds of interrogative sentences – polar, disjunctive, and content questions. §8.5.3 describes four different kinds of imperative sentences – second person imperative, first person imperative/jussive, third person imperative/optative, and prohibitive.

8.5.1 Declarative Sentences

A typical declarative sentence ends with an operator which codes tense, deixis, polarity, mood, and argument indexation. The inflected operator may be followed by one of two aspect marking particles, and a hearsay marker. We have been so far looking largely at the structure of declarative sentences in previous sections.

Examples (1101) through (1104) illustrate verbal declarative clauses with various endings. Note that they all have an inflected operator. Examples (1101) and (1102) ends with the present tense operator inflected with the third person index *ka?*, and the past tense operator inflected with the same index, *ta?*.

(1101) *sɣru* *và* *mɣ-tʰə* *rí* *k-a?*
 PN person CLF-one die PRES-3
 ‘One Swru person dies (in the war).’ [SNR-15-1.85]

(1102) *kʰiʔhî* *kámá* *kʰûkʰup* *zwénám* *t-a?*
 deer ERG tortoise insult PST-3
 ‘A deer insulted a tortoise.’ [SNR-4-2.2]

In example (1103), the sentence ends with the perfective marker *nà*, which follows the past tense operator. In example (1104), the sentence ends with the hearsay marker *ɲà*, which follows the past tense operator.

(1103) *vikrə* *hu?* *túŋ* *t-ə* *nà*
 quickly steal sit PST-3 PFV
 ‘(The crab) quickly hid and stayed (there).’ [SNR-6-4.72]

(1104) *sè* *bə* *vàn* *típ* *nɣ* *túŋ* *vɣ* *t-ə* *ɲà*
 crab DEF fire near LOC sit come PST-3 hearsay
 ‘The crab came and sat near the fire.’ [WNR-1-1.2]

A declarative may also end with the nominalizing particle *t^hŋ* instead of the inflected operators, as illustrated in (1105) through (1107). Such declarative clauses code necessity or obligation.

(1105) *tù-nàm* *c^ha?-nàm* *c^hŋrì* *b̀r̀r̀* *c^hôc^hi?* *hùn* *ván*
yam-panicle rice-panicle RED fruit all carry along

l-i?-mə *no?k^hŋ* *nɣ* *acíp^hŋ* *v̀* *t^hŋ*
NF-1PL-NF church LOC pray come should
‘Bringing all the crop and fruits, we should come and pray at the church.’
[SNR-1-1.19]

(1106) *s̄v̄* *ci?* *hap* *ku?* *t^hŋ*
insect medicine spray give should
‘(We) should spray insect medicine.’ [SNR-1-1.17]

(1107) *nɣ-ràn* *nɣ-m̄ŋ* *nɣ* *mə* *ʒ̄esu?* *nɣ*
1PL.INCL-heart 1PL.INCL-soul LOC ABL Jesus LOC

kâmlâm *t^hŋ*
believe should
‘(We) should believe in Jesus from our heart and soul.’ [MOV-4-1.251]

8.5.2 Interrogative Sentences

Three types of interrogative clauses can be distinguished. Polar questions are marked with a sentence final question particle *nê*. Disjunctive questions take a particle *le* between the disjuncts and a sentence final particle *nî*. Content questions contain question words and a sentence final question particle *nî*. Interrogative clause types are described below.

8.5.2.1 Polar Questions

The question particle *nê* turns a declarative sentence into a polar question. It occurs at the very end of the sentence, following the inflected operator and the aspectual particles. There is no other change in the structure of the sentence except for adding the question particle at the end. Examples (1108) through (1111) illustrate polar questions.

(1108) *tù nî c^ha? kəp t-at nê*
 yam and rice get PST-2PL Q
 ‘Did you get crops?’ [SCN-6-8.1]

(1109) *rôdûŋ tîsû múŋtân íbá sja?rə vɔ̃ a nê*
 God kingdom that quickly come 3 Q
 ‘Is God’s kingdom coming quickly (ahead)?’ [MOV-3-1.88]

(1110) *ŋà mə-dî nɔ̃ kà r-ɔ̃ nê*
 1SG 2SG-back LOC go PROX.NON.PST-1SG Q
 ‘Will I come after you?’ [MOV-2-1.197]

(1111) *zéká nɔ̃ ləpk^hí k-ù nà nê*
 now 2SG see PRES-2SG PFV Q
 ‘Can you see now?’ [MOV-2-1.133]

8.5.2.2 Disjunctive Questions

Disjunctive questions involve use of a particle *le* between two clauses. Like polar questions, disjunctive questions often have the question particle *nê* at the end, though it may be omitted sometimes. Examples (1112) through (1114) illustrate disjunctive questions. Note that both clauses of a disjoint clause have finite predicate, and the subsequent clause may share some or all participants of the preceding clause.

(1112) *nɔ̃ kámá írə amit-c^hà íbá ŋé ku?*
 2SG ERG that interest-DIM that be.able give

r-x *le* *ɲé* *ku?* *rə*
 INV.NON.PST-1SG or be.able give INV.NON.PST

m-x? *nî*
 NEG-1SG Q
 ‘Will you be able to pay the interest or not?’ [SCN-3-14.1]

(1113) *dà-kwàm* *tɛ* *kámá* *lúɲ* *i* *le*
 leg-bent family ERG attack 1PL or

dà-càn *tɛ* *kámá* *lúɲ* *an* *nî*
 leg-straight family ERG attack 2PL Q
 ‘Will (we) the bent legged family attack (the enemy) or will (you) the straight legged family attack (the enemy)?’ [SNR-14-1.16]

(1114) *zon* *zùcám-tí* *bə* *a-rɲkɔ* *tísú* *ɲâ* *mə*
 PN baptize-NMLZ DEF 3-right God side ABL

le *mi?* *ɲâ* *mə* *nî*
 or human side ABL Q
 ‘Is John’s right to baptize from God or from man?’ [MOV-3-1.213]

8.5.2.3 Content Questions

Content questions involve interrogative pronouns and adverbs, which have been described in §3.5.3. The interrogative pronouns and adverbs occur in situ, i.e. in the position of the constituent they replace. Content questions end with the question particle *nî*. Examples (1115) through (1119) illustrate content questions with various interrogative pronouns and adverbs, such as *hwé* ‘who/whom/whose’, *cà* ‘what’, *báká* ‘where’, and *báté* ‘how much’.

(1115) *abá* *hwé* *tɛ* *cʰà* *nî...*
 this who family child Q
 ‘Whose child is this?’ [MOV-1-124]

- (1116) *hwé kámá zap rîŋkÿ ku? t^h-u nî*
 who ERG speak right give INV.PST-2SG Q
 ‘Who gave you the right to speak (these words)?’ [MOV-3-1.210]
- (1117) *ibá rí imá cà dÿ a nî*
 that die if what happen 3 Q
 ‘What will happen, if it dies?’ [MOV-4-1.113]
- (1118) *mə-nâ-ŋù báká kà k-ə nî*
 2SG-younger.sibling-FEM where go PRES-3 Q
 ‘Where has your sister gone?’ [SNR-12-1.37]
- (1119) *báté amit cù u nî*
 how.much interest ask.for 2SG Q
 ‘How much interest are you going to charge?’ [SCN-3-15.1]

8.5.3 Imperative Sentences

We can distinguish four different types of imperative constructions. They all contain the non-final/imperative operator *l-* inflected with an argument index, except for the prohibitive, which takes the zero-operator. The second person imperative is the least marked. Other imperative constructions, such as the first person/jussive or the third person/optative constructions, have additional morphology on the verb stem, such as the permissive/causative prefix *tə-*, discussed in §6.7.1.2. The imperative constructions are discussed below.

8.5.3.1 Second Person Imperative

Second person imperatives may take one of two inflected operators – the imperative operator *l-* and the proximal/inverse non-past operator *r-*. See §6.5.1.7 and §6.5.1.5 for a discussion on these two operators. The operator *r-* is used with certain motion verbs like *kà* ‘go’ and *vÿ* ‘come’. It is also used when there is an inverse

alignment pattern and the verb indexes the P argument. The imperative sentences with the operator *r-* are not formally distinct from their declarative counterparts. Thus, the same sentences can be interpreted as imperative or declarative. With non-deictic verbs, the operator *l-* is used as the imperative marker. Note that the operator *r-* takes the Sonorous argument indexes, while the operator *l-* takes the Checked argument indexes (see §7.2 for discussion of argument indexes). In example (1120), the command involves a motion towards the speaker, and therefore, we have the second person inflected operator *ro*.

(1120) *kà* ***r-o,*** *k^hi?hî,*
 go PROX.NON.PST-2SG deer

twe?-mun *c^hwé* *i* *nà*
 compete-RECIP run 1PL PFV
 ‘Come, Deer. (We) will compete running now.’ [SNR-4-.4.4]

In example (1121) one of the commands involves motion towards the speaker, and therefore, we find the second person plural inflected operator *ran*. The second command does not involve a proximal motion (rather, it involves parallel movement), and therefore, we find the imperative marker *lat*, inflected with the second person plural index.

(1121) *kà* ***r-an,*** *i-dî* *zùn* ***l-at***
 go PROX.NON.PST-2PL 1SG-back chase IMP-2PL
 ‘Come. Follow me.’ [MOV-3-1.81]

In example (1122) the command involves motion away from the speaker, and therefore, we find the imperative operator *lo?*, inflected with the second person singular index.

(1122) *hìm nʂ vùn vʂ l-o?*
 house LOC return come IMP-2SG
 ‘Go back home.’ [MOV-2-1.198]

In example (1123), the command does not involve a deictic motion, and therefore, we find the imperative marker *lo?*.

(1123) *bə-mù mù lû so? l-o?*
 2SG-tail tail long put.inside IMP-2SG
 ‘Enter your long tail (inside the hole).’ [SNR-6-4.77]

In examples (1124) and (1125) we have commands that involve inverse alignment. In example (1124) the command involves an action involving a second person agent and first person patient, and since the verb complex indexes the P argument we find the non-past inverse marker *rʂ* (inflected with first person singular index).

(1124) *i-nà lù r-ʂ nà,*
 1SG-elder.sister hold INV.NON.PST-1SG PFV

i-dʂ? ʒo? k-ə nà
 1SG-hand get.tired PRES-3 PFV
 ‘My sister, hold me. My hand is losing grip.’ [SNR-12-1.27]

In example (1125), the command involves a second person agent and a first-person R argument, and since the verb indexes the R argument we find the operator *rʂ*, inflected with the first person singular index.

(1125) *ηὰ* *hə* *kuʔ* *r-ɣ* *vùlap* *nî*
 1SG DAT give INV.NON.PST feather and

vɣʔ-pá *abeʔ*
 pig-tooth this
 ‘Give me this feather and pig teeth.’ [SNR-11-1.42]

8.5.3.2 First Person Imperative

We also find imperative sentences marked with the imperative marker *lə* whose subject is a first-person argument. These sentences correspond to ‘let me’ construction in English. However, these sentences have additional morphology on the verb, the prefix *tə-* which has been described as a permissive/causative marker in §6.7.1.2.

(1126) *và-tʰə* *kámá* *ηὰ* *bə* *azaʔ*
 CLF-one ERG 1SG DEF a.lot

tə-kəp *l-ɣʔ* *haʔ* *a*
 PERM-get IMP-1SG land DP
 ‘One person said, “Let me have more, the land”.’ [SNR-13-1.17]

However, it is more frequent to have other verbal operators instead of the imperative operative in the first person imperative construction, as shown below.

(1127) *naʔηò* *tə-lik* *mý* *k-ɣ̣* *o*
 necklace PERM-wear first PRES-1SG EXCLAM
 ‘Let me wear the necklace first.’ [SNR-12-1.29]

(1128) *zam* *cûη* *tə-biseʔ* *mý* *k-ɣ̣*
 PN basket PERM-organize first PRES-1SG
 ‘Let me organize the basket of *Zams* (plate-like metal musical instrument) first.’ [SNR-6-4.65]

8.5.3.3 Third Person Imperative

The third person imperative is more common than the first person imperative.

Like the first-person imperative, it also takes the *tə-* prefix on the verb and the

imperative operator *l-* inflected with the third person index following the verb.

Examples (1129) through (1131) illustrate third person imperative clauses. In example (1129), the context is that a couple wants their servant to work harder in the field and decides to sow weeds to keep the servant busy. Thus, they say to each other “let him pass more time in the field”.

(1129) *mêc^hât^hə* *tə-lit* *l-a* ...
 little.bit PERM-pass IMP-3 ...
 ‘Let him pass little bit more (time)...’ [SNR-8-1.72]

The context in (1130) is that ghosts are trying to carry a man inside their hole in the ground, but the man does not fit inside. After trying several times, they say the sentence in (1130).

(1130) *imábá* *ai* *tə-d̂* *l-a*
 then EXCLAM PERM-be IMP-3

zéká *mi?* *kámá* *bà* *ləp* *r-i*
 now people ERG REST find INV.NON.PST-1PL
 ‘Then, Ai! let it be. Now people will find us.’ [SNR-8-1.23]

In example (1131), one person instructs a couple to feed their child food with salt.

(1131) *eh* *a* *kámá* *tə-cup* *c^ha?* *l-a*
 EXCLAM this INST PERM-eat.with eat IMP-3
 ‘Eh, let (them) eat (food) with this (salt).’ [SNR-11-1.26]

The third person imperative sentences are also used for wishes, as shown in (1132) and (1133). In example (1132), two tenants of a field plans to kill the only boy

of the owner in order to get the land for their own. In example (1133), a man named Simeon wishes the parents of Jesus blessing.

(1132) *irábá pik tîsû tálâ-c^hà rik bu? he? e,*
 that field owner boy-DIM die beat keep 1PL
atî jàmkâ nyrûm hə tə-dʔ l-a
 3SG property 1PL.INCL DAT PERM-be IMP-3
 ‘(We) will kill the field owner’s boy, and let his property be ours.’ [MOV-3-1.235]

(1133) *nu?c^hu? mʔ-ni ko?cê tə-dʔ l-a*
 2DL CLF-two blessed PERM-be IMP-3
 ‘May you two be blessed.’ [MOV-1-1.118]

8.5.3.4 Prohibitive Imperative

Prohibitive imperative sentences take a prohibitive particle *nʔ* before the verb stem. These sentences usually take the zero-operator, i.e. the bare argument indexes without an overt tense, etc. marker, although they may occur without any operator following the verb. These sentences take the proximal/inverse operator *rə* when the command involves a proximal motion towards the speaker or when it involves an inverse alignment. However, these sentences do not take the imperative operator *l-*.

Examples (1134) and (1135) illustrate prohibitive sentences in which the verbs are not followed by any operators. In example (1134), the verbs *tan* ‘make noise’ is preceded by the prohibitive marker *nʔ*, but there is no operator following. Similarly, in (1135), the occurrences of the verb *vʔ* ‘come’ are preceded by the prohibitive, but not followed by any operators.

(1134) [*nɣʔ tán*], [*nɣʔ tán*], *anʔ* *vérit*
 PROH make.noise PROH make.noise here talk

rì *k-ɣ*
 AUX PRES-1SG
 ‘Do not make noise! I am talking here.’ [SNR-15-1.94]

(1135) [*nɣʔ vɣ̀*], [*nɣʔ vɣ̀*]
 PROH come PROH come
 ‘Don’t leave, don’t leave.’ [SNR-15-1.44]

Examples (1136) and (1137) illustrate prohibitive sentences with zero-operators. In example (1136), the verb *sap* ‘cry’ is preceded by the prohibitive *nɣʔ* and followed by the second person singular index *o*. In example (1137), the verb *hap* ‘open’ is preceded by the prohibitive *nɣʔ* and followed by the second person plural index *an*.

(1136) [*nɣʔ sap o*], *nînap* *teʔ* *nînap*
 PROH cry 2SG tomorrow around tomorrow

teʔ *ɲâmâ* *ɲâ* *kuʔ* *t-aʔ*
 around COMP say give PST-3
 ‘Do not cry. (You eat the man) tomorrow’, (the parents) said.’ [SNR-11-1.24]

(1137) *vəsik* *mà* *rwê* *mà* *rwê*, *kásɣʔ* [*nɣʔ*
 bird.kind NEG chirp NEG chirp door PROH

hap *an*]
 open 2PL
 ‘Until the *Vasik* bird chirps, do not open the door.’ [SNR-9-10.6]

In example (1138), the command involves a proximal motion towards the speaker, and therefore, we find the operator *ro*, inflected with second person singular index. Examples (1139) and (1140) involve inverse alignment: second person agent

and first person singular patient in (1139) and second person agent and first person plural recipient in (1140). Thus, we find the operators *rɣ* and *ri*.

(1138) [*nɣʔ* *vɣ̣* *r-o*]
 PROH come PROX.NON.PST-2SG
 ‘Do not come.’ [Elic-1-101]

(1139) [*nɣʔ* *ʒwénám* *r-ɣ*]....
 PROH insult INV.NON.PST-1SG
 ‘Do not insult (me).’ [SNR-4-2.3]

(1140) *swamla* [*nɣʔ* *kuʔ* *r-i*]...
 right.away PROH give INV.NON.PST-1PL
 ‘Do not give us right away...’ [SNR-15-1.68]

CHAPTER IX

CLAUSE COMBINING

This chapter deals with combining multiple clauses with various degrees of integration into a single sentence, and briefly with combining multiple sentences into connected discourse. I start with complementation in §9.1 in which a clause functions as an argument of certain complement taking verbs. The internal structure of complement clauses varies widely. On the one hand, we have complement clauses of speech and cognition verbs which look like independent sentences with a fully inflected verb complex and their own independent arguments (§9.1.1). On the other hand, we have the complement clauses of modality verbs, such as ‘want’, ‘finish’, ‘start’ which are the most integrated with their matrix clause (see Givon, 2001b: 41 on event integration) in that (i) the complement clause always shares the subject with the matrix verb, and (ii) the complement clause does not have a finite verb complex (§9.1.3). Between these two extremes, we have complement clauses of perception verbs like ‘see’ and ‘hear’ which have a non-finite verb complex but do not always share the same subject with the matrix clause (§9.1.2).

The second set of clauses which are combined with more finite matrix clauses are the adverbial clauses, which set the background for the event in the matrix clause. A total of nine adverbial clause types are described in §9.2. They include temporal adverbial clauses of different kinds, conditional adverbial clauses of various kinds, purpose clauses, and substitutive adverbial clauses. The final clause type which combines with other clauses to form an independent sentence is the non-final clause. Hakhun has a clause chaining discourse structure in which multiple clauses are chained together, which are marked with a special non-final operator *l-* and a

suffix *-mə*, culminating in a final clause which carries one of the finite operators.

Clause chaining and non-final clauses are described in §9.3.

The final section, §9.4, describes various devices for linking one sentence to the previous sentence in the discourse. These include the strategy of tail-head linkage (§9.4.1), and various connectives like *imá* ‘then’ (§9.4.2), *dʒ imá* ‘then’ (§9.4.3), *dʒ a kámí* ‘however’ (§9.4.4), and *ɲàmà* ‘but’ (§9.4.5).

9.1 Complementation

This section describes four types of complement clauses. §9.1.1 describes two types of sentence-like complement clauses. One of these is a direct quote, which has its own personal, temporal, and spatial deixis independent from those of the matrix clause. The other sentence-like complement clause also resembles an independent sentence and has its own temporal deixis, though it takes the same personal deixis as the matrix clause. In §9.1.2 we see a complement clause type which does not have a finite operator. Then §9.1.3 describes another complement clause which also does not have a finite operator, and which always shares the subject with the matrix clause. I call this the infinitive complement clause.

9.1.1 Finite Sentence-Like Complement Clause

Speech verbs, like ‘say’ and ‘ask’, and cognition verbs like ‘know’, take the sentence-like complement clauses, i.e. clauses which resemble a finite independent clause. However, there is slight distinction between the complements of speech verbs and the complements of cognition verbs. Complements of speech verbs are more independent of the matrix clause than are the complements of cognition verbs.

9.1.1.1 Direct Quotations

This type of complement clause in Hakhun has the internal structure of an independent sentence, with a fully finite verb complex. The complement clause represents a direct quote, which has independent temporal, personal and other deictic references from the matrix clause. The complement taking verbs which take direct quotes are utterance verbs like *ŋâ* ‘say’, *rám* ‘call’, *c^hín* ‘ask’, *tán* ‘shout’, *cut/cù* ‘ask for’ etc.

In example (1141), the complement taking verb is *ŋâ* ‘say’ and the complement clause, which is inside the brackets, precedes the verb. This complement clause can function as an independent sentence. Note that the complement clause has a present time reference marked with the inflected operator *ka?*. On the other hand, the matrix clause has a past time reference marked with the inflected operator *tə*.

Moreover, we have a second person reference *bədy?* ‘your hand’ inside the complement clause, as if the narrator is addressing an addressee in the narrative (i.e. the narrator is taking the point-of-view of the speaker of the complement clause). In example (1142), we have a future time reference inside the complement clause (inside the brackets) marked with the inflected zero operator *e* ‘1PL’, whereas the rest of the sentence has a past time reference marked with the past tense operator *ta?* at the very end of the sentence. Moreover, we have first person narrator in the complement clause, marked with the first-person index *e* ‘1PL’, whereas we have a third person narrator in the rest of the sentence marked with the third person index *t-a?* ‘past-3’.

(1141) [bə-dʁʔ dʁʔ-sî dʁʔ-nâm dʁ̂ l-ə-mə
 2SG-hand hand-sour hand-bad.smell COP NF-3-NF
 cʰiʔ k-aʔ] ηâ kuʔ t-ə ηà
 out.of.order PRES-3 say give PST-3 hearsay
 “Your hand smells bad, therefore, it has gone bad”, (he) said. [SNR-14-1.7]

(1142) [bəruʔ rì l-iʔ-mə kəp e] ηâ l-ə-mə
 how do NF-1PL-NF get 1PL say NF-3-NF
 aná arábá a-pʰʁ̂ arábá vəkʰâ keʔ tʰik t-aʔ
 here this NMLZ-first this crow go CAUS PST-3
 ‘Saying/thinking, ‘How will we get (the fire)?’, (the men) sent the crow first.’
 [SNR-7-1.35]

Very often there is a **complementizer** between the complement clause and the speech verb, as in examples (1143) and (1144). The complementizer is *ηâmâ*, which contains the speech verb *ηâ* ‘say’, a common phenomenon in Tibeto-Burman languages (Saxena, 1988). The other element of the complementizer is the non-final clause marker *-mə*. Note that the non-final clause marker *-mə* cannot be directly attached to a verb root. It is usually attached to the inflected non-final operator *l-*.

(1143) [nʁʔ v̂ tʰik an ηâmâ] ηâ t-aʔ
 PROH come CAUS 2PL COMP say PST-3
 ‘Don’t let (the father) come’, said (the husband). [SNR-9-4.4]

(1144) [nʁʔ sap o, nînap téʔ nînap
 PROH cry 2SG tomorrow around tomorrow
 téʔ ηâmâ] ηâ kuʔ t-ə ηà
 around COMP say give PST-3 hearsay
 ‘Do not cry. (I will give it to you) tomorrow’, said (the father).’ [SNR-11-1.24]

	A			Quote		
(1147)	<i>a-nâ-jù</i>		<i>kámá</i>	<i>[i-jà</i>	<i>nŕ</i>	<i>vat</i>
	3-younger.sibling-FEM		ERG	1SG-elder.sister	2SG	swing

		V				
	<i>mŕ</i>	<i>l-o?</i>	<i>ŋâ</i>	<i>t-a?</i>		
	first	IMP-2SG	say	PST-3SG		
	'The younger sister said, "Elder sister, you swing first.'					[SNR-12-1.19]

	P			V		
(1148)	<i>mi?-hŕ</i>	<i>zecece</i>	<i>mə</i>	<i>zŕ</i>	<i>tán</i>	<i>rì</i>
	person-PL	SS	ADV	together	shout	do

		Quote				
	<i>t-a?</i>	<i>[zêsu? bə</i>	<i>a-rikhe?</i>	<i>t^hŋ</i>	<i>ŋâmâ]</i>	
	PST-3	Jesus	DEF	NMLZ-kill	should	COMP
	'People shouted together loudly, "Jesus should be killed".'					[MOV-4-1.98]

In example (1149), the complement clause is pre-posed to the sentence initial position preceding the Subject argument. Note that the complementizers move along with the complement clauses when they are pre-posed or post-posed, as in (1148) and (1149). Also note that when complement clauses are pre-posed to sentence initial position, a pro-form *iru?* 'like that' or *aru?* 'like this' is used in its original place, that is preceding the matrix verb complex, as in (1149) and (1150).

		Quote				A		
(1149)	<i>[ŋà</i>	<i>hə</i>	<i>nŕ</i>	<i>vàn</i>	<i>tóà</i>	<i>ŋâmâ]</i>	<i>zùbê</i>	<i>c^həp^hù</i>
	1SG	DAT	LOC	fire	EXIST	COMP	ghost	brothers

			V			
	<i>kámá</i>	<i>iru?</i>	<i>ŋâ</i>	<i>t-ə</i>	<i>ŋà</i>	
	ERG	like.that	say	PST-3	hearsay	
	'I have fire', said the ghost brothers.					[SNR-7-1.16]

		Quote				
(1150)	<i>[aru?</i>	<i>swe?</i>	<i>p^hŕ?c^ha?</i>	<i>t^hŋ</i>	<i>ŋâmâ</i>	<i>bə]</i>
	like.this	roast	eat	should	COMP	DEF

A		V			
<i>ʒùbê</i>	<i>tʃ</i>	<i>kámá aru?</i>	<i>ŋâ</i>	<i>ku?</i>	<i>t-a?</i>
ghost	family	ERG like.this	say	give	PST-3

‘Like this (you) should roast and eat (the meat)’, said the ghost family.’
[SNR-7-1.20]

The speech verb *ŋâ* ‘say’ also can be characterized as a manipulation verb, i.e.

a verb denoting asking someone to do something. Another verb used for asking someone to do something is *cut/cù* ‘ask for’. In example (1151), the A argument of the utterance verb *ŋâ* ‘say’ is *nʃ bə* ‘you’, the P argument of the utterance verb is *ʒeʔvâ* ‘squirrel, and the quote is inside the brackets.

(1151)	<i>sè-ŋà</i>	<i>nʃ</i>	<i>bə</i>	<i>ʒeʔ-vâ</i>	<i>nʃ</i>	<i>cà</i>	<i>kʰú</i>
	crab-FEM	2SG	DEF	squirrel-MAS	LOC	what	reason
	<i>nʃ</i>	<i>ŋâ</i>	<i>t-u?</i>	<i>nî</i>	<i>[pì-pʰʃ]</i>		<i>ʒàtat</i>
	LOC	say	PST-2SG	Q	fruit.type-round		pluck
	<i>kà</i>	<i>l-o?</i>	<i>ŋâmâ]</i>	<i>aru?</i>			
	go	IMP-2SG	COMP	like.this			

‘Crab, why did you ask the squirrel to go and pluck a Pi fruit?’ [SNR-6-4.43]

(1152)	<i>[mi?</i>	<i>bə</i>	<i>ván</i>	<i>l-ə-mə</i>	<i>tə-lím</i>	<i>ku?</i>	<i>r-ʃ</i>
	man	DEF	cut	NF-3-NF	PERM-cook	give	INV.NON.PST-1SG
	<i>ŋâmâ]</i>	<i>aru?</i>	<i>cù</i>	<i>t-ə</i>	<i>ŋâ</i>		
	COMP	like.that	ask.for	PST-3	hearsay		

‘(The ghost child) asked (the father), ‘Cut the man and cook and give it to me.’ [SNR-11-1.19]

(1153)	<i>[nʃ-cʰà</i>	<i>dìpcʰa?</i>	<i>rô</i>	<i>pì-pʰʃ</i>	<i>ʒàtat</i>	<i>ke?</i>
	1PL.INCL-child	soothe	PURP	fruit.type-round	pluck	go
	<i>ku?</i>	<i>l-o?</i>	<i>ŋâ</i>	<i>l-ə-mə</i>	
	give	IMP-2SG	say	NF-3-NF		

‘(The crab) asked (the squirrel), “Go get Pi fruit to soothe our child’
[SNR-6-4.39]

In example (1151), the manipulation verb is **ηâ** ‘ask’ in bold, which denotes the event of a crab asking a squirrel to bring a fruit. The complement clause, which is inside square brackets, is postposed following the matrix verb complex along with the complementizer *ηâmâ*. In example (1152), the manipulation verb is **cù** ‘ask’ in bold, which denotes the event of a ghost child asking his/her parent to bring food. The complement clause, which is inside the square brackets occurs preceding the verb and takes the complementizers *ηâmâ*. In example (1153), there is no complementizer between the manipulation verb **ηâ** ‘ask’ and the preceding complement clause in square brackets.

As mentioned above, the verb *ηâ* ‘say’ is one of the most grammaticalized verbs. Sometimes, there is no utterance verb except in what looks like the complementizer, *ηâmâ*. There is no doubt that the clauses inside the square brackets in (1154) and (1155) are direct quotes. In example (1155), we have first person narrative and present time reference inside the complement clause, and third person narrative and past time reference in the matrix clause. However, note that there are no utterance verbs anywhere in these sentences, except in the complementizer *ηâmâ*.

One possible analysis here is to say that the verb *ηâ* ‘say’ has developed a distribution where it can directly take the suffix *-mâ*, and no other utterance verb has developed that distribution yet (see §9.3 for a discussion on the development of the speech verb into non-final marker). This is the analysis that I will follow. Note that the direct

quotes in these clauses mostly express thoughts and intentions, rather than speech or manipulation.

- (1154) *[irá t^hîŋ lúŋ keʔ] ñâmâ*
 that place attack go COMP
c^hùŋù haʔ nʔ kâ t-iʔ
 PN village LOC go PST-1PL
 ‘(Thinking) “(we) will attack that place”, (we) went to the Chunyu village.’
 [SNR-15-1.6]

- (1155) *imá poʔ-ŋù kámá [i-k^hùpù nʔ câ*
 then elephant-AUG ERG 1SG-nostril LOC what
lip vʔ k-ə nî] ñâmâ poʔ-ŋù bə
 enter come PRES-3 Q COMP elephant-AUG DEF
toʔ-ruʔ toʔ-ruʔ rì l-ə-mə
 jump-CONT jump-CONT do NF-3-NF
 ‘Then the elephant (wondered) “What has entered into my nose?”, and then she jumped and jumped, and then.....’ [SNR-6-4.13]

9.1.1.2 Complements of Cognition Verbs

Cognition verbs like *c^hàm* ‘know’ and *t^hùŋhûn* ‘think’ also take finite

sentence-like complement clauses. Obviously, these complement clauses are not direct quotes. Thus, they do not have person deixis independent of the matrix clause. However, they still may have temporal deixis which is independent of the matrix clause. Sometimes the complement *ñâmâ* is overtly used. In example (1156), the complement taking verb is *c^hàm* ‘know’, preceded by the complement clause inside the brackets. The complement clause has a finite verb complex marked with the inflected present tense operator *kaʔ*, and can function as an independent sentence.

Note that there is no complementizer on the complement clause here. The

complement clause in (1157) contains an independent clause consisting of a verb stem prefixed with the causative/permissive prefix *tə-* and followed by the inflected third person imperative operator *la*. The complement clause is marked with the complementizer *ηâmâ*.

(1156) [*vî* *coʔ* *nʔ* *a-keʔ* *túŋ* *k-aʔ*]
 monkey body LOC NMLZ-go sit PRES-3

c^hâm *m-aʔ*
 know NEG-3
 ‘(The monkey) did not know that (the ants) came and sat on his body.’
 [SNR-7-1.52]

(1157) [*vəkŋî* *rip* *tə-lúŋ* *pat* *l-a* *ηâmâ*]
 wild.pig nest PERM-break throw IMP-3 COMP

mì *c^hâm* *m-ʔ*
 ADD know NEG-1SG
 ‘(I) did not know that (the Pi fruit) will cause the wild pig nest to break by falling on it.’ [SNR-6-4.40]

Note that the complementizer in (1158) consists of the verb *ηâ* ‘say’, the non-final operator *l-*, and the non-final clause marker *-mə*. Structurally speaking, *ηâ* ‘say’ here is a verb of a non-final chained clause marked with the non-final operator *l-* (see chained clauses in §9.3). However, functionally it is not contributing any meaning to the sentence as a whole. It is simply marking a complement clause.

(1158) [*anʔ* *lôpô* *t^hŋ* *ηâləmə*] *c^hâm* *m-aʔ*
 here play should COMP know NEG-3
 ‘(They) did not know that (they) should have sex here.’ [SNR-9-10.20]

The complement clause may follow the complement taking verb, as shown in (1159) and (1160). Also note that we have a content question in (1160) functioning as a complement clause. Moreover, note that the complement clause has a time reference (marked with the present operator *k-*) different from that of the matrix clause (marked with the past tense operator *t-*).

- (1159) *nîrûm* *kámá* *c^hàm* *k-ì* [*nê* *mi?*
 1PL.EXCL ERG know PRES-1PL 2SG person

k^hì *mə* *cí* *m-o?* *ηâmâ]*
 see ADV fear NEG-2SG COMP
 ‘We know that you are not afraid of people.’ [MOV-3-1.246]

- (1160) *mi?-hɣ* *kámá* *c^hàm* *t-a?* [*zêsu?* *nî*
 person-PL ERG know PST-3 Jesus and

a-c^hàηà-hɣ *mánɣ* *kà* *k-ə* *nî* *ηâmâ]*
 3-follower-PL where go PRES-3 Q COMP
 ‘People knew where Jesus and his followers went.’ [MOV-2-1.201]

Example (1161) illustrates another cognitive verb *t^hûηhûn* ‘think/believe’.

- (1161) [*atî* *a-púcó* *va?* *p^ho?* *ke?* *dê* *m-a?*,
 3SG 3-navel ABL grow go happen NEG-3

cìnlù *sí?* *va?* *t^hàm* *ηâmâ]*
 bird.kind dropping ABL FOC COMP

t^hûηhûn *k-ì*
 think PRES-1PL
 ‘(We) believe that (the big tree) is not from his (the elephant’s) navel, instead it is from Chinlu’s dropping.’ [SNR-2-2.20]

9.1.2 Non-Finite Complement Clause

Non-finite complement clauses lack an inflected operator. Otherwise, the non-finite complement clause has the argument structure of an independent clause. There is no complementizer on the complement clause. The complement clause occurs immediately preceding the complement taking verb. Thus, the verb of the complement clause and the complement taking verb end up being next to each other, which on the surface looks a verb stem with multiple verb roots. This type of complement clause is found with perception verbs like *ləpk^hi* ‘see’, *k^hi* ‘see’, *te?* ‘hear’.

In example (1162), the complement clause inside the square brackets functions as the P argument of the verb *ləpk^hi* ‘see’. The complement clause consists of the reciprocal verb *ro?mun* ‘fight with each other’, and its participants coded as a single NP *mi? m^hni* ‘two men’.

(1162) [*mi?* *m^h-ni* *ro?-mun*] *ləpk^hi* *t-a?*
 person CLF-two fight-RECIP see PST-3
 ‘(The boy) saw two people fighting.’ [WNR-2-1.2]

In (1163), the complement clause inside the square brackets functions as the P argument of the verb *k^hi* ‘see’. The complement clause consists of the intransitive verb *p^hú* ‘float’ and its subject *kwék^hú* ‘coffin’. Note that there are no verbal operators inside the complement clauses and there are no complementizers on the complement clauses.

(1163) [kwék^hú p^hú v̄x̄ ku?] k^hi lə ɲâmâ
 coffin float come give see NF NF
 ‘(The ghosts) seeing a coffin floating towards (their house).....’ [SNR-11-1.16]

In example (1164), the complement clause inside the brackets functions as the P argument of the verb *te?* ‘hear’. The complement clause consists of the verb *rwê* ‘chirp’ and its subject *v̄sik* ‘a bird kind’.

(1164) [n̄nap s̄nap n̄x̄ ib̄á v̄sik b̄ə
 few.days LOC that bird.kind DEF
 kirwekirwe ɲâmâ rwê] te? t-ə ɲâ
 SS COMP chirp hear PST-3 hearsay
 ‘In a few days, (the grandmother and the grandson) heard the Vasik bird chirp “kirwe kirwe”.’ [SNR-9-10.9]

The complement clauses above do not have any characteristics of a NP. They just lack the verbal operator. However, we do see some nominal characteristics in the complement clauses of the perception verbs. Sometimes, the verb in the complement clause is prefixed with nominalizer *a-*, as in (1165). Here, the complement clause consists of the verb *ʒip* ‘sleep’ prefixed with *a-* and its subject *v̄ək* ‘pig’. The complement clause also may be marked with the definite marker *b̄ə*, as in (1166).

Here the complement clause consists of the verb *rwē?* ‘chirp’ and its subject *v̄sik* ‘a bird kind’. Note that we have the checked stem of the verb ‘chirp’ (cf. with *rwê* ‘chirp’ in (1164)), which is often associated with nominalized constructions (see §6.2.1 on suppletive verbs).

(1165) *atî kámá sú kà t-ə bə,*
 3SG ERG look go PST-3 when

[vək bə a-zip] ləpkʰi t-ə ŋà
 pig DEF NMLZ-sleep see PST-3 hearsay
 ‘When he (the owner) went to see (what is happening), (he) saw the pig
 sleeping (in the field).’ [WNR-5-1.5]

(1166) *[vəsik rwe? bə] te? t-a?*
 bird.kind chirp DEF hear PST-3
 ‘(They) heard Vasik chirping.’ [SNR-9-10.14]

9.1.3 Infinitive Complement Clause

Infinitive complement clauses also lack a verbal operator as well as any overt complementizer. However, unlike the non-finite complement clauses discussed above, these complement clauses always share the same subject with the matrix clause. This kind of complement clause is seen with modality verbs like *ró* ‘want’, *ŋo?* ‘want’, *ŋé* ‘finish’, *bʰ* ‘start’, etc.

Examples (1167) and (1168) illustrate the modal verb *ró* ‘want’ taking an infinitive complement clause. The infinitive clauses inside the square brackets in these examples do not have a verbal operator, nor is there a complementizer. In (1167), the verb *te?* ‘hear’ and modal verb *ró* ‘want’ share the same subject, *atîvə* ‘he’. The complement verb *te?* ‘hear’, however, has its own object *rʰdûŋ tîsû ʒap* ‘God’s message’. In (1168) the verb *sit* ‘take someone along’ and the modal verb *ró* ‘want’ share the subject *pol* ‘Paul’. The infinitive verb *sit* ‘take someone along’, however, has its own object argument *timotʰi* ‘Timothy’.

(1167) *atí-và kámá [r̥d̥ũŋ t̥sũ ʒap te?] ró t-a?*
 3SG-MAS ERG God word hear want PST-3
 ‘He wanted to hear God Jesus’s words.’ [BT-13-1.12]

(1168) *pol kámá [timotʰi a-nâm n̥ sit]*
 PN ERG PN 3-with LOC take.along

ró t-a?
 want PST-3
 ‘Paul wanted to take Timothy with him.’ [BT-16-2.5]

Examples (1169) and (1170) illustrate the phasal verb *ɲé* ‘finish’ with an infinitive complement clause. The complement clauses in the brackets do not have any inflected operators and they share their subject with the matrix verb *ɲé* ‘finish’. The verb *vwe?* ‘cut’ in the complement clause has its own object *pik* ‘paddy field’ in (1169). Note that in (1169) the infinitive verb ‘cut’ is in its checked stem form *vwe?* (as opposed to its open stem form *vù*), which is mostly associated with nominalized constructions.

(1169) *irá d̥m̥a [pik vwe?] ɲé t-x?*
 that after paddy.field cut finish PST-1SG

ɲâ imá
 say then
 ‘After that, after finishing clearing the paddy field...’ [SNR-1-1.2]

(1170) *acúpʰi v̥ l-iʔ-m̥a [acúpʰi]*
 pray come NF-1PL-NF pray

ɲé t-iʔ n̥...
 finish PST-1PL PFV
 ‘Coming to pray, having finished praying...’ [SNR-1-1.20]

Example (1171) illustrates another phasal verb *bʔ* ‘start’, and example (1172) illustrates an achievement verb *tê* ‘try’ taking infinitive complement clauses. In example (1171), the infinitive verb *keʔ* ‘go’ and the phasal verb *bʔ* ‘start’ the same subject *ŋà* ‘I’. Moreover, note that the infinitive verb ‘go’ is in the checked stem form *keʔ* (as opposed to the open stem form *kà*). In example (1172), the infinitive clause inside the brackets is a causativized construction. The infinitive clause shares the causer with the matrix verb *tê*, namely *nʔ bə* ‘you’.

(1171) *ŋà* [*cô* *nʔ* *keʔ*] [*bʔ* *k-ʔ*]
 1SG school LOC go start PRES-1SG
 ‘I have started going to school.’ [Elicited]

(1172) *nʔ* *bə* ... [*lùŋ* *bə* *bekun* *dʔ* *tʰik*]
 2SG DEF ... stone DEF bread happen CAUS

tê *l-uʔ* *nî*
 try IMP-2SG Q
 ‘Will you try to turn the rock into bread.’ [MOV-1-1.190]

9.2 Adverbial Clauses

This section describes nine distinct adverbial clause types. There are five different temporal adverbial clauses. One of the temporal clauses is marked with the subordinator *bə*, which also functions as the definite marker elsewhere, and expresses an event which either temporally precedes the event of the matrix clause or overlaps with it (§9.2.1). Another temporal adverbial clause is marked with the locative *kə*, and expresses an event which always overlaps with the event of the matrix clause (§9.2.2).

Another temporal adverbial clause contains the pre-stem negative particle *mà* and a verb complex without an operator, and expresses an event which must take place before the event of the main clause can take place (similar to ‘until’ clause in English) (§9.2.3). The next temporal clause also contains the negative particle *mà*, but it also contains an inflected operator, and expresses an event before which the event of the matrix clause takes place (§9.2.4). The final temporal adverbial clause contains a non-finite verb complex and is marked with the subordinator *imá*, and expresses an event which precedes the event of the matrix clause. The event of this adverbial can also be interpreted as a condition to the event of the matrix clause (§9.2.5). §9.2.6 describes a counterfactual conditional clause marked with *nʔ kə*, which look like the two locative postpositions. §9.2.7 describes a concessive conditional clause marked with *kámí*, which contains the additive *mì*. §9.2.8 describes a purpose adverbial clause marked with the subordinator *rô*. The final adverbial clause is a substitutive clause (§9.2.9), marked with *tʰʔmə*, which is the same form as the marker on the standard of comparison in the comparative construction (see §3.2.1), or with *dʔ a kámí*, which also means ‘however’ sentence initially (see §9.4.4).

9.2.1 Temporal Adverbial Clause with *bə*

The morpheme *bə*, which codes definiteness elsewhere, is also used to code temporal adverbial clauses. The adverbial clauses have finite morphology, i.e. they contain a verbal operator. The subordinator *bə* occurs following the operator, and

such subordinate clauses mostly precede the main clause. The event of the matrix clause may follow or overlap with the event of the subordinate clause. Examples (1173) and (1174) illustrate the relation of succession between the events of the two clauses. Examples (1175) and (1176) illustrate the two events of the two clauses as overlapping.

In example (1173), the adverbial clause inside the brackets consists of the verb *tê* ‘check fortune’ marked with inflected past tense operator *ti?*, and its object *vù* ‘bird’. The adverbial clause has a first person plural A argument indexed on the verb. The adverbial clause is marked with the subordinator *bə*. The matrix clause consists of only the nominal predicate *vù sən* ‘good omen’. Here the event of the adverbial clause (i.e. checking fortune) temporally precedes the event of the matrix clause (i.e. finding out that it is ‘good omen’). In (1174) the adverbial clause consists of the intransitive verb *kà* ‘go’ marked with the inflected past tense operator *ti?*, and the locative participant *c^hùjù ha? nɣ* ‘to the Chunyu place’. The adverbial clause has a first person plural S argument indexed on the verb. The adverbial clause is marked with the subordinator *bə*. The matrix clause consists of the verb stem *ləp ván* ‘get to cut’ marked with the inflected negative operator *mi?*, and the P argument *c^hùjù* ‘Chunyu people’. The adverbial clause and the matrix clause share the same agent. Once again, the event in the subordinate clause precedes the event of the matrix clause.

(1173) [vù vikrə tē t-i? bə] vù-sân
 bird quickly check.fortune PST-1PL when bird-good
 ‘When we quickly checked the fortune with bird, it was a good omen.’
 [SNR-15-1.22]

(1174) [c^hùŋù ha? nʃ kâ t-i? bə]
 PN village LOC go PST-1PL when

 c^hùŋù mî ləp ván m-i?
 PN ADD get cut NEG-1PL
 ‘When we went to the Chunyu village, (we) did not get to kill Chunyu people
 either.’ [SNR-15-1.7]

In example (1175), the adverbial clause inside the brackets expresses the event of a tiger and a pangolin walking together, and the matrix clause expresses the event of the tiger and the pangolin coming across a mushroom place. Here the events of walking and finding the mushroom place can be interpreted as overlapping. In example (1176), the adverbial clause inside the brackets expresses the event of an elephant and a porcupine playing together in a stream. The matrix clause expresses the event of the porcupine sending its quills to the elephant. Here the event of playing in the stream and the event of sending the quills are temporally overlapping.

(1175) [rúŋ k^hwám t-ə bə] kúmdîŋ t^hîŋ bə
 gather walk PST-3 while mushroom place DEF

 vikrə tíŋ
 quickly find
 ‘While walking together, (the tiger and the pangolin) found a mushroom place
 quickly.’ [SNR-3-1.3]

(1176) [irábá zùk^hú nʃ vwé t-ə bə] vík^hâ
 then stream LOC play PST-3 while porcupine

 kámá a-pûŋ t^hwám ku? t-a?
 ERG 3-quill send give PST-3
 ‘While playing in the stream, the porcupine sent his/her quills (to the
 elephant).’ [SNR-5-1.10]

9.2.2 Temporal Adverbial Clause with the Locative *kə*

Temporal adverbial clauses are also marked with the subordinator *kə*, which functions as a locative elsewhere. The subordinator *kə* marks the events of the adverbial clause as simultaneous or overlapping with the event of the matrix clause. The adverbial clause in (1177) consists of the verb *túŋ* ‘live’ followed by the past tense operator *t-*. The adverbial clause is marked with the subordinator *kə* following the verbal operator. The event in the adverbial clause (i.e. the subject living in Delhi) temporally overlaps with the event of the matrix clause (i.e. the subject dying). The adverbial clause in (1178) consists of the verb *c^ha?* ‘eat’ marked with the inflected past tense operator, its subject *ŋà* ‘I’, and its object *càm* ‘rice’. The adverbial clause is marked with the subordinator *kə*. The event in the adverbial clause (i.e. the agent eating rice) and the event in the matrix clause (i.e. the agent hearing noise) overlap.

(1177) [*delhi nʃ túŋ t-ə kə*] *rí t-a?*
 PN LOC live PST-3 SIM die PST-3
 ‘He died when he lived in Delhi.’ [Elicited]

(1178) [*ŋà cà m c^ha? t-r? kə tʃ nʃ*]
 1SG rice eat PST-1SG SIM outside LOC

ara? te? t-r?
 noise hear PST-1SG
 ‘I heard noise when I was eating food.’ [Elicited]

9.2.3 ‘Until’ Adverbial Clause with Negative *mà*

The ‘until’ adverbial clause names an event which marks a point up until when the event expressed in the matrix clause remains true. The adverbial clause takes the preverbal negative particle *mà* before the verb stem, and there is no verbal operator.

There is a tendency to repeat the verb stem along with the negative particle. The adverbial clause has been found preceding the main clause. In example (1179), the ‘until’ adverbial clause consists of the verb *rwê* ‘chirp’, preceded by the negative particle *mà*, and its subject *vəsik* ‘a bird kind’. The ‘until’ clause names an event (i.e. the chirping of the bird *Vasik*), which marks a point up until when the event in the matrix clause (i.e. ‘do not open the door’) must remain true. In example (1180), the ‘until’ adverbial clause consists of the verb *dŷ* ‘become’, preceded by the negative particle *mà*, and its subject *t^húmlà vùkù tîkâ* ‘very old woman and old man’. The ‘until’ clause names an event (i.e. become old) which names a point till when the event in the matrix clause (i.e. ‘staying together’) must remain true.

(1179) [*vəsik* *mà* *rwê*, *mà* *rwê*] *kásɣ?* *nɣ?* *hap* *an*
 bird.kind NEG chirp NEG chirp door PROH open 2PL
 ‘Until the *Vasik* bird chirps, do not open the door.’ [SNR-9-10.7]

(1180) [*ibá* *t^húmlà* *vùkù* *tîkâ* *mà* *dŷ*
 that all old.woman old.man NEG become

mà *dŷ* *vŷ*], *c^həni?* *mŷ-nî* *bə* *rúŋrúŋ*
 NEG become come 1DL.EXCL CLF-two DEF together

bà *dŷ* *t^hîŋ*
 REST COP should
 ‘We will stay together until we are very old.’ [SCN-1-39.1]

9.2.4 ‘Before’ Adverbial Clause with Negative *mà*

The ‘before’ clauses, which name an event that has not happened by the time of the event named in the matrix clause, also take the preverbal negative particle *mà* and an optional locative marker following the verb of the adverbial clause. The ‘before’ adverbial clauses contain verbal operators. The ‘before’ adverbial clause in (1181) consists of the verb *ʒuk* ‘take lunch’, preceded by the negative particle *mà*, and its subject *aŋùvâ* ‘his parents’ and its object *ləp^hùŋ* ‘lunch’. Note that there is an inflected present tense operator *ka?*, and a locative expression *iká*. The adverbial clause names an event (i.e. parents eating lunch), which does not take place by the time of the event of the matrix clause (i.e. arrival of the son).

(1181)	<i>[a-ŋùvâ</i>	<i>ləp^hùŋ</i>	<i>mà</i>	<i>ʒuk</i>	<i>k-a?</i>	<i>iká]</i>
	3-parents	lunch	NEG	eat	PRES-3	there
	<i>ʒála</i>	<i>ləp</i>	<i>vɣ</i>			
	quickly	get	come			
	‘Before his parents take lunch, (the boy) quickly gets (home)’. [SNR-8-1.67]					

9.2.5 Temporal/Conditional Adverbial Clause with *imá*

Another set of adverbial clauses is marked with the subordinator *imá*, which seems to consist of the distal demonstrative *i* and the suffix *-mə* which we have seen on the complementizer *ŋâmâ* (see §9.1.1) and which we will see on the non-final operators in chained clauses below in §9.3. The form *imá* also functions as a sentential adverbial (see §9.4.2). We also find the long form of *imá*, i.e. *irámá*.

However, it does not function as a subordinator, rather it functions as a sentential adverbial which occurs sentence initially. The adverbial clause marked with *imá* does not contain a verbal operator, and thus the verb complex is non-finite.

In example (1182), the adverbial clause inside the brackets consists of the verb *ləpkʰi* ‘see’, its subject *saʔ* ‘tiger’ and its object *vícî* ‘pangolin’. Note that the verb complex in the adverbial clause does not have any inflected operators, instead the verb is immediately followed by the connective *imá*. The adverbial clause has a temporal relation of **subsequence** with the main clause – the event in the main clause follows the event in the adverbial clause. In example (1183), the adverbial clause inside the brackets consists of the verb *têdʎʔ* ‘lick and taste’, its A argument *avà* ‘the father’, and a P argument referring to ‘salt’. Note that the verb complex does not have an operator, and the verb stem is immediately followed by the subordinator *imá*. The adverbial clause is followed by a direct quote marked with the quotative *ŋâmâ*. The direct quote is also followed by the form *imá*, which however does not fit the distributional criteria of the subordinator *imá*. The matrix clause consists of the verb *kuʔ* ‘give’ and the R argument *ŋiù* marked with dative *hə*. Here the event in the adverbial clause temporally precedes the event of the matrix clause.

(1182) [*ʒéká saʔ kámá vícî ləpkʰi imá*]
 now tiger ERG pangolin see when

kəratrat mə rik kʎʔ heʔ k-aʔ
 by.force ADV die bite keep PRES-3

‘Today, when a tiger sees a pangolin, it bites and kills it.’ [SNR-3-1.19]

- (1183) *[a-và* *kámá* *tê-dʁ?* *imá]* *[a-c^hîm* *a-c^hîm*
 3-father ERG taste-lick then NMLZ-sweet NMLZ-sweet
- ηâmâ]* *imá* *a-ɲù* *hə* *ku?*
 COMP then 3-mother DAT give
 ‘After tasting (the salt), the father (said), ‘tasty, tasty’, and then gave (it) to the
 mother.’ [SNR-11-1.27]

Very often the subordinator *imá* follows two of the most grammaticalized verbs, *dʁ* ‘happen’ and *ηâ* ‘say’. The semantic contribution of these verbs in these adverbial clauses is very little, if any. It is the formal complement clauses of these verbs which contribute the lexical adverbial content to the sentence. Thus, it seems that the verb *dʁ* and *ηâ* are just helping fully inflected complement clauses with grounding information to function as adverbial clauses marked with *imá*, because *imá* cannot occur following a verb with finite operators. In example (1184), the adverbial clause consists of the verb *dʁ* ‘happen’ and its fully inflected complement clause (underlined). The verb *dʁ* is not marked with any verbal operator, and it is immediately followed by the subordinator *imá*. Note that the adverbial clause names the condition event (i.e. circumcision) for the the matrix clause event (i.e. getting saved). The condition is coded in the complement clause of the verb *dʁ* ‘happen’.

Thus, it is the verb of the complement clause of *dʁ* which contributes the main lexical content of the adverbial clause. It seems that the verb *dʁ* simply enables a negative adverbial clause marked with the operator *m-*. In example (1185), the adverbial clause

consists of the verb *d̥ɣ̥* ‘happen’ and its fully inflected complement clause

(underlined). The adverbial clause is marked with the subordinator *imá*. The adverbial clause expresses an event (i.e. finishing prayers) which acts as temporal background for the event in the matrix clause (i.e. reaping crops). However, the main content of the adverbial clause comes from the complement clause of the verb *d̥ɣ̥* ‘happen’.

- (1184) [*k^hwè* *k^hán* *m-at* *d̥ɣ̥* *imá*]
 skin cut NEG-2PL happen if
- nuʔrúm* *bəruʔ kámí* *hɣ̥p̥ɣ̥* *m-at* *d̥ɣ̥* *a*
 2PL in.no.way rescue NEG-2PL happen 3
 ‘If you do not circumcise, you will not be saved by any chance.’ [BT-15-2.2]

- (1185) [*acúp^hí* *ɲé* *t-iʔ* *nà* *d̥ɣ̥* *imá*]
 pray finish PST-1SG PFV happen when
- tù* *ɲê* *c^haʔ* *ɲê* *a-k^hán* *rì* *v̥ɣ̥* *t^híŋ* *nà*
 yam new rice new NMLZ-reap AUX come should PFV
 ‘When (we) finish praying, we should go to reap the new vegetables and rice.’
 [SNR-1-1.20]

Note that use of *d̥ɣ̥* ‘happen’ in the adverbial clause allows one to express situations which are actually not real. Thus, in (1184) the condition in the adverbial clause and the event in the matrix clause both are hypothetical. Similarly, in (1185) the situations in the adverbial clause and in the matrix clause both are unreal in that they never took place. The speaker here is describing the process of shifting cultivation, not a sequence of events that took place at some point. Thus, even though we have an inflected past tense operator *tíʔ* in the adverbial clause, the clause does not describe an event that took place at some point in the past.

The verb *ŋâ* ‘say’ also functions very much the same way in the following adverbial clauses. In example (1186), the adverbial clause consists of the verb *ŋâ* ‘say’ and its fully finite complement clause (underlined). The adverbial clause names an event (i.e. cutting/cleaning paddy field), which acts as a temporal background for the event in the main clause (i.e. cutting trees). Note that the relevant event in the adverbial clause is expressed in the complement clause of the verb *ŋâ* ‘say’. The contribution of the verb *ŋâ* ‘say’ is very little if any. In example (1187), the adverbial clause consists of the verb *ŋâ* ‘say’ and its fully finite complement clause (underlined). The adverbial clause is marked with the subordinator *imá*. The adverbial clause names an event (i.e. finish spraying medicine), which acts as a temporal background for the event in the main clause (i.e. seeds becoming ripe). Once again it is the complement clause inside the adverbial clause that contributes the content to the adverbial clause.

(1186) *[pik vwe? ŋé t-x? ŋâ imá]*
 paddy.field cut finish PST-1SG say when
bÿ zwe? k-ì
 tree cut PRES-1PL
 ‘When (we) finish cleaning the paddy field, (we) cut the trees.’ [SNR-1-1.2]

(1187) *[imá sÿvÿ ci? bə ŋé hap t-x? nà]*
 then insect medicine DEF finish spray PST-1SG PFV
ŋâ imá] a-rì a-pù ... a-mûn rì k-ə nà
 say when 3-seed 3-flower NMLZ-be.ripe AUX PRES-3 PFV
 ‘Then, after finishing spraying medicine, the flowers and seeds become ripe.’
 [SNR-1-1.18]

The examples in (1186) and (1187) describe hypothetical events. They are describing events in progress, not events that took place at some point or will take place at some point. Note that we have inflected past tense operators inside the adverbial clauses, though they do not express a past event.

The complement clause of the verb *ŋâ* ‘say’ is also found in interrogative forms. This is reminiscent of *ŋâ* ‘say’ as an utterance verb. However, these complement clauses do not have the illocutionary force of posing a question. They only look formally like questions. In example (1188), the underlined complement clause of the verb *ŋâ* ‘say’ is a polar question in form marked with the particle *nê*. However, there is no pragmatic (i.e. illocutionary) question involved in the adverbial clause. Instead, the adverbial clause names an event (i.e. finish cutting grass), which functions as the temporal background for the event of the matrix clause (i.e. uproot grass). In example (1189), the underlined complement clause of the verb *ŋâ* ‘say’ is a content question in form with the question word *b̄aru?* ‘how’ and the question particle *nî*. This is a rhetorical question, often used as an opening line for narratives.

(1188) *imá* [*c^hûŋrù* *ŋé* *t^húm* *t-i?* *nà* *nê* ***ŋâ***
 then grass.type finish cut PST-1PL PFV Q say

imá] *a-p^hù* *rì* *t^hîŋ* *hîŋ* *p^hwe?* *t^hîŋ*
 when NMLZ-uproot AUX should grass uproot should
 ‘Then, after cutting all the *Chongru* grass, we should uproot grass.’ [SNR-1-1.13]

(1189) *ibá* [*b̄aru?* *d̄x̄* *t-ə* *nî* ***ŋâ*** ***imá]***
 that how happen PST-3 Q say when

sa? *nî* *vícî* *abá* *tânî* *bə* *p^hûnâ*
 tiger and pangolin this 3DL DEF friend
 ‘How it happened was tiger and pangolin were friends.’ [SNR-3-1.2]

This tendency to use the verb *ηâ* ‘say’ in the adverbial clause sometimes goes one step further such that there are two ‘say’s, and neither of them denotes ‘to say’. Consider example (1190). There are two instances of *ηâ* ‘say’ inside the adverbial clause marked with the subordinator *imá*. One immediately precedes *imá*, and the other is inside a fully finite clause, which is functioning as the complement of the former *ηâ* ‘say’. The latter *ηâ* ‘say’ has its own complement clause. Each complement clause inside another complement clause which is inside an adverbial clause names a single event (e.g. burning of paddy field), which functions as the temporal background for the event in the matrix clause (i.e. clearing burned trees).

(1190) [[*[a-ruk* *rì* *l-i?-mə* *k^hâm* *t-a?*] *ηâ* *t-ʔ?*]
 NMLZ-burn AUX NF-1PL-NF burn PST-3 say PST-1SG

 ηâ *imá]* *cèdà* *k-ì*
 say when clear.field PRES-1PL
 ‘After burning (the paddy field), when (the weeds) burn, we clear (the paddy field).’ [SNR-1-1.5]

The expression containing the two instances of *ηâ* ‘say’ (i.e. *ηâ tʔ? ηâ imá*) is a fixed expression in several respects. First, the first instance of *ηâ* is always followed by the past tense operator *t-*. No other operator has been attested here. Second, the argument index on the past tense operator is always the first person singular index. Thus, it is not really indexing an argument. Note that the argument indexes on the other two operators *l-* and *k-* are first person plural *-i*, not first person singular as in

(1190). In this fixed expression, we can also replace the first instance of *ηâ* ‘say’ with the verb *d̂x̂*, as in (1191). Note that we have same restrictions. First, we have the past tense operator *t-*. Second, we have a first person singular index, even though there is no first person argument at all in the sentence. Thus, the verbs *ηâ* ‘say’ and *d̂x̂* ‘happen’ are parts of this fixed expression.

(1191) *[[[n̂x̂ bə t̂ŝû t̂lâ-c^hâ] d̂x̂ t-ɣ?]*
 2SG DEF God boy-DIM happen PST-1SG
ηâ imá] l̂uη bə bekun
 say if stone DEF bread
d̂x̂ t^hik t̂ê l-u? n̂t
 happen CAUS try IMP-2SG Q
 ‘If you are the child of God, can (you) try and turn the stone into bread?’
 [MOV-1-1.190]

Sometimes the subordinator *imá* is followed by *bə*, and it does not seem to add any noticeably different meaning to the sentence. Thus, its function in this construction is unclear. Consider example (1192).

(1192) *[[m̂x̂he kámá lám t-a?] d̂x̂ t-ɣ?]*
 other ERG find PST-3 happen PST-1SG
ηâ imábá] m̂x̂he n̂x̂ huk t^ĥη
 say if other LOC accuse NMLZ
 ‘If others had taken it, (I) would have accused others.’ [SCN-2-7.3]

Note that example (1192) describes a counterfactual situation, a situation that would have been true, had the situation in the conditional been true. The matrix clause of the

counterfactual sentence often takes the nominalizer *tʰɪŋ*. The section below describes other strategies for forming counterfactual sentences.

9.2.6 Counterfactual Conditional with *nɣ kə*

The form *nɣ kə*, which looks like the two locatives *nɣ* and *kə* together, marks a condition as counterfactual. The verb of the conditional clause does not take a verbal operator. The matrix verb often takes the uninflected operator *tʰɪŋ*.

In examples (1193) and (1194), the conditional clauses inside the brackets consist of the verb *twè* ‘take’ and its subject *ŋà* ‘I’. The clauses are marked with *nɣkə* and *bə*. It is not clear what *bə* is doing here. The matrix verb *ku?* ‘give’ in (1193) is marked with the zero-operator inflected with *e*. The matrix verb *ŋâ* ‘say’ in (1194) is marked with the uninflected operator *tʰɪŋ*. In example (1195), the conditional clause consists of the verb *ŋâ* ‘say’, and the clause is marked with *nɣkə*. The matrix verb *cʰu?mun* ‘meet’ in (1195) is marked with the uninflected operator *tʰɪŋ*, followed by the grammaticalized verb *dɣ* ‘happen’. The events in the matrix clauses in (1193) and (1194) are still possible provided the condition becomes true. But in these contexts, the conditions are conceived of as untrue. The event in the matrix clause in (1195) is no longer possible, because the window of opportunity is already closed.

(1193)	[<i>cʰɪncʰɣ?</i>	<i>ŋà</i>	<i>twè</i>	<i>nɣkə</i>	<i>bə</i>]
	if	1SG	take	if	DEF

ɲé tʰù m-i? dʂ a
 finish dig NEG-1PL happen 3
 ‘Even if we dig for two, three years, we will not finish digging.’ [SNR-6-4.98]

(1197) [*ɲà pʰə?kʰərà dʂ ɣ kámí]*
 1SG bat happen 1SG though

ɲà bə i-mómó pik nî i-mómó
 1SG DEF 1SG-indiscriminately fly and 1SG-indiscriminately

cʰwé dʂ m-ɣ?
 run happen NEG-1SG
 ‘Though I may be a bat, I do not fly or run indiscriminately.’ [SNR-6-4.26]

9.2.8 Purpose Clause with *ró*

Clauses can be overtly marked as purpose clauses with the subordinator *ró*, which is probably a grammaticalized use of the verb *ró* ‘want’. The purpose clauses do not contain inflected operators. In example (1198), the purpose clause inside the brackets consists of the verb *dipcʰa?* ‘soothe’ and its object *nɣcʰà* ‘our child’. This clause denotes the ‘purpose’ of the event in the matrix clause (i.e. getting a *pi* fruit). In example (1199), the purpose clause inside the square brackets consists of the verb stem *swe? pʰɣ?* ‘roast and eat’ and its object *ɲàm* ‘meat’. The purpose clause denotes the ‘purpose’ for the event in the matrix clause (i.e. getting the fire).

(1198) [*nɣ-cʰà dipcʰa? ró pì-pʰɣ zàtat*]
 1PL.INCL-child soothe PURP fruit.type-round pluck

ke? ku? l-o?
 go give IMP-2SG
 ‘Go get Pi fruit to soothe our child’ [SNR-6-4.39]

(1199) [*ɲàm swe? pʰɣ? ró mi? hìm va? vàn*]
 meat roast eat PURP man house ABL fire

twè vʒ l-oʔ
 take come IMP-2SG
 ‘Bring the fire from the man’s house in order to roast and eat meat.’
 [WNR-3-1.2]

The purpose adverbial clauses can also be post-posed to sentence final position. In example (1200), the purpose clause inside the brackets marked with the subordinator *rô* occurs following the matrix verb *rán* ‘choose’ marked with the inverse operator *t^h*.

(1200) *rʒdúŋ tísú kámá nuʔrúm múŋ vaʔ rán*
 God ERG 2PL middle ABL choose

t^h-ʒ [rùrʒ a-sân zentail p^hân-hʒ
 INV.PST-1SG news nmlz-good PN tribe-PL

hó kuʔ rô]
 preach give PURP
 ‘God Jesus has chosen (me) from among you to preach the message to the Gentile people.’ [BT-15-4.3]

Purpose clauses with the negative operator are attested in clause final position, as shown in (1201) and (1202). The purpose clauses here have finite verb complexes.

(1201) *imá asâncù l-at [a-kúmló múŋ*
 then pray IMP-2PL 3-temptation inside

ʒà m-at rô]
 fall NEG-2PL PURP
 ‘Pray so that (you) do not fall into temptation.’ [MOV-4-1.5]

(1202) *asâncù l-at [nuʔrúm a-kúmló kámá*
 pray IMP-2PL 2PL 3-temptation ERG

ŋé rə m-at rô]
 win INV.NON.PST NEG-2PL PURP
 ‘Pray so that temptation cannot win you.’ [MOV-3-1.312]

It is possible to code the object of the verb inside the purpose clause as a possessive prefix when it is a personal pronoun. In example (1203), the object of the verb *rám* ‘call’ inside the purpose clause inside the brackets is prefixed on the verb with the possessive prefix *mə-* ‘2SG’. The subject of the purpose clause *ηà* ‘I’ is raised to the object position of the matrix clause with the verb *t^hwám* ‘send’. Note that the subject of the purpose clause can be easily moved around. It follows the purpose clause in (1203) and precedes it in (1204).

(1203)	<i>i-và</i>	<i>kámá</i>	<i>[mə-rám</i>	<i>rô]</i>	<i>ηà</i>
	1SG-father	ERG	2SG-call	PURP	1SG
	<i>t^hwám</i>	<i>t^h-γ</i>			
	send	INV.PST-1SG			
	‘My father sent me to call you.’			[Elicited]	

(1204)	<i>i-và</i>	<i>kámá</i>	<i>ηà</i>	<i>[mə-bu?</i>	<i>rô]</i>
	1SG-father	ERG	1SG	2SG-beat	PURP
	<i>t^hwám</i>	<i>t^h-γ</i>			
	send	INV.PST-1SG			
	‘My father sent me to beat you.’			[Elicited]	

9.2.9 Substitutive Clauses

There seem to be two ways of forming substitutive clauses. One strategy is to use *t^hγ?mə*, which consists of the relator noun *t^hγ?* ‘over’ and the ablative postposition *mə*. The form *t^hγ?mə* also functions as the marker of the standard NP in a comparative construction (see §3.2.1). The verb of the substitutive clause seems to occur in more nominalized form, prefixed by *a-*, or else it takes checked stems. Also

note there is no operator on the verb in the substitutive clause. This strategy is illustrated in (1205). The substitutive clauses are put inside the brackets, which are followed by the matrix clause.

(1205) <i>ai</i>	<i>[a-dé-mun</i>	<i>t^hʔmə]</i>	<i>[tʔ-ro?</i>	<i>ke?</i>			
EXCLAM	NMLZ-argue-RECIP	instead	family-fight	go			
	<i>t^hʔmə]</i>	<i>táhé</i>	<i>nʔ</i>	<i>bà</i>	<i>hó</i>	<i>túŋ</i>	<i>e</i>
	instead	elsewhere	LOC	REST	get.aside	live	1PL
	‘Hey, instead of arguing and fighting, (we) will go aside and live elsewhere.’						
	[SNR-13-1.20]						

The other strategy involves using the expression *dʔ a kámí*, which consists of the verb *dʔ* ‘happen’, the third person index *a*, and the concessive marker *kámí*. This expression usually occurs as sentence initial sentential adverbial elsewhere (see §9.4.4). The substitutive clause in (1206) is a fully finite clause with the verb *rí* ‘die’ marked with the inflected negative operator *ma?*. The clause is then marked with the expression *dʔ a kámí*.

(1206) <i>[atî-c^hà</i>	<i>bə</i>	<i>rí</i>	<i>m-a?</i>	<i>dʔ a kámí]</i>
3SG-DIM	DEF	die	NEG-3	instead
<i>a-zíp</i>	<i>bà</i>	<i>rì</i>	<i>k-a?</i>	
NMLZ-sleep	REST	AUX	PRES-3	
‘She is not dead, instead (she) is just sleeping.’				[MOV-1-1.291]

9.3 Clause Chaining

Chaining of multiple clauses within a single sentence is very common in Hakhun. These sentences may consist of several non-final or medial clauses which do not occur as independent sentences and a final clause which can potentially occur as

an independent sentence. The non-final clauses are non-finite in that they do not contain any temporal/aspectual information. They are characterized by two elements – an inflected non-final operator *l-* and the suffix *-mə* on the non-final operator. I will gloss both elements as NF. We have seen the suffix *-mə* on the complementizer above in §9.1.1.

In example (1207), there are two non-final clauses (bracketed and underlined), and a final clause. The first non-final clause consists of the intransitive verb *tún* ‘sit/stay’ marked with the inflected non-final operator *lə* which is further suffixed with the non-final suffix *-mə*. The second non-final clause consists of the intransitive verb *vɿ* marked with the inflected non-final operator *lə*, which is further suffixed with the non-final suffix *-mə*. This non-final clause contains the subject of all three clauses – *c^hùjù*, *abá lúnɿhɿ* ‘the Chunyus, the leaders’. The final clause consists of the verb *ɲup* ‘take help/surrender’ marked with the inflected present tense operator *ka?*.

(1207)	<u><i>[imá ləpán-t^hə</i></u>	<u><i>tún l-ə-mə]</i></u>	<i>[c^hùjù,</i>	<i>abá</i>		
	then	week-one	sit	NF-3-NF	PN	this
	<u><i>lúnɿ-hɿ</i></u>	<u><i>vɿ l-ə-mə]</i></u>	<i>ha?k^hûn</i>	<i>nuk-ɲù</i>		
	leader-PL	come	NF-3-NF	PN	village-AUG	
	<i>kə</i>	<i>ɲup</i>	<i>k-a?</i>			
	LOC	take.help	PRES-3			
	‘Staying (there) for a week, the Chunyus, the leaders come and ask for help from the main Hakhun village.’ [SNR-15-1.20]					

In example (1208) also we have three chained clauses. The non-final clauses are inside the brackets and underlined. The first non-final clause consists of the verb stem

lip vɔ̀ ‘enter’ and its subject *pʰəʔkʰərâ* ‘bat’ and a locative participant *ikʰùpù nɔ̀* ‘in my nostril’. The non-final clause is marked with the inflected non-final operator *l-*, suffixed with the non-final suffix *-mə*. The second non-final clause consists of the verb *ŋâ* ‘say’ and its complement clause. The non-final clause is marked with the inflected non-final operator *lɔ̀ʔ*, suffixed with the non-final suffix *-mə*. The final clause consists of the verb *toʔ* ‘jump’ marked with the past tense operator *tɔ̀ʔ*.

- (1208) *[i-kʰùpù nɔ̀ pʰəʔkʰərâ lip vɔ̀ l-ə-mə]*
 1SG-nostril LOC bat enter come NF-3-NF
- [cà dɔ̀ k-ɔ̀ bá ŋâ l-ɔ̀ʔ-mə]*
 what happen PRES-1SG DUB think NF-1SG-NF
- toʔ t-ɔ̀ʔ*
 jump PST-1SG
 ‘When a bat entered into my nostril, wondering what is happening, (I) jumped.’ [SNR-6-4.21]

Examples (1209) and (1210) illustrate two more chained clauses with first person plural subjects and second person plural subjects respectively.

- (1209) *[loʔ twè l-iʔ-mə] tiŋ tiŋ tiŋ-mun t-iʔ*
 shield take NF-1PL-NF SS SS SS-RECIP PST-1PL
 ‘Taking the shields, (we) fought making “ting ting” noise with each other.’
 [SNR-15-1.28]
- (1210) *[arəbá tʰɔ̀ʔ l-at-mə] [aruʔ rì]*
 this start.fire NF-2PL-NF like.this do
- [l-at-mə] pʰɔ̀ʔcʰaʔ l-at*
 NF-2PL-NF eat IMP-2PL
 ‘Starting the fire, doing like this, eat (the meat).’ [SNR-7-1.23]

Non-final clauses usually occur preceding the finite final clause. However, they can also sometimes occur following the finite final clause, probably expressing an afterthought, as illustrated in (1211).

- (1211) *kitsi* *và* *m̂tʰə* *mó* *pʰɪn* *k-aʔ*
 PN person CLF-one by.mistake spear PRES-3
- [haʔme* *ŋâ* *l-ə-mə]*
 PN think NF-3-NF
 ‘(The Chunyu) speared a Kitsi person by mistake, thinking (him) to be Hame.’
 [SNR-15-1.5]

The chained clauses most often have the same subject. Thus, in examples (1209), (1210), and (1211), the subject is constant across the chained clauses. The subject in the chained clauses in (1209) is a first person plural argument referring to Hakhun people. The subject in the chained clauses in (1210) is a second person plural argument referring to two human brothers. The subject in the chained clauses in (1211) is a third person plural argument referring to a community called Chunyu. However, occasionally we also find sentences in which the chained clauses have different subjects. In (1212), the subject of the first non-final clause with the verb *lip* *v̂* ‘enter’ is the *pʰəʔkʰərâ* ‘bat’, while the subject of the second non-final clause with the verb *ŋâ* ‘think’ and the final clause with the verb *toʔ* ‘jump’ is another third person subject referring to an elephant. In (1213), the subject of the non-final clause with the verb *ŋâ* ‘say’ is the NP *səŋà* ‘crab’, whereas the subject of the final clause with the verb *lám keʔ* ‘go looking for’ is a first person singular argument referring to a squirrel.

- (1212) [*i-kʰùpù* *nɣ* *pʰəʔkʰərà* *lip* *vɣ* *l-ə-mə]*
 1SG-nostril LOC bat enter come NF-3-NF
- [cà* *dɣ* *k-ɣ* *bá* *ŋá* *l-ɣ?-mə]*
 what happen PRES-1SG DUB think NF-1SG-NF
- to?* *t-ɣ?*
 jump PST-1SG
 ‘When a bat entered into my nostril, wondering what is happening, (I) jumped.’ [SNR-6-4.21]

- (1213) [*sè-ŋà* *kámá* *ŋá* *l-ə-mə]* *lám* *ke?* *ku?* *t-ɣ?*
 crab-FEM ERG say NF-3-NF search go give PST-1SG
 ‘The crab asked (me), and (I) went looking for (the fruit).’ [SNR-6-4.41]

A non-final clause may be followed by the particle *bə*, which we have seen as a definite marker (in §5.2.3) and subordinator (in §9.2.1). The function of *bə* following the non-final clause is not clear. Examples (1214), (1215), and (1216) illustrate non-final clauses followed by *bə*.

- (1214) [*ví* *kámá* *sú* *l-ə-mə]* *bə* *rik* *ŋat*
 monkey ERG look NF-3-NF ??? die hold
- rik* *ŋat* *zà* *bu?* *zà* *bu?* *he?*
 die hold fall beat fall beat keep
 ‘The monkey looked (at the ants), then smashed (them) to death, and dropped off (the tree).’ [SNR-7-1.45]

- (1215) [*tùmla* *hwàm* *ván* *l-ə-mə]* *bə*
 all pull along NF-3-NF ???
- irá* *nɣ* *vikrə* *hu?* *cʰí* *ván*
 that LOC quickly steal KEEP along
 ‘Pulling along all (the mushroom), (the pangolin) stole away (the mushroom).’ [SNR-4-2.3]

- (1216) [*vaʔhàn* *lîŋ* *kʰâ* *kámá* *kʰat-ru?* *kʰat-ru?* *rì*
 bamboo.type string split.piece with reap-cont reap-cont do

l-ə-mə] *bə* *iká* *va?* *vàn* *hûŋ* *t-ə* *ŋà*
 NF-3-NF ??? there ABL fire appear PST-3 hearsay
 ‘Pulling the bamboo strip back and forth, the fire started.’ [SNR-7-1.18]

It is also not uncommon in narratives to see a non-final operator marked with the connective *mə* followed by the subordinator *imá*, as illustrated in (1217) and (1218). Once again, there is no obvious change in meaning.

(1217) [*a-lû* *bə* *iru?* *ku?* *l-i?*-*mə]* *imá*
 NMLZ-offer DEF like.that give NF-1PL-NF then

pîŋ *nɣ* *he?* *ke?*
 granary LOC keep go
 ‘After giving away the offerings, we keep (the rice) in the granary...’
 [SNR-1-1.24]

(1218) *irámá* [*hìm* *nɣ* *hùn* *ván* *l-ə-mə]* *imá*
 then house LOC carry along NF-3-NF then

t^hɣ? *t-a?*
 start.fire PST-3
 ‘Then bringing (the fire) home, (the men) started (the fire).’ [SNR-7-1.23]

The grammaticalized verb *ŋà* ‘say’, which we have discussed under complementation in §9.1.1, interacts with the non-final operator in various ways. One type of interaction is that the verb *ŋà* ‘say’ can directly take the non-final suffix *-mə*. This may have come through a process of reduction and deletion of the non-final operator *l-* altogether. Compare examples (1219) and (1220). In example (1219), the verb *ŋà* ‘say’ inside the brackets is directly marked with the non-final suffix *-mə*, and it is preceded by what looks like its complement clause. In example (1220), the verb *ŋà* ‘say’ inside the brackets is marked with a non-final operator *l-*, which is suffixed

with the non-final suffix *-mə*. In terms of semantic contribution, the two *ŋâ* ‘say’ verbs are not different. It is only their syntactic structure which is different. It is very likely that through reduction the structure in (1219) has developed from the structure in (1220).

(1219) *[irá t^hŋ lúŋ ke? ŋâ-mə]*
 that place attack go think-NF

c^hùŋù ha? nʃ kà t-i?
 PN village LOC go PST-1PL
 ‘Thinking (we) will attack that place, (we) went to the Chunyu village.’
 [SNR-15-1.6]

(1220) *[bəru? rì l-i?-mə kəp e ŋâ l-ə-mə]*
 how do NF-1PL-NF get 1PL think NF-3-NF

aná arábá a-p^hʃ arábá vək^hâ
 here this NMLZ-first this crow

ke? t^hik t-a?
 go CAUS PST-3
 ‘Thinking, ‘How will (we) get (the fire)?’, (the men) sent the crow first.’
 [SNR-7-1.35]

The second kind of interaction of the non-final operator and the verb *ŋâ* ‘say’ is seen below where an uninflected form of the non-final operator *l-* is followed by the verb *ŋâ* ‘say’ which is suffixed with the non-final suffix *-mə*. At this point, the verb *ŋâ* ‘say’ is an integral part of the non-final construction, the non-final marker in particular. It is no longer possible to treat *ŋâ* ‘say’ as a verb. I will treat *ŋâmə* as a non-final particle and gloss it as NF. The non-final clause in (1221) consists of the verb *súm* ‘hold’, followed by the uninflected non-final operator *lə*, and the particle

ηâmâ. In example (1222), the non-final clause consists of the verb *v̄r̄* ‘come’, the nominal subject *it̄* ‘my grandfather’, and the locative *vù t̄ê t̄^hûη va?* ‘from the place of fortune checking’. The non-final clause is marked with the uninflected non-final operator *l̄* and the non-final particle *ηâmâ*. Note that we have same subject in (1221) and different subjects in (1222).

(1221) [*z̄è kap aru? s̄úm l̄ ηâmâ*]
 iron tongs like.this hold NF NF

aru? lwe? p^hr̄? r̄ ηâ t-a?
 like.this take eat 1SG say PST-3
 ‘Holding the tongs like this, she (said), “I will take out (the eyes) like this and eat them”.’ [SNR-9-8.5]

(1222) [*i-t̄ ... v̄ù t̄ê t̄^hûη va? v̄r̄ l̄*
 1SG-grandfather bird check.fortune place ABL come NF

ηâmâ] at̄i-và kámá b̄aru? n̄i
 NF 3SG-MAS ERG how Q

v̄ù a ηâ t-ə ηà
 bird 3 say PST-3 hearsay
 ‘When my grandfather came from the place of fortune checking, he (Kepa) said, “How is the fortune?”’ [SNR-14-1.5]

We also find the non-final particle *ηâmâ* with non-final clauses headed by the verb *ηâ* ‘say/think’. In example (1223), the non-final clause consists of the verb *ηâ* ‘say’ and its complement clause (underlined). The non-final clause is marked with the uninflected non-final operator *l̄* (note that we have a first person plural subject argument in both clauses) and the non-final particle *ηâmâ*. The sentence (1223) is not different in terms of meaning in any obvious way from (1219) and (1220), although

they all have very different looking non-final clauses. In example (1224), the non-final clause consists of the verb *ηâ* ‘say’ and its complement clause (underlined). The non-final clause is marked with the uninflected non-final operator *lə* and the non-final particle *ηâmâ*. There are total of ten instances of this construction in the database.

(1223) [*bêηâ* *ibá* *le?* *lúη* *kà* *e* ***ηâ*** ***lə***
 other.side that again attack go 1PL think NF

ηâmâ *vù* *ibá* *vikrə* *tê*
 NF bird that quickly check.fortune

kulamkan *iká*
 PN there

‘Thinking (we) will attack the other side again, (we) checked the bird for omen at Kulamkan.’ [SNR-14-1.1]

(1224) [*c^hà-tí* *và-hʁ* *cəp* *i* *o* ***ηâ*** ***lə***
 child-person person-PL stand 1PL EXCLAM say NF

ηâmâ *ràn* *k^ha?* *me?* *ibá* *lʁ* *cəp*
 NF heart bitter ABL that reason stand

t-ə *ηà*

PST-3 hearsay

“‘We people with family will go to war’”, saying like that (they) stood up in anger.’ [SNR-14-1.11]

The non-final suffix *-mə* is also found on the inflected negative operator.

Unlike non-final clauses with the non-final operator *l-*, these clauses with the negative operator are technically finite and can stand as independent sentences. However, with the non-final suffix these clauses blend in among the chained clauses, and contribute events to a sequence of events coded by other chained clauses in the sentence. In example (1225), we have three clauses. The first clause is marked with the inflected

non-final operator *lə*, further suffixed with the non-final suffix *-mə*. The second clause contains the inflected negative operator *maʔ*, also further suffixed with the non-final marker *-mə*. The final clause contains an inflected past tense operator *tə*. The events in these clauses form a nice thematically coherent sequence – running, not being able to breathe, and then dying. In example (1226), we have two clauses. The non-final clause inside the brackets is marked with the inflected negative operator *maʔ*, suffixed with the non-final suffix *-mə*. The relation between the events of the non-final and the final clause can be interpreted as circumstantial. In example (1227), the non-final clause inside the bracket is marked with the negative operator *maʔ*, suffixed with the non-final suffix *-mə*. The events of the two clauses can be interpreted as circumstantial.

(1225) *[k^hiʔhî* *bə* *bwê* *c^hwé* *l-ə-mə]* *[rɣʔ*
 deer DEF be.tired run NF-3-NF breathe

m-aʔ-mə] *rí* *t-ə* *ŋà*
 NEG-3-NF die PST-3 hearsay
 ‘Feeling tired from running, not being able to breathe, the deer died.’
 [SNR-4-4.10]

(1226) *k^hûk^hup* *bə* *[a-ŋù* *a-c^hwé* *dɣ*
 tortoise DEF 3-mother NMLZ-run happen

m-aʔ-mə] *a-c^hâ-hɣ* *mâ* *nɣ* *tɪpc^hí* *t-aʔ* *nî*
 NEG-3-NF 3-child-PL front LOC hide PST-3 Q
 ‘Did the tortoise hide her children ahead, instead of the mother running (in the race)?’ [SNR-4-5.2]

(1227) *[cí* *kuʔ* *m-aʔ-mə]* *vík^hâ* *kámá* *a-pûŋ*
 fear give NEG-3-NF porcupine ERG 3-quill

t^hwám *kuʔ* *t-aʔ*
 send give PST-3
 ‘Without any fear, the porcupine sent its quills (to the elephant).’ [SNR-5-1.10]

The most common semantic relation we have seen among the chained clauses is that of **sequence**. The events of the non-final clauses precede the event of the final clause. We have also seen **causal** or **circumstantial** relation among the chained clauses. Examples (1228) through (1230) provide more illustrations of this relation. In these examples, the non-final clauses inside the brackets express reason or circumstances which bring about the events in the final clauses. Thus, in example (1228), the event in the non-final clause (i.e. your hand smells bad) brings about the event in the final clause (i.e. the fortune came out bad). In example (1229) the event in the non-final clause (i.e. the crab asked (the squirrel)) brings about the event in the final clause (i.e. the squirrel went looking for (a fruit)). In example (1230) the event in the non-final clause (i.e. lying) brings about the event in the final clause (i.e. he got the job).

(1228) [*bə-dxʔ* *dxʔ-sî* *dxʔ-nâm* *dê* *l-ə-mə]*
 2SG-hand hand-sour hand-stinky happen NF-3-NF

c^hiʔ *k-aʔ*
 out.of.order PRES-3
 ‘Your hand is bad, therefore, (the fortune) came out bad. [SNR-14-1.7]

(1229) [*sè-ŋà* *kámá* *ŋà* *l-ə-mə]* *lám* *keʔ* *kuʔ* *t-xʔ*
 crab-FEM ERG tell NF-3-NF search go give PST-1SG
 ‘When the crab asked me, I went looking for (the Pi fruit) for her.’ [SNR-6-4.41]

(1230) [*atî-và* *a-ljaʔ* *rì* *l-ə-mə]* *ləp* *t-aʔ*
 3SG-MAS NMLZ-lie AUX NF-3-NF get PST-3
 ‘He got (the job) by lying.’ [Elicited]

9.4 Inter-Sentential Linkage

There are a few other ways of connecting one predication with another. These predications can be considered different sentences, as they are morphosyntactically and phonologically independent of each other, although on a discourse level they are all connected. These various means described below are typical of narrative discourse. These mechanisms are more or less equally frequent.

9.4.1 Tail-Head Linkage

One way of connecting a sentence to a previous discourse is to repeat the last (final) predicate in the subsequent sentence. The repeated predicate takes the non-final operator *l-* instead of the finite operator in the original sentence, and is suffixed with the non-final suffix *-mə*. Thus, the repeated predicate looks like a non-final clause.

The sentences in (1231) (a) and (b) are two consecutive sentences. Note that the verb complex of the final clause (underlined) in sentence (a) is repeated in the beginning of the subsequent sentence (b). The repeated clause in (b) takes the inflected non-final operator *l-* inflected with the same index as the original operator *k-* in the previous sentence, namely the first person plural index. The non-final operator is suffixed with the non-final suffix *-mə*. Similarly, in example (1232), the sentences in (a) and (b) are consecutive sentences in the narrative. The verb complex (underlined) in the final clause of sentence (a) is repeated in the beginning of the subsequent sentence (b). The past tense operator *t* in (a) is replaced with the non-final

operator *l* in (b), though we have the same index. The non-final operator is suffixed with *-mə*.

(1231) (a) *imá* *ɲé* *l-iʔ-mə* *dá-tʰə* *té* *heʔ*
 then finish NF-1PL-NF month-one around keep
l-iʔ-mə *a-ruk* *rì* *k-ì*
 NF-1PL-NF NMLZ-burn AUX PRES-1PL
 ‘Then finishing (cutting branches), keeping (the branches) for around a month, (we) burn (them). [SNR-1-1.4]

(b) *a-ruk* *rì* *l-iʔ-mə*, *kʰâm* *t-aʔ* *ɲâ* *t-ɣʔ*
 NMLZ-burn AUX NF-1PL-NF burn PST-3 say PST-1st
ɲâ *imá* *cèdà* *k-ì*
 say when clear PRES-1PL
 ‘Burning (the branches), when they burn, (we) clear (them). [SNR-1-1.5]

(1232) (a) *rɣ-tî-ɲà* *irábá* *vɣ* *l-ə-mə*
 sky-person-FEM that come NF-3-NF
irá *rɣni* *ibə* *sit* *t-aʔ*
 that two.people that marry PST-3
 ‘The sky lady came, and then the two got married.’ [SNR-9-6.7]

(b) *sit* *l-ə-mə*, *hənî* *cʰà* *ibá* *irá*
 marry NF-3-NF 3DL child that there
zétʰə *vikrə* *kʰɿ* *ɲà*
 once.more quickly born hearsay
 ‘Having gotten married, their child was quickly born once again.’ [SNR-9-6.8]

9.4.2 Linking with *imá*

The form *imá*, which we have seen as a subordinator in §9.2.5, is also found as a linking device between sentences. The form *imá* is found in various shapes – long

form *irámá*, and marked with *bə* (*imábá*, *irámábá*). As a sentential linker, *imá* is phonologically and grammatically part of the sentence that follows it.

In example (1233), (a) and (b) are two consecutive sentences. Both sentences have finite verb complexes with the inflected past tense operator *tə* followed by the hearsay marker *ŋà*. Note that the hearsay marker is a solid sign of an end of a sentence. It is never found in an embedded sentence (except perhaps in a direct quote). The sentence in (b) starts with the connective *imá*, linking it to the previous sentence or discourse. Similarly, in example (1234), (a) and (b) are two independent consecutive sentences with finite verb complexes containing inflected operators *t-a?* ‘past-3’ and *k-a?* ‘present-3’ respectively. The second sentence starts with *imá* and connects it to the previous sentence or discourse.

- (1233) (a) *a-hîŋ* *mə* *p^hɣ?* *t-ə* *ŋà*
 NMLZ-raw ADV eat PST-3 hearsay
 ‘(The men) ate (the meat) raw.’ [SNR-7-1.13]
- (b) *imá* *zùbê* *c^həp^hù* *kámá*, *ai* *nɣ?*
 then ghost brothers ERG EXCLAM PROH
- p^hɣ?* *nɣ?* *p^hɣ?* *an*, *ŋâ* *t-ə* *ŋà*
 eat PROH eat 2PL say PST-3 hearsay
 ‘Then, the ghost brothers said, ‘Hey, do not eat, don’t eat.’ [SNR-7-1.14]
- (1234) (a) *ze?-vâ* *bə* *a-vâ* *iru?*
 squirrel-MAS DEF 3-father like.that
- dɣ̂* *t-a?*
 happen PST-3
 ‘The squirrel was the father.’ [SNR-6-4.4]

- (b) *imá hənî c^hà m̂-t^hə k^hĩ t-a?*
 then 3DL child CLF-one born PST-3
- ŋâmâ ŋâ k-a?*
 COMP say PRES-3
 ‘Then, it is said that they two gave birth to a child.’ [SNR-6-4.5]

As a sentential or discourse connective, *imá* is also found in its long form

irámá, as in the beginning of the sentences in (b)’s in examples (1235) and (1236).

- (1235) (a) ... *ʒùbê c^həp^hù vâ-ni mi?*
 ... ghost brothers CLF-two person
- c^həp^hù vâ-ni*
 brothers CLF-two
 ‘There were two ghost brothers, two human brothers.’ [SNR-7-1.5]

- (b) *irámá ʒe? n̂ ʒuʔsûŋ kûn lám*
 then forest LOC rat.kind hole search
- kà t-a? ŋà*
 go PST-3 hearsay
 ‘Then, (they) went looking for rat holes in the forest.’ [SNR-7-1.6]

- (1236) (a) *imá nap-he n̂ bə nepolis n̂*
 then day-other LOC DEF PN LOC
- hú t-i?*
 reach PST-1PL
 ‘Then, (we) arrived at Neapolis the next day.’ [BT-16-6.1]

- (b) *irámá nîrûm p^hilipi n̂ hú t-i?*
 then 1PL.EXCL PN LOC reach PST-1PL
 ‘Then, we reached Philippi.’ [BT-16-6.2]

Examples (1237) and (1238) illustrate the connective marked with the definite

bə.

- (1237) (a) *imá a-c^hà hə bə ibá càm ibá*
 then 3-child DAT DEF that rice that
i kámá cup c^ha? t^hik t-ə ɲà
 that INST eat.with eat CAUS PST-3 hearsay
 ‘Then (the ghost family) fed their child the rice with it (i.e. the salt).’
 [SNR-11-1.29]
- (b) *irámábə a-và kámá ará-ṛ̣ nu?-ha?*
 then 3-father ERG this-SIM 2PL-place
ṇ tóà ɲù nê ɲâ t-ə ɲà
 LOC EXIST lot Q say PST-3 hearsay
 ‘Then, the father asked, ‘Do you have a lot more like this one (i.e. salt)
 at your place.’ [SNR-11-1.30]
- (1238) (a) *keʔpa t-a? a-mún bə*
 PN PST-3 3-name DEF
 ‘His name was Keqpa.’ [SNR-14-1.9]
- (b) *imábə, jo iru? ḍ̣ imá*
 then ok like.that happen if
c^hà-tí và-ḥ cap i o,
 child-person person-PL stand 1PL EXCLAM
ɲâ lə ɲâmâ
 say NF NF
 ‘Then, saying, ‘Ok, even if that is the case (referring to bad omen), we
 people with family will go to war (literally stand up).’ [SNR-14-
 1.10]

The form *imá/irámá* is also found in the middle of a sentence, especially following the subject/ergative argument, and it is not clear why it occurs in that position. In example (1239), the form *imá* is found following the subject argument *anâvà kámá* ‘the younger brother’ in (b). In example (1240), the *irámá* is found following the subject argument *mí? c^həp^hù kámá bə* ‘the human brothers’.

(1239) (a) *a-p^hù* *ibá* *vut* *nʻ* *keli* *keli*
 3-elder.brother that spike LOC through RED

bə *c^hôc^hi?* *nʻ* *aru?* *rik* *rím* *t-ə* *ɲà*
 ??? all LOC like.this die pierce PST-3 heresay
 ‘The elder brother got pierced all (over his body) on spikes and died.’
 [SNR-11-1.49]

(b) *irámá* *a-nâ-và* *kámá* *imá* *riklán* *c^hí*
 then 3-younger.sibling.MAS ERG then kill KEEP

l-ə-mə *imá* *pathe?* *c^hí* *t-a?*
 NF-3-NF then throw.away KEEP PST-3
 ‘Then, killing (the older brother), the younger brother threw him
 away.’ [SNR-11-1.50]

(1240) *twè* *ván* *l-ə-mə* *mi?* *c^həp^hù* *kámá* *bə* *irámá*
 take along NF-3-NF person brothers ERG DEF then

círʻ? *ɲat* *l-ə-mə* *p^hʻ?* *t-ə* *ɲà*
 tear hold NF-3-NF eat PST-3 hearsay
 ‘Bringing (the meat), the two brothers then tore (the meat), (and) ate (it).’
 [SNR-7-1.12]

9.4.3 Linking with *dʻ imá*

The expression *dʻ imá* also functions as an inter-sentential linking device. It consists of the verb *dʻ* ‘happen’ and the connective *imá* seen in the previous section. This expression also relates a sentence to the previous discourse. It seems to be used when the relevant sentence is a logical conclusion of the previous discourse.

(1241) (a) *a-vín* *ləpk^hi* *ɲo?* *k-ʻ*
 NMLZ-again see want PRES-1SG
 ‘I want to see again.’ [MOV-3-1.137] (Speaker A)

(b) *dʻ imá* *sú* *l-o?*
 then look IMP-2SG
 ‘Then, look.’ [MOV-3-1.138] (Speaker B)

- (1242) (a) *a-sá* *təlá-c^hà* *bə* *rʂdúŋ tísú* *túnj* *t^hŋ*
 NMLZ-holy boy-DIM DEF God sit NMLZ
- dʂʔlá* *ŋá* *nʂ* *tóà* (Speaker A)
 right.hand side LOC EXIST
 ‘The Holy Child is on the right side of where God sits.’
- (b) *dʂ imá* *nʂ* *tísú* *təlá-c^hà* *nê* (Speaker B)
 then 2SG God boy-DIM Q
 ‘Then, are you God’s child?’ [MOV-4-1.54]

9.4.4 Linking with *dʂ a kámí*

The expression *dʂ a kámí* links a sentence which expresses an event which goes contrary to the expectation built in the previous discourse. It can be translated as ‘however’ or ‘yet’. This expression seems to consist of the verb *dʂ* ‘happen’, the third person index *a*, the locative *kə*, and the additive *mì*. The context in (1243) is that the speaker, a follower, here meets Jesus after he is resurrected, and is expected to recognize him. The fact that he did not recognize him for a while is marked as contrary to that expectation with *dʂ a kámí* in sentence (b). In example (1244), the sentence (b) contradicts the assumption that innocent people do not suffer which was evoked in (a).

- (1243) (a) *nîrûm* *kámá* *lâm* *nýmá* *cut-mun* *t-i?*
 1PL.EXCL ERG road from meet-RECIP PST-1PL
 ‘We met along the road.’ [MOV-1.178]
- (b) *dʂ a kámí* *a-sâm* *ʒat* *tə* *m-i?*
 however 3-appearance know PST NEG-1PL
 ‘However, I did not recognize him.’ [MOV-1-179]

- (1244) (a) *atî kámá cằlì súm-c^hi? súm tə m-a?*
 3SG ERG what work-bad do PST NEG-3
 ‘He has not done anything wrong.’ [MOV-4-1.140]
- (b) *ḍx̣ a kámí atî n̄hi? n̄am n̄y m̄ar̄in-t^hə*
 however 3SG 1DL.INCL with LOC same-one
- cámná k-a?*
 suffer PRES-3
 ‘Yet, he is suffering the same (fate) with us.’ [MOV-4-1.141]

9.4.5 Linking with *ɲàmə̀*

The linker *ɲàmə̀* also connects a sentence which expresses an event which contrasts with the previous discourse. However, it does not express contrast with assumptions evoked in the previous discourse. It contrasts the content of the clause with what is stated overtly in the previous discourse. Thus, in (1245), (a) states that the bird is very small and (b) states that it is the biggest. In (1246), (a) states that they want to hear, but (b) states that they do not hear. It can be translated as ‘but’.

- (1245) (a) *c̀inl̀u-c^hà bə ... ité-c^hà*
 bird.kind-DIM DEF ... that.much-DIM
 ‘Cinlu is very small (bird).’ [SNR-2-2.17]
- (b) *ɲàmə̀ m̄ūŋk̄àha? n̄y a-d̄ūŋ p̄ant^hùm*
 but world LOC NMLZ-big SPLT
 ‘But it is the biggest in the world.’ [SNR-2-2.17]
- (1246) (a) *a-te? ɲo? k-a?*
 NMLZ-hear want PRES-3
 ‘(They) want to hear.’ [MOV-3-1.100]
- (b) *ɲàmə̀ tíŋte? m-a?*
 but hear NEG-3
 ‘But, they do not hear.’ [MOV-3-1.100]

APPENDIX A

ABBREVIATIONS

1/2/3	first/second/third person
A	agent-like argument of transitive clause
ABL	ablative case
ADD	additive particle
ADV	adverbial
AUG	augmentative
AUX	auxiliary
CAUS	causative
CLF	classifier
COM	comparative degree
COMP	complementizer
COMPL	completive
CON	continuous (ru?)
COP	copula
DAT	dative case
DEF	definite
DEM	demonstrative
DIM	diminutive
DP	discourse particle
DU	dual
DUB	dubitative
ERG	ergative case
EXCL	exclusive
EXCLAM	exclamative
EXIST	existential copula
FEM	female
FOC	focus
GEN	general (classifier)
HON	honorific
IMP	imperative

INCL	inclusive
INV	inverse
LOC	locative
MAS	masculine
NEG	negative
NF	non-final
NMLZ	nominalizer
NON.PST	non-past
ONOM	onomatopoeia
PCT	property-concept term
PERM	permissive
PFV	perfective
PL	plural
PRES	present tense
PROG	progressive
PROH	prohibitive
PROX	proximal
PST	past tense
PURP	purpose
Q	question particle
QUOT	quotative
RC	relative clause
RECIP	reciprocal
RED	reduplication
S	single argument of intransitive clause
SG	singular
SIM	Simulative
SS	sound symbolic
SPLT	superlative degree

APPENDIX B

TEXT: SNR-1-SHIFTING CULTIVATION IN HAKHUN COMMUNITY

Phulim Hakhun describes the process of cultivating crops in the hills used by the Hakhun community. Each year the villagers collectively choose a piece of land in the hills and work on it to grow rice and vegetables. First, they clear the land by cutting down the trees and the underwoods, and burning them once they are dry. After cleaning the land, they plant the seeds and cover them with soil in order to keep them from birds and animals. Few weeks later, they uproot any weeds that grow in the field. When the crops grow and start bearing flowers, they spray medicine to kill the insects. Once the crop is ready for harvesting, they go and pray in the church and start harvesting. They offer part of their harvested crops to villagers (who are unable to work) and fill their granaries with the rest of the crops.

This text was recorded in 2013 at Malugaon by me in the presence of Khithung Hakhun and others. This narrative was transcribed and translated by me with the help of Khithung Hakhun (KH). It is interlinearized in FLE_x. The recording, which is about six and a half minutes long, is in the file: SDM23-20130808-1_KB_Z_Phulim_an-account-of-shifting-cultivation. Once again, the numeral 1 represents the low tone, numeral 2 represents the high tone, and the numeral 3 represents the falling tone.

1.1	pik	vwe [?] pik	vwe [?] nam tan pik	vwe [?] nam tan ibə
	pik	vwe [?] pik	vwe [?] nam ³ tan ² pik	vwe [?] nam ³ tan ² ibə ²
	paddy field cut	paddy field cut	bush cut paddy field cut	bush cut that
	abr	kə bə pik	vu ki	.
	a-	bɣ ³ kə bə pik	vu ¹ k	-i ¹
	NMLZ	start LOC DEF	paddy field cut PRES	1PL

At first, we cut the paddy field.

- 1.2 pik ibə nam ibə ɲe vu liʔmə irə dimə pik
 pik ibə² nam³ ibə² ɲe² vu¹ l -iʔ -mə irə² di³mə³ pik
 paddy field that bush that finish cut NF 1PL NF that after paddy field
 vweʔ ɲe tɔʔ ɲa imə bɔ ʒweʔ bɔ ʒweʔ ki .
 vweʔ ɲe² t -ɔʔ ɲa³ imə² bɔ¹ ʒweʔ bɔ¹ ʒweʔ k -i¹
 cut finish PST 1SG say then tree cut tree cut PRES 1PL

After we finish cutting the paddy field, the plants, we cut the trees.

- 1.3 bɔ ʒweʔ irəbə bɔ ʒweʔ ɲe liʔmə bɔ apʰoʔ ara
 bɔ¹ ʒweʔ irə²bə² bɔ¹ ʒweʔ ɲe² l -iʔ -mə bɔ¹ apʰoʔ ara³
 tree cut that tree cut finish NF 1PL NF tree branches and tree tops
 apʰoʔ ara ibə cʰocʰiʔ apʰoʔ ara ibə nwapdoʔ
 apʰoʔ ara¹ ibə² cʰo³cʰiʔ apʰoʔ ara³ ibə² nwap doʔ
 branches and tree tops that all branches and tree tops that piece cut
 nwapvan ki .
 nwap van² k -i¹
 piece cut PRES 1PL

After cutting trees, after finish cutting trees, tree branches, all the tree branches, we chop them into pieces.

- 1.4 imə ɲe liʔmə datʰə te heʔ liʔmə
 imə² ɲe² l -iʔ -mə da² tʰə te² heʔ l -iʔ -mə
 then finish NF 1PL NF month one around keep NF 1PL NF
 aruk ri ki .
 a- ruk ri¹ k -i¹
 NMLZ burn AUX PRES 1PL

When it is finished, after keeping them (branches/trees/leaves) for around a month, we burn them.

- 1.5 aruk ri liʔmə kʰam taʔ ɲa tɔʔ ɲa
 a- ruk ri¹ l -iʔ -mə kʰam³ t -aʔ ɲa³ t -ɔʔ ɲa³
 NMLZ burn AUX NF 1PL NF burn PST 3 say PST 1SG say
 imə ceda ki .
 imə² ce¹da¹ k -i¹
 then clear PRES 1PL

After burning, if they burn, then we clean (the paddy field).

1.6 ceda ibə ɲe liʔmə miʔ tuŋ ro tap hwe ki .
 ce¹da¹ ibə² ɲe² l -iʔ -mə miʔ tuŋ¹ ro³ tap hwe² k -i¹
 clear that finish NF 1PL NF man sit PURP hut build PRES 1PL
 When cleaning is done, we build hut for people to sit.

1.7 tap hwe liʔmə tuŋ ki .
 tap hwe² l -iʔ -mə tuŋ² k -i¹
 hut build NF 1PL NF sit PRES 1PL
 After building the hut, we sit.

1.8 tap ibə ɲe hwe liʔmə ibə cʰaʔ kʰit cʰaʔ kʰit tʰiŋ
 tap ibə² ɲe² hwe² l -iʔ -mə ibə² cʰaʔ kʰit cʰaʔ kʰit tʰiŋ
 hut that finish build NF 1PL NF that paddy plant paddy plant NMLZ
 na ɲa liʔmə cʰaʔ kʰit ki .
 na¹ ɲa³ l -iʔ -mə cʰaʔ kʰit k -i¹
 PFV say NF 1PL NF paddy plant PRES 1PL
 When the hut is built, when it is time to plant the seed, we plant the seed.

1.9 cʰaʔ irəbə bəte kʰit tʰiŋ ni tiŋni kʰit tʰiŋ tiŋrum
 cʰaʔ irə²bə² bə²te² kʰit tʰiŋ³ ni³ tiŋ³ ni kʰit tʰiŋ³ tiŋ³ rum
 paddy that how much plant should Q CLF two plant should CLF three
 kʰit tʰiŋ tiŋbəli tiŋbaŋa kʰit tʰiŋ irəbə pik nɣ
 kʰit tʰiŋ³ tiŋ³ bəli tiŋ³ baŋa kʰit tʰiŋ³ irə²bə² pik nɣ²
 plant should CLF four CLF five plant should that paddy field LOC
 su liʔmə kʰit ki .
 su² l -iʔ -mə kʰit k -i¹
 look NF 1PL NF plant PRES 1PL
 How much should we plant? Whether to plant two containers, or three containers, or four or five containers, that we look at the field, and then we plant.

1.10 irə pik kʰit (paus) cʰaʔ kʰit ki irə dimə
 irə² pik kʰit cʰaʔ kʰit k -i¹ irə² di³mə³
 that paddy field plant paddy plant PRES 1PL that after
 ahut , zehun kəmə hut kuʔ tʰiŋ , ahut ri
 a- hut zə¹hun¹ kə²mə² hut kuʔ tʰiŋ³ a- hut ri¹
 NMLZ cover tool.type INST cover give should NMLZ cover AUX

t^hiŋ , apukhut .
 t^hiŋ³ a- puk hut
 should NMLZ cover close (lid)

After we plant the seed, we should cover it with 'zehun', we should cover.

- 1.11 zuk ni vu kəmə ina twe p^hɣʔc^haʔ a ŋa liʔmə
 zuk nia³ vu¹ kə²mə² ina¹ twe¹ p^hɣʔc^haʔ a ŋa³ l -iʔ -mə
 animal and bird ERG there take eat 3 say NF 1PL NF
 ahut ri ki .
 a- hut ri¹ k -i
 NMLZ cover do PRES 1PL

We cover them thinking animals and birds will pick and eat them (seeds).

- 1.12 imə ŋe hut liʔmə irə dimə ləpənt^hə te tuŋ
 imə² ŋe² hut l -iʔ -mə irə² di³mə³ ləpən² t^hə te² tuŋ¹
 then finish cover NF 1PL NF that after week one around sit
 liʔmə c^huŋru vaʔc^huŋ ru ni rɣɣ irəbə t^hum
 l -iʔ -mə c^huŋ³ru¹ vaʔc^huŋ² ru¹ ni³ rɣ³ -hɣ³ irə²bə² t^hum²
 NF 1PL NF grass.type bamboo.shoot climbing plants PL that cut
 heʔ ki van heʔ ki .
 heʔ k -i¹ van² heʔ k -i¹
 keep PRES 1PL cut keep PRES 1PL

After we have finished covering, after that, we sit for around a week, then we cut all the grass, bamboo shoots, climbing plants.

- 1.13 imə c^huŋru ŋe t^hum tiʔ na ne ŋa imə (pause)
 imə² c^huŋ³ru¹ ŋe² t^hum² t -iʔ na¹ ne³ ŋa³ imə²
 then grass.type finish cut PST 1PL PFV Q say then
 ap^hu ri t^hiŋ hiŋ p^hweʔ t^hiŋ .
 a- p^hu¹ ri¹ t^hiŋ³ hiŋ³ p^hweʔ t^hiŋ³
 NMLZ uproot AUX should grass uproot should

Then, checking if we have cut all the weeds, we should uproot them (if any).

- 1.14 hiŋ bə p^hu liʔmə hiŋ ŋe p^hu tiʔ na ne
 hiŋ³ bə p^hu¹ l -iʔ -mə hiŋ³ ŋe² p^hu¹ t -iʔ na¹ ne³
 grass DEF uproot NF 1PL NF grass finish uproot PST 1PL PFV Q

ci? kəmə dɔdɔ ap^hu dɔdɔ ibə ɲe p^hu ɲe hun
 ci? kə²mə² dɔ³dɔ³ a- p^hu¹ dɔ³dɔ³ ibə² ɲe² p^hu¹ ɲe² hun¹
 medicine INST or NMLZ uproot or that finish uproot finish carry
 li?mə imə lanpant^hə le? tuŋ li?mə arə ci?
 I -i? -mə imə² ləpən² t^hə le? tuŋ¹ I -i? -mə arə² ci?
 NF 1PL NF then week one again sit NF 1PL NF this medicine
 kəmə ɲe ma? irə hiŋ hiŋlu meluɣ irəbə
 kə²mə² ɲe² m -a? irə² hiŋ³ hiŋ³ lu³ me lu³ -hɣ irə²bə²
 INST be able NEG 3 that grass grass long RED long PL that
 lamp^hu he? ki sop^ha .
 lam² p^hu¹ he? k -i¹ so¹p^ha¹
 look.for uproot keep PRES 1PL clean

After uprooting the grass, checking that all the grass has been finished uprooting, either by medicine or by uprooting we uproot and carry them, then we wait for a week again, then, the grass which did not dye by medicine, we find and uproot them.

- 1.15 iru? p^hwe? ku? t^hiŋ .
 iru? p^hwe? ku? t^hiŋ³
 like.that uproot give should
 Like that we should uproot.

- 1.16 ibə ɲe p^hu li?mə irə dimə c^ha? ahuŋ
 ibə² ɲe² p^hu¹ I -i? -mə irə² di³mə³ c^ha? a- huŋ³
 that finish uproot NF 1PL NF that after paddy NMLZ appear
 apuŋ ahuŋ apuŋ ri kə na
 a- puŋ¹ a- huŋ³ a- puŋ¹ ri¹ k -a? na¹
 NMLZ to sprout NMLZ appear NMLZ to sprout AUX PRES 3 PFV
 ɲa ki irəkə ci? hap ku? t^hiŋ sivi ci? .
 ɲa³ k -i¹ irə²kə² ci? hap ku? t^hiŋ³ si³vi³ ci?
 say PRES 1PL there medicine spray give should insect medicine

After finishing uprooting, after that, paddy comes out, they grow and appear, we should spray insect medicine.

- 1.17 sivi kəmə apu ina c^ha? pu ma? cip ku? a ɲa
 si³vi³ kə²mə² a- pu¹ ina¹ c^ha? pu¹ ma? cip ku? a ɲa³
 insect ERG 3 flower there paddy flower all sip give 3 say

liʔmə sivi ciʔ hap kuʔ tʰiŋ .
 I -iʔ -mə si³vi³ ciʔ hap kuʔ tʰiŋ³
 NF 1PL NF insect medicine spray give should

Thinking that insects will sip all the paddy flowers, we should spray insect medicine.

1.18 imə sivi ciʔ bə ŋe hap tʰʔ na ŋa imə ari
 imə² si³vi³ ciʔ bə ŋe² hap t -xʔ na¹ ŋa³ imə² a- ri¹
 then insect medicine DEF finish spray PST 1SG PFV say then 3 seed
 apu (paus) ləpənni ləpənrom irə dimə amun ,
 a- pu¹ ləpən² ni ləpən² rum³ irə² di³mə³ a- mun³
 3 flower week two week three that after NMLZ be.ripe
 amun ri kə na .
 a- mun³ ri¹ k -aʔ na¹
 NMLZ be.ripe AUX PRES 3 PFV

Then, after finishing spraying insect medicine, fruits and flowers become ripe after two or three weeks.

1.19 amun ri kə na irəmə dʁ imə pikkʰuʔ nʁ
 a- mun³ ri¹ k -aʔ na¹ irə²mə² dʁ³ imə² pikkʰuʔ nʁ²
 NMLZ be.ripe AUX PRES 3 PFV then happen then paddy field LOC
 pikkʰuʔ haʔ duŋ nʁ bəte bəte li ka tiʔ ni
 pikkʰuʔ haʔ duŋ³ nʁ² bə²te² bə²te² li³ ka¹ t -iʔ ni³
 paddy field land big LOC how much how much seed go PST 1PL Q
 cʰuŋri bʁri tu ni cʰaʔ səkim kimwe pʰisi pʰinduŋ
 cʰuŋ³ri¹ bʁ¹ri¹ tu¹ nia³ cʰaʔ səkim¹ ki¹mwe³ pʰi¹si¹ pʰin³duŋ³
 RED fruit yam and paddy pumpkin squash bean (small type) bean
 puŋvuŋ cali cali li ka tiʔ ni irəbə (pause) pʰuŋ
 puŋ³vuŋ³ ca¹li¹ ca¹li¹ li³ ka¹ t -iʔ ni³ irə²bə² pʰuŋ²
 flattened corn what what seed go PST 1PL Q that Chistian
 miʔcʰa noʔkʰu nʁ cʰaʔvi cʰaʔvi ŋa liʔmə
 miʔcʰa¹ noʔkʰu³ nʁ² cʰaʔvi² cʰaʔvi² ŋa³ l -iʔ -mə
 people church LOC celebrate celebrate say NF 1PL NF
 tuŋam cʰaʔŋam cʰoŋri bʁri cʰoʰiʔ huin van
 tu¹ ŋam¹ cʰaʔ ŋam¹ cʰuŋ³ri¹ bʁ¹ri¹ cʰo³cʰiʔ hun¹ van²
 yam panicle eat panicle RED fruit all carry carry long

liʔmə noʔk^hu nɣ acup^hi vɣ t^hiŋ .
 l -iʔ -mə noʔk^hu³ nɣ² acu²p^hi³ vɣ¹ t^hiŋ³
 NF 1PL NF church LOC pray come should

After becoming ripe, in the paddy field how much we planted: fruits, yam and paddy, pumpkin, squash, beans, corn, whatever we planted, the christians celebrate (them) in the church, then we carry food and vegetables, fruits, and everything, then we should pray at the church.

1.20 acup^hi vɣ liʔmə acup^hi ŋe tiʔ na dɣ imə
 acu²p^hi³ vɣ¹ l -iʔ -mə acu²p^hi³ ŋe² t -iʔ na¹ dɣ³ imə²
 pray come NF 1PL NF pray finish PST 1PL PFV happen then
 ninap ni sənap irəmə dɣ kaʔ irəbə
 ni³nəp ni^a sənap irə²mə² dɣ³ k -aʔ irə²bə²
 tomorrow and the day after tomorrow then happen PRES 3 that
 tuŋe c^haʔŋe irəbə ak^han ri vɣ t^hiŋ na .
 tu¹ -ŋe³ c^haʔ -ŋe³ irə²bə² a- k^han² ri¹ vɣ¹ t^hiŋ³ na¹
 yam new paddy new that NMLZ reap AUX come should PFV

After doing prayer, after prayer is finished, when it is tomorrow or day after tomorrow, we should go and cut the rest of the new vegetables and rice.

1.21 ibə aŋam mə k^han liʔmə bəte ʒwe k^han i
 ibə² a- ŋam¹ mə k^han² l -iʔ -mə bə²te² ʒwe¹ k^han² i
 that 3 panicle ABL reap NF 1PL NF how much to gather reap 1PL
 ni bəte ʒwe tap i ni irebə atap ak^han ri
 ni³ bə²te² ʒwe¹ tap i ni³ irə²bə² a- tap a- k^han² ri¹
 Q how much to gather cut 1PL Q that NMLZ cut NMLZ reap AUX
 liʔmə irəmə tumtap tiʔ na ne ŋa liʔmə
 l -iʔ -mə irə²mə² tum¹ tap t -iʔ na¹ ne³ ŋa³ l -iʔ -mə
 NF 1PL NF then all cut PST 1PL PFV Q say NF 1PL NF
 anɣʔ nɣʔ liʔmə irə dimə dɣ imə bə
 a- nɣʔ nɣʔ l -iʔ -mə irə² di³mə³ dɣ³ imə² bə
 NMLZ tread tread NF 1PL NF that after happen then DEF

ahun ahun ri ki .
a- hun¹ a- hun¹ ri¹ k -i¹
NMLZ carry NMLZ carry AUX PRES 1PL

After cutting (the rice) by the panicle, how much can we reap and collect, how much can we cut and collect, cutting that much, then cut them all, then after treading (with foot), after that, when it is done, we carry.

- 1.22 ahun ibə ɲe hun tiʔ na ne ɲamə se nɣ
a- hun¹ ibə² ɲe² hun¹ t -iʔ na¹ ne³ ɲa³mə³ se³ nɣ²
NMLZ carry that finish carry PST 1PL PFV Q COMP sun LOC
- relam liʔmə (pause) se nɣ
re¹ lam³ l -iʔ -mə se³ nɣ²
dry (intr) dry in the sun (tr) NF 1PL NF sun LOC
- relam ɲe relam tiʔ
re¹ lam³ ɲe² re¹ lam³ t -iʔ
dry (intr) dry in the sun (tr) finish dry (intr) dry in the sun (tr) PST 1PL
- na ne ɲa imə munrwe kəp tiʔ ne
na¹ ne³ ɲa³ imə² mun² rwe² kəp t -iʔ ne³
PFV Q say then counting.unit how much get PST 1PL Q
- munrwe kəp tiʔ ne irəbə munichⁱ
mun² rwe² kəp t -iʔ ne³ irə²bə² mun² ichⁱ³
counting.unit how much get PST 1PL Q that counting.unit ten
- roʔni dɣ a le roʔbəli roʔbaɲa amun dɣ a ni ikə le
roʔni² dɣ³ a le³ roʔbəli² roʔbə³ɲa³ mun² dɣ³ a ni³ ikə² le³
twenty happen 3 or forty fifty counting.unit happen 3 Q there or
- aca dɣ a ni irəkə vaʔ irəbə nɣnuk alu
aca² dɣ³ a ni³ irə²kə² vaʔ irə²bə² nɣ- nuk alu³
hundred happen 3 Q there from that 1PL.INCL villager offering
- nɣ bə nɣpiɲ nɣmə heʔ keʔ ki .
nɣ bə nɣ- piɲ³ nɣ²mə² heʔ keʔ k -i¹
1PL.INCL DEF 1PL.INCL granary from keep go PRES 1PL

After finishing carrying (them), we dry in the sun, then after it has been dried in the sun, how many bags we have got: ten, twenty bags or forty, fifty bags or is it hundred (bags), from there we offer to villagers (as well as) keep (the rest) in the granary.

1.23 nɣ nɣnuk hə alu irəbə municʰi ku?
 nɣ nɣ nuk hə alu³ irə²bə² mun² icʰi³ ku?
 1PL.INCL 1PL.INCL villager DAT offering that counting.unit ten give
 dɣ tɣ? ŋa imə amun muntʰə alu lu tʰiŋ
 dɣ³ t -ɣ? ŋa³ imə² mun² mun² tʰə alu³ lu³ tʰiŋ³
 happen PST 1SG say then counting.unit name one offering offer should
 munroʔni kəp imə munni munroʔrum
 mun² roʔni² kəp imə² mun² ni mun² roʔrum³
 counting.unit twenty get then counting.unit two counting.unit thirty
 kəp imə iru? .
 kəp imə² iru?
 get then like.that

We offer to our villagers, if we get ten bags, we offer one bag, if we get twenty bags, we offer two bags, and so on.

1.24 alu bə iru? ku? liʔmə imə piŋ nɣ he? ke?
 alu³ bə iru? ku? l -i? -mə imə² piŋ³ nɣ² he? ke?
 offering DEF like.that give NF 1PL NF then granary LOC keep go
 liʔmə irəmə eh , pʰɣʔcʰa? he? ke? tʰiŋ .
 l -i? -mə irə²mə² eh pʰɣʔcʰa? he? ke? tʰiŋ³
 NF 1PL NF then EXCLAM food keep go should

After giving the offerings, then go and keep in the granary, then we should go and keep there.

1.25 irəbə se nɣ relam liʔmə ali
 irə²bə² se³ nɣ² re¹ lam³ l -i? -mə a- li³
 that sun LOC dry (intr) dry in the sun (tr) NF 1PL NF 3 seed
 aru? dɣ a acʰa? aru? dɣ tʰiŋ ŋamə iru?
 aru? dɣ³ a a- cʰa? aru? dɣ³ tʰiŋ³ ŋa³mə³ iru?
 this.much happen 3 NMLZ eat this.much happen should COMP like.that
 danda liʔmə irə dimə bə pʰɣʔcʰa? tʰiŋ na .
 danda l -i? -mə irə² di³mə³ bə pʰɣʔcʰa? tʰiŋ³ na¹
 separate NF 1PL NF that after DEF eat should PFV

After drying in the sun, 'this much for seed, this much for eating' like that we separate, and then we should eat.

- 1.26 hwe hwe hwe hə tɾ hə bəru? ku? tʰiŋ ni irəbə cʰocʰi?
 hwe² hwe² hwe² hə tɾ³ hə bə²ru? ku? tʰiŋ³ ni³ irə²bə² cʰo³chⁱ?
 who who who DAT family DAT how give should Q that all
 danda hik tʰo? li?mə bə pʰɿ?cʰa? van
 danda hik tʰo? l -i? -mə bə pʰɿ?cʰa? van²
 separate properly measure NF 1PL NF DEF eat carry long
 ki .
 k -i¹
 PRES 1PL
 To whom how we should give, after dividing and distributing all that, the rest we bring and eat.
- 1.27 irəte .
 irə²te²
 that is all
 That is all.
- 1.28 dɿ?sum ke? lam nia arə tuli cʰa?li li ʒap ibə
 dɿ?sum² ke? lam² nia³ arə² tu¹ li³ cʰa? li³ li³ ʒap ibə²
 work go look.for and this yam seed paddy seed seed talk that
 irətemə atʰwemə irətemə ŋe ki
 irə²te² -mə a- tʰwe³ -mə irə²te² -mə ŋe² k -i¹
 that much ADV NMLZ short ADV that much ADV finish PRES 1PL
 Whatever we work and the talk about yam seed and paddy seed, at this point, in short, is finished here.

APPENDIX C

TEXT: SNR-6-THE CRAB AND THE SQUIRREL

This folktale is about a series of events, one leading to another and culminating in the death of ghost child. In this story, a female crab and a male squirrel are a couple. The mother crab sets off the series of events by asking her husband squirrel to get a fruit called *pi* to soothe their crying baby. When the squirrel plucks the *pi* fruit, it falls on a wild pig's nest and breaks it. The wild pig gets angry and starts cutting down the wild banana trees. On one of those trees there was a bat living in its nest. The bat gets scared when the wild pig cuts the banana trees, and starts flying to and fro and ends up inside the nostril of an elephant. The elephant gets scared and starts jumping and running, and accidentally crushes the head of a ghost child. The ghost parents of the dead child file a case against the elephant. The elephant puts the blame on the bat, and the bat puts the blame on the wild pig, and eventually the blame falls on the mother crab. All animals and birds judge the case and find the crab guilty. The crab goes into the water under a large stone pretending to bring valuable objects to pay the fine and hides there. The animals and birds try to get her out but fail. Then, they jump on top of the large stone in an attempt to kill the crab. The crab does not die, instead she becomes flat from round, which was her original shape.

This story was told by Phulim Hakhun (PH) in the presence of Khithung Hakhun (KH), and it was recorded by Stephen Morey in 2009 at Malugaon. It was partly transcribed and translated by Stephen, and partly by me. I checked the transcription and the translation again with PH in 2017 at Gauhati University. The recording, which is about 9 minutes long, is in a sound file named:

SDM23-20091219-04_SM_T_Phulim_Senya. It has been annotated and

4.2 sepa nia zeʔva bə cʰəɲu cʰəva .
 se¹ -ɲa¹ nia³ zeʔkʰi¹ -va¹ bə cʰəɲu¹ cʰəva¹
 crab FEM and squirrel MAS DEF couple

The crab and the squirrel were a couple.

4.3 sepa bə aɲu .
 se¹ -ɲa¹ bə a- ɲu¹
 crab FEM DEF 3 mother

The crab was the mother.

4.4 zeʔva bə ava iruʔ dɤ taʔ .
 zeʔkʰi¹ -va¹ bə a- va¹ iruʔ dɤ³ t -aʔ
 squirrel MAS DEF 3 father like.that happen PST 3

The squirrel was the father. It was like that.

4.5 imə həni cʰa mɤtʰə kʰi taʔ ɲamə ɲa kaʔ .
 imə² həni³ cʰa¹ mɤ³ tʰə kʰi³ t -aʔ ɲa³mə³ ɲa³ k -aʔ
 then 3PL child CLF one born PST 3 COMP say PRES 3

(People) say that they gave birth to a child.

4.6 mɤtʰə kʰi ləmə " zeʔva , nɤcʰa
 mɤ³ tʰə kʰi³ l -ə -mə zeʔkʰi¹ -va¹ nɤ²- cʰa¹
 CLF one born NF 3 NF squirrel MAS 1PL.INCL child
 limlɤʔ ro , nɤcʰa asap roko ri
 lim²lɤʔ ro³ nɤ²- cʰa¹ a- sap ro¹ko¹ ri¹
 spend time PURP 1PL.INCL child NMLZ cry all the time AUX
 kaʔ , irə limlɤʔ ro , pipʰɤ zatat keʔ kuʔ
 k -aʔ irə² lim²lɤʔ ro³ pi¹ pʰɤ¹ za¹tat keʔ kuʔ
 PRES 3 that spend time PURP fruit.type round pluck go give
 loʔ " ɲamə aruʔ ɲa taʔ .
 l -oʔ ɲa³mə³ iruʔ ɲa³ t -aʔ
 IMP 2SG COMP like that say PST 3

When a child was born, the crab said, "Squirrel, our child is crying all the time, go and get a pi fruit for our child to play."

4.7 imə ʒeʔva kəmə ca dɾ a ni aʒatat keʔ kuʔ
 imə² ʒeʔkʰi¹ -va¹ kə²mə² ca¹ dɾ³ a ni³ a- ʒa¹tat keʔ kuʔ
 then squirrel MAS ERG what happen 3 Q NMLZ pluck go give
 jo .
 jo

EXCLAM

Then, the squirrel said, "That is ok, I will get one."

4.8 aɲu kəmə ŋa ku beʔ a ŋa ləmə
 a- ɲu¹ kə²mə² ŋa³ k -u¹ beʔ a ŋa³ l -ə -mə
 3 mother ERG say PRES 2SG DEF say NF 3 NF
 ʒeʔva ibə bɾ nɾ vikrə ka ləmə pipʰɾ
 ʒeʔkʰi¹ -va¹ ibə² bɾ¹ nɾ² vikrə ka¹ l -ə -mə pi¹ pʰɾ¹
 squirrel MAS that tree LOC quickly go NF 3 NF fruit.type round
 vikrə ʒatat ka taʔ .
 vikrə ʒa¹tat ka¹ t -aʔ
 quickly pluck go PST 3

At the mother's instruction, the squirrel got up the tree immediately and plucked a pi fruit at once.

4.9 ʒatat ka taʔ abə pipʰɾ ibə ʒatat bə vakɲi rip hum
 ʒa¹tat ka¹ t -aʔ abə pi¹pʰɾ¹ ibə² ʒa¹tat bə vəkɲi³ rip hum³
 pluck go PST 3 this fruit.type that pluck when wild pig nest be precise
 la vakɲi rip kʰuʔ nɾ pəpat kuʔ taʔ
 la¹ vəkɲi³ rip kʰuʔ nɾ² pə³pat kuʔ t -aʔ
 ADV wild.pig (long teeth) nest top LOC break by falling give PST 3
 vakɲi rip pəpat taʔ .
 vəkɲi³ rip pə³pat t -aʔ
 wild pig nest break by falling PST 3

When he went to pluck the pi fruit, when (he) plucked the pi fruit, (the pi fruit) fell precisely on the wild pig's nest and broke it.

4.10 imə vakɲi irəbə irip ihm luɲti hwe ni ŋa
 imə² vəkɲi³ irə²bə² i- rip i- him¹ luɲ² -ti³ hwe² ni³ ŋa³
 then wild pig that 1SG nest 1SG house attack NMLZ who Q say

ləmə c^hwe ka amo c^hwe ka ləmə
 1 -ə -mə c^hwe² ka¹ a- mo² c^hwe² ka¹ l -ə -mə
 NF 3 NF run go NMLZ make.mistake run go NF 3 NF
 ɲap^hi ɲap^hi ɲap^ham ibə sam he? ka ta? vakɲi
 ɲap^hi² ɲap^hi² ɲap^ham³ ibə² sam² he? ka¹ t -a? vəkɲi³
 forest banana forest banana RED that cut keep go PST 3 wild pig
 kəme? .
 kəme?
 ERG

Then the wild pig (said), "Who has attacked my home?" Then he ran indiscriminately, and cut the wild banana trees unintentionally.

4.11 imə ibə irə ɲap^hi ɲap^ham bɾ nɾ arip hwe
 imə² ibə² irə² ɲap^hi² ɲap^ham³ bɾ¹ nɾ² a- rip hwe²
 then that that forest banana RED tree LOC 3 nest build
 ləmə tuɲ bə p^hə?k^həra tuɲ ta? .
 1 -ə -mə tuɲ¹ bə p^hə?k^həra³ tuɲ¹ t -a?
 NF 3 NF sit DEF bat sit PST 3

Then, a bat was living building a nest on those banana trees.

4.12 p^hə?k^həra kəmə ihm luɲti hwe ni ɲa ləmə
 p^hə?k^həra³ kə²mə² i- him¹ luɲ² -ti³ hwe² ni³ ɲa³ l -ə -mə
 bat ERG 1SG house attack NMLZ who Q say NF 3 NF
 p^hə?k^həra ibə mo pu he? ləmə po?ɲu k^hupu
 p^hə?k^həra³ ibə² mo² pu¹ he? l -ə -mə po? -ɲu¹ k^hu¹pu¹
 bat that make.mistake fly keep NF 3 NF elephant AUG nostril
 nɾ lip vɾ ta? ɲamə ɲa ka? .
 nɾ² lip vɾ¹ t -a? ɲa³mə³ ɲa³ k -a?
 LOC enter come PST 3 COMP say PRES 3

The bat said, "Who has attacked my house?", then he flew indiscriminately, and then entered into the elephant's nostril.

4.13 imə po?ɲu kəmə ik^hupu nɾ ca lip vɾ kə
 imə² po? -ɲu¹ kə²mə² i- k^hu¹pu¹ nɾ² ca¹ lip vɾ¹ k -ə
 then elephant AUG ERG 1SG nostril LOC what enter come PRES 3

ni ηamə poʔju bə toʔruʔ toʔruʔ toʔruʔ
ni³ ηa³mə³ poʔ -ju¹ bə toʔ -ruʔ toʔ -ruʔ toʔ -ruʔ
Q COMP elephant AUG DEF jump CON jump CON jump CON
cʰweruʔ cʰweruʔ toʔruʔ toʔruʔ ri ləmə
cʰwe² -ruʔ cʰwe² -ruʔ toʔ -ruʔ toʔ -ruʔ ri¹ l -ə -mə
run CON run CON jump CON jump CON do NF 3 NF
zube cʰa kʰu lunʔ taʔ ηamə
zu¹be³ cʰa¹ kʰu³ lu² nʔ t -aʔ ηa³mə³
ghost child head have.hole tread PST 3 COMP

Then the elephant said, "What has entered into my nostril?", and then she jumped and ran to and fro, and then she broke the head of a ghost's child.

4.14 iruʔ irəmə irə zube cʰa kʰu lunʔ ləmə
iruʔ irə²mə² irə² zu¹be³ cʰa¹ kʰu³ lu² nʔ l -ə -mə
like.that then that ghost child head have.hole tread NF 3 NF
aɲuva kəmə poʔ nʔ mat mat cun ibə poʔ nʔ cun
a- ju¹va¹ kə²mə² poʔ nʔ² mat mat cun² ibə² poʔ nʔ² cun²
3 parents ERG elephant LOC case case file that elephant LOC file
taʔ .
t -aʔ
PST 3

Having broken the head of ghost's child, the parents of the ghost child filed a case against the elephant.

4.15 ai poʔ nʔ bə ηəmrip ηaʔrip zukrip vurip
ai poʔ nʔ³ bə ηəm¹ rip ηaʔ rip zuk rip vu¹ rip
EXCLAM elephant 2SG DEF meat nest fish nest animal nest bird nest
cʰoʰciʔ tʰun ləmə pʰo taʔ .
cʰo³ciʔ tʰun¹ l -ə -mə pʰo³ t -aʔ
all gather NF 3 NF judge PST 3

"Hey elephant you..." (incomplete). The wild animals, the fishes, the monkeys, and the birds gathered and judged the elephant.

4.16 mat pʰo taʔ .
mat pʰo³ t -aʔ
case judge PST 3

(They) judged the case.

4.17 irə hənirum c^ho^hi? t^hun ləmə mat p^ho ta? .
 irə² həni³rum³ c^ho³c^hi? t^hun¹ l -ə -mə mat p^ho³ t -a?
 that 3PL all gather NF 3 NF case judge PST 3
 They all gathered and judged the case.

4.18 ibə po? nɾ po? nɾ bə ic^hak^hu caro
 ibə² po? nɾ³ po? nɾ³ bə i- c^ha¹ k^hu³ ca¹ro²
 that elephant 2SG elephant 2SG DEF 1SG child head why
 lunɾ? ca k^hu nɾ lunɾ? tu? ni ɲamə
 lu² nɾ? ca¹ k^hu² nɾ² lu² nɾ? t -u? ni³ ɲa³mə³
 have.hole tread what reason LOC have.hole tread PST 2SG Q COMP
 aru? p^ho ta? .
 iru? p^ho³ t -a?
 like that judge PST 3
 "Elephant, why did you break my child's head?", saying so they prosecuted.

4.19 p^ho ta? imə po? kəmə ɲa bə iɲam mə ni
 p^ho³ t -a? imə² po? kə²mə² ɲa¹ bə i- ɲam² mə nia³
 judge PST 3 then elephant ERG 1SG DEF 1SG pride ADV and
 iduɲ mə lunɾ? dɾ ma? .
 i- duɲ³ mə lu² nɾ? dɾ³ m a?
 1SG big ADV have.hole tread happen NEG 3
 When (they) judged, the elephant said, "I did not do it out/because of pride or of my big size."

4.20 imə ɲa aduɲ ri kɾ alu ri kɾ
 imə² ɲa¹ a- duɲ³ ri¹ k -ɾ¹ a- lu³ ri¹ k -ɾ¹
 then 1SG NMLZ big AUX PRES 1SG NMLZ long AUX PRES 1SG
 ɲamə lunɾ? dɾ ma? .
 ɲa³mə³ lu² nɾ? dɾ³ m -a?
 COMP have.hole tread happen NEG 3
 "I did not break (the head) thinking that I am big, I am tall."

4.21 ik^hupu nɾ p^hə?k^həra lip vɾ ləmə ca dɾ
 i- k^hu¹pu¹ nɾ² p^hə?k^həra³ lip vɾ¹ l -ə -mə ca¹ dɾ³
 1SG nostril LOC bat enter come NF 3 NF what happen

kɾ ba ŋa lɾmə toʔ tɾʔ .
 k -ɾ¹ ba² ŋa³ l -ɾʔ -mə toʔ t -ɾʔ
 PRES 1SG DUB say NF 1SG NF jump PST 1SG

"When a bat entered into my nostril, then wondering what happened to me, I jumped."

4.22 irəkə batəni mo rik nɾʔ tɾʔ .
 irə²kə² ba²'təni² mo² rik nɾʔ t -ɾʔ
 there perhaps make.mistake die tread PST 1SG

"At that time perhaps, I treaded and killed (the child) by mistake."

4.23 ibə dɾ a kə te p^həʔk^həra t^hɾʔ nɾ ta məra iruʔ ŋa
 ibə² dɾ³ a kə te p^həʔk^həra³ t^hɾʔ nɾ² ta³ mə³ra³ iruʔ ŋa³
 that happen 3 when bat over LOC DP sin like.that say
 taʔ .
 t -aʔ
 PST 3

When that happened, the responsibility was put on the bat.

4.24 dɾ imə p^həʔk^həra nɾ jo matva .
 dɾ³ imə² p^həʔk^həra³ nɾ³ jo matva¹
 then bat 2SG EXCLAM responsible

Then, "Bat, you are the responsible one."

4.25 nɾ məcoʔ nɾ na ŋamə ŋa taʔ .
 nɾ³ mə¹- coʔ nɾ² na¹ ŋa³mə³ ŋa³ t -aʔ
 2SG 2SG body LOC PFV COMP say PST 3

"(The case) is now on you", (they) said.

4.26 p^həʔk^həra ko la cap ləmə ŋa p^həʔk^həra dɾ ɾ
 p^həʔk^həra³ ko² la¹ cap l -ə -mə ŋa¹ p^həʔk^həra³ dɾ³ ɾ
 bat upward ADV stand NF 3 NF 1SG bat happen 1SG
 kəmi ŋa bə imomo pik nia imomo
 kə²mi² ŋa¹ bə i- mo² mo² pik nia³ i- mo² mo²
 although 1SG DEF 1SG mistake RED fly and 1SG mistake RED

c^hwe dɣ mɣʔ .
 c^hwe² dɣ³ m -ɣʔ
 run happen NEG 1SG

The bat stood up, and said, "Even though I am a bat, I did not fly or run indiscriminately."

4.27 it^hiŋ luŋ ləmə ni rim luŋ ləmə nia
 i- t^hiŋ³ luŋ² l -ə -mə nia³ rim² luŋ² l -ə -mə nia³
 my place attack NF 3 NF and field attack NF 3 NF and
 ihm c^hiʔheʔ ləmə ŋa irə lɣ nɣ mo pu
 i- him¹ c^hiʔheʔ l -ə -mə ŋa¹ irə² lɣ³ nɣ² mo² pu¹
 1SG house break NF 3 NF 1SG that reason LOC indiscriminately fly
 ka tɣʔ .
 ka¹ t -ɣʔ
 go PST 1SG

"When my village/house was attacked and broken, I flew away indiscriminately."

4.28 ibə ihm luŋti nia ipiŋ luŋti bə
 ibə² i- him¹ luŋ² -ti³ nia³ i- piŋ³ luŋ² -ti³ bə
 that 1SG house attack NMLZ and my granary attack NMLZ DEF
 vakŋi ta .
 vəkŋi³ ta³
 wild pig DP

"The one who attacked my house is the wild pig."

4.29 ŋa bə dɣ mɣʔ .
 ŋa¹ bə dɣ³ m -ɣʔ
 1SG DEF happen NEG 1SG

"I am not the one."

4.30 vakŋi coʔ nɣ vɣ kaʔ mərə vakŋi kəmə c^ham a .
 vəkŋi³ coʔ nɣ² vɣ¹ k -aʔ mə³ra³ vəkŋi³ kə²mə² c^ham¹ a
 wild pig body LOC come PRES 3 sin wild pig ERG know 3

"The responsibility in on the wild pig. The wild pig will know what happened."

4.31 mat hunli kəmi cɣ hunli kəmi vakɲi kəmə
 mat hun¹ -li³ kə²mi² cɣ² hun¹ -li³ kə²mi² vəkɲi³ kə²mə²
 case carry NMLZ although penalty carry NMLZ although wild pig ERG
 c^ham a ɲamə aru? ɲa ta? .
 c^ham¹ a ɲa³mə³ aru? ɲa³ t -a?
 know 3 COMP like.this say PST 3

"Whether he is guilty or not, the wild pig will know", said like this.

4.32 imə vakɲi nɣ bə nɣ vakɲi mət^hɣ? nɣ na vakɲi
 imə² vəkɲi³ nɣ³ bə nɣ³ vəkɲi³ mə- t^hɣ? nɣ² na¹ vəkɲi³
 then wild pig 2SG DEF 2SG wild pig 2SG over LOC PFV wild pig
 mət^hɣ? nɣ ɲamə mat le? cun van tə ɲa .
 mə- t^hɣ? nɣ² ɲa³mə³ mat le? cun² van² t -ə ɲa¹
 2SG over LOC COMP case again file carry long PST 3 hearsay

Then, saying, "Wild pig, the responsibility is on you", they registered the case again.

4.33 imə vakɲi kəmə ɲa bə ihm luɲ ləmə
 imə² vəkɲi³ kə²mə² ɲa¹ bə i- him¹ luɲ² l -ə -mə
 then wild pig ERG 1SG DEF 1SG house attack NF 3 NF
 ipiɲ luɲ ləmə c^hwe ka lɣ?mə iran
 i- piɲ³ luɲ² l -ə -mə c^hwe² ka¹ l -ɣ? -mə i- ran¹
 my granary attack NF 3 NF run go NF 1SG NF my heart
 k^ha? mə mo sam he? tɣ? .
 k^ha? mə mo² sam² he? t -ɣ?
 be angry ADV indiscriminately cut keep PST 1SG

The wild pig said, "when my house was attacked, when I ran, I cut (the banana trees) indiscriminately out of anger."

4.34 irə sam tɣ? ibə ihm ipiɲ ihm
 irə² sam² t -ɣ? ibə² i- him¹ i- piɲ³ i- him¹
 that cut PST 1SG that 1SG house my granary 1SG house
 ipiɲ luɲti irəbə ze?va kəmə luɲ
 i- piɲ³ luɲ² -ti³ irə²bə² ze?k^hi¹ -va¹ kə²mə² luɲ²
 my granary attack NMLZ that squirrel MAS ERG attack

t^hɣ ta aruʔ .
 t^h -ɣ ta³ iruʔ
 PST.INV 1SG DP like that

"That I cut the (banana trees), because the one who attacked my house was the squirrel."

4.35 ibə dɣ imə vakɲi nɣ mi asa tuʔ na .
 ibə² dɣ³ imə² vəkɲi³ nɣ³ mi a- sa² t -uʔ na¹
 that happen then wild pig 2SG also NMLZ clean PST 2SG PFV
 Then, (they said), "Wild pig, you are also clean."

4.36 zeʔva na zeʔva na .
 zeʔk^hi¹ -va¹ na¹ zeʔk^hi¹ -va¹ na¹
 squirrel MAS PFV squirrel MAS PFV
 "It is now the squirrel."

4.37 zeʔva t^hɣʔ nɣ mat leʔ kuʔ tə na .
 zeʔk^hi¹ -va¹ t^hɣʔ nɣ² mat leʔ kuʔ t -ə na¹
 squirrel MAS over LOC case again give PST 3 PFV
 (The animals) registered the case again on the squirrel.

4.38 imə zeʔva nɣ bə ca k^hu nɣ pip^hɣ zatat ka
 imə² zeʔk^hi¹ -va¹ nɣ³ bə ca¹ k^hu² nɣ² pi¹p^hɣ¹ za¹tat ka¹
 then squirrel MAS 2SG DEF what reason LOC fruit.type pluck go
 tuʔ ni ɲamə ɲa taʔ .
 t -uʔ ni³ ɲa³mə³ ɲa³ t -aʔ
 PST 2SG Q COMP say PST 3
 (They) said, "Squirrel, why did you go and pluck the pi fruit?"

4.39 ibə seɲa kəmə nɣc^ha sap kaʔ nɣc^ha
 ibə² se¹ -ɲa¹ kə²mə² nɣ²- c^ha¹ sap k -aʔ nɣ²- c^ha¹
 that crab FEM ERG 1PL.INCL child cry PRES 3 1PL.INCL child
 dipc^haʔ ro pip^hɣ zatat keʔ kuʔ loʔ ɲa ləmə
 dipc^haʔ ro³ pi¹p^hɣ¹ za¹tat keʔ kuʔ l -oʔ ɲa³ l -ə -mə
 soothe PURP fruit.type pluck go give IMP 2SG say NF 3 NF

sepa zapt^hun mə zatat ka tɣ? .
 se¹ -ja¹ zapt^hun³ mə za¹tat ka¹ t ɣ?
 crab FEM order ADV pluck go PST 1SG

"I went to pluck (the fruit) following the crab's instruction, who said (to me), 'our child is crying, go and bring pi fruit in order to soothe him'."

4.40 ɲa bə zatat ka ɣ mɣ , ɲa bə iru? mə ri ɣ ,
 ɲa¹ bə za¹tat ka¹ ɣ mɣ ɲa¹ bə iru? mə ri¹ ɣ
 1SG DEF pluck go 1SG 1SG DEF like.that ADV do 1SG

vɤkɲirip təlɯpat la ɲamə mi c^ham mɣ? .
 vəkɲi³ rip tə- luŋ¹pat la¹ ɲa³mə³ mi¹ c^ham¹ m -ɣ?
 wild pig nest CAUS break NF COMP also know NEG 1SG

"That I will go to pluck (fruit), that I will do something like that, and the wild pig's nest will be broken, I did not know (any of that)."

4.41 sepa kəmə ɲa ləmə lam ke? ku? tɣ? iru?
 se¹ -ja¹ kə²mə² ɲa³ l -ə -mə lam² ke? ku? t ɣ? iru?
 crab FEM ERG say NF 3 NF look.for go give PST 1SG like.that

"It is because the crab told (me), I went looking for (the fruit)."

4.42 ibə dɣ imə sepa t^hɣ? nɣ na mat na iru? .
 ibə² dɣ³ imə² se¹ -ja¹ t^hɣ? nɣ² na¹ mat na¹ iru?
 that happen then crab FEM over LOC PFV case PFV like.that

When that happened, the case fell on the crab.

4.43 sepa nɣ bə ze²va nɣ ca k^hu nɣ ɲa
 se¹ -ja¹ nɣ³ bə ze²k^hi¹ -va¹ nɣ² ca¹ k^hu² nɣ² ɲa³
 crab FEM 2SG DEF squirrel MAS LOC what reason LOC say
 tu? ni pip^hɣ zatat ka lo? ɲamə aru? .
 t -u? ni³ pi¹p^hɣ¹ za¹tat ka¹ l -o? ɲa³mə³ iru?
 PST 2SG Q fruit.type pluck go IMP 2SG COMP like that

"Crab, why did you ask the squirrel to go to pluck pi fruit?", they asked.

4.44 zəkə mi k^huto? dɣ a kəmi nɣ bə ku? lo? .
 ze²kə² mi k^hu³to? dɣ³ a kə²mi² nɣ³ bə ku? l -o?
 now also fine.type happen 3 although 2SG DEF give IMP 2SG

"Now, even if it is a fine for a death, you pay (it to us)."

- 4.45 rapu dx a kəmi ku? lo? .
 ra³pu¹ dx³ a kə²mi² ku? l -o?
 fine.type happen 3 although give IMP 2SG
 "Even if it is a 'rapu' fine, you pay it."
- 4.46 cɣ hunli dx a kəmi nɣ bə hun lo? .
 cɣ² hun¹ -li³ dx³ a kə²mi² nɣ³ bə hun¹ l -o?
 penalty carry NMLZ happen 3 although 2SG DEF carry IMP 2SG
 "Even if you have to bear the penalty fine, you bear it."
- 4.47 ha dxli dx a kəmi nɣ bə dx lo? .
 ha³ dx³ -li³ dx³ a kə²mi² nɣ³ bə dx³ l -o?
 slave happen NMLZ happen 3 although 2SG DEF become IMP 2SG
 "Even if you have to become a slave, you become a slave."
- 4.48 zube tɣ hə cɣ hun lo? .
 zu¹be³ tɣ¹ hə cɣ² hun¹ l -o?
 ghost GEN DAT penalty carry IMP 2SG
 "Pay the fine to the ghost family."
- 4.49 nɣ bə ku? t^hiŋ na .
 nɣ³ bə ku? t^hiŋ na¹
 2SG DEF give should PFV
 "You will have to pay now."
- 4.50 simɲu ku? t^hiŋ kəmi ɲamɲu ku? t^hiŋ kəmi
 sim¹ -ɲu¹ ku? t^hiŋ kə²mi² ɲam¹ -ɲu¹ ku? t^hiŋ kə²mi²
 property AUG give NMLZ although property AUG give NMLZ although
 likɲu ku? t^hiŋ kəmi zəmɲu ku? t^hiŋ
 lik -ɲu¹ ku? t^hiŋ kə²mi² zam³ -ɲu¹ ku? t^hiŋ
 ornament AUG give NMLZ although musical.instrument AUG give NMLZ
 kəmi zəkə bə seɲa nɣ bə hun t^hiŋ ɲamə seɲa
 kə²mi² zəkə² bə se¹ -ɲa¹ nɣ³ bə hun¹ t^hiŋ ɲa³mə³ se¹ -ɲa¹
 although now DEF crab FEM 2SG DEF carry NMLZ COMP crab FEM

hə mat aru? kinvan ta? .
 hə mat aru? kin²van² t -a?

DAT case like.this accuse PST 3

"Whether it is 'sim', 'nyam', ornament, or musical instrument, Crab, you must pay (the fine)." That is how they accused the crab.

4.51 imə seɲa kəmə dɣ a kə tarum bəru?la iri na
 imə² se¹ -ɲa¹ kə²mə² dɣ³ a kə ta³rum³ bə²ru?la³ iri¹ na¹
 then crab FEM ERG happen 3 LOC 2PL requesting expression PFV
 sim t^ham təkʉ? ɣ ɲam t^ham təkʉ? ɣ .
 sim¹ t^həm¹ tə- kʉ? ɣ ɲam¹ t^həm¹ tə- kʉ? ɣ
 property FOC CAUS give 1SG property FOC CAUS give 1SG

When that happened, the crab (said), "You all, what can I say, I will give pay the fine."

4.52 simtam lam vɣ kɣ ɲamtam lam vɣ
 sim¹ -tam² lam² vɣ¹ k ɣ¹ ɲam¹ -tam² lam² vɣ¹
 property flat look.for come PRES 1SG property flat look.for come
 kɣ ɲa ləmə luŋɲu aduŋɲu luŋ
 k ɣ¹ ɲa³ l -ə -mə luŋ¹ -ɲu¹ a- duŋ³ -ɲu¹ luŋ¹
 PRES 1SG say NF 3 NF stone AUG NMLZ big AUG stone
 k^hun nɣ pwe?la lip vɣ ta?
 k^hun³ nɣ² pwe?la¹ lip vɣ¹ t -a?

under LOC quickly enter come PST 3

Saying, "(I) am going to looking 'sim' and 'nyam'", (she) quickly went under a large stone.

4.53 luŋɲu zumik nɣ zumik luŋ nɣ seɲa tuŋ bə zumik
 luŋ¹ -ɲu¹ zu¹mik nɣ² zu¹mik luŋ¹ nɣ² se¹ -ɲa¹ tuŋ¹ bə zu¹mik
 stone AUG stream LOC stream stone LOC crab FEM sit DEF stream
 nɣ se luŋɲu k^hun nɣ tuŋ vɣ ta? .
 nɣ² se¹ luŋ¹ -ɲu¹ k^hun³ nɣ² tuŋ¹ vɣ¹ t -a?
 LOC crab stone AUG under LOC sit come PST 3

The crab stayed under the rock in the stream.

4.54 tuŋ vɤ taʔ .
 tuŋ¹ vɤ¹ t -aʔ
 sit come PST 3
 (She) stayed there.

4.55 tuŋ vɤ ləmə anuk irə mat pʰotihɤ irəbə
 tuŋ¹ vɤ¹ l -ə -mə a- nuk irə² mat pʰo³ -ti³ -hɤ irə²bə²
 sit come NF 3 NF 3 villager that case judge NMLZ PL that
 ake irəkə kwam la tuŋ ləmə izuŋ seŋa twe
 a- ke² irə²kə² kwam² la¹ tuŋ¹ l -ə -mə izuŋ² se¹ -ŋa¹ twe¹
 3 edge there surround ADV sit NF 3 NF ready crab FEM take
 keʔ ru na .
 keʔ r -u na¹
 go NON.PST.PROX 2SG PFV

Having come and stay (there), the villagers, those who judged the case, sat on the edges (of the stone) in circle (and said), "(We are) ready, bring (the fine) now."

4.56 se ham kə na twe keʔ ru na .
 se³ həm¹ k -ə na¹ twe¹ keʔ r -u na¹
 sun sun.set PRES 3 PFV take go NON.PST.PROX 2SG PFV
 "The sun is setting. Bring it (now)."

4.57 ma o ma o .
 ma¹ o ma¹ o
 not yet EXCLAM not yet EXCLAM
 "Not yet, not yet."

4.58 eh kumpo tərɔʔviʔ mɤ kɤ jo .
 eh kum¹po³ tə- roʔviʔ mɤ¹ k -ɤ¹ jo
 EXCLAM money CAUS count first PRES 1SG EXCLAM
 "Let me count the money first."

4.59 kane tərɔʔviʔ mɤ kɤ jo iruʔ .
 ka³ne³ tə- roʔviʔ mɤ¹ k -ɤ¹ jo iruʔ
 opium PERM count first PRES 1SG EXCLAM like.that
 "Let me count the opium first."

- 4.60 imə ɪzʊŋ seŋa twe keʔ ru na .
imə² ɪzʊŋ² se¹ -ŋa¹ twe¹ keʔ r -u na¹
then ready crab FEM take go NON.PST.PROX 2SG PFV
"(We are) ready, bring it."
- 4.61 lik cuŋ təha mɾ kɾ jo
lik cuŋ³ tə- ha² mɾ¹ k -ɾ¹ jo
ornament bag, basket PERM open first PRES 1SG EXCLAM
zəm cuŋ təha mɾ kɾ jo
zəm³ cuŋ³ tə- ha² mɾ¹ k -ɾ¹ jo
musical.instrument bag, basket CAUS open first PRES 1SG EXCLAM
iru? .
iru?
like.that
"Let me open up the ornament basket, let me open up the instrument basket first."
- 4.62 imə twe keʔ ru na se ham kə na ,
imə² twe¹ keʔ r -u na¹ se³ həm¹ k -ə na¹
then take go NON.PST.PROX 2SG PFV sun sun.set PRES 3 PFV
ɪzʊŋ twe keʔ ru na .
ɪzʊŋ² twe¹ keʔ r -u na¹
ready take go NON.PST.PROX 2SG PFV
"Bring it. The sun is setting. (We) are ready, bring it."
- 4.63 ei ma o ma o .
ei ma¹ o ma¹ o
EXCLAM not yet EXCLAM not yet EXCLAM
"Not yet, not yet."
- 4.64 likru təbise? mɾ kɾ .
likru¹ tə- bi¹se? mɾ¹ k -ɾ¹
necklace PERM arrange first PRES 1SG
"Let me organize/arrange the necklace first."

- 4.65 zam cuŋ təbiseʔ mɤ kɤ .
 zam³ cuŋ³ tə- bi¹seʔ mɤ¹ k -ɤ¹
 musical.instrument bag, basket PERM arrange first PRES 1SG
 "Let me organize the 'zams'."
- 4.66 meç^hat^heʔ bam mɤ lat bam mɤ lat .
 me¹ç^ha¹t^heʔ bæm² mɤ¹ l -at bæm² mɤ¹ l -at
 little.bit.more wait first IMP 2PL wait first IMP 2PL
 "(You all) wait a little bit first."
- 4.67 ati bə irə hən kə akun hik ç^haʔ hik ç^haʔ
 ati³ bə irə² hən¹ kə a- kun³ hik ç^haʔ hik ç^haʔ
 3SG DEF that time LOC 3 hole properly build.nest properly build.nest
 akun ibə tuŋ t^hiŋ bə hik hwe hik hwe irə tuŋ vɤ
 a- kun³ ibə² tuŋ¹ t^hiŋ bə hik hwe² hik hwe² irə² tuŋ¹ vɤ¹
 3 hole that sit NMLZ DEF properly build properly build that sit come
 taʔ irəkə sjaʔsjaʔ hik hwe ləmə tuŋ vɤ taʔ .
 t -aʔ irə²kə² sjaʔsjaʔ hik hwe² l -ə -mə tuŋ¹ vɤ¹ t -aʔ
 PST 3 there quickly properly build NF 3 NF sit come PST 3
 In the mean time, she dug a nest properly, built the nest properly, and she stayed there.
- 4.68 iməbə ei seŋa ite le lip gan se gan
 imə²bə² ei se¹ -ŋa¹ ite² le³ lip gən³ se¹ gən³
 then EXCLAM crab FEM that.much DP enter difficult crab difficult
 bəruʔ gan vɤ ku ni .
 bə²ruʔ gən³ vɤ¹ k uʔ ni³
 how difficult come PRES 2SG Q
 Then, "Hey crab, how come you are taking so long to come out?"
- 4.69 zekə lip gan se gan zekə nɤ hula nɤ ŋa ki .
 ze²keʔ lip gən³ se¹ gən³ ze²kə² nɤ² hu²la¹ nɤ² ŋa³ k i
 now frog difficult crab difficult now LOC until LOC say PRES 1PL
 (We) still say 'lipgan segan' even now (to mean very late).

4.70 ca k^hu nɣ gan vɣ ku ni aru? ɲa ta?
 ca¹ k^hu² nɣ² gən³ vɣ¹ k -u? ni³ aru? ɲa³ t -a?
 what reason LOC difficult come PRES 2SG Q like.this say PST 3
 aru? .
 aru?
 like.this
 "Why are you taking so long?", said like that.

4.71 iməbə ʒap ma? na .
 imə²bə² ʒap m -a? na¹
 then say NEG 3 PFV
 The crab won't talk anymore.

4.72 vikrə hu? tuŋ tə na .
 vikrə hu? tuŋ¹ t -ə na¹
 quickly hide sit PST 3 PFV
 (She) quickly hid.

4.73 vikrə hu? tuŋ ləmə irə mi? c^ho^hci t^hun ta? .
 vikrə hu? tuŋ¹ l -ə -mə irə² mi? c^ho³c^hi? t^hun¹ t -a?
 quickly hide sit NF 3 NF that man all gather PST 3
 Having hid quickly, all people gathered.

4.74 zukrip vurip ɲamrip ɲa?rip p^hanrip t^hun
 zuk rip vu¹ rip ɲəm¹ rip ɲa? rip p^han³ rip t^hun¹
 animal nest cut nest meat nest fish nest different nest gather
 ləmə ɲa ta? .
 l -ə -mə ɲa³ t -a?
 NF 3 NF say PST 3
 All different kinds of animals gathered and said.

4.75 ibə irəkə ai k^hova k^hova nɣ hə ʒo? nɣ
 ibə² irə²kə² ai k^ho³k^hi³ -va¹ k^ho³k^hi³ -va¹ nɣ³ hə ʒo? nɣ²
 that there EXCLAM monkey MAS monkey MAS 2SG DAT later LOC
 hum la le so? ko? nɣ hə ʒo? nɣ
 hum³ la¹ le³ so? k -o? nɣ³ hə ʒo? nɣ²
 be precise ADV DP put.inside PRES 2SG 2SG DAT later LOC

tut^hap .
 tu¹ t^hap
 piece (tail) cut/clip

When (they) made him enter (the tail) again and again, the crab clipped the monkey's tail.

4.80 k^hova ɲa ta? irəkə k^hok^hi nɾ k^hova .
 k^ho³k^hi³ -va¹ ɲa³ t -a? irə²kə² k^ho³k^hi³ nɾ² k^ho³k^hi³ -va¹
 monkey MAS say PST 3 there monkey LOC monkey MAS

Khokhi is call Khova.

4.81 irə mu bə tut^hab tut^hab aru? ri ta?
 irə² mu¹ bə tu¹ t^hap tu¹ t^hap aru? ri¹ t -a?
 that tail DEF piece (tail) cut/clip piece (tail) cut/clip like.this do PST 3

She cut that tail like this.

4.82 imə k^hok^hi ibə ak^ha? ri ta? .
 imə² k^ho³k^hi³ ibə² a- k^ha? ri¹ t -a?
 then monkey that NMLZ be angry AUX PST 3

Then, the monkey got angry.

4.83 imu c^ho^hc^hi lik tut^hab tə na .
 i- mu¹ c^ho³c^hi? lik tu¹ t^hap t -ə na¹
 1SG tail all REPLACIVE piece (tail) cut/clip PST 3 PFV

"(She) cut all my tail."

4.84 imu c^ho^hc^hi lik tut^hab tə na ɲamə
 i- mu¹ c^ho³c^hi? lik tu¹ t^hap t -ə na¹ ɲa³mə³
 1SG tail all REPLACIVE piece (tail) cut/clip PST 3 PFV COMP

aru? k^ha? ta? .

aru? k^ha? t -a?

like.this be angry PST 3

"(She) cut all my tail (as opposed to coming out of the hole)", in way (he) got angry.

4.85 irə dimə irə dimə vənp^{hi} vənp^{hi} nɾ ɲa ta? .
 irə² di³mə³ irə² di³mə³ vəp^{hi1} vəp^{hi1} nɾ² ɲa³ t -a?
 that after that after bird.kind bird.kind LOC say PST 3
 After that, (they) said to the vanphi.

4.86 ei vənp^{hi} , p^{hi}iva , nɾ bə rweʒə ha?
 ei vəp^{hi1} vəp^{hi1} -va¹ nɾ³ bə rwe²ʒɾ² ha?
 EXCLAM bird.kind bird.kind MAS 2SG DEF always land
 pjaʔti nɾ bə rweʒə ha? t^hwitti irə k^hamə irə
 pjaʔ -ti³ nɾ³ bə rwe²ʒɾ² ha? t^hut -ti³ irə² k^ha³mə³ irə²
 scratch NMLZ 2SG DEF always land dig NMLZ that reason that
 rɾɲa imə lu t^hu he? lo? .
 rɾ³ -ɲa³ imə² lu³ t^hu³ he? l -o?
 top side then deep penetrate keep IMP 2SG
 "Hey, Vanphi, you always scratch land, you always dig land. So, from the upper side dig a deep hole."

4.87 nɾ bə rweʒə ha? t^hutti la nɾ aru? ha? pjaʔti
 nɾ³ bə rwe²ʒɾ² ha? t^hut -ti³ la³ nɾ³ iru? ha? pjaʔ -ti³
 2SG DEF always land dig NMLZ 2SG like that land scratch NMLZ
 la nɾ pjaʔ luʔmə irə ɲamə lu t^hu lo? .
 la³ nɾ³ pjaʔ l -uʔ -mə irə² ɲa³mə³ lu³ t^hu³ l -o?
 2SG scratch NF 2SG NF that COMP deep penetrate IMP 2SG
 "You are always a digger, you are the scratcher who know how to scratch the land, you dig deeply."

4.88 irə ɲamə ram e atiju a huŋ hwam e aru? .
 irə² ɲa³mə³ ram² e ati³ -ɲu¹ a huŋ³ hwam¹ e aru?
 that COMP call 1PL 3SG FEM appear pull 1PL like.this
 Saying like that, "(we) will call her (i.e. the crab), (if she does not come out), (we) will pull her out."

4.89 imə vənp^{hi} kəmə pjaʔru pjaʔru ɲe pjaʔ ma?
 imə² vəp^{hi1} kə²mə² pjaʔ -ru? pjaʔ -ru? ɲe² pjaʔ m -a?
 then bird.kind ERG scratch CON scratch CON finish scratch NEG 3
 Then, the Vaphi dug and dug, but could not dig her out.

4.90 vənp^{hi} hə bəru? ku? tə ni ɲamə minno raci
 vəp^{hi}1 hə bə²ru? ku? t -ə ni³ ɲa³mə³ min³no² ra²ci¹
 bird.kind DAT how give PST 3 Q COMP ornament.kind ornament.kind
 tək^{hɣ}? ku? e ɲamə .
 tə- k^{hɣ}? ku? e ɲa³mə³
 PERM tie give 1PL COMP

How do we gave it (i.e. a decorative item) to Baphi is that (we said that we) will tie the Minno Rachi to her.

4.91 vənp^{hi} hə nɣ bə ada damin irəbə minno
 vəp^{hi}1 hə nɣ² bə a- da¹ da¹ min³ irə²bə² min³no²
 bird.kind DAT LOC DEF 3 leg leg blue that ornament.kind
 raci irə ta mə k^{hɣ}? ku? ta? .
 ra²ci¹ irə² ta² mə k^{hɣ}? ku? t -a?
 ornament.kind that place ABL tie give PST 3

(They) tied the 'minno raci' on the green leg of the Vaphi.

4.92 k^hok^{hi} hə nɣ vunp^{ha} tək^{hɣ}? ku? e ɲa ta? .
 k^ho³k^{hi}3 hə nɣ² vun²p^{ha}3 tə- k^{hɣ}? ku? e ɲa³ t -a?
 monkey DAT LOC decorative.item PERM tie give 1PL say PST 3

They said, "We will tie a Vunpha to Khokhi".

4.93 irə k^hok^{hi} hə nɣ k^{hɣ} t^ho? iru? .
 irə² k^ho³k^{hi}3 hə nɣ² k^{hɣ}3 t^ho? iru?
 that monkey DAT LOC forehead mark like.that

Khokhi has got a mark on forehead.

4.94 irəmə ai tarum bi alja bətje nɣ vɣ kə
 irə²mə² ai ta³rum³ bi³ a- lja³ bə²tje² nɣ² vɣ¹ k -ə
 then EXCLAM 3PL all NMLZ long how much LOC come PRES 3
 ni ɲa ləmə rida dat^{hə} huɲ ləmə so?
 ni³ ɲa³ l -ə -mə ri³da¹ da¹ t^{hə} huɲ³ l -ə -mə so?
 Q say NF 3 NF cane CLF one appear NF 3 NF put.inside

taʔ .
 t -aʔ
 PST 3

They wondering about how far (she) has gone, pulled a cane and put into the hole.

- 4.95 sepa kəmə kwamɲat kwamɲat kwamɲat ada kəmə
 se¹ -ɲa¹ kə²mə² kwam² ɲat kwam² ɲat kwam² ɲat a- da¹ kə²mə²
 crab FEM ERG roll hold roll hold roll hold 3 leg INST
 ibə ri lja ibə kwamɲat kwamɲat ri tə bə ri lja
 ibə² ri³ lja³ ibə² kwam² ɲat kwam² ɲat ri¹ t -ə bə ri³ lja³
 that cane long that roll hold roll hold do PST 3 DEF cane long
 ljatiŋ vɣ tə na .
 ljatiŋ vɣ¹ t -ə na¹
 whole.length come PST 3 PFV

The crab rolled the cane again and again with her legs, and the whole cane went inside (i.e. it seemed that way).

- 4.96 adɣ bə akun ka kə mɣmɣ .
 adɣ¹ bə a- kun³ ka³ kə mɣ³mɣ³
 in.fact DEF 3 hole front LOC FOC

In fact, (the crab) was just at the front (of the hole).

- 4.97 dɣ a kəmi le aa ate vɣ ka ibə ca nɣ
 dɣ³ a kə²mi² le³ aa ate² vɣ¹ k -a¹ ibə² ca¹ nɣ²
 happen 3 although DP hesitation this.much come PRES 3 that what LOC
 ɲe t^hu i ni .
 ɲe² t^hu³ i ni³
 finish penetrate 1PL Q

"(She) has gone very far. How will we reach her?"

- 4.98 pani parum t^hu i kəmi ɲe t^hu mi?
 pa² ni pa² rum³ t^hu³ i kə²mi² ɲe² t^hu³ m -i?
 year two year three penetrate 1PL although finish penetrate NEG 1PL

dx a .
 dx³ a
 happen 3

"Even if we dig for two three years, we will not reach her."

4.99 irə lɣ nɣ bə tədx , luŋ kʰu? nɣ mə ba ati rik
 irə² lɣ³ nɣ² bə tə- dx luŋ¹ kʰu? nɣ² mə ba¹ ati³ rik
 that reason LOC DEF PERM happen stone top LOC ABL only 3SG die
 rəm ba pʰja bo he? e ŋa ləmə ʒou?rip vurip
 rəm¹ ba¹ pʰja³ bo³ he? e ŋa³ l -ə -mə ʒuk rip vu¹ rip
 till only flat jump keep 1PL say NF 3 NF animal nest cut nest
 ŋamrip ŋa?rip irəmə mi?rip mɣrip apʰan pʰan ibə
 ŋəm¹ rip ŋa? rip irə²mə² mi? rip mɣ rip apʰan pʰan ibə²
 meat nest fish nest then man nest RED nest different.kinds that
 tʰun ləmə bo tə ŋa irə loŋŋu kʰu me? .
 tʰun¹ l -ə -mə bo³ t -ə ŋa¹ irə² luŋ¹ -ŋu¹ kʰu? me?
 gather NF 3 NF jump PST 3 hearsay that stone AUG top ABL

"That is why, (we) will jump on top of the stone until she dies", saying like that all animals gathered, and jumped on top of the stone.

4.100 bo ta? ibə bə se bə atʰum dx tə bə
 bo³ t -a? ibə² bə se¹ bə a- tʰum³ dx³ t -ə bə
 jump PST 3 that DEF crab DEF NMLZ round happen PST 3 DEF
 ibə apʰja bə muŋka mi?cʰa kəmə nɣ bə matŋu ŋa
 ibə² a- pʰja³ bə muŋ³ka³ mi?cʰa¹ kə²mə² nɣ³ bə mat -ŋu¹ ŋa³
 that NMLZ flat DEF universe people ERG 2SG DEF case FEM say
 ləmə pʰja bo he? ta? .
 l -ə -mə pʰja³ bo³ he? t -a?
 NF 3 NF flat jump keep PST 3

When (they) jumped, the crab, which was round, all the animals jumped and turned her flat, saying "you are the guilty one".

4.101 ibə manpʰan bə iru? ŋa tə le .
 ibə² man³pʰan³ bə iru? ŋa³ t -ə le³
 that story DEF like.that say PST 3 DP

That story goes like that.

4.102 irəbə mat ni cɣ zəkə mɣtʰeʔ coʔ nɣ mɣtʰeʔ mɣtʰeʔ
 irə²bə² mat nia³ cɣ² zə²kə² mɣ³ tʰeʔ coʔ² nɣ² mɣ³ tʰeʔ mɣ³ tʰeʔ
 that case and penalty now CLF one body LOC CLF one CLF one
 coʔ nɣ mɣtʰeʔ cʰiŋ van taʔ ibə irəkə bɣ
 coʔ nɣ² mɣ³ tʰeʔ cʰiŋ² van² t -aʔ ibə² irəkə² bɣ³
 body LOC CLF one narrow.down carry long PST 3 that there start
 cʰinmun tə ŋa .
 cʰin -mun t -ə ŋa¹
 ask RECIP PST 3 hearsay

The case and fine, which is narrowed down from one person to another, from there (judicial) inquiry started.

4.103 irəkə bɣ verit taʔ .
 irəkə² bɣ³ ve¹rit¹ t -aʔ
 there start discuss PST 3

From there (we) started judging cases.

4.104 asa va ibə sa kaʔ sa kaʔ .
 a- sa² va¹ ibə² sa² k -aʔ sa² k aʔ
 NMLZ clean person that clean PRES 3 clean PRES 3

One who is clean is clean.

4.105 irə mərə mɣtʰə coʔ nɣ ba luʔ van tʰik
 irə² mərə³ra³ mɣ³ tʰə coʔ nɣ² ba¹ luʔ van² tʰik
 that sin CLF one body LOC only narrow.down carry long CAUS
 taʔ ŋamə irə mat ni cɣ nɣ bə iruʔ .
 t -aʔ ŋa³mə³ irə² mat nia³ cɣ² nɣ² bə iruʔ
 PST 3 COMP that case and penalty LOC DEF like.that

(They) got it narrowed down to one person (to Senya). (This process of judging) is from that incident of 'case and fine'.

APPENDIX D

TEXT: SNR-7-THE CREATION STORY – GETTING THE FIRE

What is called *The Creation Story* here is a sequel of three (there may be more) stories which describe how the present-day human beings came into existence, and how they came to possess the essential things which have sustained the human lives such as the fire and the seeds of crops. The current story is about how human beings got the fire. This goes back to a time when the humans and the ghosts were believed to live together. One day, two human brothers and two ghost brothers decide to go hunting for rats together in the forest. They get a rat and divide it half and half. Immediately the human brothers start eating the meat raw. The ghost brothers get surprised and teaches the human brothers how to make a fire and cook food. The human brothers come home and make a fire which then they keep alive all the time, called *vanduthum*. One day when people were away, a monkey steals the fire and a drum and take them up a tree. Being helpless, the humans send different kinds of animals and birds to drop the fire from the tree. They first send a crow, but it fails to drop the fire. Then, they send large ants, but they also fail. Then, they send tiny little red ants. The monkey does not notice them as it was busy singing and dancing. The tiny ants climb all over the monkey's body and bite him. The monkey shakes its body and drops the fire and the drum. Thus, the humans get the fire back again.

This story was told by Phulim Hakhun (PH) and recorded by Stephen Morey in 2009 at Malugaon. This particular story of the sequel was transcribed and translated by me with the help of Phulim Hakhun (PH) and Nokrap Hakhun (NH) in February 2017 at Gauhati University. This story runs for about seven minutes and twenty seconds, and it is in the sound file: SDM23-20091216-01_SM_T_Phulim_MonkeyStory_slowed (from beginning till 7:20).

- 1.1 *ibə c^hipp^han lulvik ɲa ki nɻnuk kəmə .*
ibə² c^hipp^han¹ lu³lik ɲa³ k -i¹ nɻ- nuk kə²mə²
 that story tell story say PRES 1PL 1PL.INCL villager ERG
 We villagers call it "Chipp^han Lulik".
- 1.2 *ibə tiva nɻ zube tɻ zube ibə haʔsunj mɻt^heʔ dɻ*
ibə² ti³va³ nɻ² zu¹be³ tɻ³ zu¹be³ ibə² haʔsunj² mɻ³ t^heʔ dɻ³
 that long.ago LOC ghost family ghost that village CLF one happen
 taʔ
 t -aʔ
 PST 3
 There was a village of ghosts long time ago.
- 1.3 *imə miʔ irəbə haʔsunj mɻt^heʔ dɻ taʔ .*
imə² miʔ irə²bə² haʔsunj² mɻ³ t^heʔ dɻ³ t -aʔ
 then man that village CLF one happen PST 3
 There was a village of men.
- 1.4 *van nia van nia abo alwam irə p^hɻ verit keʔ ro .*
van¹ nia³ van¹ nia³ abo² alwam¹ irə² p^hɻ³ ve²rit keʔ ro³
 fire and fire and song (modern) dance that start talk go PURP
 I am going to talk about (the story) of fire, song, and dance.
- 1.5 *irə tani zube c^hap^hu vani miʔ c^hap^hu vani .*
irə² ta³ni³ zu¹be³ c^həp^hu² va¹ ni miʔ c^həp^hu² va¹ ni
 that 3DL ghost brothers CLF two man brothers CLF two
 These two ghosts are brothers, and the two men are brothers.
- 1.6 *irəmə zeʔ nɻ zuʔsunj kun lam ka tə ɲa .*
irə²mə² zeʔ nɻ² zuʔsunj³ kun³ lam² ka¹ t -ə ɲa¹
 then forest LOC a kind of rat hole look.for go PST 3 hearsay
 Then, (they) went to the forest to find rat holes.
- 1.7 *vat^heʔ mi ahim vaʔ ka vat^heʔ mi ahim va ka*
va¹ t^heʔ mi a- him¹ vaʔ ka¹ va¹ t^heʔ mi a- him¹ vaʔ ka¹
 CLF one also 3 house from go CLF one also 3 house from go

lam nɣ ruŋcuʔmun ka taʔ .
 lam³ nɣ² ruŋ² cuʔ -mun ka¹ t -aʔ
 road LOC together meet RECIP go PST 3

One person came from a house and another from another house and met each other on the road.

1.8 ei zuʔsuŋ kun lam ka e ŋa ləmə ei
 ei zuʔsuŋ³ kun³ lam² ka¹ e ŋa³ l -ə -mə ei
 EXCLAM a kind of rat hole look.for go 1PL say NF 3 NF EXCLAM
 ka e ŋamə not^{hə} mə lam ləmə zuʔsuŋ kunt^{hə}
 ka¹ e ŋa³mə³ no²t^{hə}¹ mə lam² l -ə -mə zuʔsuŋ³ kun³ t^{hə}¹
 go 1PL COMP together ADV look.for NF 3 NF a kind of rat CLF one
 ruŋt^{hu} taʔ .
 ruŋ² t^{hu}¹ t -aʔ
 together dig PST 3

Saying we will go looking for rat holes, looking for (the hole) together, they dig a rat hole together.

1.9 ruŋt^{hu} tə bə zuʔsuŋ bə mɣt^{hə} ba kəp tə
 ruŋ² t^{hu}¹ t -ə bə zuʔsuŋ³ bə mɣ³ t^{hə} ba¹ kəp t -ə
 together dig PST 3 DEF a kind of rat DEF CLF one only get PST 3
 ŋa .
 ŋa¹
 hearsay

When they dug together, they got only one rat.

1.10 mɣt^{hə} ba kəp ləmə zube c^hap^{hu} nia miʔ c^hap^{hu} irəhɣ
 mɣ³ t^{hə} ba¹ kəp l -ə -mə zu¹be³ c^həp^{hu}² nia³ miʔ c^həp^{hu}² irə²hɣ³
 CLF one only get NF 3 NF ghost brothers and man brothers those
 vabəli irəbə zuʔsuŋ bə t^haʔru ri tə ŋa .
 va¹ bəli irə²bə² zuʔsuŋ³ bə t^haʔru² ri¹ t -ə ŋa¹
 CLF four that a kind of rat DEF make two pieces do PST 3 hearsay

Finding only one, two ghosts and two people being four, they cut the rat into two pieces.

1.11 zuʔsuŋ ibə tʰaʔru ri ləmə zube tɾ hə nɾ
zuʔsuŋ³ ibə² tʰaʔru² ri¹ l -ə -mə zu¹be³ tɾ³ hə nɾ²
a kind of rat that make two pieces do NF 3 NF ghost family DAT LOC
tʰaʔka miʔ tɾ hə nɾ tʰaʔka twe van tə ŋa .
tʰaʔka³ miʔ tɾ³ hə nɾ² tʰaʔka³ twe¹ van² t -ə ŋa¹
one.half man family DAT LOC one.half take carry long PST 3 hearsay
Cutting the rat into halves, the ghosts took a half and the men took the other half.

1.12 twe van ləmə miʔ cʰapʰu kəmə bə irəmə
twe¹ van² l -ə -mə miʔ cʰəpʰu² kə²mə² bə irə²mə²
take along NF 3 NF man brothers ERG DEF then
ciɾɾʔ ɲat ləmə pʰɾʔ tə ŋa .
ci²ɾɾʔ ɲat l -ə -mə pʰɾʔ t -ə ŋa¹
to tear (pulled by two people) hold NF 3 NF eat PST 3 hearsay
Bringing it, the men tore (the meat), and then ate it.

1.13 ahiŋ mə pʰɾʔ tə ŋa .
a- hiŋ³ mə pʰɾʔ t -ə ŋa¹
NMLZ raw ADV eat PST 3 hearsay
They ate it raw.

1.14 imə zube cʰapʰu kəmə ai nɾʔ pʰɾʔ nɾʔ pʰɾʔ an .
imə² zu¹be³ cʰəpʰu² kə²mə² ai nɾʔ pʰɾʔ nɾʔ pʰɾʔ an¹
then ghost brothers ERG EXCLAM prohibit eat prohibit eat 2PL
The ghost brothers (said), "Hey, do not eat."

1.15 iruʔ caro pʰɾʔ kan ni .
iruʔ ca¹ro² pʰɾʔ k -an¹ ni³
like.that why eat PRES 2PL Q
"Why are you eating like that?"

1.16 ŋa hə nɾ van toa ŋamə zube cʰapʰu kəmə iruʔ ŋa
ŋa¹ hə nɾ² van¹ toa¹ ŋa³mə³ zu¹be³ cʰəpʰu² kə²mə² iruʔ ŋa³
1SG DAT LOC fire exist COMP ghost brothers ERG like.that say

ri ləmə bə ikə va? van huŋ tə ɲa .
 ri¹ l -ə -mə bə ikə² va? van¹ huŋ³ t -ə ɲa¹
 do NF 3 NF DEF there from fire appear PST 3 hearsay

Later on saying "Why are you eating raw?", taking baqsakha, taking bamboo strips, taking bamboo skins, rubbing the bamboo skins putting between (woods), pulling the bamboo strips, the fire comes out.

1.19 van huŋ ləmə aru? tʰɣ? ləmə su pʰɣ?cʰa?
 van¹ huŋ³ l -ə -mə iru? tʰɣ? l -ə -mə su¹ pʰɣ?cʰa?
 fire appear NF 3 NF like that start.fire NF 3 NF to roast eat
 ki ta .
 k -i¹ ta³
 PRES 1PL DP

When the fire started, "we roast and eat (the rat)."

1.20 van aru? tʰɣ? li?mə aru? swe? pʰɣ?cʰa? tʰiŋ
 van¹ aru? tʰɣ? l -i? -mə aru? swe? pʰɣ?cʰa? tʰiŋ
 fire like.this start.fire NF 1PL NF like.this to roast eat NMLZ
 ɲamə bə zube tɾ kəmə aru? ɲa ku? ta? .
 ɲa³mə³ bə zu¹be³ tɾ³ kə²mə² iru? ɲa³ ku? t -a?
 COMP DEF ghost family ERG like that say give PST 3

"Lighting the fire like this, (we) should eat like this", said the ghost's family.

1.21 imə ai pʰunava dɾ imə ni hə mi ku?
 imə² ai pʰu³na³ -va¹ dɾ³ imə² ni³ hə mi ku?
 then EXCLAM friend MAS happen then 1PL.EXCL DAT also give
 nɾ ri ɲa ləmə zube tɾ kəmə
 nɾ³ r -i ɲa³ l -ə -mə zu¹be³ tɾ³ kə²mə²
 politeness NON.PST.PROX 1PL say NF 3 NF ghost family ERG
 va?hənliŋ kʰatʰe? ba?sa kʰa kʰatʰe? vwe?ca
 va?hən¹liŋ³ kʰa³ tʰe? ba?sa³ kʰa¹ kʰa³ tʰe? vwe?ca¹
 strip of a bamboo.kind CLF one tree.type split piece CLF one bamboo.skin
 tumtʰe? ku? ta? .
 tum³ tʰe? ku? t -a?
 CLF one give PST 3

Then (the men said), "Hey friend, kindly give us (the fire) too", then the ghost family gave one wood, one bamboo, and a handful of bamboo skin.

1.22 miʔ heʔ kuʔ taʔ .
 miʔ heʔ kuʔ t -aʔ
 man DAT give PST 3

(They) gave (the fire) to the men.'

1.23 eh arəbə tʰɿʔ latmə aruʔ ri latmə
 eh arə²bə² tʰɿʔ l -at -mə iruʔ ri¹ l -at -mə
 EXCLAM this start.fire NF 2PL NF like that do NF 2PL NF
 pʰɿʔcʰaʔ lat ŋa ləmə bə irəmə him nɿ hun van
 pʰɿʔcʰaʔ l -at ŋa³ l -ə -mə bə irə²mə² him¹ nɿ² hun¹ van²
 consume IMP 2PL say NF 3 NF DEF then house LOC carry along
 ləmə imə tʰɿʔ taʔ .
 l -ə -mə imə² tʰɿʔ t -aʔ
 NF 3 NF then start.fire PST 3

"(You) setting the fire like this, doing like this, eat (food)", saying like that (the men) bringing (the fire) home, started (the fire).

1.24 imə tʰɿʔ ləmə tuŋ van tuŋ van ri taʔ
 imə² tʰɿʔ l -ə -mə tuŋ¹ van² tuŋ¹ van² ri¹ t aʔ
 then start.fire NF 3 NF sit carry long sit carry long do PST 3
 irəte akʰiŋ nɿ van kʰat ibə miʔ kəmə kəp tə na .
 irə²te² akʰiŋ nɿ² van¹ kʰat ibə² miʔ kə²mə² kəp t -ə na¹
 that much time LOC fire method that man ERG get PST 3 PFV

Starting the fire, continueing to keep it alive, at that time people got the fire (for the first time).

1.25 kəp ləmə himti be nɿ ka taʔ irə hən
 kəp l -ə -mə him¹ti³ be¹ nɿ² ka¹ t -aʔ irə² hən¹
 get NF 3 NF family members paddy.field LOC go PST 3 that time
 keʔ ibə vankʰat kʰat taʔ irə van irəbə eh
 keʔ ibə² van¹kʰat kʰat t -aʔ irə² van¹ irə²bə² eh
 LOC that start.fire make fire PST 3 that fire that EXCLAM

rɣŋiʔ roʔviʔ nɣ bə vantap doŋ nɣ vandut^hom ŋa ki .
 rɣ³ŋiʔ roʔviʔ nɣ² bə van¹tap duŋ³ nɣ² van¹du¹t^hum³ ŋa³ k -i¹
 everyday LOC DEF fireplace big LOC lit firewood say PRES 1PL

Having got (the fire), when the family would go to the field, the lit fire is at the large fireplace all the time. (The vanduthom is lit all the time in the fireplace.)

1.26 vandut^hom ibə rweʒɣ heʔc^hiruʔ ba .
 van¹du¹t^hum³ ibə² rwe²ʒɣ² heʔ c^hi² -ruʔ ba¹
 lit firewood that always keep DUR CON only

The vanduthum is always kept lit (by people).

1.27 ak^hat agan ŋa ləmə ibə
 a- k^hat a- gan³ ŋa³ l -ə -mə ibə²
 NMLZ make fire NMLZ difficult say NF 3 NF that
 amɣcwe van irəbə tapla kəmə pukc^hi ləmə
 a- mɣ³cwe³ van¹ irə²bə² tapla² kə²mə² puk c^hi² l -ə -mə
 NMLZ readymade fire that ash INST cover DUR NF 3 NF
 van ibə heʔ tɣʔ ŋa imə pan^hət^hə pannini mi
 van¹ ibə² heʔ t -ɣʔ ŋa³ imə² pan³ t^hə t^hə pan³ ni ni mi
 fire that keep PST 1SG say then night one one night two two also
 tuŋ ka .
 tuŋ¹ k -a¹
 exist PRES 3

Thinking that it is difficult to start a fire, covering the fire with ashes, keeping like that the fire lasts for one to two nights.

1.28 celij t^hɣʔ liʔmə du tɣʔ
 ce¹liŋ³ t^hɣʔ l -iʔ -mə du¹ t -ɣʔ
 hard firewood start.fire NF 1PL NF keep lit firewood under ash PST 1SG
 ŋa imeʔ ibə vandut^hum ŋa ki .
 ŋa³ imeʔ ibə² van¹du¹t^hum³ ŋa³ k -i¹
 say then that lit firewood say PRES 1PL

Lighting a hard firewood, and keeping it under live charcoals, the live firewood is called vanduthom.

1.29 irə vandut^hum ibə vi kəmə hu? twe vɣ tə ŋa
 irə² van¹du¹t^hum³ ibə² vi³ kə²mə² hu? twe¹ vɣ¹ t -ə ŋa¹
 that lit firewood that monkey ERG to steal take come PST 3 hearsay
 rɣŋi? nɣ him va? .
 rɣ³ŋi? nɣ² him¹ va?
 day LOC house from

A monkey stole the 'vanduthom' away from house in the day light.

1.30 mi? him va? ibə vi kəmə hu? twe .
 mi? him¹ va? ibə² vi³ kə²mə² hu? twe¹
 man house from that monkey ERG to steal take

The monkey stole it from a man's house.

1.31 irəmə nuŋ irəbə twe hun ke? vi kəme mi? him va? .
 irə²mə² nuŋ³ irə²bə² twe¹ hun¹ ke? vi³ kə²me² mi? him¹ va?
 then drum that take carry go monkey ERG man house from

The monkey (also) took a drum from man's house.

1.32 twe hun ke? ləmə bɣ p^ho? nɣ hun ke? ləmə bɣ
 twe¹ hun¹ ke? l -ə -mə bɣ¹ p^ho? nɣ² hun¹ ke? l -ə -mə bɣ¹
 take carry go NF 3 NF tree branch LOC carry go NF 3 NF tree
 p^ho? nɣ t^hɣ? ke? tə ŋa .
 p^ho? nɣ² t^hɣ? ke? t -ə ŋa¹

branch LOC start.fire go PST 3 hearsay

Taking (the things), took them up to the tree branch, started the fire on the tree branch.

1.33 t^hɣ? ləmə vi irəbə nuŋ bə bu? van bə t^hɣ? ri
 t^hɣ? l -ə -mə vi³ irə²bə² nuŋ³ bə bu? van¹ bə t^hɣ? ri¹
 start.fire NF 3 NF monkey that drum DEF beat fire DEF start.fire do
 ləmə aro? abo aru? dɣ .
 l -ə -mə a- ro? a- bo² iru? dɣ³
 NF 3 NF NMLZ shout NMLZ sing like that happen

Beating the drum and lighting the fire, the monkey shouted and sang songs.
 (Incomplete sentence. /dɣ/ should be followed by /ta?/, according to PH.)

- 1.34 irəmə nukmi?c^ha bə van t^hɣ? t^hiŋ ahu na mi? bə
 irə²mə² nukmi?c^ha¹ bə van¹ t^hɣ? t^hiŋ ahu¹ na¹ mi? bə
 then villager DEF fire start.fire NMLZ not exist PFV man DEF
 aru? bɣ nɣ iru? ba t^huŋsu .
 iru? bɣ¹ nɣ² iru? ba¹ t^huŋ³ su²
 like that tree LOC like.that only attentively watch

When man found out that there was no fire, they just looked at the tree. (could not do anything about it)

- 1.35 bəru? ri li?mə kəp e ŋamə bəru? ri li?mə kəp
 bə²ru? ri¹ l -i? -mə kəp e ŋa³mə³ bə²ru? ri¹ l -i? -mə kəp
 how do NF 1PL NF get 1PL COMP how do NF 1PL NF get
 e ŋa ləmə ana arəbə ap^hɣ irəbə ap^hɣ irəbə vək^ha ke?
 e ŋa³ l -ə -mə ana¹ arə²bə² ap^hɣ³ irə²bə² ap^hɣ³ irə²bə² vək^ha³ ke?
 1PL say NF 3 NF here this first that first that crow go
 t^hik ta? .
 t^hik t -a?
 CAUS PST 3

Saying "how will we get it?", first, they sent the crow.

- 1.36 irəbə məɣ kəme panbu?he? ka lo? .
 irə²bə² mə- rɣ¹ kə²me² pan² bu? he? ka¹ l -o?
 that 2SG wing ERG blow away beat keep go IMP 2SG
 "Go and drop (the fire) hitting with your wing."

- 1.37 nɣ hə zo? nɣ rumbe camco tərut t^hik e .
 nɣ³ hə zo? nɣ² rum²be² cam³co¹ tə- rut t^hik e
 2SG DAT later LOC altar table PERM collect CAUS 1PL
 "We will let you have the offerings of the altar."
 (The crow will collect the offerings itself.)

- 1.38 rumbe camco tərut t^hik e zabu? ka lo? ŋa
 rum²be² cam³co¹ tə- rut t^hik e za¹ bu? ka¹ l -o? ŋa³
 altar table PERM collect CAUS 1PL fall beat go IMP 2SG say

tə bə vək^ha kəme ta ʒa buʔ maʔ .
 t -ə bə vək^ha³ kə²me² ta¹ ʒa buʔ m -aʔ
 PST 3 DEF crow ERG succeed fall beat NEG 3

When (they) said, "We will get you the foods of the altar, go drop (the vandothom)", the crow could not drop it.

1.39 vi kəmə akwam bo akwam bo irəkə vɾ
 vi³ kə²mə² a- kwam² bo² a- kwam² bo² irə²kə² vɾ¹
 monkey ERG NMLZ circle sing NMLZ circle sing there come
 t^hik maʔ .
 t^hik m -aʔ
 CAUS NEG 3

The mokey singing/dancing round and round did not allow (the crow) to come.

1.40 aruʔ dɾ tə ŋa .
 aruʔ dɾ³ t -ə ŋa¹
 like.this happen PST 3 hearsay

That is how it happened.

1.41 imə irəbə vin na .
 imə² irə²bə² vin² na¹
 then that be back PFV

Then, it (the crow) withdrew.

1.42 irə dimə c^hipk^hara keʔ t^hik taʔ aduŋ irəbeʔ .
 irə² di³mə³ c^hipk^həra³ keʔ t^hik t -aʔ a- duŋ³ irə²beʔ
 that after ant go CAUS PST 3 NMLZ big that

After that, they sent an ant, big one.

1.43 c^hipk^hara aduŋ keʔ t^hik tə bə baruʔ la iri ʒoʔ
 c^hipk^həra³ a- duŋ³ keʔ t^hik t -ə bə bə²ruʔla³ iri¹ ʒoʔ
 ant NMLZ big go CAUS PST 3 DEF requesting expression later
 nɾ nirum kəmə punmɾ pomɾ luŋpo can ki irəkə
 nɾ² ni³rum³ kə²mə² pun²mɾ³ po³mɾ³ luŋ¹po³ can² k -i¹ irə²kə²
 LOC 1PL.EXCL ERG traped animal trap lay.trap PRES 1PL there

vaʔ punmɿ pomɿ təpi loʔ .
 vaʔ pun²mɿ³ po³mɿ³ tə- pi³ l -oʔ
 from trapped animal CAUS check.trap NF 2SG

Having sent the big ants, "What can we do (polite), we will catch animals in the traps, you can eat those."

1.44 ka loʔ ŋa ləmə cʰipkʰara keʔ tʰik taʔ .
 ka¹ l -oʔ ŋa³ l -ə -mə cʰipkʰəra³ keʔ tʰik t -aʔ
 go IMP 2SG say NF 3 NF ant go CAUS PST 3

Saying "Go", they sent the ants.

1.45 cʰipkʰara keʔ tʰik tə bə aduŋ lala ka taʔ irəbə
 cʰipkʰəra³ keʔ tʰik t -ə bə a- duŋ³ la¹la¹ ka¹ t -aʔ irə²bə²
 ant go CAUS PST 3 DEF NMLZ big a bit go PST 3 that
 vi kəmə su ləmə bə rik ɲat rik ɲat ʒa buʔ ʒa buʔ
 vi³ kə²mə² su² l -ə -mə bə rik ɲat rik ɲat ʒa buʔ ʒa buʔ
 monkey ERG show NF 3 NF DEF die hold die hold fall beat fall beat
 heʔ .

heʔ
 keep

When (they) sent the ants, the big ones, the monkey saw, then killed them, dropped them off (the tree).

1.46 ʒabuʔ ʒabuʔ heʔ .
 ʒa¹ buʔ ʒa¹ buʔ heʔ
 fall beat fall beat keep

He dropped them off (the tree).

1.47 ŋe keʔ tʰik maʔ .
 ŋe² keʔ tʰik m -aʔ
 be able go CAUS NEG 3

(Men) could not send (the ants).

1.48 vi coʔ nɿ ŋe keʔ tʰik maʔ .
 vi³ coʔ nɿ² ŋe² keʔ tʰik m -aʔ
 monkey body LOC be able go CAUS NEG 3

(They) could not send (the ants) to the body of the monkey.

1.49 a dx bə nɣ bə lɣ? lu?mə p^huŋk^hɣ
 a dx³ bə nɣ³ bə lɣ? l -u? -mə p^huŋ³k^hɣ²
 that happen DEF 2SG DEF bite NF 2SG NF shake (one's body)
 ka ikə təʒahe? la ŋamə iru? ke? t^hik
 k -a¹ ikə² tə- ʒa¹ he? l a ŋa³mə³ iru? ke? t^hik
 PRES 3 there CAUS fall keep NF 3 COMP like.that go CAUS
 ta?
 t -a?
 PST 3

After that, "When you will bite (the monkey), he will shake his body, at that time, he will fall', saying like that they sent (the ants).

1.50 ibə ŋe ma?
 ibə² ŋe² m -a?
 that be able NEG 3

(The ants) also could not do it.

1.51 irə dimə c^hipc^hi c^ha ate ate c^ha aso c^ha
 irə² di³ -mə c^hipc^hi³ c^ha¹ ate² ate² c^ha¹ a²- so³ c^ha¹
 that later ADV small.ant little this.much this.much little NMLZ red little
 c^hipc^hi irə kəmə ŋe tə ŋa .
 c^hipc^hi³ irə² kə²mə² ŋe² t -ə ŋa¹
 small.ant that ERG finish PST 3 hearsay

After that, tiny little red ants could do it.

1.52 irəbə bɣ nɣ mə karu? karu? no?suŋ nɣ karu?
 irə²bə² bɣ¹ nɣ² mə ka¹ -ru? ka¹ -ru? no?suŋ² nɣ² ka¹ -ru?
 that tree LOC ABL go CON go CON end LOC go CON
 karu? ri ləmə bə vi co? nɣ ake? tuŋ
 ka¹ -ru? ri¹ l -ə -mə bə vi³ co? nɣ² a- ke? tuŋ¹
 go CON do NF 3 NF DEF monkey body LOC NMLZ go sit
 kə c^ham ma?
 k -ə c^ham¹ m -a?
 PRES 3 know NEG 3

At the end, they (red ants) climbing the tree, climbed up the body of the monkey, the monkey did not know.

1.53 abo alwam limlxʔ taʔ irəkə ləpk^{hi} maʔ
a- bo² a- lwam² lim²lxʔ t -aʔ irə²kə² ləpk^{hi1} m -aʔ
NMLZ sing NMLZ dance spend time PST 3 there see NEG 3
lx nx acoʔ nx səra hu ləmə lxʔ tə
lx³ nx² a- coʔ nx² səra² hu² l -ə -mə lxʔ t -ə
reason LOC 3 body LOC all at once reach NF 3 NF bite PST 3
ŋa .
ŋa¹
hearsay

When he was singing and dancing, he did not see, because of that, all ants reached his body and bit him.

1.54 ibə aruʔ aruʔ aruʔ aruʔ p^huŋk^hx taʔ irəkə
ibə² aruʔ aruʔ aruʔ aruʔ p^huŋ³k^hx² t -aʔ irə²kə²
that like.this like.this like.this like.this shake (one's body) PST 3 there
bə nuŋ mi ikə li za heʔ van mi irəkə
bə nuŋ³ mi ikə² li² za heʔ van² mi irə²kə²
DEF drum also there immediately fall keep carry long also there
p^huŋk^hx taʔ irəkə bə van mi ikə leʔ zaheʔ kuʔ
p^huŋ³k^hx² t -aʔ irə²kə² bə van¹ mi ikə² leʔ za¹ heʔ kuʔ
shake (one's body) PST 3 there DEF fire also there back fall keep give
taʔ .
t -aʔ
PST 3

When he shook his body, the drum and the fire fell back on the ground immediately.

1.55 imx vin twe taʔ .
imə² vin² twe¹ t -aʔ
then be back take PST 3
(The men) got the (fire) back.

1.56 imə vi hə bə , aa vi kəmə bə kəp maʔ
imə² vi³ hə bə aa vi³ kə²mə² bə kəp m -aʔ
then monkey DAT DEF hesitation monkey ERG DEF get NEG 3

na .

na¹

PFV

Then the monkey did not get (the fire).

- 1.57 iməbə mi? kəmə bə nuŋ bə vin twe van bə vin twe
 imə²bə² mi? kə²mə² bə nuŋ³ bə vin² twe¹ van¹ bə vin² twe¹
 then man ERG DEF drum DEF be back take fire DEF be back take
 aru? ri ta? .
 iru? ri¹ t -a?
 like that do PST 3

Then, the men brought back the drum and the fire.

- 1.58 iru? ri ləmə zəkə c^hipk^həra kəmə luŋpo can imə ni
 iru? ri¹ l -ə -mə zə²kə² c^hipk^həra³ kə²mə² luŋ¹po³ can² imə² ni³
 like.that do NF 3 NF now ant ERG trap lay.trap then Q
 calili dɿ imə ma? p^hɿ? kə bə irə rja nɿ ire?
 ca¹li¹li¹ dɿ³ imə² ma? p^hɿ? k -ə bə irə² rja¹ nɿ² ire?
 whatever happen then all eat PRES 3 when that wage LOC like that
 koli ku? k^hamə iru? ma? p^hɿ? ka? ŋamə iru? .
 ko²li² ku? k^ha³mə³ iru? ma? p^hɿ? k -a? ŋa³mə³ iru?
 work (hazira) give reason like.that all eat PRES 3 CHAIN like.that

Happening like that, now the ant eats everything whatever is there on the 'lungpo' trap, right. That is the price for his work (i.e. getting the fire back), and that is why they eat everything (on the trap). Like that.

- 1.59 irəbə ibə na ni . [KH]
 irə²bə² ibə² na¹ ni³
 that that PFV Q
 Is that how it is?

- 1.60 irəmə aa irəmə le? ka ləmə zube tɿ nam nɿ
 irə²mə² aa irə²mə² le? ka¹ l -ə -mə zu¹be³ tɿ³ nam³ nɿ²
 then hesitation then again go NF 3 NF ghost family with LOC

noʔsuŋ nɣ van bə ibə na .

noʔsuŋ² nɣ² van¹ bə ibə² na¹

end LOC fire DEF that PFV

Then, going again to the ghosts at the end, that is the story of the fire.

1.61 van bə irəmə ʒɣʔ lə na mə , abɣ mɣmɣ

van¹ bə irə²mə² ʒɣʔ lə na¹ mə a- bɣ³ mɣ³mɣ³

fire DEF then stop (intr) NF PFV ADV NMLZ start FOC

mɣtheʔ irəbə təroʔ leʔ ka tə na ʒube tɣ nam

mɣ³ t^heʔ irə²bə² tə- roʔ leʔ ka¹ t -ə na¹ ʒu¹be³ tɣ³ nam³

CLF one that CAUS fight again go PST 3 PFV ghost family with

nɣ .

nɣ²

LOC

Having the story of the fire finished, this is one story in the beginning, then (the men) went back to fight with the ghosts (that is the second part of the story).

APPENDIX E

TEXT: SNR-8-THE CREATION STORY – GETTING THE SEEDS

This is another story of the sequel *The Creation Story*. This story is about how human beings came to possess the seeds for their crops and plants. This story also goes back to the time when ghosts and humans were believed to live side by side. The ghosts lived under the ground, and the humans lived in villages above the ground. This story starts at a time when ghosts started stealing human children and eating them. The human beings did not know how the children went missing. One day an old man being worried and angry was lying outside his house on the bamboo floor. Ghosts come and pick him up to their ground hole. The old man decides to see what the ghosts would do to him. As the ghosts try to take him inside the hole, the old man spreads his legs or his hands so that they cannot fit him inside the hole. Then, the ghosts try chopping him into pieces using their knives, which are leaves of different pants. Failing to do so, they abandon him outside their hole. The old man returns to the village and informs everyone. People then attack the ghosts, enter their underground holes, and discover the crop and plant seeds.

This story was told by Phulim Hakhun (PH) and was recorded by Stephen Morey in 2009 at Malugaon. I transcribed and translated this particular story of the sequel with the help of Phulim Hakhun and Nokrap Hakhun (NH) in February 2017 at Gauhati University. This story runs for about six minutes and thirty seconds, and is in the same file as SNR-7: SDM23-20091216-01_SM_T_Phulim_MonkeyStory_Slowed (from 7:20 till end). *Note that the numeral 1 represents the low tone, the numeral 2 represents the high tone, and the numeral 3 represents the falling tone in the text.*

1.1 nɣnuk hjaʔ , zube tɣ haʔsuŋ bə mama , miʔ
nɣ nuk hjaʔ zu¹be³ tɣ³ haʔsuŋ bə ma²ma² miʔ
1PL.INCL villager nephew/niece ghost family village DEF separate man
haʔsuŋ bə mama , mama nɣ tuŋ taʔ .
haʔsuŋ bə ma²ma² ma²ma² nɣ² tuŋ¹ t -aʔ
village DEF separate separate LOC sit PST 3

My nephew, the ghost village is separate, and the men's village is separate. They lived separately.

1.2 ibə rɣŋiʔ nɣ ibə zube tɣ kəmeʔ ibə , ɲuva be nɣ
ibə² rɣ³ŋiʔ nɣ² ibə² zu¹be³ tɣ³ kəmeʔ ibə² a- ɲu¹va¹ be¹ nɣ²
that day LOC that ghost family ERG that 3 parents paddy.field LOC
k^həm la ka kaʔ , ikə nana ibə mɣt^hə mɣt^hə mə
k^həm³ la¹ ka¹ k -aʔ ikə² na³na³ ibə² mɣ³ t^hə mɣ³ t^hə mə
quiet NF go PRES 3 there child that CLF one CLF one ADV
huʔ pi vɣ lə ɲamə , akun nɣ , zube
huʔ pi² vɣ¹ lə ɲa³mə³ a- kun³ nɣ² zu¹be³
secretely, stealthely carry on arm come NF COMP 3 hole LOC ghost
ibə , akun dɣ tə ɲa .
ibə² a- kun³ dɣ³ t -ə ɲa¹
that 3 hole happen PST 3 hearsay

Then, during the day when the parents were out to the field leaving the houses quiet, then the ghosts took away the children one by one inside a hole, it was a hole.

1.3 him dɣ maʔ .
him¹ dɣ³ m -aʔ
house happen NEG 3

It was not a house.

1.4 inɣ haʔkun nɣ ate kun nɣ lip vɣ ləmə irə
inɣ² haʔ kun³ nɣ² ate² kun³ nɣ² lip vɣ¹ l -ə -mə irə²
there land hole LOC this.much hole LOC enter come NF 3 NF that
k^hun nɣ tuŋ vɣ taʔ .
k^hun³ nɣ² tuŋ¹ vɣ¹ t -aʔ
under LOC sit come PST 3

In the underground hole, this big hole, they enter and stayed inside the hole.

- 1.5 zube tx tuŋ tʰiŋ bə haʔ muŋ kʰun nɣ dɣ tə
 zu¹be³ tx³ tuŋ¹ tʰiŋ³ bə haʔ muŋ³ kʰun³ nɣ² dɣ³ t -ə
 ghost family sit NMLZ DEF land inside under LOC happen PST 3
 ŋa .
 ŋa¹
 hearsay

The ghosts dwelling place was under the ground.

- 1.6 imə mɣtʰə mɣtʰə mə huʔ pi vɣ
 imə² mɣ³ tʰə mɣ³ tʰə mə huʔ pi² vɣ¹
 then CLF one CLF one ADV secretly, stealthely carry on arm come
 ləmə , maʔ pʰɣʔ van zube kəmeʔ .
 l -ə -mə maʔ pʰɣʔ van² zu¹be³ kəmeʔ
 NF 3 NF all eat carry long ghost ERG

Secretely carrying one by one, the ghosts ate all of them there.

- 1.7 iruʔ dɣ ləmə rɣŋiʔtʰə nɣ , nanahɣ bəruʔ dɣ
 iruʔ dɣ³ l -ə -mə rɣ³ŋiʔ tʰə nɣ² na³na³ -hɣ bə²ruʔ dɣ³
 like.that happen NF 3 NF day one LOC child PL how happen
 ləmə maʔ kə ba ni ŋamə , arancʰiʔ mə
 l -ə -mə maʔ k -ə ba¹ ni³ ŋa³mə³ a- ran¹cʰiʔ mə
 NF 3 NF lose PRES 3 DUB Q COMP NMLZ grief ADV
 tikava ju , zəkə nirum rɣ na , juva na , ŋa nɣ
 ti³ka³ -va¹ ju¹ zəkə² ni³rum³ rɣ¹ na¹ ju¹va¹ na¹ ŋa¹ nɣ²
 oldman MAS lot now 1PL.EXCL like/as PFV aged PFV 1SG LOC
 mə mi juva me na tika na .
 mə mi ju¹va¹ me³ na¹ ti³ka³ na¹
 ABL also aged COM PFV oldman PFV

Happening like this, one day, thinking how the children are disappearing, in anger an aged old man, now just like us, aged, older than me....

- 1.8 irəbə rɣŋiʔ telo nɣ zip tə ŋa .
 irə²bə² rɣ³ŋiʔ te¹lo¹ nɣ² zip t -ə ŋa¹
 that day extended bamboo floor LOC sleep PST 3 hearsay
 (He) slept on the outside bamboo floor one day.

1.9 bəru? dɣ tə ni , ɲa simte te ɣ ɲa lə ɲamə bə ,
 bə²ru? dɣ³ t -ə ni³ ɲa¹ sim²te² te³ ɣ ɲa³ lə ɲa³mə³ bə
 how happen PST 3 Q 1SG test try 1SG say NF COMP DEF
 arikmɣ rɣɣ ibə vikrə , aɣɣ ɣuɣu arik
 a rikmɣ³ rɣ¹rɣ¹ ibə² vikrə a- ɣɣ² ɣu³ɣu³ a- rik
 3 dead body like that quickly NMLZ straight sound.sym NMLZ die
 rɣɣ kʰɣ? la ɣip ku? tə ɲa .
 rɣ¹rɣ¹ kʰɣ? la¹ ɣip ku? t -ə ɲa¹
 like proper NF sleep give PST 3 hearsay

Thinking, "How did it happen, I will find out", he slept straight like a dead body.

1.10 imə rɣɣi? ɲi?dam ike? ibə , semuɲ ke? ɲa i ni , vɣ
 imə² rɣ³ɣi? ɲi?dam³ ike? ibə² se³muɲ² ke? ɲa³ i ni³ vɣ¹
 then day noon there that before noon LOC say 1PL Q come
 ləmə ɣube bi ibə vɣ lə ɲame? ibə pi vɣ
 l -ə -mə ɣu¹be³ bi³ ibə² vɣ¹ lə ɲame? ibə² pi² vɣ¹
 NF 3 NF ghost all that come NF COMP that carry on arm come
 tə ɲa .
 t -ə ɲa¹
 PST 3 hearsay

At noon, right before noon, right, all the ghosts come and then carried the old man away.

1.11 pi ləmə ada ɲa mə sɣ? e ɲamə ada
 pi² l -ə -mə a- da¹ ɲa³ mə sɣ? e ɲa³mə³ a- da¹
 carry on arm NF 3 NF 3 leg side ABL put.inside 1PL COMP 3 leg
 ɲa sɣ?
 ɲa³ sɣ?
 side put.inside

Having carried, (they tried) to take him (in the hole) from the leg side.

1.12 ada ibə ka ka? ka ka? irəmə kʰunbiɲ nɣ
 a- da¹ ibə² ka² k -a? ka² k -a? irə²mə² kʰun³biɲ³ nɣ²
 3 leg that spread PRES 3 spread PRES 3 then hole LOC

hum sɿʔ tʰik maʔ .
 hum³ sɿʔ tʰik m -aʔ
 be precise put.inside CAUS NEG 3

(He) spread his legs more and more, and therefore (they) could not take him inside the hole properly.

1.13 ka kaʔ .
 ka² k -aʔ
 spread PRES 3

(He) spreads his legs.

1.14 akʰu ŋa meʔ akʰu ŋa meʔ leʔ ŋa .
 a kʰu³ ŋa³ meʔ a kʰu³ ŋa³ meʔ leʔ ŋa³
 3 head side ABL 3 head side ABL again say

(They) said, "From the head side, from the head side".

1.15 adɿʔ ibə koʔ keʔ koʔ keʔ ibə aruʔ leʔ sɿʔ van ibə
 a dɿʔ ibə² koʔ keʔ koʔ keʔ ibə² aruʔ leʔ sɿʔ van² ibə²
 3 hand that peel go peel go that like.this again put.inside carry long that
 mi hum sɿʔ van maʔ .
 mi hum³ sɿʔ van² m -aʔ
 also be precise put.inside carry long NEG 3

(He) spread his hands slowly (like peeling outer layer), and then they could not take him properly under the hole.

1.16 imə akʰu ŋa mə te sɿʔ hum maʔ na .
 imə² a kʰu³ ŋa³ mə te³ sɿʔ hum³ m -aʔ na¹
 then 3 head side ABL try put.inside be precise NEG 3 PFV

When tried to take him inside from the head side, it does not work properly.

1.17 ada ŋa mə sɿʔ tə bə mi hum maʔ na
 a- da¹ ŋa³ mə sɿʔ t -ə bə mi hum³ m -aʔ na¹
 3 leg side ABL put.inside PST 3 DEF also be precise NEG 3 PFV

dx ləmə imə sip dxʔ sip dxʔ ŋa taʔ .
 dx³ l -ə -mə imə² sip dxʔ sip dxʔ ŋa³ t -aʔ
 happen NF 3 NF then grass.type leaf grass.type leaf say PST 3

When they tried to take him inside from the leg side, it did not work, then the ghosts said, '(Bring) sip leaf' (to cut the man).'

- 1.18 irəbə zəkə ireʔ inx caʔrwap dxʔ ee sip ni
 irə²bə² zə²kə² ireʔ inx² caʔrwap dxʔ ee sip ni³
 that now like that there tall.grass.type leaf hesitation grass.type Q
 nxrum kəmə sipliŋ ŋa ki ,
 nx³rum³ kə²mə² sipliŋ³ ŋa³ k -i¹
 we (inclusive) ERG straw (used in roof) say PRES 1PL
 lxʰa dxʔ irə kəmə te kʰan , ibə mi te kʰan
 lx³cʰa¹ dxʔ irə² kə²mə² te³ kʰan² ibə² mi te³ kʰan²
 straw.type (used in roof) leaf that ERG try reap that also try reap
 maʔ na .
 m -aʔ na¹
 NEG 3 PFV

Now there with 'caqrwap' grass leaf...(incomplete), things used for roof (sip), which we call 'sipling', the 'lxcha' leaf, with that they tried to cut the man, but could not.

- 1.19 irəmə hwam dxʔ , hwam dxʔ leʔ ŋa taʔ .
 irə²mə² hwam² dxʔ hwam² dxʔ leʔ ŋa³ t -aʔ
 then tall.grass.type leaf tall.grass.type leaf again say PST 3
 They said, "(Bring) the 'hwam' grass leaf".

- 1.20 hwam dx irəbə caʔrwap .
 hwam² dx¹ irə²bə² caʔrwap
 tall.grass.type dau, knife that tall.grass.type
 The 'hwam' dau/knife is from the 'caqrwap' grass.

- 1.21 irə kəmə irə tika coʔ nx ibə maci maru te kʰan .
 irə² kə²mə² irə² ti³ka³ coʔ nx² ibə² maci maru te³ kʰan²
 that INST that oldman body LOC that scratch try reap
 They tried to scratch the old man's body.

1.22 irə kəmə mi mi? mɣ bə ca va? ŋe tʰaʔkʰan a ni nam
 irə² kə²mə² mi mi? mɣ³ bə ca¹ va? ŋe² tʰaʔ kʰan² a ni³ nam³
 that INST also man body DEF what from be able piece reap 3 Q bush
 dɣ? kəmə iru? .
 dɣ? kə²mə² iru?
 leaf INST like.that

With that ('hwam' dau) also (they could not), and (wondered) "how will we be able to chop human body with leaves", like that.

1.23 iməbə ai tədɣ la .
 imə²bə² ai tə- dɣ l -a
 then EXCLAM PERM happen IMP 3
 Then, "Ai, let it be the way it is".

1.24 zəkə mi? kəmə ba ləp ri ŋa lə ŋamə tɣ
 zə²kə² mi? kə²mə² ba¹ ləp r -i ŋa³ lə ŋa³mə³ tɣ³
 now man ERG only get NON.PST.PROX 1PL say NF COMP outside
 kə iru? ba he? cʰi tə ŋa .
 kə iru? ba¹ he? cʰi² t -ə ŋa¹
 LOC like.that only keep DUR PST 3 hearsay

"Now, people will find us", saying like that they left the old man outside (the hole).

1.25 irə tikava ju ibe? .
 irə² ti³ka³ -va¹ ju¹ ibe?
 that oldman MAS lot that
 That very old man.

1.26 imə zube tɣ bə vɣ ləmə kasɣ? tjaʔrə sɣ?
 imə² zu¹be³ tɣ³ bə vɣ¹ l -ə -mə ka²sɣ? tjaʔrə¹ sɣ?
 then ghost family DEF come NF 3 NF door soon close (door)
 ləmə hu? tuŋ vɣ .
 l -ə -mə hu? tuŋ¹ vɣ¹
 NF 3 NF hide sit come

Then the ghost family left and closing the door quickly hid inside.

1.27 iməbə irə tikava bə vɣ ləmə , rɣʒa vɣ
imə²bə² irə² ti³ka³ -va¹ bə vɣ¹ l -ə -mə rɣ³ʒa³ vɣ¹
then that oldman MAS DEF come NF 3 NF evening come
ləmə? ibə anuk abe? tʰun vɣ ləmə , tʰun
l -ə -me? ibə² a- nuk abe? tʰun¹ vɣ¹ l -ə -mə tʰun¹
NF 3 NF that 3 villager this gather come NF 3 NF gather
vɣ ləmə , ram lə ŋamə , oi zube tɣ kəmə ma? pʰɣ?
vɣ¹ l -ə -mə ram² lə ŋa³mə³ oi zu¹be³ tɣ³ kə²mə² ma? pʰɣ?
come NF 3 NF call NF COMP hey ghost family ERG all eat
ke? ka? nanahɣ .
ke? k -a? na³na³ -hɣ
go PRES 3 child PL

Then the old man came back and gathered people at his village in the evening calling, "Hey, the ghosts have eaten all our children."

1.28 bəru? dɣ kə ba ŋa ti? bə , akun inɣ ina
bə²ru? dɣ³ k -ə ba¹ ŋa³ t -i? bə a- kun³ inɣ² ina¹
how happen PRES 3 DUB say PST 1PL DEF 3 hole there there
zube tɣ kun .
zu¹be³ tɣ³ kun³
ghost family hole

"That we wondered what happened (to the children), there is a hole, hole of ghosts."

1.29 ŋa mi iru? iru? pi tʰɣ bə aa ŋe
ŋa¹ mi¹ iru? iru? pi² tʰ -ɣ bə aa ŋe²
1SG also like.that like.that carry on arm PST.INV 1SG DEF hesitation finish
pi van tʰə rə mɣ?
pi² van² tʰə rə m -ɣ?
carry on arm carry long PST.INV NON.PST.INV NEG 1SG

"They carried me too like that, but they could not take me in."

1.30 akun nɣ inɣ tuŋ ka? .
a- kun³ nɣ² inɣ tuŋ¹ k -a?
3 hole LOC there sit PRES 3

"They live there in the hole."

1.31 irə ta keʔ həni him a həni kun a ɲamə ɲa cʰi ləmə ,
 irə² ta² keʔ həni³ him¹ a həni³ kun³ a ɲa³mə³ ɲa³ cʰi² l -ə -mə
 that place LOC 3PL house 3 3PL hole 3 COMP say DUR NF 3 NF
 ninap ibə nuk mə ka lə ɲamə tʰu ka tə ɲa .
 ni³nap ibə² nuk mə ka¹ lə ɲa³mə³ tʰu¹ ka¹ t -ə ɲa¹
 tomorrow that village ADV go NF COMP dig go PST 3 hearsay
 "There house is there, they have a hole", saying like that, going to the village few
 days later they went to dig (the hole).

1.32 zube kun ibə tʰuruʔ tʰuruʔ tʰuruʔ ri taʔ .
 zu¹be³ kun³ ibə² tʰu¹ -ruʔ tʰu¹ -ruʔ tʰu¹ -ruʔ ri¹ t -aʔ
 ghost hole that dig CON dig CON dig CON do PST 3
 They dug and dug the hole.

1.33 irəbə aa hiŋkʰo irəbə tʰumla ibə hiŋkʰo bə akəp
 irə²bə² aa hiŋ³kʰo² irə²bə² tʰum²la¹ ibə² hiŋ³kʰo² bə a- kəp
 that hesitation some that all that some DEF NMLZ get
 ri tə ɲa .
 ri¹ t -ə ɲa¹
 AUX PST 3 hearsay
 (The men) got (to kill) some of the ghosts.
 One of them escaped. (thumla 'all' was an error)

1.34 hiŋkʰo ibə akəp ri ləmə irə ahim kʰun kə
 hiŋ³kʰo² ibə² a- kəp ri¹ l -ə -mə irə² a- him¹ kʰun kə
 some that NMLZ get AUX NF 3 NF that 3 house under LOC
 vaʔ irəbə bə aa , cʰaʔli mi ikə vaʔ , tuli mi
 vaʔ irə²bə² bə aa cʰaʔ li³ mi¹ ikə² vaʔ tu¹ li³ mi¹
 from that DEF hesitation paddy seed also there from yam seed also
 ikə vaʔ , irəmə cali cali tʰumla , arim akwamli tʰumla ni
 ikə² vaʔ irə²mə² ca¹li¹ ca¹li¹ tʰum²la¹ arim akwam li³ tʰum²la¹ ni³
 there from then what what all all.kinds.of.seeds seed all Q
 , alam ala zəkə cali lihɣ tuŋ kə ni irəhɣ bə tʰumla
 alam³ ala¹ zəkə² ca¹li¹ li³ -hɣ tuŋ¹ k -ə ni³ irə¹hɣ¹ bə tʰum²la¹
 other things now what seed PL sit PRES 3 Q those DEF all

bə ali aka dɤli li bə ikə vaʔ twe tə ŋa .
 bə ali³ aka³ dɤ³ -li³ li³ bə ikə² vaʔ twe¹ t -ə ŋa¹
 DEF seed happen type seed DEF there from take PST 3 hearsay

Getting some of the ghosts, from their house rice seed, vegetable seed, and all kinds of seeds, whatever is there (now), they brought all from there.

1.35 pʰili mi ikə vaʔ twe taʔ .
 pʰi³ li³ mi¹ ikə² vaʔ twe¹ t -aʔ
 alcohol.ingredient seed also there from take PST 3

They also brought the ingredient used in making local alcohol.

1.36 pʰi arə kʰəm zuk ki pʰi ni .
 pʰi³ arə² kʰəm³ zuk k -i¹ pʰi³ ni³
 alcohol.ingredient this alcohol drink PRES 1PL alcohol.ingredient Q

The ingredient that we use in alcohol that we drink.

1.37 ibə mi irə tɤ him kə vaʔ twe taʔ .
 ibə² mi¹ irə² tɤ³ him¹ kə vaʔ twe¹ t -aʔ
 that also that family house LOC from take PST 3

That also they brought from there.

1.38 imə rikli rik zəkə kʰu nɤ coʔ nɤ duŋ kaʔ ibə
 imə² rik li³ rik zəkə² kʰu³ nɤ² coʔ nɤ² duŋ¹ k -aʔ ibə²
 then louse seed louse now head LOC body LOC increase PRES 3 that
 mi ikə vaʔ twe tə ŋa .
 mi¹ ikə² vaʔ twe¹ t -ə ŋa¹
 also there from take PST 3 hearsay

Men also brought the seed for louse, those which are now increasing on the head, on the body.

1.39 rikli tʰu lala tʰutʰə dɤ tə ŋa
 rik li³ tʰu³ la¹la¹ tʰu³ tʰə dɤ³ t -ə ŋa¹
 louse seed bamboo pipe as well bamboo pipe one happen PST 3 hearsay

There was a bamboo pipe full of louse as well. (among other things in the hole)

1.40 um irəmə hiŋli tʰu ibə tʰutʰeʔ , hiŋ
 um irə²mə² hiŋ³ li³ tʰu³ ibə² tʰu³ tʰeʔ hiŋ³
 hesitation then grass seed bamboo pipe that bamboo pipe one grass

hiŋ mi ike? .
 hiŋ³ mi¹ ike?
 grass also there

There was also a bamboo pipe full of grass seed.

- 1.41 c^haʔli cali lihɿ dɿ (unintelligible) toa ibə mi irə
 c^haʔ li³ ca¹li¹ li³ -hɿ dɿ³ toa¹ ibə² mi¹ irə²
 paddy seed what seed PL happen exist that also that
 kə vaʔ , ʒube kun kə vaʔ ni .
 kə vaʔ ʒu¹be³ kun³ kə vaʔ ni³
 LOC from ghost hole LOC from Q

Rice seed and whatever seed there is, they are all from there, from the hole of the ghosts.

- 1.42 um ʒube kun kə vaʔ .
 um ʒu¹be³ kun³ kə vaʔ
 hesitation ghost hole LOC from

From the hole of ghosts.

- 1.43 twe van ləmə irəbə irəbə twe van tə na .
 twe¹ van² l -ə -mə irə²bə² irə²bə² twe¹ van² t -ə na¹
 take carry long NF 3 NF that that take carry long PST 3 PFV

They brought those.

- 1.44 irəmə mɿt^heʔ irəbə ba akat ŋa nɿmə c^hwe ka tə
 irə²mə² mɿ³ t^heʔ irə²bə² ba¹ akat ŋa³ nɿ²mə² c^hwe² ka¹ t -ə
 then CLF one that only back door side from run go PST 3

ŋa .

ŋa¹

hearsay

Only one of them (i.e. ghosts) escaped through the back door.

- 1.45 ləpk^{hi} maʔ .
 ləpk^{hi} m -aʔ
 see NEG 3

(Men) did not see him/her.

- 1.46 ibə akat ɲa nɣmə vikrə c^hwe ka ləme? bə ahe bi
 ibə² akat ɲa³ nɣ²mə² vikrə c^hwe² ka¹ l -ə -me? bə ahe² bi³
 that back door side from quickly run go NF 3 NF DEF other all
 ɲu bə akəp tə na .
 ɲu¹ bə a- kəp t -ə na¹
 lot DEF NMLZ get PST 3 PFV

One running away through the back door, the men got all the others.

- 1.47 irə vat^he? ibə bə ʒun ke? , ʒun ke? , ʒun ke? , ri tə
 irə² va¹ t^he? ibə² bə ʒun¹ ke? ʒun¹ ke? ʒun¹ ke? ri¹ t -ə
 that CLF one that DEF chase go chase go chase go do PST 3
 bə , muŋgəm c^hwe ka lə na me? ibə .
 bə muŋ³gəm³ c^hwe² ka¹ lə na¹ me? ibə²
 DEF a lot run go NF PFV ABL that

Then the men chasing the one ghost, chasing a lot...

- 1.48 camopoti ve pɣ ka? ni ibə , adi ɲa nɣ
 ca²mo³po³ti¹ ve² pɣ² k -a? ni³ ibə² a- di³ ɲa³ nɣ²
 spider net get stuck (intr) PRES 3 Q that 3 behind side LOC
 re kəmə natnat ʒun mi? kəmə natnat ʒun ke? ta? ikə ,
 re³ kə²mə² natnat ʒun¹ mi? kə²mə² natnat ʒun¹ ke? t -a? ikə²
 enemy ERG quickly chase man ERG quickly chase go PST 3 there
 camopoti ve bə raprə lu lə ɲame? ibə mi? t^han ni ikə tja?rə
 ca²mo³po³ti¹ ve² bə raprə¹ lu¹ lə ɲame? ibə² mi? t^han³ ni³ ikə² tja?rə¹
 spider net DEF quickly hold NF COMP that man face Q there soon
 pat c^hi tə ɲa .
 pat c^hi² t -ə ɲa¹
 throw DUR PST 3 hearsay

The spider net, where things get stuck, right, while the men, the enemy, chasing from behind, the ghost quickly snatched (the spider net) and throw it at men's faces.

- 1.49 irə camopoti ve lam va? pɣ ka? ibə le , i
 irə² ca²mo³po³ti¹ ve² lam³ va? pɣ² k -a? ibə² le³ i
 that spider net road from get stuck (intr) PRES 3 that DP that

kəmə tjaʔrə pat cʰi taʔ iməbə zube mi ləpkʰi maʔ
 kə²mə² tjaʔrə¹ pat cʰi² t -aʔ imə²bə² zu¹be³ mi ləpkʰi¹ m -aʔ
 INST soon throw DUR PST 3 then ghost also see NEG 3

na .

na¹

PFV

That spider net which are on the road, that one, with that when the ghosts threw at men, the men do not see the ghosts any more.

- 1.50 miʔhɣ bə irəmə imə ba avin vin vɣ .
 miʔ -hɣ bə irə²mə² imə² ba¹ a- vin² vin² vɣ¹
 man PL DEF then then only NMLZ be back be back come

The men returned from there only.

- 1.51 lamsu tə bə tiŋkʰi maʔ na zube a irə ve kəmə
 lam²su² t -ə bə tiŋ²kʰi¹ m -aʔ na¹ zu¹be³ a irə² ve² kə²mə²
 look for PST 3 DEF see NEG 3 PFV ghost 3 that net ERG

pat cʰi taʔ imə .

pat cʰi² t -aʔ imə²

throw DUR PST 3 then

Because the ghost threw the net, the men could not find the ghost when they looked for him.

- 1.52 irə dimə bə zube bə tiŋkʰi maʔ na .
 irə² di³mə³ bə zu¹be³ bə tiŋ²kʰi¹ m -aʔ na¹
 that after DEF ghost DEF see NEG 3 PFV

After that men do not see the ghosts any more.

- 1.53 ma nɣ bə ruŋ la tuŋ tə ŋa .
 ma³ nɣ² bə ruŋ² la¹ tuŋ¹ t -ə ŋa¹
 before LOC DEF together ADV sit PST 3 hearsay

Before, they used to live together.

- 1.54 irə akun tʰu taʔ ni , um irə dimə zun van
 irə² a- kun³ tʰu¹ t -aʔ ni³ um irə² di³mə³ zun¹ van²
 that 3 hole dig PST 3 Q hesitation that after chase carry long

ta? .
 t -a?
 PST 3

They dug the hole, right, and then chased them.

1.55 irə dimə a ləpk^{hi} ma? na zube a .
 irə² di³mə³ a ləpk^{hi1} m -a? na¹ zu¹be³ a
 that after see NEG 3 PFV ghost FOC

After that, the men do not see ghosts.

1.56 ma nɣ bə iru? ma t^{hu} ka? irərə kə bə , aa
 ma³ nɣ² bə iru? ma¹ t^{hu1} k -a? irə²rə² kə bə aa
 before LOC DEF like.that NEG dig PRES 3 that LOC DEF hesitation
 ruŋ la dɣ ta? ŋamə iru? .
 ruŋ² la¹ dɣ³ t -a? ŋa³mə³ iru?
 together NF happen PST 3 COMP like.that

Earlier, when did not dig the hole, they were together.

1.57 ibə ite mə lala le? ʒɣ? tə na ŋa i ni .
 ibə² ite² mə la¹la¹ le? ʒɣ? t -ə na¹ ŋa³ i ni³
 that that.much ABL as well again stop (intr) PST 3 PFV say 1PL Q

The story is over from here, isn't it? (Khithung)

1.58 um zube nia mi? , um zube ni mi? bə ləpk^{hi}mun
 um zu¹be³ nia³ mi? um zu¹be³ nia³ mi? bə ləpk^{hi1} -mun
 hesitation ghost and man hesitation ghost and man DEF see RECIP
 mi? na .
 m -i? na¹
 NEG 1PL PFV

Ghost and men do not see each other anymore.

1.59 irə dimə ʒɣ? tə na .
 irə² di³ -mə ʒɣ? t -ə na¹
 that later ADV stop (intr) PST 3 PFV

After that the story is over.

- 1.60 iməbə k^hi mi? .
imə²bə² k^hi¹ m -i?
then see NEG 1PL
Then we do not see (ghosts).
- 1.61 iru? .
iru?
like.that
Like that.
- 1.62 imə ʒəkə rikli nia arə hiŋli vun ta? arəbə irəkə
imə² ʒe²kə² rik li³ nia³ arə² hiŋ³ li³ vun² t -a? arə²bə² irə²kə²
then now louse seed and this grass seed sow PST 3 this there
va? twe ləmə bəru? vun tə ni ŋa imə luvɣ .
va? twe¹ l -ə -mə bə²ru? vun² t -ə ni³ ŋa³ imə² lu²vɣ²
from take NF 3 NF how sow PST 3 Q say then rich person
Now how the louse seed and grass seed were sowed is that there was a rich man.
- 1.63 luvɣ tɣ c^həŋuva tɣ tɣt^he? , ibə luvɣ .
lu²vɣ² tɣ³ c^həŋu¹va¹ tɣ³ tɣ³ t^he? ibə² lu²vɣ²
rich person family couple family CLF one that rich person
The couple were rich people.
- 1.64 nana irəbə ha , zap sətwe mə dɣ? k^hiŋ nɣ tuŋ t^hiŋ ha ni
na³na³ irə²bə² ha³ zap sətwe² mə dɣ? k^hiŋ¹ nɣ² tuŋ¹ t^hiŋ³ ha³ ni³
child that slave example ADV hand under LOC sit NMLZ slave Q
There was a child servant. For example, one who lives under one's authority/control.
- 1.65 kolicaptiɣ tətə təc^hi?ɣ ŋa i ni .
ko²li² cap -ti³ -hɣ tətə¹ təc^hi? -hɣ ŋa³ i ni³
work (hazira) stand NMLZ PL child RED PL say 1PL Q
Those who do temporary job, young children.
- 1.66 irəbə mak^hu nɣ hiŋ mi ahu pikk^hu? nɣ a , cali mi
irə²bə² ma³k^hu³ nɣ² hiŋ³ mi¹ ahu¹ pikk^hu? nɣ² a ca¹li¹ mi¹
that long ago LOC grass also not exist paddy field LOC 3 what also

ahu dx lə ɲameʔ ibə .
 ahu¹ dx³ lə ɲameʔ ibə²
 not exist happen NF COMP that

In the beginning, there were not even grass in the paddy field, there were nothing.

- 1.67 zət^{hə} hiŋ sjaʔrə ɲe p^hu , aɲuva ləphuŋ zuk , ma zuk
 zə²t^{hə}² hiŋ³ sjaʔrə² ɲe² p^hu¹ a- ɲu¹va¹ ləphuŋ¹ zuk ma¹ zuk
 once more grass at.once finish uproot 3 parents lunch drink NEG drink
 kaʔ ikə zɻla ləp vɻ .
 k -aʔ ikə² zɻ²la¹ ləp vɻ¹
 PRES 3 there quickly get come

Once the child servant quickly finished uprooting grass (in the paddy field) and arrived home before they owners had lunch.

- 1.68 zət^{hə} iruʔ lala iruʔ ləp lə ɲamə bə , irə aɲuva
 zə²t^{hə}² iruʔ la¹la¹ iruʔ ləp lə ɲa³mə³ bə irə² a- ɲu¹va¹
 once more like.that as well like.that get NF COMP DEF that 3 parents
 tɻ kəmə vun tə ɲa .
 tɻ³ kə²mə² vun² t -ə ɲa¹
 family ERG sow PST 3 hearsay

Once again the boy arrived home like that, then the owners sowed (the grass).
 (In order to keep the boy away in the field so that the owners can have the lunch all by themselves.)

- 1.69 ai met^{hə} təlimɻʔ la ɲa ləmə ,
 ai me³t^{hə}¹ tə- lim²ɻʔ l -a ɲa³ l -ə -mə
 EXCLAM bit more CAUS spend time IMP 3 say NF 3 NF
 hiŋli bə vun rikli bə vun kuʔ .
 hiŋ³ li³ bə vun² rik li³ bə vun² kuʔ
 grass seed DEF sow louse seed DEF sow give

Saying, 'Let him spend little bit more time (in the field)', (the owners) sowed the grass and the louse.

- 1.70 ibə ɲiʒoʔ ɲiʒoʔ ibə rik suk p^hɻʔ hən kə təlin
 ibə² ɲi²ʒoʔ ɲi²ʒoʔ ibə² rik suk p^hɻʔ hən¹ kə tə- lin³
 that always that louse look eat time LOC CAUS to pass (of time)

la .
 l -a
 IMP 3

So that always the time passes by while the child looks for louse.
 (The boy does not really eat it. He kills them. (PH))

1.71 imə hiŋ zəkə aʒaʔnu dɾ ləmə ikə tim mecʰatʰə
 imə² hiŋ³ zɛ²kə² aʒaʔnu¹ dɾ³ l -ə -mə ikə² tim me¹cʰa¹tʰə³
 then grass now a lot happen NF 3 NF there time little.bit.more
 təlɪn la .
 tə- lɪn³ l a
 CAUS to pass (of time) IMP 3

The grass being too much, let him time pass a little bit more (while uprooting them).

1.72 akʰiŋ mecʰatʰə , mecʰatʰə təlɪt la ŋa lə ŋamə
 akʰiŋ me¹cʰa¹tʰə³ me¹cʰa¹tʰə³ tə- lit l -a ŋa³ lə ŋa³mə³
 time little.bit.more little.bit.more PERM to pass IMP 3 say NF COMP
 iruʔ vun kuʔ lə ŋamə bə zəkə hiŋ bwap kə bə nia
 iruʔ vun² kuʔ lə ŋa³mə³ bə zɛ²kə² hiŋ³ bwap k -ə bə nia³
 like.that sow give NF COMP DEF now grass increase PRES 3 DEF and
 rik huŋ kə bə ikə vaʔ huŋ kaʔ ŋamə
 rik huŋ³ k -ə bə ikə² vaʔ huŋ³ k -aʔ ŋa³mə³
 louse appear PRES 3 DEF there from appear PRES 3 COMP
 nɣnuva kəmə iruʔ zəpʰan taʔ .
 nɣ- nu¹va¹ kə²mə² iruʔ zə- pʰan¹ t -aʔ
 1PL.INCL parents ERG like.that usually tell PST 3

Thinking "Let him pass time little bit more (in the field)", they sowed like that and now grass has increased and louse has appeared, and it is all from there (that time), like that our parents usually tell the story.

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