A Descriptive Grammar of Muklom Tangsa

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Abbreviations

In-text

A	agent-like argument of a transitive clause
BLT	basic linguistic theory
C	consonant
COS	change of state
Det	determiner
F1	first formant
F2	second formant
FB	Facebook
FLEx	Fieldworks Language Explorer
GW	grammatical word
IPA	International Phonetic Alphabet
L	lateral
LTBA	Linguistics of the Tibeto-Burman Area
MHBTC	Muklom Havi Bible Translation Committee
MOA	manner of articulation
N	nasal
N	noun
NEFA	North East Frontier Agency
NP	noun phrase
Obl	oblique argument
P	plosive
P	patient-like argument of a transitive clause
PKC	Proto-Kuki-Chin
POA	place of articulation
PST	Proto-Sino-Tibetan
PTB	Proto-Tibeto-Burman
rDis	right-dislocated
R	recipient-like argument of a ditransitive clause
RelC	relative clause
S	single argument of an intransitive clause
SAP	speech act participant

SOV	subject-object-verb
ST	Sino-Tibetan
SVC	serial verb construction
T	theme argument of a ditransitive clause
TAM	tense-aspect-mood
TB	Tibeto-Burman
TBCA	Tangsa Baptist Churches Association
TBU	tone-bearing unit
V	vowel; verb
V_1	first verb
V_2	second verb
VOT	voice onset time
Σ	verb stem
$Σ_1$	verbal stem
$Σ_2$	nominal stem

Glosses

1	first person	DAT	dative
2	second person	DEF	definite
3	third person	DEM	demonstrative
ABIL	ability	DIM	diminutive
ABS	absolutive	DIST	distal
AFF	affirmative	DISTR	distributive
ASS	assumptive	DU	dual
AUG	augmentative	DUB	dubitative
AUX	auxiliary	DUR	durative
CAUS	causative	ERG	ergative
CIS	cislocative	EUPH	euphonic
CLF	classifier	EXCL	exclusive
CNT	continuative	EXCLAM	exclamative
COMP	completive	EXIST	existential
COMPAR	comparative	F	female
COND	conditional	FOC	focus
COP	copula	FUT	future
COS	change of state	GB	has given birth

HAB	habitual
HESIT	hesitation
HORT	hortative
HS	hearsay
INCL	inclusive
INFER	inferential
INGR	ingressive
INTENS	intensifier
INTER	interjection
INTR	intransitive
INV	inverse
ITER	iterative
LINK	clause-linker
LV	light verb
M	male
MED	medial
MIT	mitigative
NEG	negation
NEXIST	negative existential
NMLZ	nominaliser
NPROX	non-proximal
OBL	obligation
ONOM	onomatopoeia
PERMIS	permissive
PERS	derivational suffix, ‘person’
PFV	perfective
PL	plural
POL	politeness
POSS	possessive
PREF	prefix
PROG	progressive
PROH	prohibitive
PROSP	prospective
PROX	proximal
PRT	particle[1]
PSSB	possibility
PST	past
Q	interrogative
Q.AFF	affirmative-leading interrogative
Q.NEG	negative-leading interrogative
Q.PLR	polar interrogative
QUOT	quotative
RECIP	reciprocal
REDUP	reduplication
REV.NEG	negation reversal
SG	singular
SUPER	superlative
TOP	topic
TR	transitive
TRI	trial
VOC	vocative

[1] The term particle here denotes a grammatical element of which the meaning is yet to be determined.

Summary

This dissertation is the first published descriptive grammar of Muklom, a Tangsa language variety which belongs to the Northern Naga branch of the Tibeto-Burman family and is spoken in the state Arunachal Pradesh, Northeast India. This grammar is based on primary data collected in several Muklom villages near Kharsang Town. The core of the dissertation consists of a linguistic description of the Muklom language which focuses on phonology, the noun complex, and the verb complex, but also includes notes on clause structure and discourse structure. The dissertation further contains a selection of three fully annotated texts and a glossary of approximately 2,500 lexical entries.

Statement of authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma. No other person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

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1 Introduction

This dissertation provides a grammatical description of Muklom, a Tibeto-Burman language which is spoken in Northeast India. It is the first published grammar of the language and is primarily based on data collected by the author in Muklom villages near Kharsang Town in the state Arunachal Pradesh. This work consists of three components: a grammatical description, a selection of texts and a vocabulary. The grammar component is the largest of the three. Its focus lies on phonology, the noun complex, and the verb complex, but notes on clause structure and discourse structure are also included.

This introductory chapter provides contextual information about the Muklom language. Section 1.1 sketches an ethnographic background. The linguistic affiliation of Muklom is discussed in section 1.2 and section 1.3 then provides an overview of previous literature on the language. Finally, section 1.4 introduces the structure of this dissertation.

1.1 Ethnographic aspects

This section touches on the following ethnographic topics: location and demographics in section 1.1.1, the use of language in daily life in section 1.1.2, ethno-cultural identity in section 1.1.3, and religious affiliations in section 1.1.4.

1.1.1 Geographical location and demographics

The Muklom people number not more than a few thousand and live in Northeast India. The most recent survey that can tell us how many people identify as Muklom was performed during the 2011 census (Census of India 2011), which registered a total of 2,614 Muklom people. In the census survey results, Muklom people are listed either under the label Moglum Tangsa (n=2,606) or under Muktum (n=8). The former, unusual spelling resembles an existing exonym of the community, Moklum, the latter is probably based on a misspelling.

Figure 1 - Google Maps image of Northeast India (2020).

The Northeast of India consists of eight states, which are affectionately referred to as 'the seven sisters' plus one brother state, Sikkim.[2] Were it not for the narrow strip of land connecting the western end of the Northeast to the remainder of India, the landlocked seven sisters would have been entirely encircled by Bangladesh, Myanmar, the Tibetan Autonomous Region, Bhutan and Nepal. The Muklom people are located in the state Arunachal Pradesh, the state with the highest phylogenetic diversity of the Northeast (see Post and Burling 2017:215). The majority of the languages in this area is still underdocumented.

The Muklom people, who refer to themselves as /mukᵒlɔm²/ and to their language as /mukᵒlɔm² ɹaʔᵒ/ 'Muklom speech',[3] live spread out over two clusters of villages in the Changlang District of Arunachal Pradesh, indicated by the green pinpoint in Figure 1. The older of the two groups of settlements lies near Changlang Town, the district capital in the Patkai Hills. Approximately fifty years ago, settlers descended from this older cluster towards the plains and cleared patches of jungle to found a new settlement and create fields for growing crops. The Changlang District borders Myanmar. The exact history of the Muklom people before the settlements in the hills is unknown, but Muklom oral history does speak of a westward migration path and of events that happened at two adjacent mountains that are said to still exist in Myanmar, suggesting the Muklom have lived further to the east in an area that is now part of Myanmar at some time in the past.

The first Muklom settlement in the plains, Kuttom Village, was named after the bushes that grew abundantly along the stream of water that flowed past the village. These bushes produce beautiful round fruits called /kutᵒtɔm³-ti¹/ that are used as beads. The first settlement expanded and from it sprouted the remainder of Muklom villages now found in the plains area near Kharsang Town.

The older cluster in the hills near Changlang Town consists of the following villages: Saching, Chingsa, Longkey, Makantong, Khimyong, Yanman, Shohelaktong, Longsang, Vobang (which splits into Lower Vobang and Upper Vobang), Thamlom, Ngechang, Yungsham, and Va'phang. The Muklom pronunciation of these names is as follows, in the same order: /sa³-tsɨŋ², /tsɨŋ²-sa¹/, /lɔŋ¹-kɛ³/, /ma³-kan²-tɔŋ²/, /xɨm³-ɟɔŋ²/, /ɟan²-man³/, /ʃɔ¹-hɛ³-lakᵒ-tɔŋ²/, /lɔŋ¹-saŋ¹/, /βɔ¹-bʌŋ¹/, /tʰʌm²-lɔm²/, /ŋe-tɕaŋ/, /ɟuŋ-ʃʌm/, and /βaʔᵒ-pʰaŋ²/. This large cluster of villages is located in an area that currently has government-imposed restricted access for outsiders and information about these villages reported in this thesis comes from Muklom consultants that migrated from the hills to the plains. The Muklom, as well as other indigenous groups, can freely travel between the two areas.

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[2] Sikkim, and also the Jalpaiguri Division of West Bengal, officially belong to the Northeast since the 1990s.

[3] Superscript numbers 1, 2, and 3 represent tone categories. Tone 1 is falling and creaky, tone 2 rising-falling and modal, and tone 3 level and breathy (see section 3.2.1.1). A superscript zero indicates that a syllable does not carry tone. The zero is used to distinguish toneless syllables from syllables for which the tone category has not been determined yet. The latter are recognisable by the lack of a superscript number. See section 2.2.4 for a discussion of transcription and glossing conventions.

The newer cluster in the plains near Kharsang Town consists of the following villages: New Yanman, New Longkey, New Chingsa, New Khimyong, Tinali, and Kuttom. The first four in the list are, in similar fashion to New Amsterdam, Nova Scotia, and New Zealand, named after places in the 'old world', which in the case of the Muklom people are the Patkai Hills. Kuttom and Tinali are two new names. Tinali is Assamese for 'three roads', pronounced in Muklom as /ti^{3}na^{3}li^{3}/. The villages in the plains lie close together, practically touching one another, except for New Khimyong, which is geographically and perhaps also linguistically an outlier. This settlement is separated from the other Muklom villages and surrounded by villages inhabited by speakers of other Tangsa varieties such as Muishaung and Chamchang.

In all the above-mentioned villages, the Muklom people constitute the vast majority of residents, but there are at least two villages that have a considerable minority from a different Tangsa group: Yungsham and Lower Vobang are mixed Muklom and Joglei villages. Both in the hills and in the plains, the Muklom and Joglei border one another; they have been neighbours for a long time. In the Changlang Town area in the hills, the closest neighbours of the Muklom are the Joglei to the north, and to the south the Ha'vi, which is also a Tangsa subgroup.

It was low crop yields and other conditions which made life in the hills challenging in the past that made different Tangsa sub-tribes decide to come down from the hills into the plains, clear the jungle and make place for rice plantation and other crops. Interestingly, rumours can be heard in the Kharsang Town area nowadays that the same issue, namely low crop yields, is once again causing people to consider migrating, but this time back into the mountains. Farmers report that the rice harvest has become less and less, due to changes in the weather over the last years. Also, some of the plain-dwellers are interested to return to the hills to escape the heat in the flat lands.

1.1.2 Sociolinguistic details

Despite the relatively low number of speakers, Muklom scores high on language vitality. Section 1.1.2.1 discusses the use of Muklom in daily life and explores factors that may endanger the vitality of the language in the near or more distant future. Section 1.1.2.2 discusses the patterns of multilingualism among speakers of Muklom. As of yet there is no standardised spelling for Muklom, though attempts have been made and are being made to develop an orthography. The lack of standardised spelling fortunately does not hold people from messaging and posting online in Muklom. Orthography development and use of written language are discussed in section 1.1.2.3.

1.1.2.1 Language vitality

The vitality of a language depends on a range of factors, including total number of speakers, proportion of speakers within the population, intergenerational transmission, domains of use, and speaker attitudes (see Brenzinger et al. 2003; Lewis and Simons 2010). This section explores these factors and tries to assess, however difficult this may be to predict, how secure the continuation of language transmission is in the case of Muklom.

No recent data are available on the number of speakers of Muklom Tangsa. However, during the 2011 national census (see Census of India 2011), 2,614 respondents identified themselves as Muklom, and what I have experienced in the villages in the plains and what I have been told about the language situation in the hill villages suggests that the vast majority of the Muklom population is proficient in Muklom. Based on this information, it is probably safe to estimate that there are currently a few thousand native speakers of Muklom.

The language is still transmitted from one generation to the next. We do at the same time see some families shifting away from Muklom towards Assamese, the regional lingua franca, or to Hindi, which are both Indo-Aryan languages. The cases of language-shifting households that are known to me, involve marriages between a Muklom partner and a non-Muklom partner. Some consultants have suggested that Hindi or a Hindi-based creole (see section 1.1.2.2) is more often the language of choice in the Changlang Town area than in the Kharsang Town area.

The language is being passed on to the next generation in most domains that the previous generation was using the language in. However, a breach in transmission can be observed in one language domain: oral history. The Muklom people possess an extensive corpus of orally transmitted narratives, covering mythological times of the far past, migration histories, accounts of tribal wars, and more. A substantial part of this is incorporated in the singing cycle, or perhaps it is better described as a competition between storytellers, that is called /ɹun^{3}hun^{2}-se^{3}/, which is performed annually during the Mol festival in May. The language of the Runhun Se is not the contemporary spoken Muklom variety, but a more archaic variety that differs to a certain degree both in lexicon and grammar. The tradition of singing in song language is no longer transmitted to the new generation, at least not in the plains area. Most people that I have met in the Kharsang Town area are not able to understand song language. One consultant said that the children in the Changlang Town area are still quite familiar with the old stories, but it is unknown to me whether that includes understanding of the song language or not.

Speakers use Muklom in informal settings, for example in communication with relatives, friends, and acquaintances in the home and outside, during informal communal activities, during play, and in the field. It is also used on social media in posts and private messages, as well as in texting. There are currently no spelling conventions in use for the language; spelling in typing is to a high degree variable

within and between speakers. In certain formal settings, Muklom can be spoken when the gathered audience is (almost) exclusively Muklom. It is not used as a language of instruction in schools, nor are Muklom language classes currently part of the curriculum of any of the schools. In the Kharsang Town area, the pupil population in schools is mixed, consisting of different Tangsa and even non-Tangsa groups. One of the formal settings in which Muklom is used, are religious services, i.e. the communal meetings at the Presbyterian Churches, Baptist Churches, and Rangfra houses of worship. The services of two churches will be discussed as an example here, because they illustrate nicely the multilingual reality in one domain of community life (see also Morey 2017b:177-182 for observations on language use in different Tangsa churches).

First, in the Baptist Church of Kuttom Village, Muklom is used alongside the three languages of wider communication English, Assamese, Hindi, but also alongside Chamchang Tangsa. Bible reading normally takes place in English, with the speaker translating into Muklom the relevant portions or even sentence by sentence during the sermon. The sermon is delivered in Muklom, except during the main service which takes place on Sunday mornings, when the service is conducted in Assamese to cater to the substantial amount of Adivasi (non-Tangsa) attendees. So-called special songs, performed by Sunday school pupils, young women, young males, or another group, are sung in Hindi, Assamese, English, and sporadically Muklom. The regular hymns are in Chamchang (Tangsa) and are sung from a hymn book produced by the Tangsa Baptist Churches Association (TBCA), which has its headquarters at Nongtham Village. The intelligibility of Chamchang for speakers of Muklom is very low according to self-report. Speakers have told me that they are not able to understand the Chamchang hymns they sing every week or sermons by Chamchang guest speakers. Prayers, both centrally from the pulpit and communal or 'mass' prayer, which entails that everyone may say their personal prayers aloud simultaneously, are usually said in Muklom.

Second, in the Presbyterian Church of Kuttom, I have observed a similar multilingual practice, be it that the languages differed slightly. There, the hymns were not in Chamchang but in Joglei Tangsa, because this has been the language of choice at the headquarters of the Tangsa Presbyterian Church located in the neighbouring village Khasan Joglei. During the service that I attended, prayers were in Muklom (free prayer), Joglei (the well-known Our Father prayer), and Mizo, a language from the state Mizoram belonging to an entirely different branch of Tibeto-Burman, Kuki-Chin. The Presbyterian headquarters in Khasan Joglei are largely run by clergy from Mizoram and their language has had an imprint on the Joglei Tangsa population of Khasan Joglei, where apparently some of the children are now able to speak Mizo. The Mizo clergy take turns attending the services in the Presbyterian churches of the area, and one can sometimes hear them pray in their own language. The local Muklom population does not understand what is being said in Mizo.

The language use in Rangfra houses of worship is a topic worthy of further investigation. The religious movement Rangfraism was founded by Muklom people (section 1.1.4), so we might expect a more prominent role of Muklom and maybe a lower degree of multilingualism during services.

According to consultants, some outsiders understand Muklom or even speak it as a second language. They thought this could be due to the fact that the Muklom people constitute a relatively large subtribe within Tangsa. They claimed, for example, that the Joglei people often understand or speak their language variety. I have myself encountered a few Joglei native speakers from the village of Khasan Joglei who were able to communicate with me in Muklom. The shops in Kharsang town, which borders with a cluster of Muklom villages, are largely owned by non-Tangsa people or as they are called in Muklom, /sʌm^{2}-te^{2}/ 'people of the plains'. Consultants reported that some of the shopkeepers are able to understand Muklom.

One result of intense language contact and widespread multilingualism in the population has been extensive borrowing of words. In Muklom, we encounter loanwords from Tai languages (perhaps through Singpho), from other Tangsa varieties, and from Assamese. The component of Assamese loans seems to be particularly large. Observed loanwords include exclamatives, nouns, and verbs. The latter two are borrowed as stems to which regular Muklom noun and verb markers can be attached. Code-switching between Muklom and Assamese occurs regularly, and I found it to be especially prominent in sermons. Some speakers have expressed to me that they see the extensive borrowing and codeswitching with Assamese as a deterioration of the Muklom language and fear that it may ultimately lead to language shift.

The attitude that speakers have towards their own language is in some respects positive and in others negative. For example, we see positive attitudes to the language through the efforts that some speakers have made to develop and promote a script for writing in Muklom (see section 1.1.2.2) and to compose songs in the language. At the same time, it became clear to me in conversations with speakers of Muklom that some have a negative attitude towards their own language when they described their language as simple, deficient, or not having many words. They perceived a contrast between their mother tongue and languages with a much larger number of speakers, such as English, which they described as rich and complete. This low valuation of the mother tongue perhaps is widespread among the Muklom population. A negative attitude towards one's own language is one of the common internal forces that can contribute to language endangerment, often finding its source in external forces, such as socioeconomic dominance of a dominant speech community (see Brenzinger et al. 2003:2).

To conclude, the Muklom language is actively used by the community and can currently be classified as vigorous, i.e. a category 6b language on the scale of language vitality known as the EGIDS,

outlined by Lewis and Simons (2010:110).[4] However, there are several risk factors that could alter this state in the near or more distant future. In light of the relatively low number of speakers and the pressure of dominant languages, Muklom can still be considered as one of the many endangered languages of Northeast India. With respect to Muklom song language, we must conclude that it is in grave danger of disappearing within one or two generations.

1.1.2.2 Multilingualism

Speakers of Muklom are usually proficient in one or more second language such as Assamese, Hindi, or a Hindi-based creole that is gaining ground in Arunachal (see Post and Burling 2017:215). One of my main consultants, who grew up in the Changlang Town area, described the Hindi-based creole as 'neither Assamese nor Hindi' and indicated that it is used more often by Muklom people in the hilly area than in the plains area. Perhaps the case of the Arunachali creole shows similarities with the development of Nagamese Creole, which came into being during intense contact between speakers of Assamese and speakers of Naga languages in the state that lies to the south of Arunachal Pradesh, Nagaland. One Germanic language, English, has in recent times found its way back to Arunachal. English is spoken only sparsely by the older generations, though some people can still reproduce phrases that they remember from colonial times with a distinct British accent, but due to current English-medium education, proficiency in Indian English is rapidly increasing among the younger generations. Some Muklom people may further know a little bit of Nepali, Bengali or other languages spoken by migrant workers that they come in contact with. I am not aware of (large-scale) proficiency in closely related or neighbouring Tangsa varieties such as Ha'vi, Joglei, Muishaung, or Chamchang. Contrastively, consultants have reported that speakers of other varieties, specifically Joglei, may understand or even speak Muklom (see also section 1.2.3).

1.1.2.3 Orthography development

The Muklom community currently does not have a fully developed orthography in use, although various consultants indicate that the community would like to have an orthography and standardised spelling rules for their language. As far as I am aware, there have been three attempts to develop and implement a spelling standard. The first two have not gained wide support in the community or taken into use by a substantial part of the community, the last is still under development.

[4] EGIDS stands for Expanded Graded Intergenerational Disruption Scale and builds on a scale introduced by Fishman (1991), the GIDS. It is one of many scales of language vitality (see Bradley and Bradley 2019:14-29).

The first script was developed by the late Mr Lathong Ngemu. He printed and distributed a booklet with an alphabet that he developed for Muklom. Unfortunately, I have not been able to obtain a copy. A few consultants remembered having the booklet somewhere in the house but could not locate it anymore. Mr Ngemu promoted his alphabet through community meetings, but when he passed away, his work was not taken over and his alphabet was never implemented.

The second script was developed by the Muklom engineer Mr Latsam Khimhun, which in a printout is titled 'Rang Frah Lipi', where Rang Frah stands for the name of a religious movement, Rangfraism, and Lipi for 'script'. Below are images of cursive and printed script, obtained from Mr Khimhun by anthropologist Meenaxi Barkataki-Ruscheweyh, Figure 2 and Figure 3. The alphabet contains six vowel symbols (compare to ten vowel phonemes, see section 3.1.1.2), eighteen 'simple' consonant symbols (compare to a total of 22 consonant phonemes, see section 3.1.1.1), and presumably no indicators for tone.

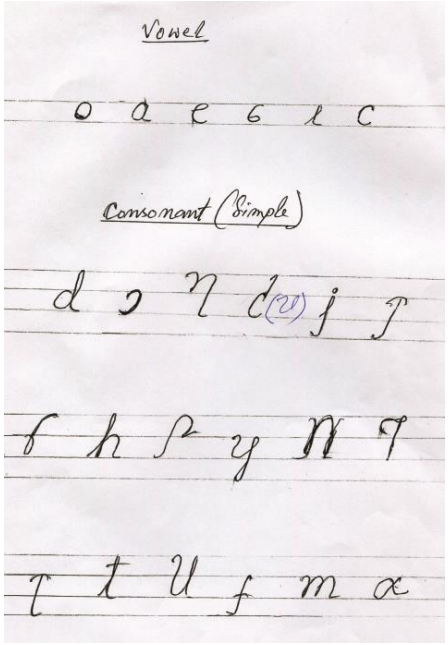

Figure 2 - Rang Frah Lipi cursive script by Mr Latsam Khimhun.

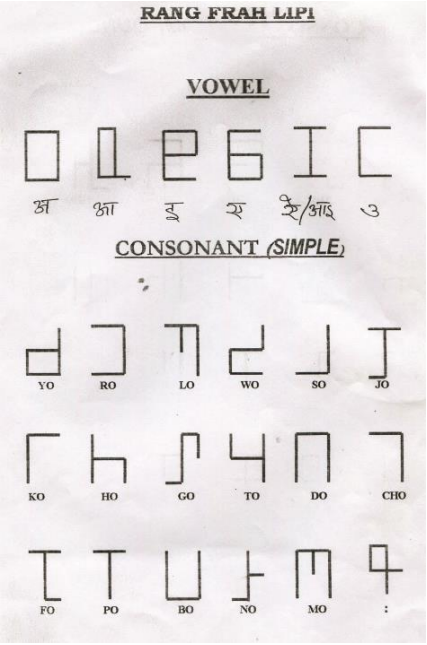

Figure 3 - Rang Fra Lipi printed script by Mr Latsam Khimhun.

The last orthography is under development by the inter-denominational Muklom Havi Bible Translation Committee (MHBTC). Their translation team, based in Kharsang Town, has started working on translations of paraphrased stories from the Bible from 2015. While the strategy of many such translation teams is to first develop at least a grammatical description, a lexicon, and a preliminary orthography, this team adopted a different approach, choosing to commence directly with translation and develop an orthography on the go. Spelling is therefore, at least in the beginning stages, not

consistent between translators and even not within translators. An alphabet chart is not available as far as I am aware. Unlike Mr Latsam Khimhun, the MHBTC has opted for an existing character set, namely the Roman alphabet, but similar to the Rang Frah Lipi script, their first draft translations did not indicate tone.

These are all the scripts developed for Muklom that have come to my attention. Other orthographies have been developed for different Tangsa varieties. Of these, I will discuss only one. A native speaker of the Shecyü variety who completed an MA in linguistics, Binkhäm Khämlan, composed a symbol set which he hopes 'can be shared by all Tangshang varieties', i.e. a script that is intended for Tangsa languages in general (see Khämlan 2017). An overview of the consonant and vowel characters is provided in Table 1 and Table 2 (based on Khämlan and Owen 2018). Contrary to the Muklom writing systems discussed above, this orthography does express tone, namely by adding an extra letter at the end of the syllable as an indicator of tone. The 'tone' letters are x, z, and s. One tone is said to be left unmarked (see Khämlan and Owen 2018:17).

orthography	IPA
p	p
ph	pʰ
b	b
ht	ʈʰ
t	t
th	tʰ
d	d
cy	c[5]
ch	cʰ
k	k
kh	kʰ
g	ɡ
q	ʔ

orthography	IPA
ts	ts
tz	tsʰ
f	f
v	v
tf	θ
dz	ð
s	s
z	z
sh	ɕ
j	dʒ
qh	x
gh	ɣ
h	h

orthography	IPA
lh	ɬ
m	m
n	n
ny	ɲ
ng	ŋ
r	ɹ
y	j
l	l

Table 1 - Tangshang Naga Unified Orthography consonant symbols (Khämlan and Owen 2018).

[5] Khämlan and Owen (2018:16) use a non-standard IPA symbol for the palatal stop. This has been replaced by the standard IPA symbol [c] here.

orthography	IPA
i	i
e	e
ö	ø/y
ü	ɯ
ii	ɤ
ä	ə
a	a
u	u
o	o
aw	ɔ

orthography	IPA
ia	ia
aü	əɯ
äo	ɐo
ao	ao

Table 2 - Tangshang Naga Unified Orthography vowel symbols (Khämlan and Owen 2018).

Finally, there is a domain in which Muklom is used in written form, but without standardised spelling: social media and text messaging. When posting or sending messages in Muklom, people use the Roman script. The spelling of vowels and some consonants is not consistent between and within speakers. Where people place word boundaries, i.e. add spaces, differs greatly between speakers. It is not impossible to imagine, though, that extensive online use of Muklom may lead to some level of auto-standardisation.

Ideally, in my opinion, a script that is developed for the Muklom language will encode tones, even if optionally, for example at least in dictionaries or primers. Tone marking makes reading easier and reduces ambiguity. It does makes writing or typing slightly more complicated. The consultants with whom I have discussed orthography in depth, preferred to mark tones by diacritics rather than tone letters at the end of syllables, or they preferred not to mark tone at all. The reasons consultants provided for preferring diacritics over tone letters were: 1) aesthetics - the words ‘become too long’ with tone letters, 2) learnability - some were afraid that a tone letter system would be harder to learn, especially for older people, though it seems to me this would apply to a system of diacritics just as well, and 3) transparency of spelling for outsiders - if an outsider sees a text or a sign in the language, they should be able to guess the approximate pronunciation but the pronunciation is obscured by ‘unpronounced’ final consonants.

1.1.3 Social organisation

The Muklom people often refer to themselves as ‘tribal’ or ‘Mongoloid’, terms that are commonly encountered within Indian discourse. They distinguish at least four layers of societal structure: 1) tribe level, 2) subtribe cluster level, 3) subtribe level, and 4) clan level. These four levels will be discussed in this section, and it will also be shown that most of these are of rather recent origin. They are not watertight containers; there can be leaking from one category to the other, either through migration or through changes in social identification or political affiliation.

At tribe level, the Muklom people identify as Tangsa. The term Tangsa has not been around for a long time yet: it was coined in 1956 by an Indian government official (see section 1.2). Saul (2005) describes the tribe level as largely a British administration fiction. Although the concept of a Tangsa alliance may be a relatively recent one that may have been at first imposed by outsiders, it is a level of social organisation that has meaning to the Muklom people today. Tangsas can be found on both sides of the India-Myanmar border. The Tangsa subtribes that live on the Indian side have often been present there for a long period. Migration westward from Myanmar has been going on for hundreds of years (see Morey 2017a). Between the subtribe and the tribe level, people make a further distinction between the subtribes that arrived earlier on from the eastern to the western side of the Patkai hill range, referred to as Tangwa, and the subtribes that arrived during a later wave of migration, called Pangwa or Pangsa. The Muklom subtribe are early arrivals and belong to Tangwa cluster. Various Tangsa subtribes span the India-Myanmar border, but the Muklom people are found exclusively on the Indian side. The subtribe level is characterised amongst others by a shared language variety, a common oral history, and an own version of holidays that link to the agricultural cycle. Like each of the subtribes, the Muklom have their own style of festive garb. For females, the festive skirts are striped with broad horizontal bands of red and white.

The Muklom subtribe is composed of different clans, which are called /pʰʌn^{2}/ ‘type, species, clan’. The Muklom speakers I have had the pleasure of meeting, carried the following clan names: /bɔ/,[6] /tɕaŋ^{1}mi^{2}/, /xɨm^{3}hun^{3}/, /mʌt^{0}tɕa^{2}/, /ŋe^{2}mu^{2}/ or /ŋe^{2}muŋ^{2}/, /ɹe^{2}kʰuŋ^{1}/, /sa^{3}ɟuŋ^{2}/, /tʌŋ^{2}haʔ^{0}/, /te^{3}tsi^{3}/, /te^{2}kʰɨl^{2}/, and /ɟan^{2}tsaŋ^{3}/.[7] When providing one’s full name, one uses the order given name-clan name. Parents may choose to give their children a name that contains one syllable from the clan name, for example Wangmi Changmi, or Thangseng Thangha. The list of clan names provided here may not be exhaustive. It is said that some of the Muklom clans are descendants of people that broke off from another subtribe and became integrated into the Muklom community. This is clearly the case with the Ngemu clan,

[6] The tone on the first clan name could not be determined yet.
[7] These names are usually spelled as follows: Bo, Changmi, Khimhun, Matcha, Ngemu, Rekhung, Sajung, Tangha, Techi, Tekhil, and Yanchang.

whose name reflects the Muklom pronunciation of the Tangsa subtribe Ngaimong. While some people have no issue talking about their clan's history, some may avoid the topic due to sensitivity of the topic.

Finally, there is another term that may be relevant to the social identity of some, but not of others, which is the umbrella term 'Naga'. While some communities may identify strongly as Naga, others may feel that they are on the fringe or outside the scope of that umbrella term. Barkataki-Ruscheweyh (2015a:72) reports that some Tangsa people happily identify themselves as Naga, while others strongly oppose the suggestion of a Naga connection. She further reports that not many Nagas in the state of Nagaland are aware of the existence of the Tangsa people. The term Naga denotes an ethnic, political, and linguistic grouping. The Nagas are linguistically very diverse though: the label Naga is used by numerous communities in the hilly India-Myanmar border area that speak rather different Tibeto-Burman (TB) language varieties. To give an example of its linguistic heterogeneity: the Naga languages in the state Nagaland alone already belong to perhaps four distinct TB branches (see Post and Burling 2017:215). This shows again that we cannot blindly rely on existing non-linguistic classification when trying to map linguistic affiliations, and the same may apply to lower levels of societal structure. When in-depth grammatical descriptions become available, when lexical comparisons can be made, and more importantly, when shared innovations can be reconstructed, only then can we determine with more certainty which language varieties cluster together and which are more distantly related. Fortunately, research into Tangsa varieties is slowly increasing, but there is still a lot of work left to be done. Linguistic affiliations are the topic of discussion in section 1.2.

1.1.4 Religion

The Muklom people adhere to different religions. While many Pangwa subtribes can now be called Christian, among the Muklom only a minority has embraced Christianity. The majority follows a new religion called Rangfraism or the traditional religious practices (see Barkataki-Ruscheweyh 2015a:184). Muklom Christians are associated with the Baptist, Presbyterian, or Evangelical denominations. The Baptist Church was introduced to the region by Naga missionaries and the Presbyterian Church by Mizo missionaries. During the 1990s, the new religion known as Rangfraism was developed by a group of educated Muklom people in reaction to increased conversion to Christianity among their fellow tribespeople (see Barkataki-Ruscheweyh 2015b). This religion brought together elements from traditional practices, Hinduism, and even shows some similarities in its practices with Christianity, such as the singing of hymns and the practice of mass prayer, when worshipers say individual prayers simultaneously and aloud. The most recent data on religious affiliation among the Muklom people are from the 2011 national census (see Census of India 2011) and

are provided below in Table 3. While Christians are easy to identify in these numbers, constituting 21% of the Muklom population, the followers of Rangfraism and traditional practices are spread out over the categories <Hindus> and <Other religions and persuasions>.

1. Hindus	733	28%
2. Muslims	2	<1%
3. Christians	552	21%
4. Sikhs	-	-
5. Buddhists	40	2%
6. Jains	-	-
7. Other religions and persuasions	1,283	49%
8. Religion not stated	4	<1%
Total	**2,614**	**100%**

Table 3 - Religious affiliations among the Muklom people according to the 2011 Census of India.[8]

1.2 Linguistic affiliation

This section discusses the linguistic affiliation of the Muklom language. It follows a top-down structure: section 1.2.1 starts with the level of the language phylum, section 1.2.2 moves one level lower into the branches of TB, and section 1.2.3 discusses the internal diversity of the Tangsa languages.

1.2.1 A Sino-Tibetan language

Muklom belongs to the Sino-Tibetan language phylum, which counts over a billion speakers (see Matisoff 1991:469; Bradley 2007:354-368) and covers a large area stretching from eastern China southwards and the westwards to the Tibetan region, Myanmar, Thailand, Laos, Vietnam, India, Bhutan, Bangladesh, Nepal, and finally Pakistan. Since scholars started to become aware of the existence of this phylum in the 19th century (e.g. Hodgson 1853), then known under the name Indo-Chinese, the language tree has been under a constant process of pruning and re-arrangement as new data have come available. On a few occasions, scholars have coined new names for the phylum: Sino-Tibetan, Trans-Himalayan, and Tibeto-Burman. The purpose of coining the name Sino-Tibetan was to express that the phylum had received a new definition and previously included branches were now

[8] This overview is based on the data under the two labels <Moglum> and <Muktum> in the Census of India (2011).

excluded. Trans-Himalayan was suggested as a new label for the phylum to better reflect its geographic distribution (see Van Driem 2011; Blench and Post 2013). An upgrade from branch name to phylum name was suggested for the label Tibeto-Burman, to indicate that branches had been rearranged (see Van Driem 2002). The phylum name still encompassed Sinitic. Throughout this dissertation, the label Sino-Tibetan (ST) will be used for the phylum and the label Tibeto-Burman (TB) will be used as a high-node branch label.

The ST phylum is in classifications often divided into a Sinitic branch on one side and multiple TB branches on the other side. Muklom falls under the TB branches. Opinions differ with respect to the status of the TB branches in relation to Sinitic. Some propose that the TB branches grow out of a common node, separate from Sinitic, others propose a more equal status between Sinitic and the TB branches which all derive from a common ST node, while yet others decide to remain agnostic due to limited supporting linguistic evidence for either position. Figure 4 visualises the two different views with respect to the top nodes in the ST phylum.

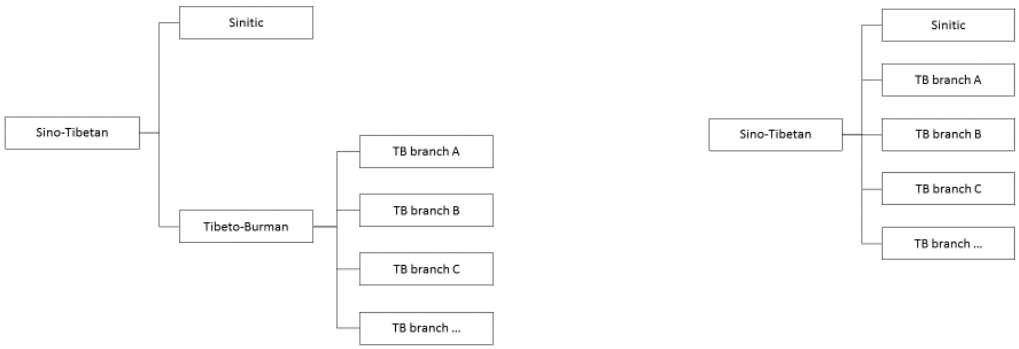

Figure 4 - Sino-Tibetan subgrouping: two views.

The sub-classification of TB languages is still ongoing (see Campbell and Poser 2008:112-114). Although for some subgroups, like Lolo-Burmese, scholars have made a convincing case by collecting a substantial amount of data and working out compelling lexical reconstructions (see Thurgood 2017:5), for many other subgroups, categorisation is based on less reliable sources of information such as geographical distribution, folklore, typology, or the presence of shared cultural customs. For this reason, Van Driem (2001, 2015:140) proposes to abandon tree models of TB until sufficient linguistic evidence has been collected. The process of sub-classifying, deconstructing and re-ordering of unconvincing classifications is unlikely to come to an end soon: much more research needs to be done on individual languages.

1.2.2 The place of Muklom within Tibeto-Burman

For the placement of Muklom within TB, the following three proposed subgroupings are most relevant, ordered from higher level to lower level: Sal, Northern Naga, and Tangsa. The highest subgroup of these, proposed by Burling (1983), is based on shared innovations in the lexicon of a collection of languages and is named after a shared cognate reconstructed as *sal 'sun'. The Sal subgroup consists of the lower groupings Jingpho(-Asakian), Northern Naga,[9] and Boro-Garo. On the basis of shared morphosyntactic features it has further been proposed that Mru-Hkongso belongs to the same subgroup (see Peterson and Wright 2009). Burling (1983:1) points out that other scholars before him suggested a closer connection between the first three groups, for example Shafer (1953) and Benedict (1972). The first author, Shafer (1953:227), notices that Boro-Garo (Baric) and Jingpho (Katśin) have some stems in common that have not been found in most of the ST languages, including the words for 'sun' and 'fire', but is careful to add that he could not determine with certainty whether these two form a sub-division within ST. The second author, Benedict (1972:6), states that the Northern Naga languages (Konyak) 'are most profitable compared' with Boro-Garo (Bodo-Koch) and implies a further connection with Jingpho (Kachin) by providing two sets of cognates for 'sun' and 'fire' that contrast with his general lexical reconstruction of these words for Proto-Tibeto-Burman (PTB), *niy and *mey respectively, which is reproduced below in Table 4 with the addition of Muklom, which falls under the Northern Naga group.

English	Kachin	Namsang	Moshang	Garo	Chairel	Muklom
sun	dźan	san	śar	sal	sal	sal²
fire	ʔwan	van	var	waʔl	phal	βʌl¹

Table 4 - Two series of cognates in Sal languages (based on Benedict 1972:7).

Burling (1983) first provides a sketch of sound correspondences between Sal languages, and then lists lexical correspondences that could separate the Sal languages from other TB languages, divided into the categories 1) 'most convincing' (n=17), 2) 'suggestive sets' (n=9), and 3) 'tantalizing possibilities' (n=6).[10] These cognates can support the separate status of Sal if they are not found in other TB languages.

[9] Following French (1983) and Bradley (1997), the term 'Northern Naga' will be used throughout this dissertation to refer to the subgroup under which scholars includes Tangsa, Nocte, Konyak, Wancho, Phom, Chang, and sometimes other languages. Other terms that appear in the literature to denote the same entity are: 'Eastern Naga' (Grierson 1903b; Burling 1983), 'Konyak' (Benedict 1972), and 'Konyakian' (Thurgood 2017).
[10] He lists additional cognate sets, but those are not claimed to be Sal-specific.

Although accepted by many scholars, the Sal subgrouping has left some scholars unconvinced. A few decades after Burling's essay on Sal languages, Thurgood (2017:20) observes that many of the lexical innovations are in fact not restricted to Burling's Sal languages, but rather are found in TB languages beyond this subgroup, and thus question its viability. According to Thurgood, this negatively affects the strength of the hypothesised connection between Jingpho and the other two groups, Northern Naga and Boro-Garo, and to a lesser extend the connection between Northern Naga and Boro-Garo. Matisoff (1991:480-482, 2003:5-6) proposed a classification of TB that splits the Sal languages into two groups and allots them to different branches of TB, with Jingpho assigned to the branch Jingpho-Nungish-Luish and Boro-Garo to a different group of languages formerly known as Kamarupan, while acknowledging the relationship between Northern Naga and Jingpho, be it as contact languages (Matisoff 2008:xxix). However, Matisoff's (2013:15) more recent view is again in favour of Burling's Sal.

One level lower, we arrive at a cluster of languages consisting of Tangsa, Nocte, Wancho, Konyak, Phom, Chang, Khiamniungan, and depending on the author different languages are added to this. Following French (1983) and Bradley (1997), the term 'Northern Naga' will be used throughout this dissertation to refer to this cluster. The Northern Naga sub-group is much more linguistically diverse than Boro-Garo, another branch of Sal (see Post and Burling 2017:226). Other terms that appear in the literature to denote the same entity, are: 'Eastern Naga'[11] (e.g. Grierson 1903a, 1903b; Burling 1983), 'Nagish', derived from the rather fluid ethnic term 'Naga' (e.g. Shafer 1953), or similarly the somewhat embarrassing term 'Naked Naga' (e.g. Benedict 1972:5), 'Konyak', named after one of the languages that constitute this subgroup (e.g. Marrison 1967; Benedict 1972:5), or in similar fashion, 'Konyakian' (e.g. Thurgood 2017:20),[12] and 'Kachinic', the ethnic term for speakers of the Jingpho language (e.g. Van Driem 2001). One reason for the multitude of labels is that subgrouping of languages in this part of the world still remains rather unsure and therefore scholars come up with different (tentative) trees, along with different labels that fit best within their classification.

Within Northern Naga, it has been suggested that Tangsa stands closest to Nocte (e.g. Shafer 1953:228; French 1983:726; Burling 1983:17, 2003:175; Bradley 1997:21; Morey 2013). It may therefore not be surprising that some language varieties are subgrouped either as Tangsa or Nocte, depending on the geographical location of their village. For example, the language varieties Phong/Phontai and Hakhun are called Tangsa when the speakers are located within an area in

[11] Since the speakers of these languages are located to the northeast of other 'Naga'-groups, it is not surprising that authors have coined both the term 'Eastern Naga' and 'Northern Naga'. The latter of the two is more widely used nowadays.

[12] The list of 11 Northern Naga languages provided by Thurgood (2017:20) is over-simplistic and lists Tangsa, Yogli (Joglei), Longchang, and Moshang side by side, while the latter three are elsewhere in the literature considered sub-varieties of the first.

Changlang district or in Assam that is predominantly Tangsa, but Nocte when they are located in an area in the Tirap district of Arunachal that is predominantly populated by speakers of Nocte (see Morey 2017a). The fluidity in sub-tribe association could indicate that there is no clear linguistic boundary between Tangsa and Nocte. It has further been suggested that Tangsa and Nocte form a group with Tutsa, or even Wancho (see Post and Burling 2017:226-227). Indeed, on the Myanmar side, as will be discussed in the following paragraph, these three are subsumed under a unit called 'Tangshang'.

1.2.3 The Tangsa languages

The name Tangsa is a recent invention, coined by Indian official Bipin Borgohain only in 1956 (Saul 2005:28). Borgohain states in his foreword to Barua (1991:vii) that <Tang> stands for 'mountain' and <sa> for 'person' but he does not specify from which language variety these words were taken. The term 'Tangsa' has been used in India since. In Myanmar, however, the alternative term 'Tangshang' is used, coined even more recently, in 2003, by the Tangshang Central Culture and Literature Committee in Nanyun, Myanmar. Despite superficial similarity of the two names, they are not cognate; 'Tangshang' derives from the names of two ancestors in local oral history, the brothers Tangnyu Wang and Shangnyu Wang[13] (see Statezni 2013:5). Until recently, a third term, 'Tase' was employed by Ethnologue (see Simons and Fennig 2017), but they have now switched to using 'Tangshang' or 'Tangshang Naga' (see Simons and Fennig 2018). The subgroup carries the ISO-code 639-3:nst. The old name, Tase, reflects the pronunciation of the word 'Tangsa' in Chamchang, one of the many Tangsa language varieties. Chamchang has dropped the coda /ŋ/ in rhymes consisting of /aŋ/, hence first syllable 'Ta', and the vowel in *sa 'child' has changed to /e/, hence second syllable 'se' (see Morey 2017a). The term Tase was initially retained to avoid having to choose between one of the two competing terms Tangsa or Tangshang (see Statezni 2013:6). Prior to the coining of these tribe labels, the subgroups and their language varieties were known by their subtribe names, to which it was possible to add the term 'Naga' (see section 1.1.2.2).

As mentioned in section 1.2.2, the terms Tangsa and Tangshang differ in scope considerably. While the Tangshang subgrouping includes Nocte, Wancho, and Tutsa, these are excluded from the subgroup referred to as Tangsa, where they are instead considered sister tribes (see Morey 2015:24; Statezni 2013:7). Finally, it should be mentioned that at least some of the languages that fall under the scope of Tangshang in Myanmar are also known as Heimi (see Saul 2005; Statezni 2013; Morey 2017a). The concept of a Tangsa tribe is valid from the perspective of present-day ethno-cultural identity (see section

[13] <Wang> means 'king' or 'chief' and has a Muklom cognate that is found, for example, in the compound /luŋ²-βʌŋ²/ 'highest chief'.

1.1.3), though problematic in the sense that the scopes of Tangsa, Tangshang (and Heimi) do not coincide. It has yet to be determined whether these ethno-cultural labels reflect linguistic subgroupings as well. Throughout this thesis, the term Tangsa will be used, as this is the standard tribe name in India, where Muklom is spoken.

The Tangsa group shows a rather high degree of internal diversity. Morey (2014b:63, 2017a) estimates that there are 70 to 80 subtribes on both sides of the India-Myanmar border that belong to the larger Tangsa tribe. Each of these speak their own variety of Tangsa and while sometimes there is mutual intelligibility between the subtribes, more often there is not (see Statezni 2013). For example, the varieties Chamchang and Shecyü are very similar to one another and therefore mutually intelligible, but Chamchang and Muklom are different to the degree that speakers can no longer understand one another. Differences in phonology, grammar and lexicon between two varieties play an important role in intelligibility, as in the case of Muklom and Chamchang, but also duration of close contact plays a role. We do encounter varieties that are quite different but where speakers still report a relatively high level of intelligibility. This is the case between Muklom and Joglei. Some degree of intelligibility has arisen because these two groups have been in close contact over an extended period both in the hills and in the plains. Consultants in Kuttom village claim that the intelligibility is stronger in one direction: the Joglei people understand Muklom better than the Muklom people understand Joglei.

Though our knowledge of the internal diversity of Tangsa has been growing steadily since the commencement of Stephen Morey‘s DoBeS project on Tangsa, Tai and Singpho in Northeast India in 2005[14] and since the start on the Burman side of languages surveys around the same time by the Linguistic Society Naga Survey Team in cooperation with SIL International (Statezni 2013:25), the classification of the Tangsa languages, as well as their relation to adjacent groups, is yet to be solidified. For most varieties, we still do not have more than a short wordlist, so it is difficult to reconstruct shared innovations on which a strong classification can be built. One preliminary subgrouping of Tangsa languages has been proposed by Morey (2017a). In this classification, the languages of the late arrivals in Arunachal form one group, Pangwa, and the early arrivals are divided into three smaller groups, as shown in Table 5. Muklom is grouped together with Ha’vi.

[14] Recordings can be accessed via http://dobes.mpi.nl/projects/singpho_tai_tangsa/.

India
Tikhak group (Tikhak, Yongkuk, Longchang, Kato, Nokja)
Muklom group (Muklom, Ha'vi)
Phong
Pangwa varieties

Myanmar
Hakhun
Bote-Haidley group (Bote, Haidley, Hakhi)
Olay group (Lumnu, Chamkok, Champang, Haqchum, Nahen and others)
Raqsa group
Kaisan group
Yongkon group
Sansik group
Pinkhu group

Table 5 - A preliminary classification of Tangsa languages (Morey 2017a).

The Tangsa population, whether one chooses to give a narrow or broad definition to the name, spans the India-Myanmar border. In India, Tangsa people are found in the states Arunachal Pradesh and Assam, in Myanmar they are found in the northern part of the Sagaing Region. While some sub-tribes live in both countries, the Muklom people dwell only on Indian territory. In previous literature, the Tangsa language variety that is the topic of this dissertation is usually referred to as Moklum, for example by Das Gupta (1980) in his grammar booklet of eleven Tangsa varieties. Some Muklom consultants indicate that this pronunciation is used by certain other neighbouring groups, such as the Chamchang and the Joglei people. This implies that 'Moklum' is what we call an exonym, a name used by outsiders (see Matisoff 1991:479). The insider name or autonym has a slightly different pronunciation: [muk̄⁰lɔm²]. Das Gupta (1980:1) must have been aware of this, as he provides in the contents of his grammar booklet an alternative spelling between brackets, Muklom. I consider the spelling based on the autonym preferable and will use it throughout this work.

1.3 Literature review

This section provides an overview of previously published work on the Muklom language. While research into the various 'dialects' of Tangsa is fortunately increasing, published original data on the Muklom variety is extremely rare. To my knowledge, the earliest mentions of Muklom language data originate from the second half of the 20th Century. The first works on Muklom were written by the Indian scholars Ngemu (1977), Das Gupta (1971b, 1980) and Bandyopadhyay (1980, 1989).

Ngemu, in his function of Language Officer of Changlang in Arunachal Pradesh, composed a sixty-six-page booklet about Muklom titled 'Moklum language guide' (Ngemu 1977), which consists of remarks on grammar, phrases with English translation and a Muklom-English wordlist.

Das Gupta was also a government official and during his appointment as Director of Research in Arunachal Pradesh he wrote a treatise on a collection of Tangsa varieties titled 'The Tangsa language, a synopsis' (Das Gupta 1980) which included a six-page sketch of Muklom. From Ngemu (1977:7) we know that Das Gupta must have published some notes on the Muklom language six years prior in a publication called 'A few concepts in Moklum dialect', published in Shillong (Das Gupta 1971b). I have not been able to locate a copy of this document.

Ngemu and Das Gupta published their work in Shillong, far away from where the Tangsa languages are spoken. The current state of Arunachal was situated on the fringes of the old Ahom and Tibetan Empires but was never fully part of either. Similarly, the British administration occupied only portions of this region from the middle of the nineteenth century. When the colonial powers withdrew and India became an independent country in 1947, the region was known as the North East Frontier Agency (NEFA), which was ruled first from Delhi, then from Shillong and Guwahati. Hence the works on Tangsa languages by Indian government officials were published in these places. Later, the name NEFA was replaced by Arunachal Pradesh, which was inaugurated as a state in 1987.

The third and last published source from the 20th Century is a wordlist by the Indian scholar Bandyopadhyay (1989). Swapon Kumar Bandyopadhyay submitted in 1980 a doctoral thesis titled 'A linguistic study of Tangsa, a Tibeto-Burman language' at the University of Delhi, under supervision of Professor K.V. Subbarao. The manuscript, which I have unfortunately so far not been able to obtain, was made available to the journal Linguistics of the Tibeto-Burman Area (LTBA) by Professor F.K. Lehman. An 868-entry wordlist was taken from the thesis and published in volume 12, issue 2 of LTBA under the name of the original author (Bandyopadhyay 1989). It should be noted that Bandyopadhyay (1989) does not specify to which Tangsa variety the words in the list belong, but I can confirm that it concerns the Muklom variety beyond any doubt, and it has been correctly identified as such by Morey (2011a:79). Perhaps most telling is that grammatical elements such as person indices, definite and demonstrative markers, conjunctions, case markers, and tense markers are identical to what I have observed in collected Muklom data. Khämlan (2017:24) and Goswami (2017:20), however, mistakenly refer to Bandyopadhyay (1989) as a wordlist of Joglei.

More recently, the Australian linguist Stephen Morey came into contact with speakers of Muklom during trips to Arunachal Pradesh in 2009, 2010, 2012 and 2014. He made audio recordings of Muklom and collected a spoken wordlist, which can be accessed through the DoBeS archives.[15] Based on data

[15] Online accessible via http://dobes.mpi.nl/projects/singpho_tai_tangsa/.

from earlier resources and on data from his own recordings he made short notes on Muklom grammar and lexicon in multiple publications (see Morey 2011a:passim, 2014a:667, 2015: passim, 2016, 2017a). Morey acted as the main supervisor of the PhD research project which resulted in the creation of this dissertation and in the publication of two articles on verb inflection (see Mulder 2018a, 2019) and an article on the tone system of Muklom (see Mulder 2018b). Finally, Kellen Parker van Dam carried out a PhD project on tone systems across Tangsa varieties, including Muklom, also under the supervision of Stephen Morey (see Van Dam 2018a).

1.4 The structure of this dissertation

This dissertation follows the classical format of a descriptive grammar in that it contains a grammar component, a vocabulary, and a sample of texts. In structuring the grammar component, I have given priority to function over form to make this dissertation a more accessible reference work for typological studies, including for scholars who are not or less familiar with the Tibeto-Burman language family.[16] For the same reason I have included 1) table overviews of same-function elements, 2) noun complex and verb complex overviews showing their different slots, and 3) evidence for the order of elements in the noun and verb complexes in the shape of glossed example sentences from the corpus.

The first component, the grammatical description, starts with a chapter on methodology, chapter 2. From then onward, the grammar follows a bottom-up structure, starting with the phonology of the language in chapter 3, followed by a discussion of word classes and wordhood in chapter 4, the noun complex in chapter 5, the verb complex in chapter 6, clauses in chapter 7, and finally discourse in chapter 8. The focus of the grammar component lies on the three topics phonology, the noun complex, and the verb complex. The chapters on words, clauses and discourse structure constitute minor chapters. The vocabulary and sample of texts can be found in the appendices, along with a list of all the recordings of which glossed extracts are presented in this dissertation and a list of so-called stem-alternating verbs.

[16] The opposite organisation, according to form, has its own benefits. As one reviewer pointed out, form-based grammatical descriptions better reflect the unique make-up of a language and may help identify evidence in the reconstruction of grammaticalisation paths of particular forms and constructions.

2 Methodology

This chapter describes the research methodology adopted during the collection of data and the composing of this dissertation. Section 2.1 makes explicit to which theoretical framework this dissertation adheres and where it stands in the tradition of descriptive grammar writing. Section 2.2 describes the methods that have been used during data collection and the conventions adopted in the presentation of these data in this dissertation. Section 2.3 provides information on the equipment and software used during data collection and analysis. Finally, section 2.4 outlines the scope and limits of this grammatical description of Muklom.

2.1 Theoretical framework

This dissertation follows the descriptive theoretical framework known as general comparative grammar (see Lehmann 1989; Evans and Dench 2006:6) or basic linguistic theory (BLT) (see Dixon 1997:128; Dryer 2006). This framework is eclectic in the sense that it builds on traditional grammar but has adopted tools from various explanatory theoretical frameworks such as structuralism and generative grammar, yet is slow in adopting novel ideas, taking only what is considered necessary. These characteristics on the one hand tend to increase the readability of descriptive grammars written within this framework but on the other hand, such grammars might come across as theoretically shallow to those used to working from within an explanatory theoretical framework. The theoretical framework sometimes goes unmentioned in descriptive grammars, but it would be a mistake to assume that such grammars or any BLT grammar for that matter is atheoretical.

As was pointed out by one reviewer, in field of descriptive linguistics, we frequently fail to define terminology and adopt, sometimes without discussion, concepts from different theoretical frameworks. This dissertation is no exception to that, and I am quick to admit it is guilty of the same imperfection. Two important factors that in my opinion contribute to theoretical weakness in this field: 1) the eclectic nature of BLT, 2) the wide array of topics covered by grammatical descriptions. In BLT, concepts are adopted form different, on particular points conflicting, theories of grammar, but authors use them nevertheless because they serve the descriptive purpose. Behind every label lies a theoretical discussion; there is definitely no lack of rabbit holes in this field. In many places throughout this dissertation I clarify terminology by providing a short definition, but I have consciously refrained from entering theoretical debate about terminology. With regard to the second factor: when a wide array of topics needs to be covered, the depth of discussion suffers. The discussion of each topic in this dissertation should be read as a first exploration, not as an exhaustive study.

Since the anthropologist Franz Boas stressed the importance of text corpora for the understanding of language structure (see for example Boas 1917), building descriptive grammars on text collections has become seen as a good practice. Language descriptions that consist of the three components grammar, vocabulary, and texts are said to follow the concept of the Boasian trilogy or triumvirate. The description that Boas (1917) wrote of the Tlingit language is an example of such a trilogy. This dissertation contains all three components and the grammatical description tries to rely on the corpus of fully annotated texts as much as possible.

A few of the works that I used for inspiration while structuring the grammatical description presented in this dissertation are the grammar of Galo by Post (2007), the grammar of Turung Singpho by Morey (2010), the grammar of Karbi by Konnerth (2014), the grammar of Wadu Pumi by Daudey (2014), and the grammar of Hakhun Tangsa by Boro (2017).

2.2 Methods

The grammatical description presented in this dissertation was primarily based on data that I recorded during two fieldwork trips to the Kharsang Town area in Arunachal Pradesh, one in the winter of 2015-2016 and the other a year later in the winter of 2016-2017. The time spent in Muklom villages is approximately 7 months. This section describes data collection and presentation. Data carriers and file name conventions are discussed in 2.2.1. The genres of collected texts and the settings in which recordings were made are discussed in 2.2.2. Section 2.2.3 gives an overview of the research participants or language consultants. Finally, the presentation of data is discussed in 2.2.4.

2.2.1 Data collection and file naming

The data I collected can be categorised according to the medium they were recorded on and these will be discussed in separate sections: 1) audio and video recordings in section 2.2.1.1, 2) paper notebooks in section 2.2.1.2, 3) notes in the Fieldworks Language Explorer database in section 2.2.1.3, and 4) extracts from social media posts and messenger texts in section 2.2.1.4. An advantage of the first category is that data can be listen to or watched over and over and thus more easily allows reinterpretation of data as metalinguistic understanding of the language evolves. A strength of the other categories is that the recording method is experienced as less intrusive. In the following sections, I describe for each data category the file naming conventions that were adopted and by which abbreviated labels the language resources are referred to in this dissertation.

2.2.1.1 Audio and video recordings

The convention that I adopted for naming audio and video files is outlined in Figure 5, taking a randomly picked recording as an example. Recording labels can be divided into seven slots. Slot 1 contains the ISO 639-3 code of the Tangsa languages, <nst>. The ISO coding system defines three-letter codes used for the identification of languages and its aim is to incorporate all known natural languages. An advantage of this system is the transparency of the language codes: each language can be represented by one code only and this code is universal. The codes therefore constitute a useful tool for electronic processing and also for locating information about languages (see Bickford 2016:32). However, as Morey et al. (2013) point out, the general ISO 639 system has its weaknesses. For example, its nature dictates that it must decide on what counts as a language and what does not but should count as a dialect instead, while these two often cannot be distinguished from one another based on linguistic criteria. Because Tangsa is a very diverse language cluster, I have specified the language variety in slot 2, using <muk> as an abbreviation for Muklom. Slot 3 contains the date of recording in the format [YYYYMMDD] and the number in slot 4 indicates which place the recording takes in the sequence of recordings of that day, in this case the first. Slot 5 and 6 contain letter codes for the researcher and main speaker. These slots can contain multiple letter codes if there is more than one researcher or main speaker. Finally, slot 7 contains a string of letters that summarises the content of the recording, which is in this case a narrative from Muklom oral history about the loss of knowledge about medicines.

The advantage of long file names is that they can carry quite a bit of metadata, making it easy to identify their contents by the name but the main disadvantage is that the file name takes up a lot of space. When my recordings are referred to in this dissertation, the name is therefore abbreviated so that it takes up as little space as possible while still remaining unique, i.e. abbreviated recording names consist of slot 3 and 4. The recording in Figure 5 will be referred to as (20151208_01). A complete list of the recordings that were made by me and are quoted from in this dissertation is provided in Appendix B.

1	**2**	**3**	**4**	**5**	**6**	**7**
nst_	muk_	20151208_	01_	MM_	TY_	LossAndRediscoveryOfMedicine

Figure 5 - File naming conventions for recordings made by the author.

While primarily built on recordings made by me during two field trips to Northeast India, the grammatical description presented in this dissertation also benefits from recordings made previously by Stephen Morey, Meenaxi Barkataki-Ruscheweyh, and the missionary organisation Global Networks

Recordings. From Stephen and Meenaxi I have received spoken permission for their recordings to be used in my research of the Muklom language. The videos produced by Global Network Recordings are freely accessible through their website[17] and via the online video sharing platform YouTube, where videos have been uploaded under the username 'World Language Movies'. I have contacted Global Network Recordings with inquiries about their Muklom recordings but not received a reply. The Muklom speaker in their recordings has been identified by my consultants as Kampu Techi. When language examples from recordings by others are quoted, the transcription and glosses are mine except when otherwise indicated. An overview of all audio recordings that are referred to in this dissertation and are not my own are provided in Appendix B. The files are referred to by an abbreviation of the original file name, again taking a short but still unique string of characters.

Some of the language data captured in audio or video recordings was subsequently transcribed and glossed in Fieldworks Language Explorer (FLEx) in order to build up a digital lexicon and to allow the data to be searched by means of the integrated concordance tool.[18] Only a subset of the recordings could be transcribed and from those transcriptions only a subset could be glossed and corrected with the help of consultants. As anyone with experience in transcribing (in a second language) knows, this task is time-consuming. The same applies to correcting transcriptions and glosses with the help of consultants: it takes dedication and patience both from the side of the consultant and of the researcher to carry out these tasks. One does need a consultant of the highest calibre, like Tchithan Techi who was simply indispensable in the task of glossing texts, to produce a substantial amount of fully annotated texts.

2.2.1.2 Paper notebooks

The paper notebooks that were used to record observed language use when no recording device was switched on carry a unique label and each page in the notebook was marked with a page number. An overview of the notebooks referred to in this dissertation is provided in Table 6. The letters S and B stand for the size of the notebook: I used pocket-sized notebooks (S) that were easy to carry around all day and a sturdy large notebook (B) that had a hard cover and was suitable for making longer sets of notes when I did not have to move around as much. When examples from a notebook are quoted, the two-character notebook code will be followed by the page number, separated by a dot, for example S1.14.

[17] http://globalrecordings.net/
[18] FLEx can be downloaded from software.sil.org/fieldworks/.

Notebooks
S1
S2
S3
B1

Table 6 - List of paper notebooks.

All language data captured in notebooks was subsequently transcribed and glossed in FLEx in order to build up a digital lexicon and to allow the data to be searched by means of the concordance tool. A softcopy of the notebooks has been created by scanning them page by page so that the hand-written version could also be backed up.

2.2.1.3 Notes in FLEx

Notes on lexicon, such as new lexical entries, allomorphs, and tone determination, were often entered directly into FLEx. I have held many language consultation sessions on the lexicon. During these sessions, me and the consultant would fix existing lexical entries in FLEx and add relevant information to them such as the tone of each syllable or, for verbs, I would ask question to determine whether they showed stem alternation. Notes of this type are referred to in this dissertation by listing the consultant letter code followed by <.lexicon>, for example: CTT.lexicon.

2.2.1.4 Social media posts and messenger texts

A small selection of extracts from Facebook posts and messenger texts was collected in FLEx. These extracts are of two types. First, there are a few messenger conversations in which I asked a consultant clarification questions about Muklom grammar. Text messages obviously have their limitations when it comes to elicitation, but they constitute a useful tool when no better option is available. Second, there are non-elicited extracts. The posts and extracts recorded in FLEx contain no sensitive or personal information. The rare occasions that this category of data is quoted in this dissertation, Facebook posts are identified as such by the label <FB post> and messenger extracts by the label <MessagesExtracts>.

2.2.2 Genres and elicitation settings

The texts that I have collected during my fieldtrips and the other language resources on which this dissertation is based, belong to the following genres: personal narrative, oral history narrative, translated religious narrative, dialogue about customs and traditions, modern song, and controlled elicitation. The overview of recordings in Appendix B indicates for each text to which of the above genres it belongs and whether it was obtained through free or controlled elicitation.

For my own recordings, I made use of two types of elicitation settings. During controlled elicitation sessions, the languages of communication were English and Muklom. I would sit with one or two consultants and ask them questions directly, without the intervention of a translator. When collecting texts of other genres, I worked with a native speaker interviewer where possible to prevent speakers from adapting their language use to me, a beginning learner of their native tongue. The following people have assisted me as interviewers: Mr Munkap Khimhun and Mr Ngulang Changmi. Their excellent help was crucial for obtaining so-called natural spoken texts. Before a recorded session, I would discuss with the interviewer what topic I would like the speaker or speakers to talk about, for example the different types of augury. The interviewer would discuss that with the speakers and agree on what the topic or main line of the monologue or dialogue would be. In dialogue situations, the interviewer kept the conversation going by asking questions. During free elicitation sessions, I was present but did not join the discussion.

2.2.3 Speakers and language consultants

A couple of tens of speakers of Muklom participated in the recordings on which this dissertation is based. The people who have acted as storytellers or main speakers in recordings are listed here, ordered alphabetically by their last name and then by first name: Mr Bongam Bo, Ms Bina Changmi, Ms Likjong Changmi, Mr Ngulang Changmi, Mr Nongmai Changmi, Ms Sunumi Changmi, Mr Kamhong Matcha, Mr Munglong Ngemu, Mr Yongngam Ngemu, Mr Muncha Khimhun, Mr Munkap Khimhun, Mr Munson Khimhun, Mr Ngammun Khimhun, Mr Yongtim Khimhun, Mr Phanglong Sajung, Ms Khokcha Tangha, Ms Shantim Tangha, Ms Thangna Tangha, Mr Thangseng Thangha, Mr Kampu Techi, Ms Tchithan Techi, Ms Changnem Tekhil, Mr Tchangtit Yanchang, Ms Kamsing Yanchang, Mr Teychang Yanchang.

The following people have helped me gain a better understanding of the workings of the Muklom language by engaging with me in metalinguistic conversation on a regular basis or at least during multiple conversations: Mr Ngulang Changmi and Ms Likjong Changmi, Mr Nongmai Changmi and Ms Bina Changmi, Ms Tchithan Techi, Ms Sunumi Changmi, Mr Chupan Changmi, Mr Munkap

Khimhun and Ms Thangna Tangha, Ms Nongdam Khimhun, Mr Munson Khimhun, and Ms Nginnem Changmi. This work would not have been possible without them. These were the main linguistics consultants but there were the countless other Muklom speakers that have spent time with me and were happy to talk about their language and answer questions. Again, without them this research would not have been possible.

When language variation is discussed in the text of this dissertation, I will identify certain speaker characteristics such as biological sex, age, year of birth, place of birth, or dwelling place at the time of recording, as far as these data points are known, without providing full names. The reason for not providing full names is that language variation can be a sensitive topic to speakers of the language due to prescriptivist views that people, either themselves or others, may hold. When quoting extracts from controlled elicitation sessions or when reporting on grammaticality judgements by speakers, I therefore refer to speakers by a two- or three-letter code. The letter codes for all of the speakers that are referred in this dissertation and the mentioned data points are presented in Table 7. While the current dwelling place is known for all speakers, the place of birth and exact year of birth were often not noted down. Ideally this metadata should have been noted down by me and other researchers before making our recordings, but unfortunately this was not always done. A tilde in the year of birth column indicates that the given year (range) is an educated guess.

code	sex	year of birth	place of birth	dwelling place
CTT	f	1990	Janman	New Longkey
MC	f	~1960's	Makantong	Kuttom
MK	m	~1960's		New Chingsa
MKK	m	~1960's		New Chingsa
MSK	m	~1980's		New Chingsa
NC	m	1961	Makantong	Kuttom
NGK	m	~1970's		Tinali
NMN	f	~1980's	Kuttom	Kuttom
NUC	m	1981	Kuttom	Kuttom
SC	f	~1985	Kuttom	Kuttom; Guwahati
SHT	f	~1945		New Chingsa
SN	m	[unknown]		Kharsang Town
TT	m	~1970's		New Chingsa
YK	m	~1945		New Khimyong

Table 7 - Speakers letter codes.

2.2.4 Transcription and glossing conventions

This section discusses the conventions that have been adopted in the transcription of Muklom examples and texts and their glossing.

2.2.4.1 Transcription

The language currently does not have a standardized orthography and spelling (see section 1.1.2.3). All examples have been transcribed using the International Phonetic Alphabet (IPA, 2005). As a rule, the transcribed text presented in this dissertation is broad, meaning phonemic. In tables and figures, phonemically transcribed words and phrases are generally placed between slashes: / /. In glossed examples, the slashes are left out. Narrow or phonetic transcription is used when allophonic variation or deviating phonetic realisation is demonstrated. The usual square brackets [ ] are placed around phonetically transcribed text. Angled brackets < > are used for orthographic representations (in any language).

When transcribing phonemically, decisions need to be made with regard to which symbols will be selected to represent the sounds of the language that is the object of study. These decisions are not always made explicit in descriptions, but for the sake of transparency and clarity I will do so here. In this dissertation, decisions with respect to phonemic transcriptions are based on Muklom data primarily and not on cross-Tangsa data. I use IPA symbols without diacritics such as indicators for sound features like no audible release, creakiness or breathiness. Such features are covered in sections 3.1.1 and 3.2.1 for every phoneme and toneme. However, long duration is indicated in the phonological representation by means of the diacritic [ː], but only when duration is the sole feature that sets a phoneme apart from another. In this manner, /uː/ can be distinguished from /u/, but even though /i/ is longer than /ɨ/, no duration diacritic is added since we can distinguish between the two phonemes already on the basis of their symbol shape. When allophony occurs, I have selected the IPA symbol of the most frequently used allomorph to represent the phoneme. This principle has also been applied to instances of free variation. Free variation does not necessarily imply equal variation and indeed often one surface form is observed to occur more frequently than the other. For example, the palatal which is sometimes pronounced as [j] or [dʒ] but more often as [ɟ], is transcribed phonemically as /ɟ/ (see section 3.1.1.1). Transcription conventions sometimes prioritise symbols which are incorporated in the Roman script, even though they may not be the most accurate representation sound-wise. This has not been done in the convention used in this thesis: /ɹ/ is chosen to represent the postalveolar approximant and not the

symbol <r>, /ɻ/ and not <j>, /β/ and not <v> or <w>, /ŋ/ and not <ng> (see section 3.1.1.1). These are all consonant symbols, but the same decisions need to be made with regard to vowels. Since vowel space is not as straightforwardly partitionable as consonant space, often more than one IPA symbol can be argued for as a suitable phonemic notation for a sound. In case of allophony, I have again selected the IPA symbol for the more frequent allophone to represent the phoneme. For example, /ɨ/ represents the vowel which is sometimes pronounced [ɪ] or [u] but more often as [ɨ] (see section 3.1.1.2). Finally, although there is a tradition in linguistic literature on Southeast Asian languages of writing a schwa for central vowels, in non-stressed but also in stressed syllables, for Muklom the symbol /ʌ/ is used to represent this vowel, as this reflects its quality more precisely (which is not so central after all) and thus fits in better with the general transcription convention for Muklom adopted in this work.

Tones are indicated on syllables by means of a postposed superscript number 1, 2, or 3. The number signifies the tone category, of which there are three (see section 3.2.1.1). A superscript zero indicates that a syllable is toneless. Syllables whose tone or lack of tone could not been determined yet can be recognised by the lack of a superscript number. Marking tone by means of category numbers is not a new convention in the context of Tangsa languages. Morey (2011a and various later publications) indicates the tone of a syllable by a postposed superscript number, and Weidert (1979, 1987) indicates the tone of a syllable by a preposed superscript number. Note, however that the numbering of categories differs between the two authors. For Tangsa, Morey's tone 1 = Weidert's tone 1, Morey's tone 2 = Weidert's tone 3, Morey's tone 3 = Weidert's tone 2. This can easily be established based on the section 'Sample sets of reconstructed etyma for Tibeto-Burman tonal categories I, II, and III' in Weidert (1979:117-124). This dissertation follows Morey's numbering of categories.

2.2.4.2 Glosses

Texts are divided into utterances and each utterance is provided with a gloss. Glossed examples in this dissertation generally consist of four tiers. An example of a glossed utterance is provided in Figure 6. The first two tiers contain a phonemic transcription, the third tier contains morpheme by morpheme glosses, and the fourth tier contains an English translation with a reference to the source. Elements that are the focus of the discussion are bolded in tier 2 and 3. The contents of each tier are discussed in more detail below.

tier	example		
1	ŋa^{1} a^{3} ɨil^{2} sʌt^{0} kʌm^{1}.		
2	ŋa^{1}=a^{3}	ɨil^{2}	sʌt^{0}-**kʌm^{1}**
3	1SG=ERG	rice	eat.soft-**PROG**
4	‘I am eating rice.’ (20161223_02)		

Figure 6 - The structure of glossed examples.

The first tier contains a phonemic transcription without indication of morpheme boundaries. This is the more condensed transcription; elements are not divided by tabs but by spaces. The elements separated by spaces in this tier do not necessarily represent phonological words. This tier is intended to be developed into a phonological word tier but has not yet reached that status. The identification of phonological word boundaries is still at a beginning stage. The first tier is included in examples despite its shortcomings for two reasons: 1) a more condensed line of text is easier to read than words separated by tabs, and 2) the short strings of characters in the first tier does convey the staccato sound of the language. Spaces have been placed according to the following make-shift convention: all major syllables form a separate unit and all minor syllables form a unit with the accompanying major syllable. See section 3.3.1 for a discussion on syllable structure.

The second tier shows the same text but now divided according to grammatical word boundaries (see section 4.4). Space between strings of characters indicate grammatical word boundaries, and within grammatical words, morpheme boundaries are indicated by a dash or an equal sign. The connection between a bound grammatical root, i.e. affix, and another element is indicated by a dash. The connection between compounded lexical morphemes is also indicated by a dash. The boundary between a clitic and the element they attach to is indicated by means of an equal sign.

In combinations of a prefix and an enclitic, I have chosen to connect the two morphemes by means of a single hyphen in the transcription, i.e. the hyphen overrules the equal sign. Four examples are provided below. Example (1) consists of the prefix /i^{3}-/ ‘PROX’ and the enclitic /=ɹi^{3}/ ‘PROX’, example (2) consists of the prefix /e^{2}-/ ‘NPROX’ and the enclitic /=ʃi^{3}/ ‘DIST’, in example (3) the same prefix /i^{3}-/ ‘PROX’ combines with the enclitic ‘postposition’ /=nʌŋ^{3}/ ‘to’, and in example (4) with the enclitic ‘postposition’ /=tan^{3}/ ‘as much/many as’.

(1) /i^{3}-ɹi^{3}/
PROX-PROX
‘this’

(2) /e^{2}-ʃi^{3}/

NPROX-DIST

'that'

(3) /i^{3}-nʌŋ^{3}/

PROX-to

'towards here'

(4) /i^{3}-tan^{3}/

PROX-as.much.as

'this much/many'

Morpheme boundaries can become opaque due to progressive compounding. For example, the first syllables of the numerals 4 up to and including 10 were prefixes historically but these numeral prefixes no longer function as prefixes synchronically (see section 5.1.5). The numerals have become monomorphemic and I transcribe them without a morpheme boundary indicator, for example: /tʰʌ^{0}ɹɔk^{0}/ 'six'. Cranberry morphemes also represent a type of morpheme boundary blurring: the meaning of one morpheme in a word may still be clear while the meaning of another morpheme, i.e. the cranberry morpheme, is no longer transparent. Words that contain a cranberry morpheme are here transcribed also without a morpheme boundary indicator. In the word /ba^{3}ɹi^{2}/ 'which/what', for example, the first syllable is clearly the question word prefix /ba^{3}/, but the meaning and origin of the second syllable /ɹi^{2}/ are less clear, hence no morpheme boundary is indicated.

If allomorphy occurs, tier 1 will show the surface form of the morpheme and tier 2 will show the underlying form of the morpheme when there is a clear idea of what the underlying form is. For example, if the distal demonstrative element /=ʃi^{3}/~/=ʃ/ is pronounced as /=ʃ/ in a phrase, tier 1 will have /ʃ/ without /i^{3}/, but tier 2 will show the full underlying form /ʃi^{3}/ (see section 5.1.3.2). Target-language forms that appear in the body of the dissertation and in tables mostly follow the layout of tier 2: the transcription is phonemic unless indicated otherwise and grammatical word boundaries and morpheme boundaries are shown by dashes or equal signs. However, where allomorphy occurs, the surface form and not the underlying form is used unless indicated otherwise.

Tier 3, as mentioned, contains a morpheme by morpheme translation of the text in tier 1 and 2. Grammatical elements are glossed in small caps. For grammatical functions covered by the Leipzig Glossing Rules (2008), that convention was followed. A complete overview of abbreviations from the Leipzig Glossing Rules and additional abbreviations used in the glosses as well as in the body of this

dissertation can be found under Abbreviations. The glosses are in English and it should be pointed out that the lexicons of two languages never neatly map onto one another and, likewise, glosses never perfectly match the semantics of the target language. For example, Muklom encodes directionality of movement in relation to the speaker by means of an inverse marker (see section 6.1.3) while English lexically encodes this distinction in the verbs <come> and <go>. Throughout this dissertation, the basic movement verbs of Muklom are glossed with 'go' regardless of whether the movement is away or towards the speaker: /ka^{1}/~/ka^{3}/~/kat^{0}/ 'go', /ɟu^{3}/~/ɟɔk^{0}/ 'go.down', and /βʌŋ^{1}/~/βʌŋ^{3}/ 'go.up'.

Finally, tier 4 contains an English translation. Sometimes a literal translation of the utterance or a portion of it is provided between round brackets, preceded by the abbreviation <lit.>. Tier 4 is closed off with a reference to the source of the example, using the shortened version of file names when the source is an audio or video recording (see section 2.2.1.1 on file naming). The stories and discussions that have been fully annotated with the help of a consultant, have been transcribed and glossed twice. The first version of the text stays as close to the original text as possible and the second version incorporates corrections of ungrammatical or unclear utterances and removes hesitations (see also Appendix C). Quotations from the second, edited, version of a text can be recognised by the code <.ed> at the end of a file name reference.

2.3 Equipment and software

During my first fieldtrip in the winter of 2015-2016 to the Kharsang Town area I used a Zoom H4n to make audio recordings. During the second fieldtrip in the winter of 2016-2107 I used a Tascam DR-40 audio recorder and on one occasion a video recorder of the type Zoom Q4. Mostly, the integrated microphones of the recorders were used. When recording outdoors or even indoors when it was draughty, I covered the microphone of the audio recorder with a basic foam windsock or the microphone of the video recorder with a so-called dead cat windshield. Bamboo houses do tend to be draughty. On two occasions I made use of external microphones, the Sony ECM-44B omnidirectional lavalier microphone which is battery-powered (single AA). The lavaliers were always covered with a small wind cap and clipped to the shirt of the speaker. The two recordings for which lavalier microphones were used, are the morphology elicitation sessions 20161223_02 and 20170125_02. All three recording devices were set to record in wave-format.

Research data was backed up to the cloud on a regular basis, either to Microsoft OneDrive or to private server space via WinSCP.[19] Where internet access was limited, backups were placed on a portable hard drive until fast internet was available and backups could be made to the cloud again. The

[19] OneDrive is accessible online via onedrive.live.com and WinSCP can be downloaded from winscp.net.

recordings I made are not yet made available to an online archive but are planned to be made available in the near future.

To play back audio to consultants and to extract acoustic data such as formant measurements and pitch contours I used the software program Praat, developed by Paul Boersma and David Weenink.[20] To manage transcriptions and build up a lexicon I used Fieldworks Language Explorer, developed by SIL International.

2.4 The scope and limits of this dissertation

This dissertation provides a grammar sketch of a language with a relatively small speaker population. Despite the small size of the speaker population, dialectal differences do occur. A few of these dialectal variations are discussed in the chapter on phonology (see section 3.4.3.5) but there are likely to be many more that have not come to my attention yet. The area in which I collected data was the cluster of Muklom villages near Kharsang Town. The second cluster of villages near Changlang Town is off-limits to foreigners according to government policy. Although there were a few people among my language consultants that spent most of their life in the Changlang Town area, most of my contacts either grew up near Kharsang Town, or migrated to that area of newer settlements there a long time ago. There is therefore a bias in my corpus towards language use of the Muklom population in the Kharsang Town area and within that cluster of villages there is a bias towards Kuttom and New Chingsa, though more so in my notebook notes than in the spoken corpus, as the speakers that contributed to the spoken corpus are more spread out over the villages of this cluster.

The grammatical description presented here is based on a limited corpus and within that corpus only a small subset could be fully annotated with the help of consultants. The interpretation of the function of grammatical elements and the analysis of syntactic structure is based on my understanding of this limited corpus. In this dissertation I cannot cover all subtleties of the Muklom language, or even answer all the important questions about the structure of the language. Some constructions are less frequent in usage, so are less likely to appear in a small corpus and be noticed by the researcher. Also, some constructions may be difficult to elicit. Scholars are still continuing to publish books and articles on well-studied languages such as English. If there are still questions to answer on a language such as English which has a large body of research, of course this first grammar of the Muklom language cannot be expected to answer all questions about Muklom.

[20] Praat can be downloaded from fon.hum.uva.nl/praat/.

The recruitment of speakers for storytelling and free dialogue was relatively easy. Finding consultants that were willing to assist with tone determination on lexicon entries and transcription and annotation of recorded texts proved more challenging. There were several reasons for this, some of which can be mentioned here and some of which should and will remain unmentioned. First, consultation work is time consuming and requires patience and motivation. A limited group of people has both the time and the motivation to do the task. Second, I found that many people were shy to talk about their language, thinking that there would surely be somebody older or more knowledgeable than them and that it would be better to ask them instead. But then, those who were older or perceived as more knowledgeable often had a lower proficiency in English, which made it difficult or almost impossible for me to engage in metalinguistic conversation with them. Females were at times shy to give their opinion on language matters but working with male consultants as a female researcher was not always workable. It was only towards the end of the last fieldtrip that I found a consultant that had the time, ability and willingness to assist in the transcription and annotation of texts. Until then, consultants I came in contact with were willing to summarize recorded texts in English but not more than that. Even though their contributions were excellent and helpful, summaries are not enough to reach the goal of annotating complete texts. Needless to say, the efforts of that last consultant significantly broadened the range of data and improved the quality of the data on which this dissertation builds.

Having a background in Semitic linguistics, studying the Muklom language constitutes my first venture into the Tibeto-Burman language family. Being new to the family has its advantages and disadvantages. An advantage is that I approached the data unhindered by a vast set of expectations of what a TB language should look like and have noticed features that are ‘unexpected’. Not having that vast set of expectations also created a disadvantage: it took me longer to make sense of certain structures because I was less familiar with the typical patterns of TB in general or Northern Naga in particular.

3 Phonology

This chapter covers a range of aspects in the phonology of Muklom. It establishes categories on the segmental and suprasegmental levels in section 3.1 and section 3.2. The structure of syllables and morphemes is explored in section 3.3. Different types of variation in the pronunciation of phonemes have been observed: rule-based variation, dialectal variation, and free variation. These phonological variations are discussed in section 3.4. More remains to be explored with respect to suprasegmental variation, but one process of tone change is already examined in 3.5. The chapter closes off with sound-symbolic elements in section 3.6 and irregular phonological structures that have been found in a subset of the exclamatives in section 3.7.

3.1 Segmental phonology

This section deals with segmental phonemes, starting with the consonant and vowel inventories in section 3.1.1, followed by notes on their phonetic realisation in 3.1.2. This section is closed off by the discussion of restrictions on the occurrence of certain phonemes. There are two types of restrictions: phonemes that are restricted to loans, which are discussed in section 3.1.3, and 'native' phonemes that are restricted to certain word classes, which are dealt with in section 3.1.4.

3.1.1 Distinctive segments

The Muklom phoneme inventory consists of 32 segments, of which 22 are consonants, discussed in section 3.1.1.1, and of which 10 are vowels, discussed in section 3.1.1.2. The glottal stop is treated as phonemic in syllable-final position but not in syllable-initial position, as is discussed in section 3.1.1.3.

3.1.1.1 Consonants

All segments of the language are produced with an airstream flowing from the lungs through the vocal tract and out through between the lips or through the nostrils, that is, all phonemes are so-called pulmonic egressive sounds. The language does not exhibit any non-pulmonic egressives or any ingressive sounds.

Muklom has a total of 22 consonant phonemes that contrast with one another, as can be illustrated by minimal sets. There are six different places of articulation. Table 8 lists the consonants according to place of articulation (POA) and manner of articulation (MOA). Pairs or triplets of homorganic plosives

or affricates are listed in order of decreasing voice onset time (VOT), i.e. in the order aspirated-voiceless-voiced. The category 'aspirated' involves only voiceless aspirated plosives; the consonant inventory of Muklom does not include any voiced aspirated plosives, voiced fricatives, or voiced affricates. Table 8 presents the most common pronunciation of consonants; allophones are discussed in section 3.4.

CONSONANTS						
POA / MOA	bilabial	alveolar	post-alveolar	palatal	velar	glottal
plosive	/pʰ/ /p/ /b/	/tʰ/ /t/ /d/			/kʰ/ /k/	/ʔ/
affricate		/ts/		/tɕ/		
fricative	/β/	/s/	/ʃ/	/ʝ/	/x/	/h/
nasal	/m/	/n/			/ŋ/	
approximant			/ɹ/			
lateral		/l/				

Table 8 - Muklom consonants.

There is a gap in the plosive series: voiceless plosives appear in three places of articulation and so do the aspirated plosives, but we find voiced plosives only at two places of articulation, bilabial and alveolar; /g/ is not part of the consonant inventory, although it does appear as an allophone of /k/ due to intervocalic voicing (see section 3.4.1.1). A comparative wordlist of Tangsa varieties compiled by Morey (unpublished) suggests that this gap in the plosive series may be the result of a sound change: for a set of cognates, Muklom and some of the other language varieties have initial /h/,[21] where certain other varieties have an initial velar /g/ or /ɣ/. Perhaps Muklom and other varieties have been affected by a sound change which transformed a Proto-Tangsa velar, perhaps the plosive /g/, into a glottal sound /h/. Four example cognate sets are provided in Table 9. For two of the lexemes, allophony between /h/ and /k/ is reconstructed dating as far back as the PTB stage (see Matisoff 2003:57).

[21] The following varieties for example have initial /h/ in the word for 'earth' where certain other varieties have an initial velar: Joglei, Mungre, Jiingi, Chamchang, Hakhun, Haidley, Shecyü, Phong, Bote, Champang, and Haqchum.

Muklom	Cholim	Muishaung	PTB	English
/hʌn^{1}/	/gɤn^{1}/	/ɣən^{1}/	*guŋ	body
/hɔ^{1}/	/əgɯ^{1}/	/əɣu^{1}/	*kuw	maternal uncle
/haʔ^{0}/	/geʔ/	/ɣaʔ/	*ha~*r-ka	earth
/huʔ^{0}/	/guʔ/	/ɣɯuʔ/	*hu~*r-kew	steal

Table 9 - Corresponding /h/ and velars, a few cognates.

All consonants of the Muklom consonant inventory may occur in onset position except the glottal stop (see section 3.2 for the discussion of syllable structure), and minimal sets for them are presented below, in the following order: the labial plosive series in (5), the alveolar plosive series in (6), the two velar plosives in (7), the affricates and sibilants in (8), the palatal fricative and palatal affricate in (9), the nasal series in (10), the lateral, rhotic plus palatal fricative in (11), the velar and glottal fricative in (12), and the bilabial voiced plosive and voiced fricative (13).

(5) /p^{h}aŋ^{2}/ ‘sand, gravel’
/paŋ^{2}/ ‘year’
/-baŋ^{2}/ ‘diluted, tasteless’

(6) /tʌk^{0}/ ‘breath’
/t^{h}ʌk^{0}/ ‘upwards’
/-dʌk^{0}/ ‘other’

(7) /k^{h}ɔ^{2} / ‘head’
/kɔ^{2}/ ‘be few; be less’

(8) /tsɔŋ^{3}/ ‘wear in the ear’
/tɕɔŋ^{3}/ ‘meet’
/sɔŋ^{3}/ ‘dwell’
/ʃɔŋ^{3}/ ‘sit low, settle’

(9) /ɟuŋ^{1}/ ‘lazy’
/tɕuŋ^{1}/ ‘navel’

(10)	/maʔ^{0}/	‘perish, disappear’
	/naʔ^{0}/	‘bee’
	/ŋaʔ^{0}/	‘fish’
(11)	/li^{2}/	‘buffalo’
	/ɹi^{2}/	‘cane’
	/ʝi^{2}/	‘back’
(12)	/xuŋ^{2}/	‘buttocks’
	/huŋ^{2}/	‘length’
(13)	/buk^{0}/	‘mud’
	/βuk^{0}/	‘jump’

The following are minimal sets for consonants that may occur in coda position, which are: /m/, /n/, /ŋ/, /p/, /t/, /k/, /ʔ/, and /l/ (see section 3.2 on syllable structure). First a minimal set for nasals is provided in example (14), followed by near minimal set of plosive codas in (15), and finally a minimal pair for the lateral and the alveolar nasal in (16).

(14)	/dʌm^{3}/	‘spread out horizontally (mat, floorboards)’
	/dʌn^{3}/	‘separate’
	/dʌŋ^{3}/	‘manner, behaviour’
(15)	/nɔp^{0}/	‘go inside, convert’
	/nɔt^{0}/	‘rub’
	/nɔk^{0}/	‘friend’
	/e^{2}-n=ɔʔ^{0}/	‘in there’
(16)	/βɔn^{3}/	‘sow’
	/βɔl^{3}/	‘lie down’

3.1.1.2 Vowels

The vowel inventory consists of 10 phonemes which are listed in Table 10 according to the features height, frontedness, rounding, and length. Where height and frontedness are the same, the unrounded

vowel is listed before the rounded vowel. Similarly, short vowels are listed before long vowels. There are six unrounded and four rounded vowels, of which only /ʌ/, /ɔ/ and /ɔː/ form an unrounded-rounded set. The unrounded vowel in the set is clearly a low-mid vowel /ʌ/ and not a pure mid vowel /ə/. Unlike many other Tangsa languages, the Muklom vowel inventory contains only monophthongs, a fact which has been noticed also by Das Gupta (1980:3).

vowel inventory			
	front	central	back
high	/i/	/ɨ/	/u/ /uː/
high-mid	/e/		
low-mid	/ɛ/		/ʌ/ /ɔ/ /ɔː/
low		/a/	

Table 10 - Muklom vowels.

Table 10 presents an abstract phonological presentation of the Muklom vowel inventory and it should be noted that if we zoom in on the phonetic realisation of these phonemes, particularly by taking into account 1) formant values (see Figure 7) and 2) vowel duration differences between vowels that are not identical in vowel quality but stand in close proximity on the vowel plot (see Table 12), a more symmetrical picture arises. Then it becomes clear that the inventory is organised into five vowel pairs: /i/ and /ɨ/, /e/ and /ɛ/, /a/ and /ʌ/, /u/ and /uː/, /ɔ/ and /ɔː/ (see section 3.1.2.1 and 3.1.2.2).

Minimal sets for the front high and mid vowels are provided in example (17), the back rounded vowels in example (18), and the low vowels /a/ /ʌ/ and /ɔ/ in example (19). A perfect minimal set for the high vowels does not occur in the current corpus, but a near minimal set can be provided, as in example (20).

(17) /bi³/ ‘searching’
/be³/ ‘hang, spread’
/=bɛ³/ question particle

(18) /puŋ³/ ‘fat (of meat)’
/pɔŋ³/ ‘blow (wind)’

(19)	/βaŋ²/	‘bamboo floorboard’
	/βʌŋ²/	‘paternal uncle’
	/βɔŋ²/	‘paddy (unhusked)’

(20)	/kʰuʔ⁰tiŋ²/	‘owl’
	/tɨŋ²/	‘smell’
	/jʌk⁰tuŋ²/	‘middle (between)’

Vowel length is phonemic in rounded back vowels, but exclusively in syllables that end in /p/, /t/, or /k/. Minimal pairs are provided in examples (21) and (22). Multiple consultants have confirmed that these words sound different. There are other tonal TB languages in which vowel length distinctions have been found to be phonemic. An extreme example is the Kiranti language Khaling, which has been reported to exhibit length distinctions in eight vowels (see Jacques et al. 2012:1098). Muklom vowel duration differences are discussed in more detail in section 3.1.2.2 and 3.3.1.3.

(21)	/juk⁰/	‘time’
	/juːk⁰/	‘basket’

(22)	/pʰɔt⁰/	‘boil (intrans)’
	/pʰɔːt⁰/	‘smoke (trans)’

Das Gupta (1980:3) claims that Muklom lengthens the final vowel of words where other varieties may have diphthongs. The examples he provides are of Longchang word-final diphthongs and Muklom word-final monophthongs. However, I do not find evidence for the correspondence that Das Gupta describes. Muklom does not show vowel duration distinctions in open syllables but duration appears to be a feature of tone. However, diphthongs in other Tangsa varieties may correspond to any tone category in Muklom, not necessarily a ‘long’ one. It remains to be seen whether a correlation between diphthongs in other varieties and long vowel duration in stopped syllables does exist. A brief look at Muishaung and also Lainong, which is not a Tangsa variety but a more distant relative, gives the impression that this is not the case: diphthong /au/ in Muishaung, and /ua/ in Lainong, in stopped syllables, corresponds to short vowel /ʌ/ in Muklom. Other varieties in the Tangsa comparative wordlist (S.D. Morey, p.c.) do not exhibit diphthongs in stopped syllables (glottal stop coda excluded).

Occurrences of diphthongs have been observed in the Muklom corpus, but they are extremely infrequent and they occur exclusively in loanwords (section 3.1.3), in exclamatives (section 3.7), or as

an allophone of a monophthong, where the allophony is caused by anticipatory assimilation to a following vowel. The latter has only been observed once in the current corpus, namely in the word /ta^{3}hi^{1}/ ‘blood’. As illustrated by example (23), the vowel /a/ of the first syllable may be pronounced [ʌi], gliding towards the high vowel /i/ of the second syllable. This example has been taken from a wordlist recording.

(23) [**tʌi^{3}**hi^{1}]
/ta^{3}hi^{1}/
‘blood’ (20100124-102848)

Sequences of vowels do occur, but each vowel in a sequence carries their own tone and the vowels stand on opposite sides of a morpheme or syllable boundary. For example, in (24), the vowel /e/ forms a tone bearing unit which carries tone 2 while the directly following person index /-u^{3}/ carries a different tone.

(24) i^{3} ɹa^{2} pe^{2} u^{3}.

i^{3}-ɹi^{3}=a^{2}	**pe^{2}-u^{3}**
PROX-PROX=ABS	**take-2SG**

‘Take this one.’ (B1.73)

3.1.1.3 The glottal stop as a segment and non-segment

Before moving on to the realization of phonemes, I will briefly discuss the status of the glottal stop. Syllable-initial [ʔ] is not phonemic in Muklom but rather a by-product of the articulation of a syllable-initial vowel. Occasionally, such syllables start off with a glottal fricative [h] instead of a glottal stop. This phenomenon is illustrated with the words /ʌ^{0}-lɔ^{1}/ ‘long’, /ʌ^{0}-puŋ^{2}/ ‘white’, and /ʌ^{0}-mʌk^{0}/ ‘black’ in (25), taken from wordlist recordings. The speaker who uttered the tokens in (25) has pre-vocalic glottal friction occasionally, not consistently. Compare this to the pronunciation of the same words by another consultant in (26) with the more common initial pre-vocalic glottal stop.

(25)	a.	[ʰ**ʌ⁰**-lɔ¹]	b.	[ʰ**ʌ⁰**-puᵍŋ²]	c.	[ʰ**ʌ⁰**-mʌk̄⁰]
		/ʌ⁰-lɔ¹/		/ʌ⁰-puŋ²/		/ʌ⁰-mʌk⁰/
		NMLZ-long		NMLZ-white		NMLZ-black
		'long'		'white'		'black'
		(20100124-105856)		(20100124-110318)		(20100124-110318)

(26)	a.	[ˀ**ʌ⁰**-lɔ¹]	b.	[ˀ**ʌ⁰**-puŋ²]	c.	[ˀ**ʌ⁰**-mʌk̄⁰]
		/ʌ⁰-lɔ¹/		/ʌ⁰-puŋ²/		/ʌ⁰-mʌk⁰/
		NMLZ-long		NMLZ-white		NMLZ-black
		'long'		'white' (110318)		'black' (110318)
		(20100124-105856)		(20100124-110318)		(20100124-110318)

The syllable-final glottal stop is phonemic, as is confirmed by the abundance of minimal pairs in which a glottal stop contrasts with other final plosives (see also Mulder 2018b:118). Three minimal pairs are provided under (27). Similarly, glottal stop coda can be contrasted with creaky tone in open syllables, i.e. tone 1, as illustrated by the minimal pairs in (28).

(27)	/hap⁰/	'shoot'	/-pit⁰/	'soft'	/puk⁰/	'stomach'
	/haʔ⁰/	'earth'	/piʔ⁰/	'3SG'	/puʔ⁰/	'carry on the back'

(28)	/sa¹/	'child'	/ki¹/	'brother in law'	/ɹu¹/	'rope'
	/saʔ⁰/	'eat soft foods'	/kiʔ⁰/	'fishing hook'	/ɹuʔ⁰/	'communal fishing'

3.1.2 Notes on the phonetic realisation of segments

This section discusses a small selection of topics in the segmental phonetics of Muklom: the distribution of vowels across the vowel space in section 3.1.2.1, vowel duration in section 3.1.2.2, and voice onset time of plosives in section 3.1.2.3.

3.1.2.1 Vowel space

To get an impression of where in the vowel space the Muklom vowels are located, the vowels of male consultant MSK, who was in his thirties at the time of recording, have been measured and plotted in Figure 7. The samples were taken from an elicitation session on minimal sets (recording 20160115_01).

With the use of Praat, first and second formant centre frequencies were measured at points where formant bands were clearly visible in the spectrogram and from a portion of the vowel that indeed sounded like the target vowel when played back, preferably in the middle of a vowel where there is less change of formant movement away from a preceding consonant or towards a following consonant. Vowels that were blurred by background noise have been excluded and so were words that are known to be loans, such as /dal³/ 'lentil sauce'. The maximum range was set to 5 kHz and number of formants to be detected set to 5.

The coordinates in the following figure are the median first formant (F1) and second formant (F2) values for each vowel, with n=57 for all vowels, except for /e/ and /ɛ/, which have n=3 and n=20 respectively. The low number of /e/ tokens in the source recording, is due to the general low frequency of occurrence of /e/, as this vowel only contrasts with /ɛ/ in open syllables. For this reason, few words with /e/ and /ɛ/ appeared in the minimal sets of the elicitation session.

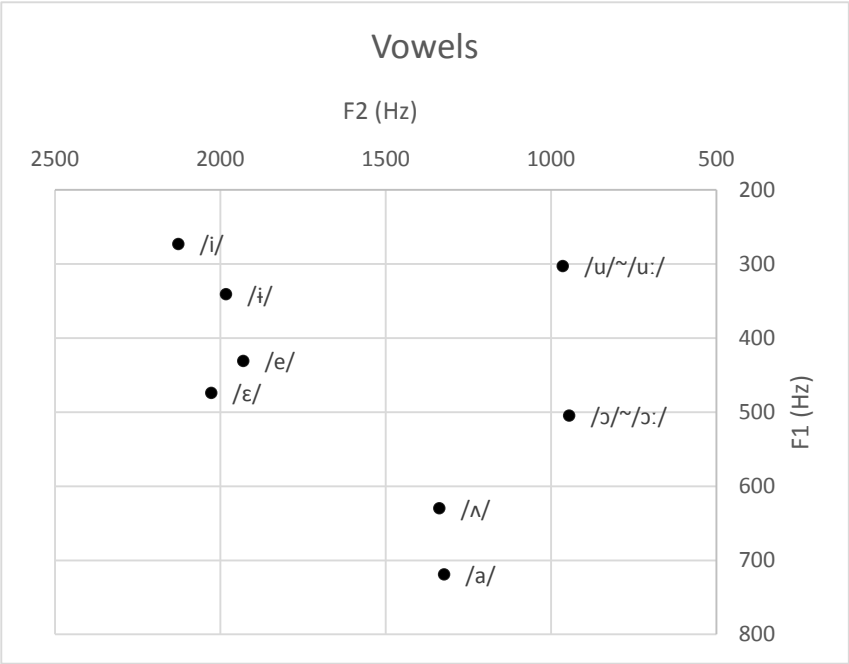

Figure 7 - Vowel plot for speaker MSK (20160115_01).

3.1.2.2 Vowel duration

The ten vowels in Figure 7 form five pairs, as shown in Table 11. Pairs number 4 and 5 are identical in vowel quality; duration is the only distinguishing factor. For the pairs 1, 2, and 3 both vowel quality and duration difference are distinguishing factors. To determine whether one cue weighs heavier than

the other in increasing the auditory distance between the counterparts, or that they are equally important, a perception experiment would need to be conducted.

#	short	long
1	/ɨ/	/i/
2	/ɛ/	/e/
3	/ʌ/	/a/
4	/ɔ/	/ɔː/
5	/u/	/uː/

Table 11 - Short and long vowel pairs.

Vowel quality does not differ in pairs number 4 and 5 and I did not pick up on the phonemic distinction between short and long back vowels until consultants explicitly stated that certain words containing /u/ or /ɔ/ were longer, that is, there exists distinction between short /u/ and long /uː/, and similarly between short /ɔ/ and long /ɔː/. These phonemes only contrast in syllables with an oral plosive coda: CVp, CVt, and CVk. Four minimal pairs are provided in (29)-(32).

(29) /puk⁰/ 'stomach'
/puːk⁰/ 'elephant'

(30) /luk⁰/ 'frog'
/-luːk⁰/ 'tall'

(31) /pʰɔt⁰/ 'boil (intrans)'
/pʰɔːt⁰/ 'smoke (trans)'

(32) /tɔk⁰/ 'maternal aunt'
/tɔːk⁰/ 'take a photo'[22]

Duration measurements have been taken from an elicitation session on minimal sets with consultant MSK (recording 20160115_01). Table 12 shows that long vowels /uː/ and /ɔː/ are approximately double the duration of short vowels /u/ and /ɔ/ in this sample.

[22] The word /tɔːk⁰/ 'take a photo' is identified by S.D. Morey (p.c.) as a Tai loan which used to carry the meaning 'hammer'. This hammer was one of the tools used in the traditional way of printing.

vowel	median duration (ms)	number of tokens
/uː/	128	12
/u/	57	17
/ɔː/	127	8
/ɔ/	66	22

Table 12 - Vowel duration measurements (I).

The idea that duration also plays a role in pairs number 1, 2, and 3 of Table 11 can be backed with acoustic measurements for 1 and 2, but not (yet) for 3 due to a low number of tokens (n=3) of /e/ in the minimal set recording from which measurements have been taken (recording 20160115_01). It was found that vowel /i/ was distinctively longer than /ɨ/, and similarly, /a/ was longer in duration than /ʌ/ for speaker MSK. Median values are provided in Table 13. The samples have been taken from minimal pairs ending in stop consonants, for example /p^{h}at^{0}/ 'vomit' vs /p^{h}ʌt^{0}/ 'wash' and /-pit^{0}/ 'soft' vs /pɨt^{0}/ 'ask'. Minimal pairs ending in a nasal coda do exist, such as /ham^{2}/ 'smell' and /-hʌm^{2}/ 'brown', but have been excluded because the boundary between the vowel and following nasal is particularly difficult to discern. Open syllable minimal pairs do not exist for these two pairs of vowels, since short vowels /ʌ/ and /ɨ/ never occur in open major syllables (see section 3.3.1.6).

vowel	median duration (ms)	number of tokens
/a/	149	26
/ʌ/	60	33
/i/	125	15
/ɨ/	53	7

Table 13 - Vowel duration measurements (II).

The vowels in Table 13 are distinguished both by quality and duration. In a narrow phonetic transcription, the long vowels should be marked as such, for example [iː] for /i/, but since duration is not the sole cue for vowel recognition in these cases, I have for the sake of simplicity decided not to mark duration in the phonemic transcription. However, (long) vowel duration must be indicated for the rounded back vowels, as duration is the only distinguishing cue in those vowels. Long vowel duration will therefore be included in phonemic transcriptions for rounded back vowels when confirmed by consultants or duration measurements. For most stop-coda syllables with rounded back vowels it has

not been determined yet whether they are short or long in duration. They are left unmarked for duration in the transcriptions.

3.1.2.3 Voice onset time

The prevoicing of voiced plosives is rather salient in Muklom and is visible in spectrograms as a pre-release band of voicing. Measurements have been taken to obtain a first indication of how the Muklom plosive series is distributed along the voice onset time (VOT) continuum. The VOT data presented in Figure 8 were extracted from the speech of consultant MSK, recorded during a controlled elicitation session on tone minimal sets (recording 20160115_01). The following sampling criteria were followed: all tokens of plosives must occur in onset position of major syllables, all tokens must not be part of (recent) loanwords, and unclear tokens with a blurred voicing band at the bottom of the spectrum due to singing or other noises in the background are to be excluded. Thus, for example, the onset /tʰ/ in the minor first syllable in /tʰʌ⁰.ɨk⁰/ 'louse', and the onset of the loanword /dal³/ 'lentil sauce' were excluded.

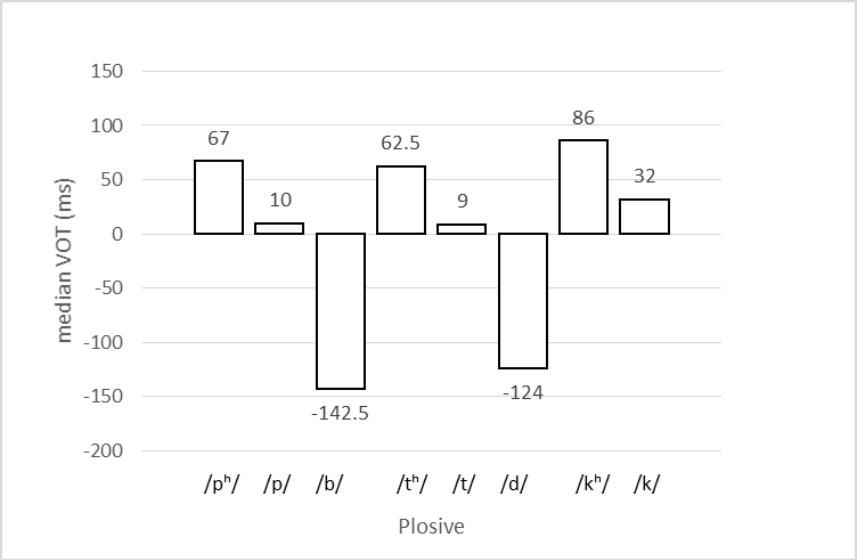

Figure 8 - Median VOT in plosives.[23]

The results suggest that the VOT of voiced plosives may indeed be relatively low. A seminal cross-linguistic study on VOT in initial plosives by Lisker and Abramson (1964) found that voicing categories tend to have median values around -100, +10, and +75 ms. The voiced plosives /b/ and /d/ in this Muklom sample both deviate in negative direction from the typical median value of -100 ms. At the

[23] Number of tokens for each phoneme: /pʰ/=39, /p/=53, /b/=26, /tʰ/=20, /t/=53, /d/=21, /kʰ/=53, and /k/=43.

same time, we see that the aspirated plosives /pʰ/, /tʰ/, and /kʰ/ in this sample cluster around +75 as expected. The unaspirated voiceless plosives /p/ and /t/ fit the +10 category, though the VOT of /k/ is rather high.

3.1.3 Segments which are restricted to loans

A few sounds, not listed in the phoneme inventories presented in Table 8 and Table 10, occur exclusively in loanwords; they are marginal phonemes. This section discusses the loanword phonemes /f/ and /ai/.

3.1.3.1 The consonant /f/

A consonant that only occurs in loans is the labiodental fricative /f/, for example in /ɹʌŋ²-fɹa³/ 'God', the main deity in a local religion called Rangfraism (see section 1.1.4). The first element of the compound, /ɹʌŋ²/, means 'sky' or 'God' and the second element, /fɹa³/, derives from the Tai-Kadai language stock and has a similar meaning, 'deity'. Some speakers replace the fricative by an aspirated homorganic plosive and insert an epenthetic vowel /ʌ/ to break up the consonant cluster: /ɹʌŋ²-pʰʌ⁰ɹa³/ 'God'. Consultants have suggested that the second is in fact an older way of pronouncing the word. It is not clear weather only the element /fɹa³/ is borrowed, or that the compound has been borrowed as a whole from a closely related language variety that does have /f/ as a full-fledged phoneme, such as the Tangsa varieties Mungre, Phong, or Shangti (S.D. Morey, p.c.).

3.1.3.2 The diphthong /ai/

Muklom does not have any diphthongs, except in loanwords, where we sometimes encounter /ai/. This diphthong appears for example in the loanword /bai³bɛl²/ 'Bible', and in the Tangsa subtribe name /pɔn³tʰai²/ 'Phong, Ponthai'. According to Morey (2017a:351), names that are used for Tangsa subtribes fall into one of the following categories: 1) the autonym, the name which is used by the subtribe to refer to itself, 2) the exonyms, the names that other subtribes use to refer to this specific subtribe, and 3) the general name, which does not derive from a specific Tangsa language variety and can be used across the Tangsa region. The name /pɔn³tʰai²/ is not the Muklom exonym for the subtribe that calls itself 'Phong', it is the general name, hence a loanword from the perspective of Muklom.

3.1.4 Segments which are restricted by word class

While loanwords include certain segments that are not part of the general Muklom phoneme inventory, some types of words show the opposite pattern, they lack certain segments that occur in the general Muklom inventory. This has been observed for two word types: grammatical particles and proper nouns.

In grammatical particles, the following restriction appears to be in place: the consonants /ts/ and /x/ do not occur in them (unless intensifiers are counted as grammatical - then /ts/ does occur). So far, no grammatical marker in the corpus has been observed to contain one of these consonants.

In proper nouns we also find a restriction on the consonant /x/. None of the proper nouns that appear in the corpus contain a /x/. This also applies to compound proper names which contain an element that derives from a common noun which does currently contain an /x/. Let me illustrate this with two examples. First, the Muklom clan name /kʰɨm³ hun³/ literally means 'village-build'. When 'village' appears as a common noun, however, it is pronounced with a fricative /x/ onset instead of an aspirated plosive /kʰ/: /xɨm³/ 'village'. The same has been observed for the village name /kʰɨm³-ɟɔŋ²/, literally meaning 'big village', again containing the element which is as common noun pronounced as /xɨm³/ 'village'.

The lack of /x/ in certain word types is therefore probably due to a sound change that affected the whole lexicon with the exception of some conservative pockets of the vocabulary, such as proper names and grammatical morphemes. It remains to be determined whether such a sound change indeed took place and if so, which consonant or cluster of consonants it is that changed into /x/. The examples of /kʰɨm³-hun³/ 'Khimhun (clan)' and /kʰɨm³-ɟɔŋ²/ 'Khimyong (village)' seem to suggest an older *kʰ, but the source could also be a cluster such as *kʰj and *kʰβ.[24]

No restrictions seem to apply to vowels. The phonemes /i/ /ɨ/ /e/ /ɛ/ /ʌ/ /a/ /ɔ/ and /u/ can all occur both in lexical and grammatical morphemes, in common nouns and proper nouns, though for markers containing [u]- and [ɔ]-sounds it has yet to be determined whether they are of short or long duration and if any restrictions apply there.

3.2 Suprasegmental phonology

This section investigates suprasegmental features. The focus lies on the description of the Muklom tone system, in section 3.2.1. Section 3.2.2 is a first exploration into stress patterns and section 3.2.3 describes emphatic intonation.

[24] Indeed, some Cholim cognates of words that start with /x/ in Muklom have an onset cluster /kʰj/ (S.D. Morey, p.c.).

3.2.1 The tone system

This section introduces the tonemes of Muklom and provides a brief introduction into their phonetic realisation.

3.2.1.1 Tone categories

Muklom has three tone categories (see also Mulder 2018b), which are indicated in transcriptions by superscript numbers 1, 2, and 3 following the syllable. A superscript zero indicates tonelessness, and absence of a number indicates that the tone category of that syllable has not been determined yet. The tone categories are best defined as a bundle of features, namely pitch contour, pitch height, phonation type, and duration (see Ohala 1973:4). All four parameters play a role in Muklom; tone cannot be reduced to a single cue (compare Morey 2014a:638 on Tai, Singpho, and Tangsa; Mazaudon 2014:587 on Tamang). At the phonemic level, the values 'low', 'mid', and 'high' are sufficient in order to describe pitch height, and the abstract labels 'level', 'falling', and 'rising' suffice to describe prototypical pitch contours. Phonetic details of tone realization are discussed in section 3.2.1.2. The following table provides an overview of the tone categories and their features, along with an example of a minimal tone set in (33).

(33) /kɔ^{1}/ 'threshold'
/-kɔ^{2}/ 'few'
/kɔ^{3}/ 'genitals'

tone	pitch contour	pitch height	phonation	duration
1	falling	mid/low	creaky	
2	rising-falling/ delayed falling	high/mid	modal/breathy	long
3	level	mid	breathy	

Table 14 - Tone categories in Muklom.

As is typical for Tangsa varieties (see Morey 2014a:641), tonal contrasts occur on open syllables like the words in (33) and on syllables with a non-plosive coda, which taken together are referred to as 'non-stopped syllables'. The syllable structure of syllables which carry tone can be formalised as (C)V(N/L),

in which N stands for nasal, and L for lateral. Syllables of the type (C)VP, where P stands for plosive, do not show tonal contrasts. These are also called ‘stopped’ syllables. In Sino-Tibetan literature, syllables with a plosive coda are often treated as a tone category in its own right, ‘checked tone’. That practice has not been adopted here, but it should be noted that Morey (2014a:658) calls ‘stop final words’ a fourth category and Van Dam (2018a:87) labels ‘morphemes ending in oral or glottal stop codas’ in Tangsa as tone 4. This fourth category incorporates all syllables ending in /p/, /t/, /k/, and /ʔ/. Because glottal stop codas differ from their oral counterparts with respect to the nucleus vowels they can take, i.e. oral stops can be preceded by /ɨ/, /ʌ/, and the long vowels /uː/ and /ɔː/ and glottal stop codas cannot (see section 3.3.1.6), one could decide to treat syllables with a glottal stop ending as a separate tone category. In fact, this is the analysis I followed in a recent article on verb inflection in Muklom (Mulder 2019), where I labelled all (C)Vʔ syllables as tone 4. However, in this dissertation I revert back to my earlier analysis according to which all stopped syllables are toneless and the final glottal stop is segmental (see Mulder 2018a, 2018b).

In Muklom, as mentioned in section 3.1.2.2, syllables with an oral stop coda show duration contrasts between /u/ and /uː/, and between /ɔ/ and /ɔː/. This contrast should probably be analysed as a phonemic vowel distinction rather than a feature of tone. Nevertheless, it should be noted that consultants have so far been unwilling to accept the idea that syllables with an oral stop coda cannot carry contrastive tone, and there is at least one Northern Naga language that shows tonal contrasts on syllables ending in /p/, /t/, or /k/, namely Phom (Burling and Phom 1998:19). Considering the fact that consultants are keen to accept certain open syllables as toneless (section 3.3.1.1) while they are less willing to accept the idea that stopped syllables lack tonal distinctions, we should perhaps remain open to the possibility that tone is playing a (limited) role in stopped syllables and that the vowel duration difference between /u/ and /uː/ and between /ɔ/ and /ɔː/ may be a correlated feature of a tonal contrast. Consultants sometimes associated short vowels in stopped syllables with tone 1, but never long vowels, so stopped syllables with short vowels might carry tone 1 if they are indeed tonal. However, pending better evidence for tonal contrast in stopped syllables, it is for now proposed that stopped syllables do not carry tone, while all other types of major syllable can potentially carry tone in Muklom, and that association with the short falling tone (tone category 1) of short vowels in stopped syllables is due the naturally falling pitch caused by the closure towards the final stop.

A lack of contrastive tone in stopped syllables does not necessarily imply lack of contrastive pitch. Long vowels in stopped syllables perhaps inherently have a higher peak frequency. This situation would to a certain degree be comparable to Ngaimong, which according to Morey (2014a:665) shows a pitch contrast in stopped syllables that is entirely predictable based on morphosyntactic context, and is therefore not considered to be a phonological distinction.

As mentioned above, Muklom exhibits a typical Tangsa tone system with its three-way tonal contrast on non-stopped syllables. For a detailed study of tone systems across Tangsa varieties, see Van Dam (2018a). Although Tangsa tone systems show a great degree of similarity in that the majority has a three-way tonal contrast on non-stopped syllables and that cognates will often but not always carry the same tone category, the realisation of the three tone categories varies considerably between the language varieties, so we need to keep tone category (phonemic) and tone realisation (phonetic) strictly separated in our discussion. It is therefore preferable to refer to tones by category number, rather than by a label based on pitch features. The diversity in tone realisation is illustrated by Table 15, which compares pitch, contour and phonation features of Muklom tones to those of three other Tangsa varieties (based on Morey 2014a:658 and Van Dam 2018a). An example of pitch difference between varieties can be found under tone 3, which is low in Mungre, mid in Muklom, and high in Cholim. Tone 3 also greatly differs in contour between the varieties in this sample: falling in Cholim and Mungre, level in Muklom, and level or even rising Muishaung. Finally, while phonation may be the steadiest of features across varieties, differences still occur. For example, tone 1 is associated with creakiness in all varieties in the sample except in Mungre, which exhibits modal phonation on tone 1 syllables.

	1	**2**	**3**
Muklom	mid/low	high/mid	mid
	falling	delayed fall	level
	creaky	modal	breathy
Cholim	high	mid	high
	level	level	falling
	creaky	modal	breathy
Mungre	high	high	low
	falling	level	falling
	modal	modal	modal
Muishaung	low	mid/low	mid
	falling	delayed fall	level/rising
	creaky	modal	modal

Table 15 - Tone category cues in four Tangsa varieties.

The phonation characteristics of Muklom tones align one on one with the reconstructed proto-tone system proposed by Van Dam (2018a:273): *creaky tone 1, *modal tone 2, *breathy or coda *h origin

for tone 3. In Muklom, creakiness and breathy phonation, when present, often occur towards the end of the syllable, but it may also extend to the rhyme or the entire syllable.

3.2.1.2 Tone realization

The start of phonetic analysis of tones in Muklom was made by Morey (2014a), who presented pitch measurements based on the earliest fieldwork recordings. This section further discusses the characteristics of Muklom tone categories on a phonetic level: the tone bearing unit, pitch height and contour, duration, and phonation.

Examination of pitch contours shows that onset consonants are not part of the tone-bearing unit (TBU), but rather that the rhyme, including the coda if present, constitutes the TBU. As has been proposed in section 3.2.1.1, stopped syllables do not carry tone, but the vast majority of non-stopped syllables does. The language contains only a small collection of toneless non-stopped syllables. To illustrate that onset consonants do not form a distinguishing part of tonal contours, two sets of pitch contours are provided, based on a single token of each word, pronounced by speaker MSK (recording 20160115_01).[25] The first, in Figure 9, is a minimal set for tone 1, 2, and 3 with (voiced) nasal onset: /mʌŋ^{1}/ 'dream', /mʌŋ^{2}/ 'corpse', and /mʌŋ^{3}/ 'stop'. This is compared to a minimal set with voiceless plosive onsets in Figure 10: /tʌŋ^{1}/ 'bottom', /=tʌŋ^{2}/ plural marker, and /tʌŋ^{3}/ 'cut across'. During the production of the nasals, the vocal folds are vibrating, so a pitch contour is visible on them in the figure. On the other hand, during voiceless plosives, there is no vocal fold vibration, and the pitch contour starts on the vowel that follows. These voiceless onset syllable pitch contours correspond to the pitch contours of the rhymes in the voiced nasal onset examples, rather than the pitch contour of the entire syllable including the nasal onset, i.e. the rising pitch that we see on the nasal onsets is not found at the beginning of the syllables that start with a plosive, which is precisely what we would expect if onsets fall outside the scope of the TBU.

[25] By asking the consultant to pronounce words in isolation, as I did with this recording, interference by the context on tone category, i.e. tone sandhi, is prevented. However, listing intonation does sometimes pose a challenge in recordings of words in isolation. In this recording, the speaker repeated each word three times and it seems that the token in the middle is the most stable in reflecting a typical pitch contour.

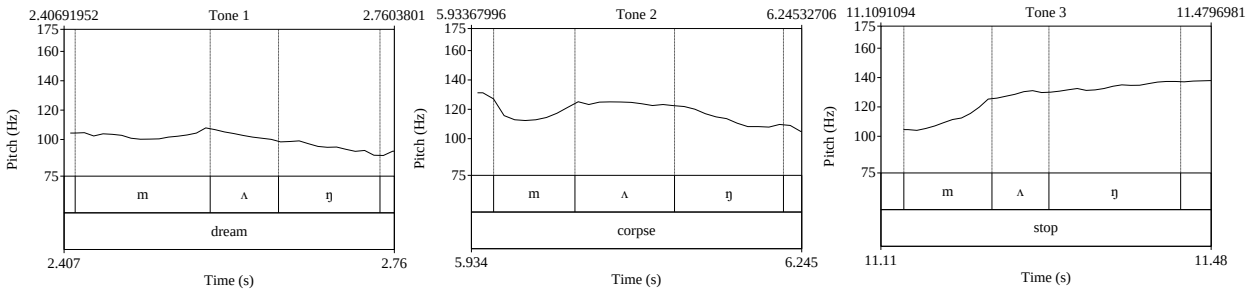

Figure 9 - Pitch contours for a (voiced) nasal onset: **tone 1, 2, and 3.**

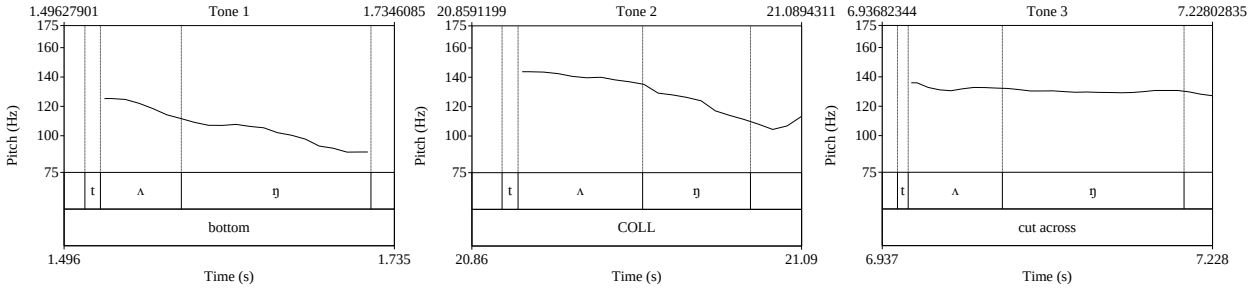

Figure 10 - Pitch contours for a voiceless plosive onset: **tone 1, 2, and 3.**

The inter- and intra-speaker variation in the realization of tones is rather large. For example, some speakers tend to pronounce tone 3 syllables that stand in isolation with a delayed falling contour, or even a rising-falling contour, which makes them hard to distinguish from tone 2 syllables, while other speakers tend to show the prototypical level contour of tone 3, even throughout the coda if present. Speaker MSK is an example of the latter, and one can see in the tone 3 words ‘stop’ and ‘cut across’ in Figure 9 and Figure 10 that there is no considerable drop in pitch on the coda, as opposed to the tone 1 and 2 syllables on the left. It seems as if the contours of tone 1 and 2 are more stable between and in speakers than tone 3, but this is yet to be confirmed by pitch measurements on a substantial number of tokens from a sample of speakers.

Another cue for tone identification is duration. This becomes evident, for example, when the ability of speakers to metalinguistically identify tone 2 is negatively affected by the presence of an inherently short vowel such as /ʌ/ (see section 3.1.1.2). Apparently, it is confusing that a long tone appears shorter because of its short vowel.

Finally, phonation is also a cue for tone identification. It is most saliently present on words in isolation and at the end of an utterance and may be neutralized to modal phonation in other contexts. Again, intra- and inter-speaker variation occurs; it depends on the speaker which of the features is the most important cue for a specific tone. For example, if we look at tone 1, we see that creaky voice is found in abundance in some speakers, while in other speakers the creakiness only surfaces occasionally.

This means that creaky phonation may be a relatively reliable cue for tone 1, especially in isolation, for some speakers, but not for others. When creakiness is present relatively consistently in a speaker, other cues such as pitch contour may be less salient. An example of this is found in a wordlist recording with speaker MSK (recording 20160115_01). He almost consistently exhibits creaky phonation on tone 1 tokens in isolation, but at the same time shows great variation in pitch contour. Unlike many other speakers, he often pronounces tone 1 syllables with rising-falling pitch. Between speakers, the most typical contour for tone 1 is a straight declining line.

While breathiness is foremostly a feature of tone 3, it sometimes occurs on tone 2 syllables. This breathiness may also surface as the pronunciation of a voiceless lateral at the end of a high front vowel that carries tone 2. One consultant sometimes pronounces a voiceless lateral [ɬ] at the end of a tone 2 syllable, as the example of /ʌ⁰si²/ 'ten' in (34) and (35) illustrates. The speaker does not do so consistently in all recorded tokens of the word. Insertion of a voiceless lateral, as illustrated here, might represent an idiosyncrasy. Two examples are provided below.

(34) [ʌ⁰**siɬ²**]
/ʌ⁰si²/
'ten' (20120218_02)

(35) [ʃa³-ʃɛ¹ ʌ⁰-**siɬ²**]
/ʃa³-ʃɛ¹ ʌ⁰si²/
'one hundred and ten' (20120218_02)

3.2.2 Stress

With respect to prosody, the TB languages are divided into two areas: a northern region which has trochaic stress, and a south-eastern region with iambic stress (LaPolla 2017a:51). The iambic stress pattern in the southeast is considered to be the result of close contact with Austro-Asiatic languages (LaPolla 2017a:51). A portion of the Muklom lexicon consists of so-called sesquisyllabic words. The term sesquisyllable is a term that was coined by Matisoff (1973a:86) and refers to words which consist of one minor and one major syllable.[26] Minor syllables are syllables that are more restricted with respect to segmental and suprasegmental contrasts than regular or major syllables (see Henderson 1952:150; Thomas 1992). In Muklom, the order of syllables is minor-major, so the language falls under the group of languages which show iambic stress. An example of a sesquisyllabic word is /tʰʌ⁰ɹɔk/ 'six'. The first

[26] Sesqui- means 'one and a half'.

syllable contains a schwa-like short vowel and carries no tone even though it concerns a non-stopped syllable.

The minor syllable in a sesquisyllabic word is always open, i.e. V or CV. There is a direct or indirect correlation between tone and the range of vowels that may occur in this syllable type. So far, only four vowels have been observed to occur in minor syllables: /ʌ/, /u/, /ɨ/, and /ɛ/. Whether the remaining vowels can occur in this type of syllable remains to be determined. When consultants are asked to identify the low vowel in a minor syllable, they often have difficulty deciding between /ʌ/ and /a/. For now, I will treat all those syllables as instances of the structure Cʌ. Consultants also often indicate they do not perceive a tone on minor syllables, or they hesitate between assigning them to tone 1 or 3 (but never tone 2). They make comments about minor syllables being 'too short' to determine tone because they cannot place a pause after it or say that the tone lies 'in between'. For this reason, minor syllables are here treated as toneless.

Unstressed minor syllables are often grammatical morphemes. A few examples are provided in Table 16. The nominalizer /ʌ^0-/ derives a noun from an adjective and /u^0-/ derives a noun from a verb (see section 4.2.1 and 4.2.2). The prefix /tʌ^0-/~/t^{h}ʌ^0-/ derives a new verb from an existing verb (see section 4.2.4).

half syllable	gloss	example sesquisyllable	gloss
/ʌ^0-/	NMLZ	/ʌ^0-xʌl^2/	'the good one'
/u^0-/	NMLZ	/u^0-βat^0/	'hitting'
/t^{h}ʌ^0-/	RECIP	/t^{h}ʌ^0-mɔl^3/	'fight one another'
/tʌ^0-/	CAUS	/tʌ^0-k^{h}am^3/	'warm up (trans)'
/hɨ^0/	-	/hɨ^{0}mi^2/	'foxtail millet'
/dɛ^0/	-	/dɛ^{0}hɨŋ^3/	'Dehing (river)'

Table 16 - Toneless (C)V syllables.

3.2.3 Emphatic intonation

Emphasis can be achieved by raising the pitch and extending the duration of a syllable. This language feature is used by all speakers, but extensive use is by some considered bad style. For example, one church attendee commented after a sermon that the speaker had been overusing high pitch on emphasized syllables. An example of an utterance which contains emphatic intonation is provided in (36). The pitch contour of this phrase has been generated in Praat and is presented in Figure 11. The

duration of the emphasised syllable /ɹi²/ is longer than any of the other syllables in the phrase and the highest peak in pitch lies on this syllable, even though it occurs towards the end of the utterance.

(36) i³ ɹi³ pɨl² puŋ³ ɹa² naʔ⁰ ɹi² xʌl² a³.

i³-ɹi³	pɨl²-puŋ³=ɹi³=a²	naʔ⁰**ɹi²**	xʌl²-a³
PROX-PROX	flower=PROX=ABS	**very**	be.good-3

'This flower is very beautiful.' (20121105_07)

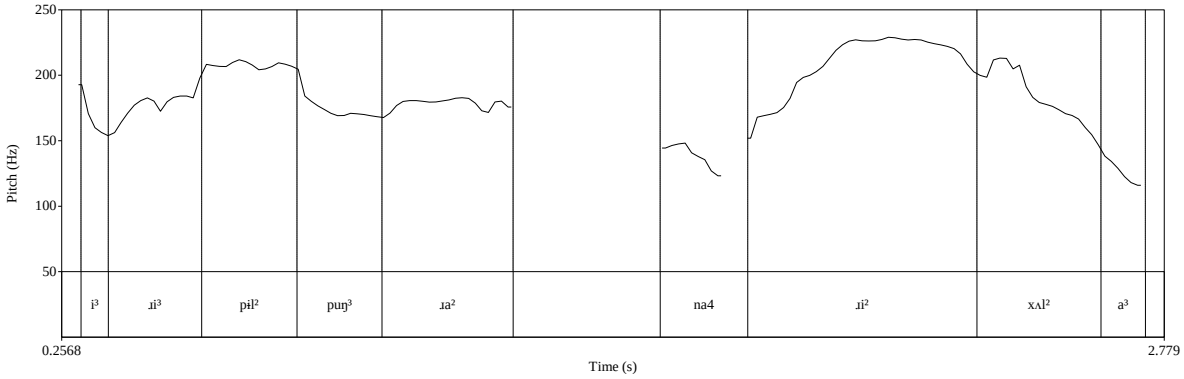

Figure 11 - An example of emphatic intonation on /ɹi²/.

3.3 Phonotactics

The Muklom language exhibits a rather low degree of phonological complexity in that it has an average-sized phoneme inventory and does not permit initial and final consonant clusters.[27] This section discusses the phonological structure of syllables (section 3.3.1) and morphemes (section 3.3.1.7). Since the criteria that define the prosodic word are currently still unclear, the structure of prosodic words cannot be described yet.

3.3.1 Syllable structure

This section covers three topics: the canonical syllable (section 3.3.1.1), the distribution of consonants (section 3.3.1.2 to 3.3.1.5), and the distribution of vowels (section 3.3.1.6).

[27] However, the cluster /st/ does occur in loanwords occasionally, for example in /pʰʌst/ 'first' (<English).

3.3.1.1 The canonical syllable

The canonical syllable pattern of the language is (C)V(C). This relatively simple pattern gives four possible syllable types: CVC, CV, VC and V. An example of each syllable type is provided in (37).

(37)	a. CVC	b. CV	c. VC	d. V
	/mɨk^{0}/	/pu^{3}/	/ʌŋ^{2}/	/i^{2}/
	‘eye’	‘snake’	‘be’	‘we (excl)’

Of these four types, the first two occur frequently; the vast majority of syllables exhibits the structure CV(C). The structures VC and V are rather rare. Indeed, the current corpus contains only nine syllables of the structure VC. They are listed in Table 17. None of them constitutes a typical lexical word. They serve either as a copula or auxiliary, a grammatical marker, a postposition, or an exclamative (see section 3.7). The first six are (highly) frequent functional elements.

VC	**English**
/ʌŋ^{2}/	‘COP/AUX’
/ɛʔ^{0}/	‘do’
/ɨn^{2}/	‘yes’
/-ɨn^{2}/	‘2SG’ (person index)[28]
/-ʌŋ^{3}/	‘1SG’ (person index)[29]
/=ɔʔ^{0}/	‘at’
/aŋ/	exclamation used to call cattle
/akβe(i)/	exclamation of surprise
/ahβe(i)/	exclamation of surprise

Table 17 - All VC syllables that occur in the current corpus.

Syllable structure V is also rare, but a little more frequent than VC with approximately 30 types occurring in the current corpus. All V syllables except one are grammatical elements, such as

[28] The second person plural index exhibits the allomorphs /-ɨn^{1}/, /-ɨn^{2}/, and /-ɨn^{3}/. Only /-ɨn^{2}/ may constitute a syllable by itself, in the present tense when no marker stands between the verb stem and the index. The other allomorphs always form a syllable with the preceding element, which is either future tense /-n/, past tense /-t/, inverse or cislocative /-p^{h}/, or negative /-m/ (see section 6.1).

[29] Similarly, the first person singular index exhibits the allomorphs /-ʌŋ^{1}/, /-ʌŋ^{2}/, and /-ɔŋ^{1}/ besides the present tense index /-ʌŋ^{3}/. The former allomorphs never constitute a syllable by themselves. Rather, they form a syllable with the element that precedes them, which is either future tense /-n/, past tense /-t/, inverse or cislocative /-p^{h}/, or negative /-m/ (see section 6.1).

postpositions (see section 5.1.7) or person indices (see section 6.1.2), or function as exclamation. The one exception is the word /i²/~/i³/ ‘scream’. This is a lexical verb which can be inflected like any other regular verb and can be nominalized by means of the nominalizing prefix /u⁰-/. However, it may derive from an exclamation or is at least onomatopoeic and if one of these scenarios indeed applies, then it is a rather a-typical lexical verb. A few examples of grammatical V syllables are listed under (38).

(38)	/ʌ⁰-/	‘NMLZ’	/=ɛ³/	‘ERG’
	/i²/	‘1EXCL’	/=ɔ³/	‘at (location)’
	/u³-/	‘3SG.POSS’	/=a³/	‘at (time)’
	/e²-/	‘NPROX’		

Unlike certain other Tangsa varieties, Muklom does not exhibit syllabic nasals. In general, it can be stated that C is not a permitted syllable structure in this language. Consonants also never function as the nucleus of a syllable. Syllabic nasals occur in at least 11 Tangsa varieties. Examples are provided in Table 18.

language variety	**example word**	**English**	**source**
Cholim	/n̩²re²/	‘thus’	Morey (2011b:694)
Shangthi	/ŋ̩guʔ/	‘stealing’	Morey (2017a:363)
Muishaung	/m̩²ja³/	‘yesterday’	Morey (2014a:658)
Shecyü	/m̩¹ji³/		Khämlan (2017:193)
Mungre	/m̩¹jɯ³/		
Hacheng	/m̩ʒaa³/		Morey (unpublished wordlist)
Ngaimong	/m̩³ɲəŋ⁴/	‘2SG’	Morey (2017a:356)
Joglei	/m̩³nɐŋ²/		Morey (unpublished wordlist)
Donghi	/m̩naa¹/		
Chamchang	/m̩²naʔ/		
Rinkhu	/m̩nɔŋ¹/		

Table 18 - Syllabic nasals in 11 Tangsa varieties.

3.3.1.2 Onset consonants

The language has syllable-initial consonants, but no initial clusters. All consonants that are listed in the inventory in Table 8 can occur in onset position, except the glottal stop, which is not considered

phonemic word-initially. None of the consonants can function as nucleus, including the nasals, which in certain other Tangsa varieties can be syllabic.

When we assess the distribution of initial consonants in the collected lexicon, a few patterns become visible. Figure 12 shows the frequency of occurrence in onset position for each consonant in the consonant inventory. The percentages and numbers that are reported in Figure 12 are based on an early 2018 version of the collected lexicon, which counted 2291 entries starting with a consonant. The counts give a rough indication of distributions only. A small number of loanwords was included. Onsets of proper nouns were included in the count. If a morpheme occurred multiple times as the first element in a word or compound, each token was counted. This includes prefixes, which entails that the onset of the most frequent prefix, the valency-changing prefix /tʌ⁰-/ (see section 6.1.7), is quite overrepresented in the counts. Its allomorph /tʰʌ⁰-/ has only a weak effect on the numbers, as it appears much less frequently in the lexicon. The onset of the second syllable in sesquisyllabic words could not be included in the count. The following six onsets are least frequent, each falling below four percent: /pʰ/, /d/, /ts/, /ʃ/, /x/ and /ŋ/.

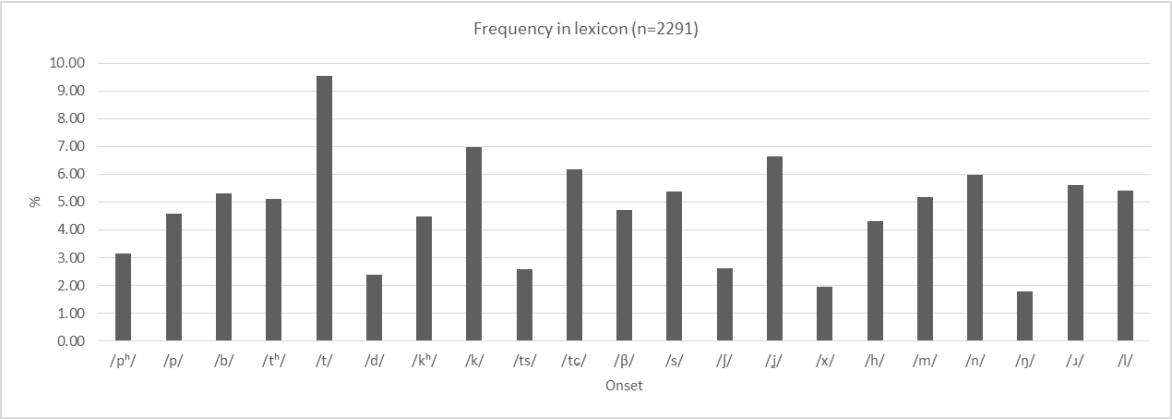

Figure 12 - Onset frequencies in a sample of 2291 lexical entries.

When we look at combinations of onset and nucleus that can be made, there seem to be few or no restrictions. Combinations with /e/, /ɛ/, /u:/, and /ɔ:/ are much less frequent than others, because these vowels in general appear less frequently in the lexicon than the other vowels. However, it has to be pointed out that long duration of rounded back vowels, which is a phonemic distinction exclusively in stopped syllables (see section 3.1.2.2), has not been determined yet for most syllables of that type and undetermined vowels have been counted as if they were all short. If the language has any restrictions on onset-nucleus combinations, then they will probably involve one or more of the four vowels mentioned above.

Table 19 provides an overview of all possible combinations of onset and nucleus. CV and CVC syllables have both been considered. A plus symbol indicates that the combination does occur, an asterisk indicates that the combination occurs less than five times in the collected lexicon, and shading marks those combinations which are not attested in the collected lexicon. That a certain combination does not appear in the collected lexicon indicates either that the combination may not occur in the language at all or that it may occur but is rather infrequent and happens not to be encountered yet.

nucleus / **onset**	**/i/**	**/ɨ/**	**/u/**	**/uː/**	**e**	**ɛ**	**ʌ**	**/ɔ/**	**/ɔː/**	**/a/**
/pʰ/	+	+*	+		+*	+*	+	+	+*	+
/p/	+	+	+	+*	+*	+*	+	+		+
/b/	+	+	+		+*	+*	+	+		+
/tʰ/	+	+	+	+*	+*	+*	+	+		+
/t/	+	+	+	+*	+	+*	+	+	+*	+
/d/	+*	+	+	+*	+*	+*	+	+		+
/kʰ/	+	+	+	+*		+*	+	+	+*	+
/k/	+	+*	+		+*	+	+	+	+*	+
/ts/	+*	+	+		+*	+*	+	+		+
/tɕ/	+	+	+		+*	+	+	+		+
/β/	+	+	+		+*	+*	+	+	+*	+
/s/	+	+	+		+*	+*	+	+		+
/ʃ/	+	+	+			+*	+*	+		+
/j/	+*	+	+		+*	+*	+	+		+
/x/	+	+	+	+*	+*		+	+		+
/h/	+	+	+		+*	+*	+	+		+
/m/	+	+	+		+*	+	+	+	+*	+
/n/	+	+	+	+*		+*	+	+		+
/ŋ/	+*	+*	+		+*	+	+	+		+
/ɹ/	+	+	+		+	+	+	+	+*	+
/l/	+	+	+	+*	+*	+*	+	+	+*	+

Table 19 - Combinations of onset and nucleus attested in collected lexicon.

3.3.1.3 Coda consonants

While almost all consonants may occur in onset position, only a small selection of the consonants may occur in coda position. There are no syllable-final clusters. Permitted codas are the voiceless unaspirated stops, the nasals, and the lateral: /p/, /t/, /k/, /ʔ/, /m/, /n/, /ŋ/, and /l/. However, part of the population has changed syllable-final /l/ into /n/ (section 3.4.4.2) and therefore does not have /l/ in coda position. These speakers do preserve /l/ in onset position. Figure 13 shows the frequency of occurrence in the collected lexicon for each consonant that may occur in word-final position. In total there are 2117 entries in the collected lexicon that have a final consonant. Tokens, not types have been counted, which means that roots which appear as the last component of a compound or have prefix-derived stems have been counted more than once. Proper nouns and loans were included. Word-medial syllable codas of compound words could not be included. The counts give a rough indication of distributions only.

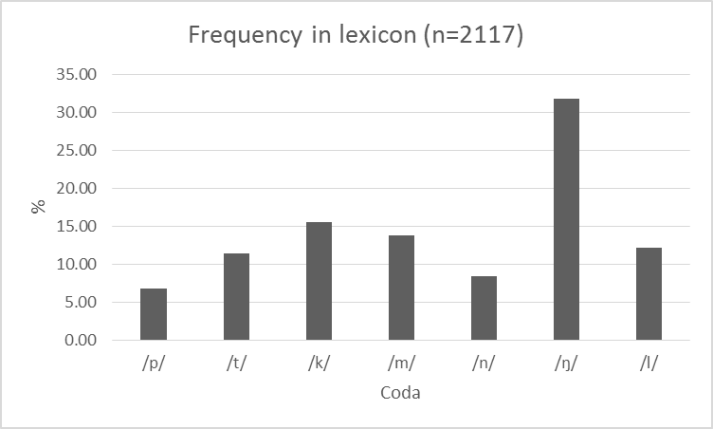

Figure 13 - Coda frequencies in a sample of 2117 lexical entries.

The percentages in the sample suggests that velar codas are most frequently encountered in the language and that the bilabial plosive coda /p/ is least frequent.

Tangsa varieties differ as to whether they permit lateral and/or rhotic codas. Muklom can have a lateral in coda position while certain other varieties like Rera (see Goswami 2018:xlix) cannot. Conversely, Muklom cannot have a rhotic in coda-position while certain other varieties like Muishaung (Morey 2019a) and Mungre (S.D. Morey, p.c.) can. Das Gupta (1980:3) notices a correspondence between Joglei final /l/ and Muishaung final /r/ in cognate sets and seems to suggest that coda /l/ through a sound rule changed into /r/ since he uses the notation ‘l>r’. All Joglei examples provided by Das Gupta have final /l/ in Muklom as well, but as mentioned, some speakers pronounce a final /n/ in these words instead. If we look at cognates of the Muklom word /βʌl^{1}/ ‘fire’ in related language varieties, we see that some also exhibit final /n/. A few examples are Jingpho /ʔwàn/ (Matisoff 2003:xli), Hakhun

/vàn/ (Boro 2017:50), and Nocte /van/ (Das Gupta 1971a:57). The reconstructed PTB stem for this lexeme is *bʷar~*pʷar ‘fire’ (Matisoff 2003:585). If this reconstruction is correct, then the sound change took place in the direction /r/ → /l/ rather than its reverse. In a subset of the Muklom speaker population final /l/ subsequently turned into /n/. Whether those languages that have final /n/ in the word for ‘fire’ and other such cognate sets followed the same path of sound change is a topic worthy of further investigation. If they did, this could represent a shared innovation.

Table 20 shows all combinations of coda and nucleus which occur in the collected lexicon. Included syllables are the common structure CVC and the extremely rare structure VC (see section 3.3.1.1). Loanwords and proper nouns have been excluded from the sample. The shaded boxes represent unattested combinations, and an asterisk indicates that the combination is attested in the current corpus, but only in a few lexemes. The phonological distinction between short and long vowels, /u/ and /uː/, /ɔ/ and /ɔː/, is restricted to syllables ending in /p/, /t/, or /k/ (see section 3.1.2.2), hence for the remaining codas the columns of these vowels are combined.

nucleus / **coda**	**/i/**	**/ɨ/**	**/u/**	**/uː/**	**/e/**	**/ɛ/**	**/ʌ/**	**/ɔ/**	**/ɔː/**	**/a/**
/p/	+	+	+	+			+		+	+
/t/	+	+	+	+		+*	+	+	+	+
/k/	+	+	+	+		+*	+	+	+	+
/ʔ/	+		+		+*	+		+		+
/m/	+*	+	+				+	+		+
/n/	+	+	+			+*	+	+		+
/ŋ/	+	+	+			+*	+	+		+
/l/		+				+	+	+		+

Table 20 - Combinations of coda and nucleus attested in collected lexicon.

Two patterns become visible in Table 20. First, the combinations of nuclei /ɛ/ with coda are very few in number in the current corpus and only one combination with a coda has been found so far for its nearest neighbour in vowel space, the phoneme /e/: /seʔ⁰/ ‘sediment which is formed during beer brewing’. Initial consonants do not frequently combine with /e/ and /ɛ/, as we have seen in Table 19, but the use of these two vowels with final consonants is even more restricted. The vowel /ɛ/ is not attested in the corpus with a final bilabial, /p/ or /m/, and occurs in a very limited manner with the remaining four stops and nasals. The combinations /ɛp/, /ɛt/, and /ɛk/ only occur in onomatopoeia and intensifiers: /t/ in /hɛt⁰ʃɔŋ²/ and /hɛt⁰tɕi²/ ‘sneeze’ and /k/ in /bɛk⁰/ ‘bleat’, /kɛk⁰/ ‘gurgling sound’, and

the intensifier /kɛk⁰-kɛk⁰/. The combination /ɛʔ/, on the other hand, does occur in a few regular lexemes such as /βɛʔ/ ‘fold’. The combination /ɛn/ occurs only in three entries, /kʰɔʔ⁰mɛn³/ ‘turmeric’, /=tɕɛn³/ ‘equally, both’, and its homophone /=tɕɛn³/ ‘alone, only’. Note that at least for the last two words, pronunciation differs between speakers. Some pronounce /=tɕʌn³/ instead. It remains to be determined whether the same applies to ‘turmeric’. The combination /ɛŋ/ again occurs only in three entries: onomatopoeia /bɛŋ¹-bɛŋ¹/, /na¹mɛŋ²/ ‘cat’ which is possibly also an onomatopoeia, and /-pʰɛŋ²/ ‘flat’, a regular lexical word. While combinations of /ɛ/ with stops and nasals are either unattested or infrequent, /ɛ/ with final /l/ is found in numerous lexemes: /ɛ/ freely combines with the lateral coda.

The second pattern that stands out in the distribution of consonants is the non-occurrence of coda /l/ with two of the high vowels, /i/ and /u/. All of the other codas freely combine with these high vowels. At the same time, final /l/ does occur freely with the vowel /ɛ/, while the other final consonants do not or rarely combine with this vowel. Part of the population has changed final /l/ into /n/ though, as will be discussed in section 3.4.4.2. These speakers do not exhibit the combination /ɛl/, but instead have various lexemes ending in /ɛn/, while this latter combination is rare in the part of the population that was not affected by this merger of finals.

It should be mentioned that the combination /im/ is very infrequent, with only three occurrences in the current collected lexicon. However, in contrast to most other infrequent combinations, the three words concerned are regular lexemes, not onomatopoeia or intensifiers: /lim³/ ‘flood’, /ɹim¹/ ‘crawl’, and /ɹim³/ ‘taming’.

The distribution of final consonants could be pointing us in the direction of sound changes that have taken place. For example, the restrictions on /e/ and /ɛ/ raise the question whether these vowels have shifted to other places in vowel space in certain phonological contexts. Proper names and so-called song language (section 1.1.2.1) seem to have retained combinations of nucleus and coda which have become obsolete or rare in regular lexemes. An example is the combination /ɛŋ/: as mention above, this combination is extremely rare in contemporary speech. However, it does occur in song language, for example in the word /sɛŋ/[30] meaning ‘fire’ and in various Muklom first names which contain the element /sɛŋ³/ ‘gemstone’, for example the person names /sɛŋ³-pʰʌŋ²/ and /sɛŋ³-nuk⁰/. This suggests it may have been less rare in a previous stage of the language.

Another matter for future investigation are the restrictions on final /l/. One possible scenario that could explain the lack of the combinations /ul/ and /il/, is a partial /l/ > /n/ merger. This would mean the language now has a set of words ending in /un/ and /in/ that correspond to an earlier */ul/ and */il/.

Finally, the phonological distinction between short and long vowels, /u/ and /uː/, /ɔ/ and /ɔː/, is restricted syllables of the types CVp, CVt, and CVk (see section 3.1.2.2). Minimal pairs or near

[30] For song language, tones have not been determined yet.

minimal pairs of rhymes containing these vowels are provided for final /p/ in (39), final /t/ in (40) and (41), and final /k/ (42) and (43). It should be mentioned that the minimal pair for the rhymes /up/ and /uːp/, in (39), shows two weaknesses: 1) vowel duration has been determined based on measurements of small amount of tokens, 2) the word /u⁰kʰup⁰/ 'dove' is known to some but not all consultants. The latter used the compound /βɔ¹-tɔkʰu/ 'wild dove' instead. In general, words ending in /p/ are infrequent in the current corpus, hence the lack of better examples for these rhymes. No minimal pair for the rhymes /ɔp/ and /ɔːp/ is found in the current corpus. Perhaps minimal pairs for these rhymes will become available with the collection of more words.

(39)	/u⁰kʰup⁰/	'dove'
	/u⁰kʰuːp⁰/	'skin, bark'
(40)	/sut⁰/	'stab'
	/tʰuːt⁰/	'dig'
(41)	/pʰɔt⁰/	'boil'
	/pʰɔːt⁰/	'smoking (of food)'
(42)	/luk⁰/	'frog'
	/-luːk⁰/	'tall'
(43)	/tɔk⁰/	'step (of ladder)'
	/tɔːk⁰/	'take a photo'

3.3.1.4 Restrictions between syllable initial and syllable final segments

In coda position we find bilabial (/p/, /m/), alveolar (/t/, /n/, /l/), velar (/k/, /ŋ/), and glottal (/ʔ/) consonants. While the alveolar, velar and glottal codas can combine freely with each place of articulation in the onset of the same syllable, final bilabials cannot co-occur with a bilabial onset within the same syllable. In other words, the onsets /pʰ/, /p/, /b/, /β/, and /m/ do not combine with a /p/ or /m/ in coda position. This rule is formalised in Figure 14.[31] The only two words in the lexicon collected so

[31] One reviewer wondered whether the lack of syllables in the collected vocabulary with a bilabial in both onset and coda position could be due to coincidence rather than to a phonotactic rule. Theoretically this is possible, but the combination must be very rare if not a single native token appears in a sample of 2500+ lexical entries.

far that break this rule are loans: /bɔm^{3}/ ‘bomb’ (borrowed form English), and /pap^{0}/ ‘sin’ (borrowed from Assamese).

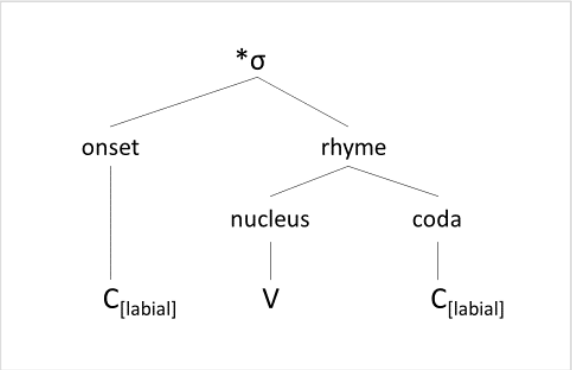

Figure 14 - A restriction on onset and coda combinations.

The onset and coda of a syllable may be identical, as long as they are not bilabials. Examples of identical alveolar or velar onset and coda are provided in (44).

(44)	/nʌn^{3}/	‘doubt, suspect’
	/ŋuŋ^{3}-βa^{1}/	‘second rank chief’
	/tit^{0}/	‘proximity’
	/kʌk^{0}/	‘bite’
	/lʌl^{3}/	‘pry’

3.3.1.5 Consonant clusters

Muklom does not permit clusters in onset position unlike certain other Tangsa varieties, such as Muishaung (Das Gupta 1980:6). The language also does not permit syllable-final consonant clusters, which is not surprising considering the already limited occurrence of single-consonant codas: only 8 out of the 22 consonant phonemes may occur in coda position (see section 3.3.1.3).

3.3.1.6 Initial, medial, and final vowels

There are four syllable types: CVC, CV, VC, and V (see section 3.3.1.1). Table 21 indicates which vowels can occur as nucleus of each syllable type. The first type has been split up into three because vowels show different patterns of distribution with them: syllables which end in an oral plosive ($CVP_{[+oral]}$), syllables which end in a glottal stop (CVʔ), and syllables with a nasal or lateral coda

(CVN/CVL). Also, there is a phonemic distinction between short and long rounded back vowels in syllables of the type CVP$_{[+oral]}$ and not in any of the other syllable types (see section 3.1.2.2). Shaded boxes indicate combinations which are not attested in the current collected lexicon.

nucleus / **σ type**	**/i/**	**/ɨ/**	**/e/**	**/ɛ/**	**/a/**	**/ʌ/**	**/ɔː/**	**/ɔ/**	**/uː/**	**/u/**
CVP$_{[+oral]}$	+	+		+	+	+	+	+	+	+
CVʔ	+		+	+	+		+		+	
CVN/CVL	+	+		+	+	+	+		+	
CV	+	+ (-tone)	+	+	+	+ (-tone)	+		+	
VC		+		+	+	+	+			
V	+		+	+	+	+	+		+	

Table 21 - Distribution of nucleus vowels.

The following observations are made with respect to CV(C) syllables, i.e. all syllables that contain an onset. All vowels except /e/ are attested for the syllable types CVP$_{[+oral]}$, CVN, and CVL. This vowel seems to occur only in open syllables and syllables ending in a glottal stop. Syllables with the structure CVʔ never take /ɨ/ or /ʌ/ as a nucleus and neither do syllables of the structure CV, except when the CV syllable is toneless, then it can contain /ʌ/ or /ɨ/ as a nucleus. Indeed, syllables of the type Cʌ^0, which often function as minor syllables in sesquisyllabic words, are rather frequent in the language. The syllable Cɨ^0 is rare; in the current collected lexicon it only occurs in the word /hɨ^{0}mi^2/ 'foxtail millet'. Muklom sesquisyllables are iambic and the minor Cʌ^0 syllables possibly represent reduced syllables that have changed their original vowel to /ʌ/ and became toneless. A few examples of minor, toneless Cv syllables are: the causative prefix /tʌ^0-/ in /tʌ^0-k^{h}am^2/ 'to heat up', the reciprocal prefix /t^{h}ʌ^0-/ in /t^{h}ʌ^0-mɔl^3/ 'fight one another', the first syllables of the numerals /bʌ^{0}ŋa^3/ 'five', /bʌ^{0}li^3/ 'four' and /sʌ^{0}nʌt^0/ 'seven'.

The following observations are made with respect to the nucleus of V(C) syllables, i.e. onset-less syllables. Type VC is extremely rare. In fact, I have collected only nine instances of VC syllables, which are listed in Table 17 in section 3.3.1.1. None of these contains the vowels /i/, /e/, or /u/. The last syllable type, V, seems to allow all vowels except /ɨ/ and tone-bearing /ʌ/. Non-tone bearing /ʌ/ does occur and usually functions as the minor syllable in a sesquisyllable, for example the nominalising prefix /ʌ^0-/ in /ʌ^0-huʔ^0/ 'thief'. So far, nearly all observed V syllables are grammatical elements. The

only lexical element consisting of a single V syllable observed so far is the a-typical verb /i^{2}/~/i^{3}/ 'scream' (see section 3.3.1.1).

3.3.1.7 Correlations between tone and syllable structure

There are a few direct or indirect correlations between tone and the range of vowels certain syllable types can contain. As has been mentioned in section 3.2.2, it seems toneless minor syllables can contain /ʌ/, /u/, or /ɨ/ but no other vowel from the inventory. The phoneme /e/ does not occur very frequently. It can occur in syllables ending in a glottal stop, which are always toneless, and in open syllables that carry tone 2 or 3, for example in /se^{2}/~/se^{3}/ 'sing'. So far, no instances of a syllable type (C)e^{1} have been encountered yet. Since /e/ is so infrequent, it cannot be determined yet whether there is a restriction on the range of vowels that may occur in a tone 1 syllable or whether syllables with this structure do exist but happen not to be included in the current collected lexicon.

3.3.2 Morpheme structure

In Muklom, morphemes tend to be one syllable long. A small percentage of morphemes are longer or shorter than a syllable unit. This aligns with the general pattern of morpheme structure in the Sino-Tibetan phylum, which exhibits a tendency for morphemes to be monosyllabic (Matisoff 1973a:77-78; Bickel 2003:91).

Morphemes which are longer than one syllable unit in Muklom tend to be sesquisyllabic; they consist of a minor and a major syllable, in that order. Historically they must have been bimorphemic, but they have been fused together as the meaning of the minor syllable bleached and, in at least some cases, as phonological erosion took place. Sesquisyllabic morphemes are always lexical, there are no sesquisyllabic grammatical morphemes. One domain in which we find examples of such morphemes are the numerals. Seven of the Muklom numerals, all listed under (45), are sesquisyllabic and monomorphemic. The first syllables /bʌ^{0}/, /t^{h}ʌ^{0}/, /sʌ^{0}/ and /ʌ^{0}/ were once prefixes but have now lost their independent meaning. The process of semantic bleaching appears to have been completed already at the stage of PTB, as Benedict (1972:passim) reconstructs PTB numerals 2 up to and including 9 with prefix-like elements that do not seem to carry a specific meaning (see section 5.1.5).

(45)	/bʌ⁰li³/	‘four’
	/bʌ⁰ŋa³/	‘five’
	/tʰʌ⁰ɹɔk⁰/	‘six’
	/sʌ⁰nʌt⁰/	‘seven’
	/ʌ⁰ʃʌt⁰/	‘eight’
	/ʌ⁰kʰu¹/	‘nine’
	/ʌ⁰si²/	‘ten’

Similarly, the first syllable /tʰʌ⁰/ of certain animal names historically constituted a prefix. Examples of sesquisyllabic, synchronically monomorphemic animal names are /tʰʌ⁰ɹɨk⁰/ ‘louse’ and /tʰʌ⁰ɹu³/ ‘type of big rodent’. Another animal name that has a prefix-like element with alveolar stop onset in a number of Tangsa varieties is the word for ‘leech’. In Muklom however, this word does not have a first syllable /tʰʌ⁰/ but has a /s/-onset instead: /sa³βʌt⁰/ ‘land leech’ and is not sesquisyllabic. Perhaps the syllables /tʰʌ⁰/ and /sa³/ both derive from PTB *sya ‘animal, flesh, body’, an etymon that survives in many languages as the minor syllable in sesquisyllabic animal names (see Matisoff 2003:97, 102), or perhaps the syllable /tʰʌ⁰/ in animal names is etymologically related to the valency-affecting verbal prefix /tʰʌ⁰/, an idea which is more far-fetched but not impossible. It remains to be determined whether there is historic reality to any of the scenarios sketched here.

Besides the above mentioned numerals and animal names, I have encountered three more monomorphemic sesquisyllables: 1) /pʰʌ⁰lʌp⁰/ ‘tea’, which could be a loan from Singpho, 2) /tsʌ⁰ɹɔ¹/ ‘finger millet’ and its dialectal variant with a slightly different onset /tɕʌ⁰ɹɔ¹/, and 3) /lʌ⁰jʌk⁰/ ‘bad, naughty’. The latter is by some speakers pronounced as /jʌ⁰lʌk⁰/. Clearly metathesis has affected this word, but it has not been determined yet which of the two words reflects the oldest order of consonants (see section 3.4.3.5).

Morphemes which are smaller than a syllable unit consist of an onset or rhyme. They are without exception grammatical morphemes. Examples in the domain of the noun complex are proximal determiner forms /=ɹ/, medial /=n/, distal /=ʃ/, and definite determiner /=tʰ/ (see section 5.1.3.2). Examples in the domain of the verb complex are the tense markers /-t/ ‘PST’ and /-n/ ‘FUT’ (see section 6.1.6.1) and the person indexes, such as /-u³/ ‘2SG’ and /-in²/ ‘2PL’ (see section 6.1.2).

3.4 Segmental phonological variation

This section discusses changes that affect segmental phonemes. Variations in the production of phonemes that are discussed here may be the result of rule-based phonological processes, and they may

correlate with geographical location, age, or register. Some allophones have an apparent random distribution.

3.4.1 Assimilation

Six assimilation processes will be discussed here: 1) intervocalic voicing (section 3.4.1.1), 2) vowel rounding (section 3.4.1.2), 3) velarisation and post-alveolarisation (section 3.4.1.3), 4) vowel lowering (section 3.4.1.4), 5) vowel raising (section 3.4.1.5), and 6) vowel fronting (section 3.4.1.6). The first two, intervocalic voicing and vowel rounding are the most commonly observed variations of these five. The last four seem to occur less frequently and may be restricted to certain speakers. The variations discussed in this section involve different directions of assimilation. The processes of velarisation and post-alveolarisation, vowel lowering, vowel raising, and vowel rounding as discussed here involve regressive assimilation, while the type of vowel fronting discussed here involves progressive assimilation. Finally, intervocalic voicing can be considered a combination of both assimilation directions.

3.4.1.1 Intervocalic voicing

All voiceless unaspirated plosives in coda position, i.e. /p/, /t/, and /k/, can become voiced when the following syllable starts with a vowel. This rule does not appear to affect plosives in onset position. For example, we do not expect /ʌ^0-pɨŋ^1/ ‘tasty’ to show the alternative pronunciation [ʌ^0-bɨŋ^1].

(46) P [-voice, -asp] → P [+voice, -asp] / V__$V

An example of intervocalic voicing of /p/ is given in (47). The voiceless bilabial plosive in the root /ɟɨp^0/ ‘sleep’ becomes voiced, [b], when followed by person index /-u^3/.

(47) nʌŋ^1 [**ɟɨb^0**] u^3.
nʌŋ^1 **ɟɨp^0**-u^3
2SG **sleep**-2SG
‘You are sleeping.’ (B1.16)

In a similar manner, final /t/ becomes [d] when occurring between vowels, as is illustrated by examples (48) and (49), where the /t/ of the verb roots /bat^0/ ‘say’ and /βat^0/ ‘hit’ is voiced. The first example is

taken from casual speech and the second from careful, elicited speech, yet both show voicing assimilation, which indicates that intervocalic voicing is not merely a feature of fast speech.

(48) e^{2} ʃi^{3} βaŋ^{3} ʌŋ^{3} ta^{1} t^{h}a^{2} [**bad^{0}**] a^{3}.

e^{2}-ʃi^{3}=βaŋ^{3}	ʌŋ^{2}-t-a^{1}=t^{h}i^{3}=a^{2}	**bat^{0}**-a^{3}
NPROX-DIST=from	COP-PST-3=DEF=ABS	**say**-3

'They say that it was from there.' (20151208_05)

(49) miʔ^{0} βa^{1} sa^{1} nɛ^{3} miʔ^{0} nu^{1} sa^{1} t^{h}a^{2} [**βad^{0}**] a^{3}.

miʔ^{0}-βa^{1}-sa^{1}=ni^{3}=ɛ^{3}	miʔ^{0}-nu^{1}-sa^{1}=t^{h}i^{3}=a^{2}	**βat^{0}**-a^{3}
person-M-DIM=MED=ERG	person-F=DIM=DEF=ABS	**hit**-3

'The boy hits the girl.' (20121103_04)

Like /t/ and /p/, syllable-final /k/ becomes voiced when occurring in intervocalic position. Example (50) shows how the final consonant of /t^{h}uk^{0}/ 'to spit' turns into voiced [g] before the vowel /u/ of the person index.

(50) nʌk^{0} [**t^{h}ug^{0}**] u^{3}.

nʌk^{0}	**t^{h}uk^{0}**-u^{3}
PROH	**spit**-2SG

'Don't spit!' (20151020_01)

A general pattern among the plosives is that the unaspirated voiceless series show the widest variety of allophony based on phonological context, while not much seems to be happening in the voiced and aspirated series.

3.4.1.2 Rounding

The vowel of the auxiliary /ʌŋ^{2}/ easily assimilates to a preceding rounded vowel. A few examples are provided below. First, an example of /ʌ/ adapting to a preceding /ɔ/, despite the intervening glottal stop.

(51) piʔ^{0} a^{3} kɔʔ^{0} mɔʔ^{0} [**ɔŋ^{2}**] ta^{1}.

piʔ^{0}=a^{3} kɔʔ^{0}-m-ɔʔ^{0} **ʌŋ^{2}**-t-a^{1}

3SG=ERG give-NEG-3 **AUX**-NEG-3

'He did not give it.' (20121103_04)

The rounding of /ʌ/ equals full assimilation in the example provided above, but assimilation is only partial when /ʌ/ is rounded to [ɔ] under influence of a preceding high rounded vowel /u/, as illustrated by the following example.

(52) nʌŋ^{1} a^{3} tɨl^{2} saʔ^{0} mu^{1} [**ɔŋ^{2}**] nu^{3}.

nʌŋ^{1}=a^{3} tɨl^{2} saʔ^{0}-m-u^{1} **ʌŋ^{2}**-n-u^{3}

2SG=ERG rice eat-NEG-2SG **AUX**-FUT-2SG

'You will not eat rice.' (20121103_04)

The vowel /ʌ/ may sometimes be rounded to [ɔ] without a preceding round vowel. It is not clear yet what triggers this alternative pronunciation. An example is provided below, of /nʌŋ^{1}/ 'you (sg)' pronounced as [nɔŋ^{1}].

(53) piʔ^{0} a^{3} [**nɔŋ^{1}**] ma^{3} kɔʔ^{0} taʔ^{0} p^{h}u^{3} i^{3}?

piʔ^{0}=a^{3} **nɔŋ^{1}**=ma^{3} kɔʔ^{0}-taʔ^{0}-p^{h}-u^{3} i^{3}

3SG=ERG **2SG**=DAT give-PST-INV-2SG Q.AFF

'Did she give it to you?' (20120217_02)

3.4.1.3 Velarisation and post-alveolarisation

The alveolar sibilant /s/ and affricate /ts/ can be velarised or glide into a post-alveolar sibilant when preceding a high or mid front vowel (/i/ /e/ and /ɛ/). These processes are not automatic but occur only sometimes and perhaps also only in certain speakers. Velarization and post-alveolarisation are conjoined here, because even though they are different articulatory movements, they are united in their goal, which is anticipation of a following high front vowel. This may be achieved either by bulking up the dorsum of the tongue towards the velum, or by pulling back the tongue so that its tip moves to post-alveolar position.

The examples provided below were produced by two speakers from Kuttom village, father NC, and daughter SC. With regard to example (54), it should be mentioned that out of six repetitions, the speaker

only clearly velarized two tokens. However, the speaker that pronounced the word in example (55) three times, velarized all three tokens.

(54) [ˀʌ⁰**sʸi²**]
/ʌ⁰si²/
‘ten’ (20121105_06)

(55) [**tsʸi³**jạ³]
/tsi³ʝa³/
‘spirit’ (20120217_01)

Retraction of the alveolar sibilants has been observed in the word /tʌ⁰sɛʔ⁰/ ‘star’, as is shown in (56). Only the end portion of the sibilant has shifted here, not the entire segment. We are dealing with partial assimilation, not with a full sound shift of the kind discussed in section 3.4.4.1.

(56)	[tʌ⁰**sɛʔ⁰**]	←→	[tʌ⁰**sʃɛʔ⁰**]
	/tʌ⁰sɛʔ⁰/		/tʌ⁰sɛʔ⁰/
	‘star’ (MK, in 20100124-104250)		‘star’ (TT, in 20100124-104250)

The same speaker showed postalveolarization in another word, /ʝa¹-si²/ ‘toe’, as illustrated by (57).

(57) [ʝa¹-**sʃi²**]
/ʝa¹-si²/
foot-finger
‘toe’ (TT, 20100124-111650)

One could try and explain the presence of velarisation or post-alveolarisation not as partial assimilation to a following high or mid front vowel, but instead as a reflex of a previously existing final diphthong. However, it is better to dismiss this hypothesis, since none of the Tangsa varieties in Morey’s comparative Tangsa wordlist (p.c.) shows a diphthong in the number ‘ten’ (the word for ‘spirit’ is not included in it).

3.4.1.4 Vowel lowering

The vowel of the second person singular index /-u^{3}/ may be lowered to [o^{3}] or [ɔ^{3}] following a low vowel /a/, even when a glottal stop intervenes, as illustrated by the following examples from two different speakers. This variation may be restricted to certain speakers.

(58) nʌŋ^{1} a^{3} tɨl^{2} saʔ^{0} [**o^{3}**].
nʌŋ^{1}=a^{3} tɨl^{2} saʔ^{0}-**u^{3}**
2SG=ERG rice eat-**2SG**
'You(sg) eat rice.' (SDM31-2009)

(59) nʌŋ^{1} a^{3} tɨl^{2} saʔ^{0} [**ɔ^{3}**].
nʌŋ^{1}=a^{3} tɨl^{2} saʔ^{0}-**u^{3}**
2SG=ERG rice eat-2SG
'You(sg) eat rice.' (20121103_04)

The vowel /i/ is sometimes lowered to [e] after a low vowel. One example of this was found in the pronunciation of question marker /i^{3}/. The following clause was uttered three times by the same consultant, and only the last time did she pronounce [e^{3}] instead of [i^{3}].

(60) kɔʔ^{0} taʔ^{0} p^{h}a^{3} [**e^{3}**]?
kɔʔ^{0}-taʔ^{0}-p^{h}-a^{3}**=i^{3}**
give-PST-INV-3**=Q.AFF**
'Did he give it to you?' (20120217_02)

3.4.1.5 Vowel raising

The vowel /ɔ/ may sometimes be raised to [o] and additionally even lose its rounding, [ɤ], preceding a bilabial nasal /m/. The examples below were produced by a speaker who pronounced most tokens of 'three' with [ɔ], but in some tokens exhibited the two other allophones.

(61) [ʌ^{0}-ni^{3}-**tom^{2}**]
/ʌ^{0}-ni^{3}-tɔm^{2}/
'A little.' (Lit. 'two-three') (20121105_11)

(62) [ʌ⁰-ni³-**tɤm²**]

/ʌ⁰-ni³-tɔm²/

‘A little.’ Lit. ‘Two-three.’ (20121105_11)

3.4.1.6 Vowel fronting

The vowel /ʌ/ is sometimes fronted to /ɛ/ following /ʃ/ by some speakers, as is illustrated by the following example.

(63) [ˀʌ⁰**ʃɛt̄⁰**]

/ʌ⁰ʃʌt⁰/

‘eight’(20100124-105300)

3.4.2 Dissimilation

Three examples of dissimilation, all affecting consonants, are discussed in this section: aspiration, plosivisation, and labialization. The type of aspiration process discussed in section 3.4.2.1 is based on a productive morphophonological rule that appears to be applied consistently across the speaker population. The processes of plosivisation discussed in section 3.4.2.1 and the process of labialisation discussed in section 3.4.2.3, on the other hand, do not seem to be applied as consistently.

3.4.2.1 Aspiration

The Muklom language exhibits a prefix that changes the valency of the verb it attaches to (see section 6.1.7). This prefix has two allomorphs, /tʌ⁰-/ and /tʰʌ⁰-/, of which I propose /tʌ⁰-/ is the underlying or older form, which is likely to be etymologically related to the PST valency-increasing prefix *s-. The unaspirated prefix occurs when the verb stem starts with an unvoiced consonant and the aspirated prefix occurs when the verb stem starts with a voiced consonant. This variation appears to be the result of phonological change, of aspiration of a voiceless onset before a following voiced onset in the following syllable, i.e. regressive dissimilation. The phonological rule that lies behind the allomorphy in the valency-changing prefix is formalised in (64).

(64) /tʌ⁰-/ → [tʰʌ⁰-] / __$C_{[+voice]}$

One exception to this rule has been found. I have found eight verb stems that start with /m/ and take the valency prefix in the corpus. Seven take, as expected with a voiced consonant, the prefix /tʰʌ⁰-/. One, however, takes the prefix /tʌ⁰-/: /tʌ⁰-miŋ³/ ‘to call’, derived from /miŋ³/ ‘name’. Recordings from different speakers confirm that the prefix in this verb is unaspirated. A possible explanation could be that /miŋ³/ at some proto-stage had a voiceless onset, for example */m̥iŋ³/. Some TB languages do indeed show voiceless nasal reflexes of the PTB form */r-miŋ/ ‘name’ (Benedict 1972:31): Lushei <hmiŋ> ‘name’, and Burmese <hmáń> ‘to name’.

3.4.2.2 Plosivation

When a syllable-final lateral meets a syllable-initial lateral, the first is sometimes pronounced as a voiced stop [d], as shown in example (65). This process is not automatic, it appears only in a subset of tokens. This process of dissimilation is somewhat similar to the process of stop-insertion discussed in section 3.4.3.3.1.

(65) [**ɹɔd**³luŋ²]
/ɹɔl³luŋ²/
‘life’ (20100124-095559)

3.4.2.3 Labialization

The velar fricative has a labialized allophone [xᵝ] which perhaps can only occur in a particular phonological context, namely preceding /i/. If this is indeed the case, then we may be dealing with dissimilation: the contrast with the high unrounded vowel is increased by rounding the consonant. An example is found in the word /xiʔ⁰/ ‘faeces, shit’ which is by many speakers pronounced with a labio-velar, as shown below. It has to be investigated whether this pronunciation is limited to this lexeme or has a wider distribution.

(66) [xᵝiʔ⁰]
/xiʔ⁰/
‘faeces, shit’ (20160115_01)

3.4.3 Other alternations

Some phonological processes do not fall under the umbrella of assimilation of dissimilation. This section discusses exactly those processes. The first process, final de-releasing (section 3.4.3.1) is a rule-based variation that is applied consistently across the speaker population. The deletion (section 3.4.3.2) and insertion (section 3.4.3.3) processes discussed here affect particular sets of phonemes but are not occurring consistently across the speaker population. Finally, the processes of final glottalization (section 3.4.3.4) and metathesis (section 3.4.3.5) discussed here appear to affect particular lexemes only.

3.4.3.1 Final de-releasing

Two types of allophony affect the three voiceless plosives. The first is intervocalic voicing (see section 3.4.1.1), and the second is de-releasing of final stops. All voiceless unaspirated plosives, /p/ /t/ and /k/, are pronounced as unreleased stop in coda position before a consonant or before a pause, as is summarized in the following formula (P=plosive, rel=released). This is a rule-based variation that is applied consistently in normal-paced speech. Final consonants may be released in extremely careful speech (see section 3.4.7).

(67) P [-voice, -asp, +rel] → P [-voice, -asp, -rel] / __$C
/ __#

Examples will be provided for each plosive, starting with the bilabial, /p/. In onset position, this phoneme is pronounced with a release. This is exemplified twice in (68), where the two bilabial plosives in the expression /pɨl^{2}puŋ^{3}/ ‘flower’ are pronounced as released [p].

(68) i^{3} ɹi^{3} [**pɨl**^{2} **puŋ**^{3}] ɹa^{2} naʔ^{0}ɹi^{2} xʌl^{2} a^{3}.

i^{3}-ɹi^{3}	**pɨl^{2}puŋ^{3}**=ɹi^{3}=a^{2}	naʔ^{0}ɹi^{2}	xʌl^{2}-a^{3}
PROX-PROX	**flower**=PROX=ABS	very	good-3

‘This flower is very beautiful.’ (20121105_07)

However, when /p/ occurs in syllable-final position and is followed by a consonant or a pause, or stands at the end of an utterance, it is pronounced as [p̚] without a release. An example is found in (69); the word /ɹup^{0}/ ‘unite’ which has a bilabial plosive coda remains unreleased before the velar plosive in the onset of the following syllable.

(69) ʃɔl^{2} ɟʌm^{2} ɔʔ^{0} tat^{0} [**rup̚^{0}**] kɔ^{3} lɛ^{3}, ʃɔl^{2} t^{h}i^{3} lɛ^{2}.

ʃɔl^{2}-ɟʌm^{2}=ɔʔ^{0}	tat^{0}	**ɹup^{0}**	kɔ^{3}lɛ^{3}	ʃɔl^{2}=t^{h}i^{3}=lɛ^{2}
wolf-company=at	try	**unite**	because	wolf=DEF=FOC

'Because he tried to stay with the wolf, with the wolf.' (20151208_04)

The voiceless alveolar plosive /t/ also has an unreleased allophone, [t̚], which occurs in coda position when directly followed by a consonant, or before a pause. Example (70) illustrates how the second voiceless dental plosive in /tat^{0}/ 'try' remains unreleased before the following consonant /ɹ/ of /ɹup^{0}/ 'unite'.

(70) ʃɔl^{2} ɟʌm^{2} ɔʔ^{0} [**tat̚^{0}**] ɹup^{0} kɔ^{3} lɛ^{3}, ʃɔl^{2} t^{h}i^{3} lɛ^{2}.

ʃɔl^{2}-ɟʌm^{2}=ɔʔ^{0}	**tat^{0}**	ɹup^{0}	kɔ^{3}lɛ^{3}	ʃɔl^{2}=t^{h}i^{3}=lɛ^{2}
wolf-company=at	t**ry**	unite	because	wolf=DEF=FOC

'Because he tried to stay with the wolf… the wolf.' (20151208_04)

The same rule applies to /k/. Example (71) contains an token of a released [k] in syllable-initial position and unreleased [k̚] in syllable-final position in the word /kʌk^{0}/ 'bite'.

(71) ɹɛʔ^{0} e^{2} na^{3} t^{h}ak^{0} [**kʌk̚^{0}**] kɔ^{3} ɛʔ^{0}, k^{h}ʌm^{2} ma^{3} t^{h}ʌ^{0}hun^{1} ta^{1}, ɹu^{1} βa^{3}.

ɹɛʔ^{0} e^{2}-na^{3}	t^{h}ak^{0}	**kʌk^{0}**	kɔ^{3}ɛʔ^{0}	k^{h}ʌm^{2}=ma^{3}	t^{h}ʌ^{0}-hun^{1}-t-a^{1}	ɹu^{1}=βaŋ^{3}
then NPROX-in	try	**bite**	when	alcohol=DAT	INTR-create-PST-3	rope=from[32]

'Then, there, when she tried to eat it, it had become rice beer, from the rope.' (20160106_04)

3.4.3.2 Deletion

In some speakers, we observe occasional deletion of the velar nasal in coda position. This is different from the structural deletion of certain nasals found in speakers from New Khimyong village (see section 3.4.4.3), as in this case the process is not systematic. So far, optional deletion has only been observed in the context of a preceding /u/ or /ɔ/, and no other vowel. An example of /ŋ/-deletion and associated nasalization of a preceding /ɔ/ is provided in (72), where the first person singular index /-ɔŋ^{1}/ is realised as [ɔ̃^{1}]. This example is taken from an elicitation recording where two speakers are translating English

[32] Regional variation: the nasal coda of /=βaŋ^{3}/ 'from' is dropped by speakers from New Khimyong.

prompts. The older of the two uttered example (72) twice, but when the younger speaker repeated part of the phrase, example (73), he did pronounce the final velar nasal on the person index.

(72) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} [**mɔ̃^{1}**].
ŋa^{1}=a^{3} tɨl^{2} saʔ^{0}-**m-ɔŋ^{1}**
1SG=ERG rice eat.soft-**NEG-1SG**
'I do not eat rice.' (20100124-112046)

(73) tɨl^{2} saʔ^{0} [**m-ɔŋ^{1}**].
tɨl^{2} saʔ^{0}-**m-ɔŋ^{1}**
rice eat.soft-**NEG-1SG**
'I do not eat rice.' (20100124-112046)

Sometimes, speakers delete a final /l/. This also seems to be optional and not systematic, as the same speaker may pronounce the same word with and without final lateral as is shown in example (74) and (75) respectively. This example of final lateral deletion is remarkable, since after deletion of the coda, the vowel /ɨ/ is standing in an open, tone-bearing syllable, while normally this vowel is restricted to closed and toneless syllables (see section 3.3.1.6).

(74) [nuŋ^{2}-**bil^{1}**]
/nuŋ^{2}-bɨl^{1}/
mouth-lip
'lip' (20121105_10)

(75) [nuŋ^{2}-**bi^{1}**]
/nuŋ^{2}-bɨl^{1}/
mouth-lip
'lip' (20121105_10)

Another example of a deletion process is found in the (76), where the syllable-final /k/ of the superlative marker /dʌk^{0}-/ is deleted. It remains to be seen whether deletion of /k/ in front of /x/ is a more general phenomenon or whether deletion is the result of grammaticalization involving phonological reduction of the superlative marker /dʌk^{0}-/. Evidence against reduction of the superlative marker is the fact that the final /k/ is pronounced in all tokens in the corpus that occur in front of /lɔ^{2}~lɔt^{0}/ 'far'.

(76) i³ ɹi³ pɨl² puŋ³ ɹa² **dʌ⁰**xʌl² ʌŋ² a³.

i³-ɹi³	pɨl²-puŋ³=ɹi³=a²	**dʌk⁰**-xʌl²	ʌŋ²-a³
PROX-PROX	flower=PROX=ABS	**SUPER**-good	COP-3

'This flower is very beautiful.' (20121105_07)

When the consultant carefully repeats the superlative plus the following adjective in the same recording, the form appears with the /k/ that would normally be elided, as can be seen in the following example.

(77) [**dʌk⁰**] xʌl².

dʌk⁰-xʌl²

SUPER-good

'Very good.' (20121105_07)

3.4.3.3 Insertion

Two types of insertion are observed in the language; 1) insertion of a preceding homorganic stop or 'prestopping', 2) insertion of a following homorganic stop or 'poststopping'. The first occurs mainly on onset consonants, whereas the latter is restricted to coda consonants.

3.4.3.3.1 Prestopping

Insertion of a prothetic stop may occur with certain onsets, namely with sibilants, lingual fricatives (but not with the labial or glottal fricative), and the lateral, respectively: [ˢs] and [ᵗʃ], [ᵈʒ] and [ᵏx], and [ᵈl]. In a similar manner, prosthetic stops may occur on nasal and lateral codas. The prothetic stops are (near-)homorganic and with respect to voicing identical to the phoneme they are inserted in front of. The process of stop-prothesis, which we could also call affrication in case of the sibilants and fricatives, is not automatic but occurs in certain speakers only and on a subset of tokens only.

Examples of affrication or pre-stopping on sibilants and fricatives are listed in examples (78)-(81), all taken from wordlist recordings by S.D. Morey. It should be noted that in these wordlists, the younger of the two consultants, speaker TT, is more likely to pronounce pre-stopped allophones than the older speaker MK. The first two examples, (78) and (79), are taken from speaker TT, who has merged sibilants (see section 3.4.4.1), hence the retracted pronunciation [s̠].

(78) [^{t}s̱u^{1}]
/su^{1}/
‘grandchild’ (20100124-103507)

(79) [^{t}s̱ʌp̄^{0}]
/ʃʌp^{0}/
‘bear’ (20100124-104250)

(80) [^{d}ja^{1}]
/ja^{1}/
‘leg’ (20100124-103034)

(81) [^{k}**xaŋ^{3}**-pik̄^{0}]
/xaŋ^{3}-pɨk^{0}/
‘shifting cultivation field’ (20100124-105300)

The fricative may further assimilate to the place of articulation of the prothetic velar stop and be pronounced as [χ], as shown by the following example.

(82) [^{k}χʌm^{2}]
/xʌm^{2}/
‘mat’ (20100124-105300)

A lateral can be pre-stopped, i.e. proceeded by a homorganic voiced stop, both in onset and in coda position, as the following two examples illustrate.

(83) [ʔu^{0}-^{d}**laŋ^{3}**]
/u^{0}-laŋ^{3}/
NMLZ-stand
‘standing’ (20100124-105856)

(84) [ʔʌ⁰-**rɛ^{d}l^{3}**]

/ʌ⁰-ɹɛl³/

NMLZ-near

'near' (20100124-105300)

Examples of prosthetic stops on a final nasals are provided in the three following examples: a bilabial nasal in (85), an alveolar nasal in (86), and a velar nasal in (87). They are again homorganic. No examples of nasal pre-stopping in onset position have been observed yet. Perhaps nasals can also be pre-stopped in initial position when the preceding word ends in a vowel. This remains to be determined.

(85) [xɨ^{b}m³]

/xɨm³/

'village' (20100124-105300)

(86) [ʔu⁰-**p^{h}ɪ^{d}n^{3}**]

/u⁰-p^{h}ɨn³/

NMLZ-sew

'sewing' (20100124-110318)

(87) [ʔʌ⁰-**vu^{g}ŋ̰^{1}**]

/ʌ⁰-βuŋ¹/

NMLZ-thick

'thick' (20100124-110318)

3.4.3.3.2 Poststopping

All three nasals, /m/ /n/ and /ŋ/, may be pronounced with an epenthetic homorganic stop when occurring in coda position. This is not an automatic rule; some speakers show this pronunciation sometimes. Homorganic final stops on nasals seem to occur more frequently in certain Tangsa varieties than they do in Muklom. An example of a variety which is reported to show abundant poststopping is Tikhak (K.P. van Dam, p.c.). In Muklom, the bilabial nasal /m/ can be realized as [m^{p}] in word-final position, as illustrated in (88).

(88) [kam^{p3}]
/kam^{3}/
'work'[33] (20160115_01)

Likewise, the alveolar nasal /n/ is in word-final position sometimes realized as [n^{t}], as shown in (89).

(89) [ʔʌ^{0}-**min^{t2}**]
/ʌ^{0}-min^{2}]
NMLZ-yellow
'the yellow one' (S1.12)

Finally, also the velar nasal /ŋ/ in word-final position is sometimes realized with a homorganic stop, [ŋ^{k}]. The following example shows the first person /-ʌŋ^{2}/ first pronounced without a stop, but in its second occurrence pronounced with a homorganic stop.

(90) e u^{0}bi^{3} ka^{1} βe^{3} p^{h}[**ʌŋ^{2}**], ŋa^{1} u^{0}nʌm^{3} ɛʔ^{0} ka^{1} βe^{3} p^{h}[**ʌŋ^{k2}**].

e	u^{0}-bi^{3}	ka^{1}-βe^{3}-p^{h}-**ʌŋ^{2}**	ŋa^{1}	u^{0}-nʌm^{3}	ɛʔ^{0}	ka^{1}-βe^{3}-p^{h}-**ʌŋ^{2}**
EXCLAM	NMLZ-search	go-CNT-INV-**1SG**	1SG	NMLZ-borrow	do	go-CNT-INV-**1SG**

'Oh, I still have to search it for you; I still have to go and borrow it.' (20151208_05)

The epenthetic homorganic stops may be unreleased, released or even occur with aspiration, similar to what has been noted for the phonemic voiceless stops /p/, /t/, and /k/ (see sections 3.1.1.1 and 3.4.7). So far, I have only observed epenthetic stops on second and third tone syllables and never on first tone syllables. First tone syllables do sometimes occur with a post-nasal glottal stop. This post-nasal glottal stop is not restricted to first tone, however, as it can also occur on second or third tone syllables with nasal coda. I have further observed a post lateral stop in a token of the word /-dal^{1}/ 'rough, hard' in a wordlist recording, as shown in example (91). Though I have not come across examples so far, it might be possible that the lateral occurs with an epenthetic homorganic stop as well in syllables that carry tone 2 or 3, as [l^{t}].

[33] Indo-Aryan loan.

(91) [dalʔ^{1}]

/-dal^{1}/

‘rough, hard’ (20160115_01)

3.4.3.4 Final glottalization

In certain lexemes we observe glottalization of a final oral plosive, by which is meant here that the oral plosive is reduced to a segmental glottal stop. For example, final /p/ in /ɹʌp^{0}nɛ^{3}/ ‘very’ can be realized as a glottal stop, [ɹaʔ^{0}nɛ^{3}], as illustrated by the following example. The vowel /ʌ/ changes to /a/ because /ʌ/ does not combine with a glottal stop coda (see section 3.3.1.6). Notice how the glottal stop occurs in the same phonological environment that conditions the allophone [p̚]: in syllable-final position before a consonant (see section 3.4.3.1). It has yet to be determined whether this allophone arises from a sound rule, a sound change or is a characteristic of fast speech. Anecdotal evidence suggests that this allophone occurs more often in the speech of younger people. Example (92) illustrates how the bilabial plosive in /ɹʌp^{0}nɛ^{3}/ ‘very’ can be realized as a glottal stop, [ɹaʔ^{0}nɛ^{3}].

(92) i^{3} ɹi^{3} hi^{1} ɹi^{3} lɛ^{3} [**ɹaʔ^{0} nɛ^{3}**] lʌ^{0}jʌk^{0} a^{3}.

i^{3}-ɹi^{3}	hi^{1}=ɹi^{3}=lɛ^{3}	**ɹʌp^{0}nɛ^{3}**	lʌ^{0}jʌk^{0}-a^{3}
PROX-PROX	dog=PROX=FOC	**very**	naughty-3

‘This dog is very naughty.’ (B1.16)

3.4.3.5 Metathesis

Metathesis is taking place in the word /lʌ^{0}jʌk^{0}/~/jʌ^{0}lʌk^{0}/ ‘bad, evil, naughty’ (see also section 3.3.1.7). Which of the two represents the older order of sounds remains to be determined.

3.4.4 Dialectal variation

Some observed alternative pronunciations are associated with a subgroup of the Muklom speakers. This subgroup may be the inhabitants of a certain village or area (regional variation), but it may also be a development in the younger generations (sound change), or a combination of both, i.e. sound change that is underway in a certain geographical area, but not in others. This section discusses a few of these phenomena and makes suggestions as to their origin.

3.4.4.1 Merger of sibilants and affricates

In some speakers, /ts/ and /tɕ/ have merged, meeting one another mid-way at [ts̻]. Similarly, we find some speakers that merge /s/ and /ʃ/ into [s̻]. Based on the current data, it cannot be confirmed yet whether the two always go hand in hand or that some group of speakers may merge one set but not the other. The end point of each merger lies between the two original sibilants or affricates; the counterparts moved towards one another rather than one phoneme of a set moving towards a stationary counterpart. This is exactly what we would expect from segments that are on the same auditory dimension: inventories of two affricates move away from the spectral centre, but in a system with only one affricate, this phoneme tends to be realized in the middle of the spectrum (see Boersma and Hamann 2008), as illustrated by the figure below.

Figure 15 - Affricate distribution: non-merged versus merged.

There appears to be a correlation with age for this sound change. For example, consultants from New Chingsa indicated that young people do not distinguish the two affricates any longer, while the older still do. However, in the nearby village of Kuttom, where I carried out most of my fieldwork, children still have non-merged affricates as far as I have observed. Consultant CTT, in her twenties and from Changlang Town (her family is from Janman originally), did merge the affricates while her father did not.

It has further been suggested that there is a distinction between speakers from the plains and speakers from the hills. Consultant CTT expressed that she had the impression that the people from the hills pronounced only /tɕ/, while the people from the plains had /ts/ 'in some words'. The fact that at least some younger speakers in New Chingsa show the merger and this village is located in the plains, does speak against a clear-cut plains versus hills isogloss in this sound change. Future research is needed to determine which villages have been affected by the change and whether it is a recent development that is currently still confined to the younger generations.

It may be the case that speakers who do not make a distinction in production are also no longer aware of the distinction between the two affricates in speakers that still pronounce them differently. An anecdote from one consultation session does suggest so. During a conversation with consultant CTT, she stated with conviction that her parents, who resided in the hills, did not have the sound [ts] in their speech. However, a phone call to her father quickly disproved that statement. When she asked him to

pronounce the word for ‘paddy’, he produced the word /tsʌm^{1}/ with a clear alveolar [ts]. The consultant did hear the difference with her own pronunciation of this word as [t̪sʌm^{1}] and was quite taken aback by her discovery. Similarly, she was convinced that her friends and relatives from Kuttom village did not pronounce [ts], which contrasts with my observation that residents of Kuttom did exhibit non-merged affricates.

Table 22 shows how the non-mergers have kept the distinction between /ts/ and /tɕ/ while the mergers only have /t̪s/. Examples are given in pairs: each first row represents a word with original /ts/ onset and the second represents a word which originally has a /tɕ/ onset. The pairs have one thing in common: the segment that follows. This is to show that the merger is not conditioned by the following vowel. The merging population has turned every /ts/ into /t̪s/, irrespective of phonological context. Some of the examples in the table are exact minimal pairs, most are near minimal pairs.

proto-form	non-merging	merging	English
*ts	/tsi^{3}ʝa^{3}/	/t̪si^{3}ʝa^{3}/	‘spirit’
*tɕ	/tɕi^{1}lɛ^{1}/	/t̪si^{1}lɛ^{1}/	‘type of lizard’
*ts	/tsɨk^{0}/	/t̪sɨk^{0}/	‘chicken food’
*tɕ	/tɕɨk^{0}/	/t̪sɨk^{0}/	‘pot’
*ts	/tsut^{0}/	/t̪sut^{0}/	‘clitoris’
*tɕ	/tɕuk^{0}/	/t̪suk^{0}/	‘request’
*ts	/tse^{3}/	/t̪se^{3}/	‘rain’
*tɕ	/-tɕe^{2}/	/-t̪se^{2}/	‘progressive’
*ts	/tsɛl^{1}/	/t̪sɛl^{1}/	‘split by tearing’
*tɕ	/tɕɛl^{1}/	/t̪sɛl^{1}/	‘slip and fall’
*ts	/tsɔŋ^{2}/	/t̪sɔŋ^{2}/	‘type of basket’
*tɕ	/tɕɔŋ^{3}/	/t̪sɔŋ^{3}/	‘meet’
*ts	/-tsʌl^{2}/	/-t̪sʌl^{2}/	‘straight (of hair)’
*tɕ	/tɕʌm^{2}/	/t̪sʌm^{2}/	‘what’
*ts	/tsaŋ^{1}/	/t̪saŋ^{1}/	‘sticky rubber juice’
*tɕ	/tɕaŋ^{3}/	/t̪saŋ^{3}/	‘giving birth’

Table 22 - Part of the population merges /ts/ and /tɕ/.

An example of potential generational difference is found in a wordlist recording by Morey (20100124-103507), where we find variations in affricate realization between an older speaker (MK) and a slightly younger male speaker (TT), as shown in Table 23.

speaker MK	speaker TT	English
/kʰun³tsaŋ²/	/kʰun³t̪saŋ²/	‘liver/heart’
/ɹʌŋ²-tse³/	/ɹʌŋ²-t̪se³/	‘rain’

Table 23 - Merging /ts/: examples from recording 20100124-103507.

In some speakers, the phonemes /s/ and /ʃ/ have merged into a sibilant of which the realization lies between the pronunciation of the phonemes /s/ and /ʃ/ in speakers that have not merged the two, phonetically transcribed as [s̪]. In a wordlist recording by Morey (20100124-103507), we find differences in sibilant realization between an older (MK) and a bit younger male speaker (TT), as shown in Table 24. It is plausible that speakers who merge the affricates, also merge the sibilants, as is the case with speaker TT, but we currently do not have enough data to confirm this.

speaker MK	speaker TT	English
/ʃɔm¹/	/s̪ɔm¹/	‘medicine, hospital’
/ʃiŋ²-ke²/	/s̪in²-ke²/	‘beans’

Table 24 - Merging /ʃ/: examples from recording 20100124-103507.

The younger consultant’s articulation of the sibilant is more fronted compared to the older speaker. It may be that there is a generational difference, where the younger generations are merging the sibilants while older speakers still keep the two apart, similar to what we suspect for the merger of /ts/ and /tɕ/. Indeed, this is exactly what has been suggested to me by several inhabitants of the Muklom village New Chingsa, who stated that ‘children’ will pronounce [s], where ‘adults’ pronounce [ʃ]. However, sometimes we may find the opposite for certain speakers and certain tokens. For example, in one recording (20100124-104250), the sibilant in a token of /sɨp⁰/ ‘ant’ uttered by an older speaker has a lower frequency range than the turbulence in the sibilant uttered by the younger speaker, i.e. the younger speaker pronounced the /s/ more to the front than the older speaker, while based on the remarks by consultants from New Chingsa we would expect the opposite. The same occurs with the initial of the words /sɨm¹/ ‘salt’ in another recording (20100124-103507).

3.4.4.2 Merger of final lateral and alveolar nasal

Some speakers have merged syllable-final /l/ with /n/. It seems that this merger has taken place somewhere in the cluster of Muklom villages near Changlang town, but this information about the

geographical distribution of the merger is preliminary. In speakers that merge the two phonemes, syllable-final /l/ has become /n/, though /l/ in onset position remains unaffected. Examples are: unmerged /kɛl^{2}/ 'goat' vs merged /kɛn^{2}/ 'goat', and unmerged /tɛl^{3}/ 'oil' vs merged /tɛn^{3}/. It has yet to be determined whether this merger has taken place only after certain vowels, for example only after /ɛ/, or that it took place in all codas regardless of the preceding vowel.

One of the consultants from Tinali (NGK), exhibits the results of this merger in his speech. This man moved to the Kharsang area from the Changlang Town area. I did notice that people who moved from mainly Makantong village near Changlang Town to Kuttom near Kharsang around thirty/forty years ago did not show this merger. We can conclude from this that either the merger has not taken place in Makantong, or it did take place, but only after the migration wave to the planes.

When we compare Tangsa varieties, we see that some cognate sets show a correspondence between /l/ and /n/ in coda position. Nine sets of these (potential) cognate sets are provided in Table 25. The Tangsa varieties roughly split into three groups with respect to these lexemes: 1) those which have final /l/, 2) those which have final /n/, and 3) those which have open syllables. Muklom falls between groups 1 and 2. The Muklom data presented in Table 25 is taken from the Kharsang Town area. Where final-/n/ alternate forms were reported by consultants, they have been added. Forms that diverge form the general pattern are shaded grey. Blank cells indicate that cognate forms are not present in the comparative wordlist from which these forms were sourced (S.D. Morey, unpublished).

group	**1. coda /l/**				**2. coda /n/**				**3. no coda**			
Language variety >	Joglei	Ngaimong	Muishaung	Muklom	Haq-chum	Rangsi	Shangthi	Cham-pang	Cham-chang	Shecyü	Laux-changx	Cholim
‘face’	/tʰɐl³pʰaŋ¹/			/tʰʌl²pʰaŋ³/								
‘goat’		/kel²kai²/		/kɛl²/~/kɛn²/					/tɕʰe² tɕʰi²/	/tɕʰe²tɕʰi²/		
‘fire’	/vɐl¹/	/vəl¹/	/βər¹/	/βʌl¹/	/βən/	/wən¹/	/vɤn¹/	/wən/	/βa¹/	/vaa¹/	/ve¹/	/βai¹/
‘flower’	/pul²poŋ³/	/pul²poŋ³/	/pul² pɯ³/	/pɨl²puŋ³/			/pʰɤn²pʰjy³/	/pənpo/			/py² pjaŋ³/	/pi²pjo³/
‘tree’[34]	/pul²tɕuŋ²/	/pul²tʰuŋ²/	/pul² juŋ²/	/pɔl²/		/pən²koʔ/	/pʰɤn²tɕʰuŋ²/	/pənkoʔ/	/pe¹tɕoŋ²/	/pe²tɕɔŋ²/	/py² cʰeŋ²/	/pi²tɕʰuŋ²/
‘good’	/axɐl²/	/həl²/	/əhəl²/	/xʌl²/		/hən²/	/ahan²/		/əhɛə²/	/hia²/	/əhei²/	/hai²/
‘green’	/apil¹/	/wil¹/	/əβɯl¹/	/pɨl¹/	/avin/	/awin¹soŋ²/	/nviŋ¹ʃo²/	/wən/	/əβai¹/	/avai¹/	/vəi²/	/βi¹/
‘new’	/aɲal²/	/əɲal²/	/əɲal²/	/nal²/	/aɲan/	/anan²/	/anen²/	/nan/	/əɲe²/	/aɲe²/	/ɲi²/	/anai²/
‘wash’		/hoəl¹/	/hol¹/	/xɔl²/	/hɔn/				/he¹/	/he¹/	/haɯ³/	/hai³/

Table 25 - Tangsa cognate sets with final /l/-/n/ correspondences.

[34] The lexemes ‘flower’ and ‘tree’ of course form a single cognate set. The first element of the compound words is identical, except in Muklom.

3.4.4.3 Deletion of velar nasal coda

Speakers from New Khimyong village drop the syllable-final velar nasal in certain words, as is illustrated by (93). Muklom speakers from other villages, at least some of them, notice this difference and can identify it as one of the features which differentiates the speech of New Khimyong residents from their own. It remains to be determined which types of words have been affected by this sound change, i.e. which phonological rule lies behind the change.

(93) e^{2} tʰi^{3} [**βa^{3}**] niŋ^{2} ʃa^{2} tʌ^{0}pʰʌl^{3} tɕu^{3} βʌŋ^{2} ta^{1} tʰɔ^{3} [...]

e^{2}tʰi^{3}**=βaŋ^{3}** niŋ^{2}=ʃi^{3}=a^{2} tʌ^{0}-pʰʌl^{3}-tɕu^{3}-βʌŋ^{1}-t-a^{1}=tʰi^{3}=ɔ^{3}

NPROX-DEF**=from** 3PL=DIST=ABS INTR=distribute-away-go.up-PST-3

'When they spread out form there […]' (20160106_01)

3.4.4.4 Substitution of /ɨ/ with /u/

In some words with /ɨ/, certain speakers pronounce a short high rounded vowel [u] instead. This has been observed, for example, in the words /hɨm^{2}/ 'house', /miŋ^{3}/ 'name', and /pɨk^{0}/ 'field'. An example of the latter is provided in (94), taken from two different speakers.

(94)	[**puk̄^{0}**]	←→	[**pɨk̄^{0}**]
	/pɨk^{0}/		/pɨk^{0}/
	'field' (20160115_01)		'field' (20100124-105300)

It is not clear yet which section of the speaker community shows this alternative pronunciation, and also not why some words are affected while others continue to be pronounced with the vowel /ɨ/. Speakers who pronounce certain words with [u] instead of [ɨ], or its frequent allophone [ɪ] (see section 3.4.5.2), have not fully merged the vowels /ɨ/ and short /u/. Evidence for this is found in the fact that these speakers will still pronounce certain other words with /ɨ/. The speaker that utters [puk̄^{0}] in (94), for example, in the same recording pronounces /lɨt^{0}/ 'grind' repeatedly as [lɪt̄^{0}], and never as [lut̄^{0}].

Sometimes we hear the same speaker alternate between [ɪ] and [u] in the same word, as is illustrated by example (95). Intra-speaker variation may be caused by hyper-correct self-repair. Indeed, this sample is taken from a recording in which an older and a bit younger speaker read out the same words, and the two words in (95) are both uttered by the younger speaker, who may have been influenced by hearing the older speaker say [mɨk^{0}] and [mɪk^{0}], but not [muk^{0}] for 'eye'.

(95)	[**muk̚⁰**]	←→	[**mɪk̚⁰**]
	/mɨk⁰/		/mɨk⁰/
	'eye'		'eye'
	(younger speaker, 20100124-102848)		(younger speaker, 20100124-102848)

Another example of a word containing /ɨ/ of which the realization differs considerably between speakers is found in (96).

(96)	[kɔm²**ɟɪm²**]	←→	[kɔm²**jum²**]
	/kɔm²ɟɨm²/		/kɔm²ɟɨm²/
	'mushroom'		'mushroom'
	(older speaker, 20100124-103507)		(younger speaker, 20100124-103507)

In the latter token, the syllable with [u] is rather short of duration, while the phoneme /u/ is usually not that short in non-stopped syllables. It has yet to be determined whether the allophone [u] of the phoneme /ɨ/ can generally be distinguished from the phoneme /u/ in non-stopped syllables based on duration.

3.4.5 Free allophonic variation

While most phonological alternations are either rule-based or stem from dialectal differences, some alternations are, or at least appear to be, free and not bound by any morphophonological rules or isoglosses. This section discusses instances of free variation that have been observed in consonants (section 3.4.5.1) and in vowels (section 3.4.5.2).

3.4.5.1 Consonants

Free allophonic variation has been observed in the following consonants: frequent and widespread variation in /β/, /ɟ/, /ɹ/, and occasional variation in /x/. The first, the bilabial voiced fricative /β/, shows free allophonic variation between a bilabial fricative [β], a labio-dental voiced fricative [v], and an approximant [ʋ]. Pronunciation seems to be speaker-dependent; each speaker tends to adhere to one realisation. The following table shows the pronunciation of the word /βʌl¹/ 'fire' by three different speakers.

pronunciation	speaker (recording)
[βʌl^{1}]	YN (20121103_01)
[vʌl^{1}]	MSK (20160115_01)
[ʋʌl^{1}]	TT (20100124-104250)

Table 26 - Three pronunciations of the word /βʌl^{1}/ 'fire'.

The second phoneme, the voiced palatal fricative /ʝ/, can be pronounced as a fricative [ʝ], a glide [j] or a pre-stopped [^{d}ʝ]. The latter is the result of a phenomenon that can affect all lingual fricatives and is discussed under insertion in section 3.4.3.3.1. The variation between [ʝ] [j] and [^{d}ʝ] is not governed by a phonological rule but depends on the speaker: some speakers more often pronounce [ʝ], while others tend pronounce an approximant [j], and yet others more often use [^{d}ʝ]. For example, speaker MSK in one word elicitation recording (20160115_01) pronounces every /ʝ/ as [^{d}ʝ] except for [ɹʌŋ^{2}-ja^{3}] 'evening', and similarly speaker SC in another word list recording (20151020_01) pronounces every /ʝ/ as [j] except for [^{d}ʝi^{1}] 'intestines'. The variable realization of the palatal voiced fricative or approximant phoneme may be an areal phenomenon. It occurs for example also in Assamese (Indo-Aryan) and in the Tai languages of Northeast India (Morey 2005:140). Careful versus casual speech does not seem to play a role. The following examples of three possible realizations of /ʝ/ in the same word, namely /ʝuŋ^{2}/ 'water', by three different speakers are taken from word list recordings.

(97) [ʝuŋ^{2}]
/ʝuŋ^{2}/
'water' (TT, 20100124-103507)

(98) [juŋ^{2}]
/ʝuŋ^{2}/
'water' (SC, 20151020_01)

(99) [^{d}ʝuŋ^{2}]
/ʝuŋ^{2}/
'water' (MSK, 20160115_01)

The rhotic /ɹ/ may be realized as a post-alveolar approximant [ɹ], a retroflex fricative [ʐ] or, less common, as a trill [r]. Variation is free within and between speakers. Examples (100) and (101) are from the same consultant and the same recording, showing intra-speaker variation between [ɹ] and [ʐ] respectively.

(100) [ɹʌŋ^{2}]
/ɹʌŋ^{2}/
‘sky’ (20100124-111527)

(101) [ʐʌŋ^{2}]
/ɹʌŋ^{2}/
‘sky’ (20100124-111527)

The following two examples show intra-speaker variation between [ɹ] and [r], again from one speaker and uttered during the same recording session. The aspiration on the final consonant [k] is a feature that sometimes appears in careful, slow speech.

(102) [tʰʌ^{0}-**ɹik^{h0}**]
/tʰʌ^{0}-ɹik^{0}/
‘wedding’ (20160115_01)

(103) [tʰʌ^{0}-**rik^{h0}**]
/tʰʌ^{0}-ɹik^{0}/
‘wedding’ (20160115_01)

The allophones of the voiceless velar fricative /x/ are in free variation, but different from the three phonemes /β/ /j/ and /ɹ/ discussed directly above, this phoneme has is a clear default pronunciation, [x], and the allophones [χ] and [^{k}x] or [^{k}χ] occur much less frequently. An example of uvularisation is provided below.

(104) [a̯^{0}-χa̯ʔ^{0}]
/ʌ^{0}-xaʔ^{0}/
‘right side’ (20100124-105300)

Like the other lingual fricatives (see section 3.4.3.3.1), /x/ is sometimes pronounced with a preceding homorganic stop [^{k}x], as is shown by the following example.

(105) [ᵏ**xaŋ³**-pɨk̚⁰]
/xaŋ³-pɨk⁰/
‘shifting cultivation field’ (20100124-105300)

These two variations, prestopped and uvular, can co-occur, as is shown by the following example.

(106) [ᵏχɑm²]
/xʌm²/
‘mat’ (20100124-105300)

Finally, there is one other example that may reflect free variation, although it is suspicious that it has so far been observed in one lexeme only. The word for ‘son in law’ is in one wordlist recording recorded with an initial [k] and in a later recording, with the same two speakers, as starting with [*x*], as is shown below. The latter version, with the fricative onset, seems to be more frequent in use and therefore this is analysed as the default form. If this does not represent a case of allophony, then the form with a plosive onset may be due to a misunderstanding that took place prior to the first elicitation session, possibly due to mixing up /ki¹/ ‘brother in law’ and /xi²-βa¹/ ‘son in law’.

(107) [**ki²**-βa¹] ←→ [**xi²**-βa¹]
/xi²-βa¹/ /xi²-βa¹/
‘son in law’ (20100124-100530) ‘son in law’ (20100124-103507).

3.4.5.2 Vowels

The vowel /ɨ/ can be realised as [ɨ], [u], and [ɪ]. There is some pattern behind the occurrence of the allophone [u] (see section 3.4.4.4), but there seems to be free variation between [ɨ] and [ɪ], and the latter two may be observed within the same speaker. For example, speaker NC uses both allophones in the word /tɨl²/ ‘(cooked) rice’, as shown below. Younger speakers seem to use the allophone [ɨ] less than older speakers.

(108) [**til²**] ←→ [**tɪl²**]
/tɨl²/ /tɨl²/
‘(cooked) rice’ (20121105_11) ‘(cooked) rice’ (20121105_11)

Another example, of a different word and from a different speaker, is provided in (109).

(109) [**mɨk⁰**] ←→ /**mɪk⁰**/

/mɨk⁰/ /mɨk⁰/

'eye' (20100124-102848) 'eye' (20100124-102848)

High vowel allophony has been reported for at least one related language, Phom (Bano 2017:49, 57-58).

3.4.6 Features of casual speech

Some alternative pronunciations of segments are not the result of phonological rules but rather are the result of reduction or lenition in casual speech. The following sections discuss the alternative realizations of phonemes that are strictly features of casual speech.

3.4.6.1 Vowel lenition: [a] → [ʌ]

The vowel /a/ in affixes and clitics may be weakened to [ʌ] in casual speech. For example, the vowel of the ergative marker /=a³/ that attaches to pronouns and proper nouns is often pronounced [=ʌ³]. We can rule out partial assimilation to a preceding vowel in this case, as raising from [a] to [ʌ] occurs not only following a high vowel /i/ but also following /ŋ/, as illustrated by (110) and (111).

(110) i² [**ʌ³**] tɨl² saʔ⁰ ti¹.

i²**=a³** tɨl² saʔ⁰-t-i¹

1EXCL**=ERG** rice eat-PST-1PL

'We ate rice.' (20121103_04)

(111) nʌŋ¹ [**ʌ³**] tɨl² saʔ⁰ tu¹.

nʌŋ¹**=a³** tɨl² saʔ⁰-t-u¹

2SG**=ERG** rice eat-PST-2SG

'You(sg) ate rice.' (20121103_04)

Another example of a clitic that can undergo vowel lenition, is the dative marker /=ma³/, as illustrated by (112).

(112) miʔ^{0} βa^{1} sa^{1} tʰɛ^{3} tɕʌm^{2} lʌŋ^{2} nʌŋ^{1} [**mʌ^{3}**] kɔʔ^{0} mɔ^{1} ʌŋ^{2} ta^{1}.

miʔ^{0}-βa^{1}-sa^{1}=tʰi^{3}=ɛ^{3}	tɕʌm^{2}-lʌŋ^{2}	nʌŋ^{1}**=ma^{3}**	kɔʔ^{0}-m-ɔ^{1}	ʌŋ^{2}-t-a^{1}
person-M-DIM=DEF=ERG	what	2SG=**DAT**	give-NEG-3	AUX-PST-3

'What did the child not give to you?' (20121103_04)

3.4.6.2 Frication

In casual speech, aspirated plosives may be pronounced as fricatives.[35] For example, the voiceless aspirated bilabial plosive /pʰ/ may be pronounced like a voiceless fricative [ɸ]. However, perhaps in New Longkey and also New Chingsa /pʰ/ is even in careful speech (sometimes) pronounced as [ɸ]. I have observed the following two things: 1) even in careful speech, consultant MKK from New Chingsa sometimes pronounces [ɸ] (however, he may have been chewing tobacco which could have caused this pronunciation), 2) when singing Chamchang songs, the Kuttom Baptists pronounce written <ph> as [pʰ], but the New Lonkey Baptists sing [ɸ]. An example of /pʰ/ pronounced as [ɸ] is provided in (113).

(113) βaʔ^{0} [**ɸɔk^{0}**]

βaʔ^{0}-**pʰɔk^{0}**

bamboo-**explode**

'augury with bamboo' (20160106_05)

The alveolar aspirated plosive /tʰ/ can also be pronounced as a voiceless fricative [θ] in casual, less careful speech. This is illustrated by example (114), in which /e^{2}tʰɔ^{3}/ 'and' is pronounced as [ʔe^{2}θɔ^{3}].

(114) [**ʔe^{2} θɔ^{3}**] tɕʌm^{2} ma^{3} ta^{3}kɔ^{3}ɛʔ^{0} nɔ^{2} ti^{2} sa^{1} ni^{3} hɨm^{2} tʰi^{3} nʌŋ^{3} tʰu^{3} ɛʔ^{0}…

e^{2}tʰɔ^{3}	tɕʌm^{2}=ma^{3}=ta^{3}kɔ^{3}ɛʔ^{0}	nɔ^{2}-ti^{2}-sa^{1}-ni^{3}	hɨm^{2}=tʰi^{3}=nʌŋ^{3}	tʰu^{3}	ɛʔ^{0}
and	that=DAT=because	orphan-DIM-two	house=DEF=to	arrive	do

'And because of that, he came to the house of two orphans […]' (20160106_01)

In addition to frication, intervocalic voicing may occur, resulting in the pronunciation [ð], as is illustrated by the following example, which contains the same word /e^{2}tʰɔ^{3}/ 'and'.

[35] This is also the case in Assamese, an Indo-Aryan language spoken as a second language by the majority of Muklom speakers.

(115) [**ʔe^{2} ðɔ^{3}**] e^{2} na^{3} sal^{2} ʃɛ^{1} t^{h}ɔ^{3} t^{h}ə u^{3} nu^{1} t^{h}ɛ^{3}…

e^{2}t^{h}ɔ^{3}	e^{2}-na^{3}	sal^{2}-ʃɛ^{1}=t^{h}i^{3}=ɔ^{3}	t^{h}ə	u^{3}-nu^{1}=t^{h}i^{3}=ɛ^{3}
and	NPROX-in	day-one=at	HESIT	3SG.POSS-mother=DEF=ERG

‘And there, one day, his mother […].’ (20160106_02)

3.4.6.3 Approximation

Plosives may be realized as approximants in casual speech. For example, the voiced bilabial plosive /b/ is generally realized as [b], but in fast speech may be reduced to a voiced approximant [β̞]. There is no phonological rule that predicts this alternative pronunciation. Example (116) illustrates how the topic marker /=ba^{3}/ (see section 8.3.1) may be pronounced as [=β̞a^{3}].

(116) e^{2}t^{h}ɔ^{3} [**β̞a^{3}**] tɕʌm^{1} mʌl^{2} ɛʔ^{0} kʌp^{0} βʌŋ^{3} k^{h}i^{3} ta^{1}.

e^{2}t^{h}ɔ^{3}**=ba^{3}**	tɕʌm^{1}=mʌl^{2}	ɛʔ^{0}	kʌp^{0}	βʌŋ^{3}	k^{h}i^{3}-t-a^{1}
and**=TOP**	what=like	do	succeed	go.up	see-PST-3

‘Then they came and saw it like that.’ (20151208_04)

3.4.6.4 Tapping

The phoneme /t/ has an allophone [d] which occurs in syllable-final, intervocalic position (see section 3.4.1.1). An example of this is provided in (117), where the verb stem /bat^{0}/ ‘say’ is pronounced with a voiced plosive coda, [bad^{0}]. The phoneme /t/ may undergo further change in fast speech by lenition towards a tap, [ɾ]. Example (118) shows the same word /bat^{0}/ ‘say’, but this time the final voiceless plosive turns into a tap.

(117) e^{2} ʃi̖^{3} βaŋ^{3} ʌŋ^{3} ta^{1} t^{h}a^{2} [**bad^{0}**] a^{3}.

e^{2}-ʃi̖^{3}=βaŋ^{3}	ʌŋ^{2}-t-a^{1}=t^{h}i^{3}=a^{2}	**bat^{0}**-a^{3}
NPROX-DIST=from	COP-PST-3=DEF=ABS	**say**-3

‘They say that it was from there.’ (20151208_05)

(118) i³ ɹa² haʔ⁰ sɔŋ³ tʌŋ² puɹa kʰɔtɔm tat⁰ tɨk⁰

i³-ɹi³=a²	haʔ⁰-sɔŋ³=tʌŋ²	puɹa	kʰɔtɔm	tat⁰	tɨk⁰
PROX-PROX=ABS	village=whole	all	finish[36]	try	die

tʌ⁰pʌt⁰ tɕʌk⁰ ta¹ ta³ [**baɹ⁰**] a³.

tʌ⁰-pʌt⁰-tɕʌk⁰-t-a¹=tʰi³=a² **bat⁰**-a³

CAUS-throw-PFV-PST-3=DEF=ABS **say**-3

'They say that he tried to kill the whole village by throwing [hail stones].' (20151208_05)

3.4.7 Features of extremely careful speech

In careful speech we may find pronunciations that do not follow the phonological rules for allophony. For example, we expect final plosives to be unreleased before a pause. However, in extremely careful speech or when a word is emphasized, final plosives can be released or even aspirated. Example (119) illustrates final aspiration of /k/ in extremely careful speech.

(119) [kakʰ⁰]

/kak⁰/

'peel' (20160115_01)

3.5 Suprasegmental phonological variation

Tone changes may take place under the process of compounding. This phenomenon has been observed in certain lexical compounds (see Mulder 2018b:117), but also in certain combinations of relator nouns and postpositions (see section 5.1.7). These tone changes seem to affect only a subset of all compounds, as most compounds seem to retain their original tones. In affected compounds, tone 1 or 2 on the first syllable changes into tone 3, which has a level contour and lies in the middle to low pitch range. Three examples of lexical compounds are provided under (120)-(122), each containing /kʰɔ²/ 'head' as the first element.

(120)

/kʰɔ²/	+	/ɹun²/	→	/kʰɔ³-ɹun²/
'head'		'hair'		'head hair'

[36] The words /puɹa/ 'all' and /kʰɔtɔm/ 'finish' are loans from Assamese. Tones have not been determined yet for these words.

(121) /kʰɔ²/ + /tsɨp⁰/ → /kʰɔ³-tsɨp⁰/
'head hair'[37] 'scales' 'dandruff'

(122) /kʰɔ²/ + /ʃɨt⁰/ → /kʰɔ³-ʃɨt⁰/
'head hair' 'brush' 'hairbrush'

Most of the time, however, the first element of a compound seems to retain its original tone, as exemplified in (123). Even /kʰɔ²/ 'head' may keep its tone, as illustrated by (124).

(123) /βɔ¹/ + /ɹaŋ²/ → /βɔ¹-ɹaŋ²/
'bird' 'hornbill (bird)'

(124) /kʰɔ²/ + /tɕip⁰/ → /kʰɔ²-tɕip⁰/
'hair' 'clip' 'hair clip'

Examples of relator nouns that change tone are /ɟi²/ 'back' and /ɟa¹/ 'leg', as shown in (125) and (126). Again, not all relator nouns have undergone change. For example, /ɟʌm²/ 'company' and /mɔŋ²/ 'inside' seem to have retained their tone, as shown in (127) and (128).

(125) /ɟi²/ + /=na³/ → /**ɟi³**=na³/
'back' 'in' 'after'

(126) /ɟa¹/ + /kʰɔ²/ + /=na³/ → /**ɟa³**-kʰɔ=na³/
'back' 'in' 'in' 'in front of'[38]

(127) /ɟʌm²/ + /=na³/ → /**ɟʌm²**=na³/
'company' 'in' 'with (comitative)'

(128) /mɔŋ²/ + /=βaŋ³/ → /**mɔŋ²**=βaŋ³/
'inside' 'from' 'from inside'

[37] To refer to hair on the head, one can use the compound /kʰɔ³-ɹun²/ 'head hair' or simply use the word /kʰɔ²/ 'head' as a metonym meaning 'head hair'.
[38] It could not be determined yet which tone the syllable /kʰɔ/ carries in the collocation /kʰɔ=na³/.

It is not fully clear yet what makes that one compound is affected by tone change and the other is not. From the available data, we cannot deduce a semantic or phonological motivation. The words /kʰɔ²-tɕɨp⁰/ 'hair clip' and /kʰɔ³-ʃɨt⁰/ 'hairbrush' fall within the same semantic domain, as they are both items that are used on the hair, yet the former is not affected by tone change and the second is. Similarly, the phonological structure of the words /kʰɔ²-tɕɨp⁰/ 'hair clip' and /kʰɔ³-tsɨp⁰/ is nearly identical, yet the former is not affected by tone change and the second is. The answer could be of diachronic nature. For example, it may be possible that a tone Sandhi rule changed first elements with tone 1 or 2 into tone 3 and that this rule stopped being productive at a certain point in time. Compounds like /kʰɔ³-tsɨp⁰/ 'dandruff' would then have formed before or while the rule was active and compounds like /βɔ¹-ɹaŋ²/ 'hornbill' would have been formed after the rule had stopped being active.

3.6 Mimetic elements

Muklom is rich in sound symbolic expressions. Mimetics of the calls of animals, human sounds, sounds of nature, sounds associated with hitting, falling or breaking, and other environmental sounds, and motion (see Williams 2013a) are in Muklom often encoded by a reduplicated onomatopoeic syllable, or by onomatopoeic quadrisyllabic elaborate expressions with semi-reduplication (see also section 4.3.3). One example of a simple reduplicated onomatopoeic syllable is provided in (129). The reduplicated element /tɕɔk⁰/ imitates the sound of wet clothes being picked up and dropped, rinsed and scrubbed thoroughly, and stands in a slot where we would normally find an uninflected verb, the position directly preceding the auxiliary /ɛʔ⁰/ 'do', so it seems like /tɕɔk⁰-tɕɔk⁰/ is functioning as a (nominalized) verb here and together with the auxiliary forms an adverbial phrase.

(129) kʰʌt⁰ ni³ tɕɔk⁰ tɕɔk⁰ ɛʔ⁰ xɔt⁰ u³!

kʰʌt⁰=ni³	**tɕɔk⁰-tɕɔk⁰**	ɛʔ⁰	xɔt⁰-u³
cloth=MED	**ONOM-ONOM**	do	wash.clothes-2SG

'Wash the clothes thoroughly!' (B1.18)

Expressions that imitate sounds caused by natural phenomena are also found, for example the form /hu¹/ which mimics the sound of the wind, as illustrated by (130).

(130) hu^{1} hu^{1} pɔŋ^{3} ta^{1}.

hu^{1}-hu^{1} pɔŋ^{3}-t-a^{1}

ONOM-ONOM wind.blow-PST-3

'The wind howled.' (S2.27)

The following examples show the imitation of a hitting sound. In (131) and (132), there is the sound of a thin, long object slicing the air and making contact with the unfortunate object of the action, while in (133) the instrument of hitting is a more compact, blunt shape, for example a fist or a flat hand.

(131) sɨp^{0} sɨp^{0} βat^{0} ta^{1}.

sɨp^{0}-sɨp^{0} βat^{0}-t-a^{1}

ONOM-ONOM hit-PST-3

'Het hit him with a whipping motion.' (S2.27)

(132) hɨp^{0} hɨp^{0} βat^{0} ta^{1}.

hɨp^{0}-hɨp^{0} βat^{0}-t-a^{1}

ONOM-ONOM hit-PST-3

'Het hit him with a whipping motion.' (S2.27)

(133) bɛŋ^{1} bɛŋ^{1} βat^{0} p^{h}ʌ^{0}nʌŋ^{3}.

bɛŋ^{1}-bɛŋ^{1} βat^{0}-p^{h}ʌ^{0}-n-ʌŋ^{3}

ONOM-ONOM hit-INV-FUT-1SG

'I will punch you.' (S2.27)

The imitation of a kicking motion is illustrated by (134).

(134) tɕʌk^{0} tɕʌk^{0} nʌk^{0} p^{h}ʌ^{0}nʌŋ^{3}.

tɕʌk^{0}-tɕʌk^{0} nʌk^{0}-p^{h}ʌ^{0}-n-ʌŋ^{3}

ONOM-ONOM kick-INV-FUT-1SG

'I will kick you.' (S2.27)

Remaining within a violent setting, the following example shows the imitation of the sound of a person being strangled. The verb /k^{h}uk^{0}/ in general can refer to the production of a wide variety of sounds, such as the snoring of humans, the howling of dogs, and the cackling of hens.

(135) kɛk^{0} kɛk^{0} k^{h}uk^{0} a^{3}.

kɛk^{3}-kɛk^{3} k^{h}uk^{0}-a^{3}

ONOM-ONOM make.sound-3

'He makes a choking sound.' (S2.27)

Mimetic quadrisyllabic expressions follow the rhyming pattern ABAB$_{1}$, where B$_{1}$ stands for a syllable which is near-identical to the preceding B syllable, differing only in the nucleus. This type of semi-reduplication is illustrated by the following three examples, which each express the noisiness of someone performing a task in a rough manner, such as doing the dishes, or the noise a person makes while moving in a rough manner.

(136) kʌ^{0}ɹiŋ^{1} kʌ^{0}ɹuŋ^{1}

kʌ^{0}ɹiŋ^{1}-kʌ^{0}ɹuŋ^{1}

ONOM-ONOM

'making noise' (S2.12)

(137) kʌ^{0}dʌŋ kʌ^{0}dɔŋ

kʌ^{0}dʌŋ-kʌ^{0}dɔŋ

ONOM-ONOM

'making noise' (S2.46)

(138) ɹʌŋ^{2} lip^{0} a^{3} kʌ^{0}ʃiŋ kʌ^{0}ʃɔŋ.

ɹʌŋ^{2} lip^{0}-a^{3} **kʌ^{0}ʃiŋ-kʌ^{0}ʃɔŋ**

sky lightning-3 **ONOM-ONOM**

'There is lightning, bang, bang!' (S2.52)

All discussed mimetic expressions either have a stop coda or carry tone one, as far as tones are known. Perhaps this reflects a general restriction with respect to the tones that may occur on mimetic elements.

3.7 Exclamatives with irregular phonological structure

The segments in mimetic two-syllable and quadrisyllabic expressions are part of the regular phoneme inventory and follow the phonotactic rules of Muklom. However, when we turn to exclamatives (see section 4.1.2.5), we find many forms with irregular phonological structure. They may violate syllable structure rules or contain a sound that is not part of the phoneme inventory.

An example of an exclamative which contains a sound that falls outside the regular phoneme inventory is /tɕys/. This exclamative is used to chase away animals like goats or cows. The vowel /y/ is not part of the Muklom phoneme inventory (see section 3.1.1.2). This form also has a /s/ in coda-position,[39] while regular words cannot have a sibilant in coda position (see section 3.3.1.3): a violation of syllable structure rules.

An overview of exclamatives that violate syllable structure rules is provided in Table 27. For all, except the forms which are used to call a person, no tone could be determined. Perhaps they do not carry tone at all. These exclamatives violate a total of four rules. First, Muklom does not permit clusters in onset or coda position (see section 3.3.1.2), yet /sβa/ contains a cluster in onset position. Second, Muklom does not allow more than one vowel per syllable, yet among exclamatives we encounter the diphthongs /aɔ/, /ʌi/, /ei/, /ɔi/, and /ai/. Third, open, tone-bearing syllables cannot contain the vowel /ɨ/ except minor syllables of sesquisyllables (see section 3.3.1.6), yet /tsɨ/ is not a minor syllable but does contain /ɨ/. Fourth, /s/ and /h/ are not permitted codas, yet they occur in /tɕys/, as already mentioned, and in the first syllable of /ahβe(i)/.

violated rule	**exclamative**	**use**
no clusters	/sβa/	exhalation when gathering strength to fight
no diphthongs	/ʃaɔ/	express negative surprise
	/βaɔ/	express negative surprise[40]
	/ʌi/	express disapproval
	/akβe(i)/	express surprise
	/ahβe(i)/	express surprise
	/ɔi²/	call a person
	/ai²/	call a person
no /ɨ/ in open syllables with tone	/tsɨ/	chase away animals (dogs)
permitted codas: $C_{[+plos, -voice, -asp]}$ $C_{[+nasal]}$ $C_{[+lat]}$	/tɕys/	chase away animals
	/ahβe(i)/	express surprise

Table 27 - Exclamatives which violate syllable structure rules.

[39] However, the sound /s/ does occur in coda position in some loanwords, either word final or word medial. Examples are: /baptis/ 'baptise' (<English), /biskʉt/ 'biscuit' (<English), and /bosti/ 'village' (<Assamese).
[40] The exclamation of positive surprise /βaɔ/ is likely to be a loan from English, <wow>.

Some exclamatives contain or consist of a syllable with the structure VC: exclamations of surprise /akβe(i)/ and /ahβe(i)/ which are listed in the above table, but also the form /aŋ/ which is used to call cows. This structure is not a violation of any phonotactic rule, but it is an extremely rare syllable type (see section 3.3.1.1) which occurs only in a few grammatical markers and exclamatives.

For two forms in Table 27, tones could be determined: /ɔi^{2}/ and /ai^{2}/. These forms are used to call a person and behave like vocative markers in that they are placed directly after the addressing term, such as a kinship term or a name. Perhaps tones can be determined on vocative(-like) markers but not on the other exclamatives because the former function as grammatical markers and grammatical elements tend to carry tone. The language appears to have three vocative markers in total. In addition to the above mentioned two, there is the form /=ɔ^{2}e^{3}/. Contrary to the first two, this last vocative marker consists of two syllables which each carries its own tone. An example of /=ɔ^{2}e^{3}/ is provided in 120. The title /βi^{1}-ku^{2}/ 'old lady' is used with respect here.

(139) βi^{1} ku^{2} ɔ^{2} e^{3}.
βi^{1}-ku^{2}**=ɔ^{2}e^{3}**
grandmother-F.GB**=VOC**
'Oh, old lady!' (20160107_04)

4 Words

This chapter deals with the word unit. In section 4.1, words are categorised into different major and minor word classes. The major word classes consist of large numbers of lexemes and allow new lexemes to be added through different processes. Section 4.2 discusses the process of derivation and section 4.3 discusses compounding. Finally, section 4.4 addresses the topic of word boundaries.

4.1 Word classes

This section provides an overview of Muklom word classes. The term word class is used in a broad sense here, including not only lexical word classes but also grammatical word classes (see Rijkhoff 2007:710). The lexical word classes, or parts of speech, are defined in section 4.1.1. In Muklom, there are three major word classes: nouns, verbs, and adjectives. Section 4.1.2 explores the minor word classes. To avoid overlap with chapter 5 on the noun complex and chapter 6 on the verb complex, the focus of this section lies on the identification of word classes and the amount of examples is kept to a minimum. The reader is encouraged to use the cross-references to find further discussion and examples in context of each element.

4.1.1 Major word classes

Muklom has three open or major word classes: nouns, verbs, and adjectives. The majority of noun, verb and adjective roots is monosyllabic. Multisyllabic nouns and adjectives tend to be compounds. There is no major word class consisting of adverbs. If adverbs form a word class in this language, and it has yet to be determined whether there is a group of words that can be subsumed under this umbrella term or not, their number will be low, so they will constitute a minor and not a major word class. Each word class will be defined based on a combination of pragmatic, semantic, and syntactic function, and distributional (morphological and syntactic) criteria. It is important to consider a cluster of characteristics rather than focus on a single property, since word class properties will show some degree of overlap (see Schachter and Shopen 2007:4). Following modern practice (see Evans 2000:708), distributional criteria will be assigned the greatest weight. Nouns are discussed in section 4.1.1.1, followed by verbs in section 4.1.1.2, and adjectives in 4.1.1.3.

Three other topics relating to the major word classes will be discussed here. The first topic concerns word class fluidity. A prominent feature of Muklom roots in the major word classes is that a considerable portion of them appears in two word classes, adjective and verb, without requiring

derivational morphology. Section 4.1.1.4 argues that despite this porosity of the boundary between adjectives and verbs, adjectives must be considered a word class of their own right. The second topic is the numerals. Though numerals form one semantic category, their morphosyntactic characteristics place them in two separate word classes in Muklom. This is explained and exemplified in section 4.1.1.5. The last topic, existentials, is discussed in section 4.1.1.6.

4.1.1.1 Nouns

The typical or unmarked pragmatic function of nouns is reference to an entity (see Croft 2000:88). Nouns can function as the head of an NP (see Hengeveld 1992:35), but this is not their only function: they can alternatively function as nominal predicate or as modifying noun. Following the traditional semantic definition, most names of persons, places, and things fall under this word class (see Schachter and Shopen 2007:5). The category nouns can also be defined in morphosyntactic terms by describing the set of grammatical but also lexical elements that can modify nouns. The elements that form part of the noun complex are discussed and exemplified in chapter 5. To avoid overlap with the chapter on noun classes, the discussion of the morphosyntax of nouns will be limited to listing elements that may accompany the noun and the reader is encouraged to use the cross-references to find further details and examples of each element. The grammatical elements that have been observed to modify nouns or NPs are: possessive determiners (see section 5.1.3.1), the definite and demonstrative determiners (see section 5.1.3.2), classifier determiners (see section 5.1.3.3), quantifying determiners, including an optional plural marker (see section 5.1.3.4), interrogative determiners (see section 5.1.3.5), postpositions, including case markers (see section 5.1.7).The lexical elements that have been observed to modify nouns are: adjectives (see section 5.1.4) and modifier or possessive nouns (see section 5.1.2). Finally, nouns can also be modified by the set of elements which semantically fall under the category of numerals but morphologically behave like adjectives or (modifying) nouns (see section 4.1.1.5 and section 5.1.5). The order of elements in noun complexes is discussed in section 5.2.

Noun stems can be underived or derived, simplex or compound. The allowed compositions of noun stems are: 1) one root morpheme, 2) a sequence of root morphemes, 3) one derivational prefix plus one root morpheme, 4) and a root morpheme plus one or more derivational suffixes. Noun stems cannot contain more than one prefix and noun stems with a prefix cannot contain more than one root morpheme. With respect to the restrictions on derivational prefixes, Muklom somewhat resembles the structure of Galo (see Post 2009:941).

The word class comprises three types of nouns: common nouns, proper nouns, and pronouns. Using a negative definition, we can state that common nouns are all nouns that are neither proper nouns nor pronouns. In Muklom, common nouns can further be distinguished from proper nouns and pronouns

based on a morphological feature. All A-arguments must be marked by the ergative clitic, which shows allomorphy between the forms /=a³/~/=ɛ³/ (see section 5.1.7.1.1). Common nouns always take allomorph /=ɛ³/, irrespective of the presence or absence of definite or demonstrative determiners. Proper nouns and pronouns, on the other hand, take /=ɛ³/ when a definite or demonstrative determiner is present, but its allomorph /=a³/ when such a determiner is absent.

Pronouns form a minor word class within the major word class of nouns (see also section 5.1.1). They are similar to other types of nouns in that they can function as the head of an NP, but they are different in that they form a closed subclass while the superclass 'nouns' is an open word class, plus they may take only a subset of the noun modifiers that were listed above. Pronouns will be discussed as a minor word class in section 4.1.2.1.

4.1.1.2 Verbs

The typical or unmarked pragmatic function of verbs is predication of an action (see Croft 2000:88) and semantically we can say that the word class of verbs is the word class in which most of the words that express actions, events and processes occur (see Schachter and Shopen 2007:9). Verbs exclusively function as the head of a clause (see Hengeveld 1992:35); they do not fulfil other syntactic functions. The grammatical categories for which verbs may be specified include person (see section 6.1.2), polarity (see section 6.1.4 and section 6.1.5), directionality (see section 6.1.2.2.2 and section 6.1.3), tense-aspect-mood (TAM) (see section 6.1.6), and valency (see section 6.1.7). The order of elements in the verb complex is discussed in section 6.2. Another feature which sets verbs apart from the other word classes is the use of the derivational prefix /u⁰-/, which derives nouns from verbs (see section 4.2.2). This section will make some notes on two characteristics of verbs that cannot always be used with all verb roots but exhibit some restrictions: verb inflection and the nominalizing prefix. For further discussion of the elements of the verb complex, the reader is encouraged to follow the cross-references provided above.

Muklom has two grammaticalised verbs (see Bybee 2000:806) that function as an auxiliary or copula: /ʌŋ²/ and /ti³/~/tɨk⁰/. They can be considered a very small subclass within the word class of verbs: they take the same verbal markers as lexical verbs but cannot take the nominalising prefix /u⁰-/ or the valency-changing derivational prefix /tʌ⁰-/~/tʰʌ⁰-/, while most lexical verbs can. The first verb, /ʌŋ²/, generally expresses a state and the second, /ti³/~/tɨk⁰/, a change of state. The use of auxiliaries and copulas is discussed and exemplified in section 6.1.1.2.

Regular verbs can co-occur freely with all tense and person indices, but there is a subset of defective verbs that is limited in its combinations with person and tense markers. There is a connection between defective verbs and the word class of adjectives: words which occur as defective verbs are found to

function as adjectives as well (see also section 4.1.1.4 on adjectives and word class porosity). In fact, they comfortably function as adjectives but can, with restrictions, be used as verbs. An example is the root /baŋ^{2}/ ‘diluted, tasteless’, which functions without any issues as an adjective in expressions like /pʰʌ^{0}lʌp^{0}=baŋ^{2}/ ‘diluted tea’, but from all indices appears to take only the third person index when functioning as a verb, for example in (140). Consultant CTT indicates that the modifier /naʔ^{0}ɹi^{2}/ ‘very’ cannot be left out in this case, as this would result in an utterance that sounds incorrect. This shows that verbal use is possible with this root, but only in a felicitous context.

(140) naʔ^{0}ɹi^{2} baŋ^{2} ta^{1}.
naʔ^{0}ɹi^{2} baŋ^{2}-t-a^{1}
very be.tasteless-PST-3
‘It was very tasteless.’ (CTT.lexicon)

In discussions with consultants about the lexicon, I tried to find out for each adjectival root whether it could also function as a verbal root. Sometimes consultants indicated they could function as regular or defective verbs, and sometimes consultants said they could not function as verbs at all. In the latter case, I would ask again but then adding /naʔ^{0}ɹi^{2}/ ‘very’ and a past tense marker /-t/, i.e. I would ask whether /naʔ^{0}ɹi^{2} {root}-t-a^{1}/ was an acceptable expression (‘it was very {root}’). The response was sometimes positive, which seems to indicate that past tense and the presence of the quantifying element /naʔ^{0}ɹi^{2}/ ‘very’ represent a more receptive environment for ‘adjectival’ roots.

The derivational prefix /u^{0}-/ can be used to derive a noun from a verb. Not all verb stems are suitable for derivation by /u^{0}-/: only monomorphemic verb stems can be. Multimorphemic verb stems can be used as nouns through zero-derivation. Defective monomorphemic verbs can sometimes be turned into nouns with /u^{0}-/ and sometimes cannot. For example, the root /baŋ^{2}/ ‘diluted, tasteless’ which has been shown to function as a verb in (140), appears as a deverbal noun in (141). An example of a defective verb that cannot take the derivational prefix /u^{0}-/ is the root /tsɨŋ^{2}/ ‘immovable’. This root can receive person indices like a verb when combined with the modifier /naʔ^{0}ɹi^{2}/ ‘very’ but does not take the nominalizer /u^{0}-/ according to consultant CTT.

(141) u^{0}baŋ^{2} ʌŋ^{2} na^{3}.
u^{0}-baŋ^{2} ʌŋ^{2}-n-a^{3}
NMLZ-tasteless COP-FUT-3
‘It will be tasteless.’ (CTT.lexicon)

Conversely, not all nouns that contain the nominalizing prefix /u⁰-/ have a root that (still) functions as a verb. The root /kɔm¹/ 'round' is an example of this: it takes the prefix to form /u⁰-kɔm¹/, but does not appear with person marking, and consultant CTT says inflection on this root sounds weird. In summary, the nominaliser /u⁰-/ attaches to monomorphemic verb roots and some defective verb roots, but not all roots it attaches to have a functioning verb root.

4.1.1.3 Adjectives

The morphological status of adjectives differs from that of the other major word classes. While nouns and verbs are unbound, adjectives are bound roots. Adjectival roots cannot occur in isolation; they either attach to the noun they modify or combine with the nominalising prefix /ʌ⁰-/. An example of an adjective bound to a noun is provided in (142) and an example of a nominalised adjective is provided in (143). These two configurations in which adjectival roots may occur are discussed in more detail further on in the current section and in section 5.1.4.

(142) nʌŋ¹ ɹa² miʔ⁰ xʌl².
nʌŋ¹=ɹi³=a² **miʔ⁰-xʌl²**
2SG=PROX=ABS **person-good**
'You are a good person.' (S1.34)

(143) ba³ na¹ ʌ⁰xʌl² bɛ³?
ba³-na¹ **ʌ⁰-xʌl²**=bɛ³
2SG.POSS-sister **NMLZ-good**=Q.AFF
'Is your sister okay?' (B1.26)

The typical or unmarked function of adjectives is modification by a property (Croft 2000:88) and the traditional semantic definition of adjectives describes them as a group of words which denote qualities, attributes, or states of entities (Schachter and Shopen 2007:13; Evans 2000:714). Cross-linguistically, adjectives have been observed to cover a range of semantic domains. Not all languages have the word class adjectives and those that do, differ as to the semantic domains that are covered by the word class. According to Dixon (2010:73), the most basic and common semantic types are dimension, age, value, and colour. All four semantic types are covered by adjectives in Muklom. Languages with a larger number of adjectives in addition tend to include physical properties, human propensity, and speed. Adjectives form a large word class in Muklom, and it is therefore not surprising to find that these three semantic types are covered by adjectives in the language as well, though it should be noted that human

propensities are sometimes expressed by a combination of noun and verb instead. This type of expressions are known as psycho-collocations (see Matisoff 1986). The six least common semantic domains according to Dixon (2010:73-74) are difficulty, similarity, qualification, quantification, position, cardinal numbers. Muklom adjectives seem to cover all domains except qualification, which would include meanings such as ‘definite’, ‘true’, ‘probable’, and ‘normal’ (Dixon 2010:74). The domain of quantification is largely covered by quantifying pronouns and determiners (see section 5.1.1.7 and section 5.1.3.4) but a small slice of the domain is occupied by adjectives. Examples of adjectives that express quantifying meaning are: /-ɹɛl^{3}/ ‘few, little’, /-nɛ^{2}/ ‘few, little’, /-hʌn^{1}/ ‘many’. Muklom numerals can act either as adjectives or as nouns. Of the cardinal numbers, only the first three have distinct adjectival forms. From four and above the numerals show no difference in form depending on adjectival or nominal use (see section 4.1.1.5).

Syntactically, adjectives can function as a modifier of the head of an NP (see Hengeveld 1992:35). In Muklom, they cannot function as the head of a clause, i.e. as a predicate adjective. However, most if not all roots that function as an adjective can be turned into a noun using the nominalizing prefix /ʌ^{0}-/. This prefix is different from the de-verbal nominalizing prefix /u^{0}-/. Nouns, including de-adjectival nouns, do have the capacity to function as nominal predicates. One example is provided in (144). The de-adjectival noun /ʌ^{0}-puŋ^{2}/, literally ‘a white one’, functions as a predicate. Syntactically, nominal clauses with a de-adjectival predicate like (144) and nominal clauses with a nominal predicate that does not derive from an adjective are the same in structure, as is illustrated by (145), which shows a (derived) noun functioning as nominal predicate, /nɛdɛɹlɛn-te^{2}-nu^{1}/ ‘a Dutch woman’. Nominal clauses are further discussed in section 7.1.2. Similarly, some of the roots that can be used as adjectives also can be employed as (defective) verbs (see sections 4.1.1.2 and 4.1.1.4). They then function as verbal predicates which can take (certain) person indices, negation, or TAM markers.

(144) e^{2} ʃi^{3} mɛŋ^{2} ʃa^{2} ʌ^{0}puŋ^{2}.

e^{2}-ʃi^{3}	mɛŋ^{2}=ʃi^{3}=a^{2}	**ʌ^{0}-puŋ^{2}**
NPROX-DIST	cat=DIST=ABS	**NMLZ-white**

‘That cat is white.’ (B1.73)

(145) mika na^{2} nɛdɛɹlɛn te^{2} nu^{1} bɔ^{3}.

mika=ni^{3}=a^{2}	**nɛdɛɹlɛn-te^{2}-nu^{1}**=bɔ^{3}
Mika=MED=ABS	**Netherlands-PERS-F**=indeed

‘Mika is indeed Dutch.’ (B1.58)

Another derivational prefix that derives nouns from adjectives is the superlative prefix /dʌk⁰-/. An example is provided in (146). We can tell that the word /-lɔ¹/~/-lɔːt⁰/ functions as a noun here based on two cues: 1) /dʌk⁰-lɔt⁰/ 'very far' is modified by a postposition and the syntactic function of postpositions is to modify NPs, 2) the allomorph /lɔːt⁰/ is a so-called nominal root (see section 6.1.1.4 on root allomorphy). An alternative analysis would be that /-lɔːt⁰/ is functioning here as an attributive adjective that modifies /dʌk⁰-/, which according to this line of reasoning would then be a noun. However, this analysis needs to be rejected: the adjectival root of this lexeme takes the shape of /-lɔ¹/ and not /-lɔːt⁰/.

(146) ɔstɹelia dʌk⁰ lɔt⁰ na³.
ɔstɹelia **dʌk⁰-lɔːt⁰**=na³
Australia **SUPER-far**=in
'Australia is very far.' (lit. 'Australia is in more distance.') (20121105_08)

Only a small subset of roots shows allomorphy, so in most cases we cannot differentiate between adjectival or nominal roots based purely on their form. Based on the morphosyntactic context and the alternation to nominal forms of roots that do show allomorphy, it must be concluded that the superlative prefix is a derivational prefix.

Adjectives may be modified by intensifiers (see section 5.1.6). Intensifiers are monosyllabic elements whose meaning has often become opaque. They are placed after the adjective they intensify and are usually reduplicated. For example, the adjective /-puŋ²/ 'white' can be intensified by means of the reduplicated element /bɔŋ¹/, leading to the expression /-puŋ² bɔŋ¹ bɔŋ¹/ 'very white'. So far, intensifiers have been observed with adjectives from the following domains as defined by Dixon (2010:73-74), but are perhaps used beyond these: dimension, colour, physical property, and position. For an overview of all observed combinations of adjectives and intensifiers see section 5.1.6.

With regard to phonological and morphological structure, it is observed that adjectives are most commonly monosyllabic and monomorphemic, for example /-xʌl²/ 'good', /-kiʔ⁰/ 'cold', and /-pit⁰/ 'soft'. However, compound adjectives and sesquisyllabic adjectives also occur. Compound adjectives tend to consist of a noun and an adjective. Three examples are provided under (147).

(147)	sʌk⁰-xʌl²	taʔ⁰-ɹɔŋ¹	tɨn¹-mʌŋ³
	body-good	strength-strong	heart-at.rest
	'healthy'	'strong'	'patient'

An example of a sesquisyllabic adjective is /lʌ⁰jʌk⁰/ ‘bad, naughty’, which is sometimes pronounced as /jʌ⁰lʌk/ (see section 3.4.3.5). This sesquisyllabic word may derive from a bimorphemic compound, but synchronically the meaning of its components has become opaque and thus should be considered monomorphemic.

4.1.1.4 Adjectives constitute a separate word class

In this section, I will argue that adjectives constitute a word class of their own right in Muklom rather than form a part of a combined word class, i.e. a subclass of verbs, or non-nouns. The previous sections, which outlined the definition of ‘verb’ (see section 4.1.1.2) and ‘adjective’ (see section 4.1.1.3), already briefly touched upon the fact that a large subset of adjectival roots can function as (defective) verbal roots without requiring morphological derivation. Languages that, like Muklom, frequently employ verbs to denote qualities or attributes of entities are referred to by Schachter and Shopen (2007:18) as adjectival-verb languages. Adjectives are often considered a subset of verbs in descriptions of languages of the Asia-Pacific region. In general, there is a hesitation among linguists to recognise adjectives as a separate word class. However, Hajek (2004:349-350) does notice an increase in the recognition of adjectives as a separate word class in languages of the Asia-Pacific region and I would like to argue that they are a separate word class in Muklom as well.

The reasons for considering adjectives a separate word class in Muklom are threefold: 1) adjectives and verbs fulfil different syntactic functions, 2) adjectives and verbs are accompanied by different sets of grammatical elements, and 3) the porosity of the boundary between the word classes adjective and verbs differs depending on directionality. I will discuss and exemplify each of these reasons.

First, the approach to word class assignment that I adopt here is that roots can be assigned to word classes only by considering their context. Strictly speaking, roots in isolation then cannot be assigned to word classes. This approach differs from, for example, LaPolla and Huang (2004) and Enfield (2004), who consider a root that can behave like an adjective or a verb to be an adjective in either case. One important component of ‘context’ is syntactical function: adjectives can function as a modifier of the head of an NP (see section 4.1.1.3) and verbs function as the head of a clause (see section 4.1.1.2). That adjectival roots and verbal roots fulfil different syntactic functions is illustrated with the root /xʌl²/ ‘good’ in examples (148) and (149). In example (148), /xʌl²/ modifies the noun /miʔ⁰/ ‘person’. In example (149), on the contrary, /xʌl²/ with inflection functions as the head of the clause.

(148) nʌŋ^{1} ɹa^{2} miʔ^{0} xʌl^{2}.

nʌŋ^{1}=ɹi^{3}=a^{2} miʔ^{0}-**xʌl^{2}**

2SG=PROX=ABS person-**good**

'You are a good person.' (S1.34)

(149) ba^{3} k^{h}ɔ^{2} ɹʌp^{0} nɛ^{3} xʌl^{2} a^{3}.

ba^{3}-k^{h}ɔ^{2} ɹʌp^{0}nɛ^{3} **xʌl^{2}**-a^{3}

2SG.POSS-hair very **good**-3

'Your hair is very good.' (S1.2)

The second important component of 'context' that allows us recognise to which word class a root belongs, is their distribution, i.e. with which elements it combines: roots are considered adjectives when they stand after a noun and can be followed by nominal markers such as demonstrative determiners or postposition and roots are considered verbs when they combine with verbal markers such as person indices or tense markers. An example of a root functioning as an adjective is provided in (150): /ɟɔŋ^{2}/ 'big' stands after the noun /hɨm^{2}/ 'house' and is followed by the postposition /=na^{3}/ 'in'. An example of a root functioning as a verb is provided in example (151): /baŋ^{2}/ 'tasteless' is followed by future tense marker /-n/ and third person index /-a^{3}/.

(150) hɨm^{2} ɟɔŋ^{2} na^{3}.

hɨm^{2}-**ɟɔŋ^{2}**=na^{3}

house-**big**=in

'In a big house.' (20161223_01)

(151) naʔ^{0}ɹi^{2} baŋ^{2} na^{3}.

naʔ^{0}ɹi^{2} **baŋ^{2}**-n-a^{3}

very **tasteless**-FUT-3

'It will be very tasteless.' (CTT.lexicon)

A third reason for proposing that adjectives constitute a word class of their own right is that the porosity of the boundary between the word classes adjective and verb differs depending on directionality. Languages can differ in how many lexical word classes they possess, but also in the nature of the boundaries between lexical word classes. Boundaries can be rigid, allowing little movement of words between word classes, or porous, allowing words to move between classes more freely (see Hengeveld 1992:47; Rijkhoff 2007:718). Muklom shows porosity between the word classes adjective and verb,

but while many roots that can be used to modify the head of an NP can be used as the head of a clause without requiring any derivational morphology, the majority of roots that can be used as the head of a clause cannot be used to modify the head of an NP without derivational morphology: directionality matters. Also, some roots that span the boundary between the word classes of adjectives and verbs can function as full verbs, meaning they potentially combine with all grammatical markers of the verbal domain, but some roots function as defective verbs, taking only certain indices or TAM markers. The root /xʌl^{2}/ 'good' is an example of the former: this root has been observed to combine with past and future tense markers and negation. An example of /xʌl^{2}/ with negation and third person index is provided in (152).

(152) i^{3} sʌk^{0} xʌl^{2} mɔʔ^{0}.

i^{3}-sʌk^{0} **xʌl^{2}**-m-ɔʔ^{0}

1SG.POSS-body **good**-NEG-3

'I am not well.' (lit. 'My body is not good.') (B1.157)

An example of a root that functions as an adjective and a defective verb is /baŋ^{2}/ 'diluted, tasteless'. As mentioned (see section 4.1.1.2), verbal use of this root is possible but only in felicitous contexts. The modifier /naʔ^{0}.ɹi^{2}/ apparently provides such context, because when it is present, consultant CTT accepts a future tense form with the root /baŋ^{2}/, as is shown in (153). However, she does not find the clause in (154) acceptable. The modifier /naʔ^{0}.ɹi^{2}/ can be dropped but only if the clause structure is adapted in a certain manner, as illustrated by (155), where the derivational prefix /u^{0}-/ is employed to make the word function as a noun and the copula /ʌŋ^{2}/ carries the present tense marker and third person index.

(153) naʔ^{0}.ɹi^{2} baŋ^{2} na^{3}.

naʔ^{0}.ɹi^{2} **baŋ^{2}-n-a^{3}**

very **tasteless-FUT-3**

'It will be very tasteless.' (CTT.lexicon)

(154) *baŋ^{2} na^{3}.

baŋ^{2}-n-a^{3}

tasteless-FUT-3

Intended: 'It will be tasteless.' (CTT.lexicon)

(155) u^{0}baŋ^2 ʌŋ^2 na^3.

u^0-baŋ^2 ʌŋ^2-n-a^3

NMLZ-tasteless COP-FUT-3

'It will be tasteless.' (CTT.lexicon)

Defective verbs differ with respect to restrictedness and roots in the adjective word class can be placed on a scale from rigidly adjectival to fully capable of taking verb markers, with different levels of verbal defectiveness in the middle. It is yet to be determined whether there is a correlation between semantic domain of the adjective and their position on this scale.

To conclude, there is large-scale word class fluidity or zero-derivation in the direction adjective → verb, which does not affect the status of adjectives as an independent word class. Large-scale word class fluidity appears to be restricted to the word classes adjective and verb. Convincing examples of fluidity between other combinations of two word classes or between all three major word classes have not been observed. Roots that function in all three major word classes require derivational morphology to function as a noun, which is the topic of discussion in section 4.2.

4.1.1.5 Numerals are adjectives or nouns

Cross-linguistically, numerals tend to form a subclass within the word class of nouns but sometimes they exhibit features that are associated with both nouns and adjectives (see Evans 2000:715). Muklom belongs to the latter type: the numerals constitute one semantic category, but they do not constitute a unified word class. Rather, numerals either belong to the word class adjective or noun, depending on its syntactic function. When a numeral modifies a noun, it is considered an adjective, and when a numeral takes the position of a head, it is considered a noun. All numerals can perform either function, but only the first three numerals have distinct forms for the two functions, as listed in Table 28. The adjectival forms are bound, and the nominal forms are not. The nominal forms carry the nominalizing prefix /ʌ^0-/.

numeral	adjective	noun
1	/-ʃɛ^1/	/ʌ^0-ʃɛ^1/
2	/-ni^3/	/ʌ^0-ni^3/
3	/-tɔm^2/	/ʌ^0-tɔm^2/

Table 28 - Numerals one, two, and three.

When counting, the first three numerals are pronounced in their nominal form: /ʌ⁰-ʃɛ¹/ ‘one’, /ʌ⁰-ni³/ ‘two’, and /ʌ⁰-tɔm²/ ‘three’. The numerals four up to and including ten, listed below in Table 29, are disyllabic like the nominal forms in Table 28 above. The first syllables of the higher numerals are historically prefixes but synchronically these numerals are monomorphemic: their ‘prefixes’ cannot be dropped. For a further discussion of numerals, including the fossilized prefixes and the formation of composite higher numerals, and example phrases see section 5.1.5.

numeral	adjective/noun
4	/bʌ⁰li³/
5	/bʌ⁰ŋa³/
6	/tʰʌ⁰ɹɔk⁰/
7	/sʌ⁰nʌt⁰/
8	/ʌ⁰ʃʌt⁰/
9	/ʌ⁰kʰu¹/
10	/ʌ⁰si²/

Table 29 - Numerals four up to and including ten.

4.1.1.6 Existentials are a derived noun or a defective verb

Muklom exhibits two existential roots: affirmative /tʰa¹/ ‘there is/are’ and negative /huŋ¹/ ‘there is/are not’. The affirmative existential seems to function as a derived noun only: /ʌ⁰-tʰa¹/, as exemplified in (156). The prefix is a de-adjectival nominaliser.

(156) pʰʌk⁰ sʌt⁰ ʌ⁰tʰa¹.

pʰʌk⁰-sʌt⁰	**ʌ⁰-tʰa¹**
food.hard-food.soft	**NMLZ-EXIST**

‘There is food.’ (20161223_01)

The negative existential may function both as a derived noun, as in (157) and as a defective verb, as in (158). The nominal form is again derived by means of the de-adjectival nominaliser: /ʌ⁰-huŋ¹/. The verbal negative existential can only occur with a third person index, not with any of the other indices.

(157) nam^{2} t^{h}-a^{2} ʌ^{0}huŋ^{1}, haʔ^{0} na^{3}.

nam^{2}=t^{h}i^{3}=a^{2}	**ʌ^{0}-huŋ^{1}**	haʔ^{0}=na^{3}	
grass=DEF=ABS	**NMLZ-NEXIST**	earth=in	

'There is no grass on the earth.' (20121103_03)

(158) ŋɨn^{2} pe huŋ^{1} a^{3} duk^{0} kan nʌŋ^{3} ka^{1} tʌŋ^{1}.

ŋɨn^{2}	pe	**huŋ^{1}**-a^{3}	duk^{0}kan=nʌŋ^{3}	ka^{1}-t-ʌŋ^{1}
money	take	**NEXIST**-3	shop=to	go-PST-1SG

'I went to the shop without taking money.' (B1.149)

While both existentials can combine with the de-adjectival nominaliser, neither the affirmative nor negative existential seems to be able to function as an adjective synchronically. Whether the origin of the prefix /ʌ^{0}-/ in existentials is not a nominaliser but another element, such as a prefixed third person marker, is a topic worthy of further investigation. For further discussion of the existentials and more examples in context, see section 6.1.1.3.

4.1.2 Minor word classes

Like the open word classes (see section 4.1.1.3), the closed word classes contain not only unbound forms but also bound forms. The overview provided in this section is not yet a complete analysis. The subdivision of minor word classes has mainly been made on the basis of syntactic function. Forms that function as heads, i.e. pronouns, are discussed in section 4.1.2.1. Modifiers that fall under the domain of the noun complex, determiners and postpositions, are discussed in section 4.1.2.2 and 4.1.2.3. Conjunctions, which link units of different domains, are briefly discussed in section 4.1.2.4. Finally, the word class of exclamatives is discussed in section 4.1.2.5. When the order of elements is considered, it may be discovered that a more fine-grained categorisation is required. The overview of closed word classes presented here is not claiming to be exhaustive: there remains a set of words and particles which have not been categorised yet.

4.1.2.1 Pronouns

Pronouns fill the same slot in the clause as full NPs; full NPs can be replaced by pronouns. They function as heads; they are non-modifying elements. Muklom exhibits the following types of pronouns: 1) personal, 2) possessive, 3) demonstrative, 4) definite, 5) classifier, 6) quantifying, and 7) interrogative. All of these except the personal pronouns have counterparts in the minor word class of

determiners. The pronouns are unbound forms. All seven types of pronouns are discussed and exemplified in section 5.1.1.

4.1.2.2 Determiners

Determiners are a group of elements which share the following function: they modify nouns and express a features of those nouns in reference to (discourse) context. Determiners encode information pertaining to, for example, definiteness, proximity, quantity, and possession rather than expressing attributes of the referred to entity. They are similar to adjectives in that they modify nouns, but different in that they form paradigms; they constitute a closed word class. Muklom determiners show considerable overlap in form with their pronominal counterparts, but of course differ in function: pronouns function as heads and determiners function as modifiers. The language exhibits the following types of determiners: 1) possessive, 2) demonstrative, 3) definite, 4) classifier, 5) quantifying, and 6) interrogative. Some determiners are bound forms, and some are unbound. Different word classes take a slice from the semantic domain of quantification: quantifying pronouns, quantifying determiners, and quantifying adjectives (see section 4.1.1.3). Unlike quantifying adjectives, quantifying pronouns or determiners cannot be nominalized by means of the prefix /ʌ^{0}-/. The six different types of determiners are discussed and exemplified in section 5.1.3.

4.1.2.3 Postpositions

There are two types of postpositions in Muklom: 1) three postpositions that mark core arguments, i.e. case markers, and 2) ten postpositions that mark oblique arguments. Oblique postpositions indicate position, orientation or direction in space, and location in time. All postpositions are discussed and exemplified in section 5.1.7. Postpositions attach to the right edge of NPs and are morphologically bound but promiscuous: they are clitics. Some of the postpositions can combine with relation nouns. Two examples are provided in (159).

(159)	/=na^{3}/ ‘in’	→	/tit^{0}=na^{3}/	‘near’ (lit. ‘proximity-in’)
			/ja^{3}-k^{h}ɔ=na^{3}/	‘in front of’ (lit. ‘leg-head-in’)

4.1.2.4 Conjunctions

Conjunctions can conjoin units of different sizes: NPs, clauses, paragraphs. In Muklom, the following conjunctions may conjoin NPs: 1) ni^{3}a^{3}/~/ni^{3}/ ‘and’, 2) /ʌ^{0}-/ ‘and’, 3) /e^{2}t^{h}ɔ^{3}/ ‘and’, 4) /ti^{1}a^{3}/~/ti^{3}/ ‘or’.

NP conjunction is discussed in section 5.3. Two conjunctions that have been observed to conjoin paragraphs are: 1) /e²tʰɔ³/ ‘and’, 2) /i³ɹɛʔ⁰/~/ɹɛʔ⁰/ ‘then’. Paragraph conjunction is discussed in section 8.2.2. Clause and paragraph conjunction is not explored in depth in this dissertation.

4.1.2.5 Exclamatives

Exclamatives have different functions: they may express an emotion the speaker is feeling, or they may have a pragmatic function such as calling a person or chasing away an animal. We may also want to include fillers under this word class (see section 8.5). Many words that belong to this word class have an irregular phonological structure (see section 3.7). They may, for example, contain sounds that are not part of the regular phoneme inventory or violate syllable structure rules. It may not always be possible to determine tones on exclamatives. The filler words or phrases that have been observed in Muklom do align with the phoneme inventory and obey phonotactic rules.

A few examples of exclamatives used by speakers of Muklom are listed in Table 30. Undoubtedly, some of these are loans from contact languages or expressions shared by multiple languages in the region rather than unique to Muklom. From Assamese speakers, for example, one can hear /kuti ah/ ‘doggy, come!’[41] and in Hindi we also encounter the word /kutta/ ‘dog’, so there is likely to be link between these and the Muklom exclamative /kutu/ for calling dogs. The following exclamatives are also look similar or identical to exclamatives used by speakers of Assamese: /aɹɛ/ (surprise), Muklom /ɛ/ and Assamese /ɛh/ (objection), Muklom /tʌt/ and Assamese /tʰɛt/ (disapproval), and Muklom /a/ (call animal) and Assamese /ah/ ‘come!’ (imperative).

exclamative	**use**
/a/	calm down an animal and call it
/aŋ/	call a cow
/mimi/	call a cat
/kutu/	call a dog
/aɹa/~/aɹɛ/	negative surprise
/aki/~/akɛ/	negative surprise
/alɛ/	negative surprise
/ɛ/	negative surprise, objection
/tʌt/	disapproval

Table 30 - A few exclamatives used by speakers of Muklom.

[41] Poppy Gogoi, p.c.

4.2 Word derivation

This section discusses the formation of words through derivational morphology. Word formation through compounding and zero-derivation will not be dealt with here but can be found under section 4.3 and 4.1.1.4 respectively. Derivational morphology in Muklom includes prefixation, suffixation, and root allomorphy, also known as verb stem alternation (see section 6.1.1.4). The majority of derivational processes observed derive a noun from another word class or from another noun. While there is derivational morphology available to turn verb and adjective roots into nouns, the opposite has not been observed so far: no examples were observed of derivational processes that turn nouns into verbs or adjectives. Section 4.2.1 discusses adjective to noun derivation, section 4.2.2 verb to noun derivation, and section 4.2.3 noun to noun derivation. One of the derivation prefixes that has been observed derives a verb from another verb and this is discussed in section 4.2.4. While nouns and verbs can be categorized as either underived or derived, it seems adjectives are exclusively underived.

4.2.1 Adjective to noun

From an adjective we can derive a noun through adding the prefix /ʌ^{0}-/, for example /xʌl^{2}/ 'good' → /ʌ^{0}xʌl^{2}/ 'a good one'. The underived word, the adjective, can be considered the default word class of the root. The adjectival numerals 1, 2, and 3 are turned into nouns by means of the same prefix /ʌ^{0}-/: /-ʃɛ^{1}/ → /ʌ^{0}-ʃɛ^{1}/ 'one', /-ni^{3}/ → /ʌ^{0}-ni^{3}/, and /-tɔm^{2}/ → /ʌ^{0}-tɔm^{2}/ (see section 4.1.1.5). It appears that all roots that can function as an adjective can undergo this derivational process, meaning that 'adjectival' roots always function in at least two word classes, adjective and noun. De-adjectival nouns are often best glossed as 'an X one'. An example of a de-adjectival noun in context is provided in (160). We can tell that /ʌ^{0}-ɹɛl^{3}/ 'few' is functioning as a noun here because of the definite and absolutive markers that follow it.

(160) sʌm^{2} nʌŋ^{3} ʌ^{0}ɹɛl^{3} t^{h}a^{2} tʌ^{0}p^{h}ʌl^{3} ti^{1}.

sʌm^{2}=nʌŋ^{3}	**ʌ^{0}-ɹɛl^{3}**=t^{h}i^{3}=a^{2}	tʌ^{0}-p^{h}ʌl^{3}-t-i^{1}
plains=to	**NMLZ-few**=DEF=ABS	INTR-split.off-PST-1PL

'Some of us split off towards the plains.' (lit. 'Some we split off to the plains.')
(20151208_05)

The derivational prefix /ʌ^{0}-/ only attaches to monomorphemic words, and not to complex adjectives such as /sʌk^{0}-xʌl^{2}/ 'healthy', and only to adjectives, not verbs or nouns. However, a potential exception

to this rule is found in the word /ʌ⁰tʰʌ⁰ɹʌŋ²/ ‘alive’. The origin of the two syllables /tʰʌ⁰ɹʌŋ²/ and whether they constitute one or multiple morphemes is not clear, but perhaps /tʰʌ⁰/ represents the valency-changing verbal prefix /tʰʌ⁰-/ (see section 4.2.4). An example of /ʌ⁰tʰʌ⁰ɹʌŋ²/ ‘alive’ in context is provided in (161), where it functions as a nominal predicate. This example was taken from a discussion between three people about a narrative from Muklom oral history. According to the story, almost all humans were annihilated by a man from the sky. Just two children survived. In (161), one of the speakers expresses her belief that the parents must still have been alive (though immediately after she realises that she was wrong: the children were orphans, their parents had already passed).

(161) u³ nu¹ ni³ βa¹ tʰa² ʌ⁰tʰʌ⁰ɹʌŋ² sɛ³ ɹi³.

u³-nu¹	ni³	βa¹=tʰi³=a²	**ʌ⁰tʰʌ⁰ɹʌŋ²**=sɛ³=ɹi³
3SG.POSS-mother	and	father=DEF=ABS	**alive**=COMP=INFER

‘The parents must have been alive.’ (541)

4.2.2 Verb to noun

There are different derivational processes through which a noun can be derived from a verb. First, a noun can be derived from a verb by adding the derivation prefix /u⁰-/ to a root. As with the de-adjectival nominalizer /ʌ⁰-/, it seems this derivational affix can only attach to a monomorphemic stem, i.e. a root, and not a complex stem such as a combination of prefix and root or a compound consisting of two roots. All verb roots can take the nominalizer /u⁰-/, so ‘verbal’ roots always belong to at least two word classes, verb and noun. The underived word, the verb, can be considered the default word class of the root. Some roots can take both the de-adjectival and the de-verbal nominaliser, which most often means they function as both verb and adjective primarily, and secondarily as noun. An example of a nominalised verb with /u⁰-/ in context is provided in (162). We can tell that /u⁰-ɟɨp⁰/ is functioning as a noun because it takes a postposition here, the dative case marker /=ma³/.

(162) ŋa¹ u⁰ɟɨp⁰ ma³ sɛ³ ka³ ʌŋ².

ŋa¹	**u⁰-ɟɨp⁰**=ma³	sɛ³-ka³-ʌŋ³
1SG	**NMLZ-sleep**=DAT	COS-go-1SG

‘I am going to sleep.’ (S1.66)

Most often the shape of the root does not change between word classes, but sometimes the change of word class from verb to noun triggers a mutation in the tone, vowel, or coda of the root, and this type of allomorphy is known as ‘verb stem alternation’ (see section 6.1.1.4). Roots that exhibit stem

alternation take the so-called verbal stem (Σ_1) when used as a verb and will take the so-called nominal stem (Σ_2) when turned into a noun by means of the nominaliser /u^0-/. A few examples are listed under (163). On the left stands the third person present tense forms of each verb, and on the right their nominalised form.

(163)	{Σ_1-3}	{NMLZ-Σ_2}	
	/pu^2-a^3/	/u^0-puk^0/	'fly'
	/ti^3-a^3/	/u^0-tik^0/	'die'
	/kɔʔ^0-a^3/	/u^0-kɔt^0/	'give'
	/p^{h}ʌn^2-a3/	/u^0-p^{h}ʌn^3/	'chase'

In some constructions, for example in nominalised clauses, a noun can be derived from a verb without the need to add the nominalising prefix /u^0-/. With verbs that do not show stem alternation this can be considered zero-derivation, but with verbs that do show stem alternation this derivation process is accompanied by phonological change: they take the nominal stem. An example of a zero-derived noun is presented in (164). We know that /p^{h}ʌk^0/ is functioning as a noun here because verbs that show stem alternation take the nominal stem in the same construction, as is exemplified by (165). The verbal stem of the verb 'eat soft foods' is /saʔ^0/. In both examples, the nominalised verb is located inside a nominalised clause.

(164) man^2 ŋʌm^2 p^{h}ʌk^0 ma^3 nuk^0 u^3 bɔ^3?

man^2-ŋʌm^2	**p^{h}ʌk^0**=ma^3	nuk^0-u^3=bɔ^3?
cow-meat	**eat.hard**=DAT	like-2SG=Q.PLR

'Would you (sg) like to eat cow meat?' (B1.24)

(165) nap^0 ti^1 sʌt^0 ma^3 nuk^0 ɨn^2 bɔ^3?

nap^0-ti^1	**sʌt^0**=ma^3	nuk^0-ɨn^2=bɔ^3
banana-fruit	**eat.soft**=DAT	like-2PL=Q.PLR

'Would you (pl) like to eat bananas?' (B1.24)

Across the Tangsa area, some varieties exhibit two phonologically distinct prefixed nominalisers like Muklom: one de-adjectival and one de-verbal. Other varieties have only one prefixed nominaliser for both adjectives and verbs. In a sample of 21 varieties, S.D. Morey (p.c.) found that all de-adjectival nominalisers take the shape of either a low vowel /a/ or a central, schwa-like vowel. This is consistent with the shape of the Muklom de-adjectival nominaliser, /ʌ^0-/. Seven de-verbal nominalisers in the

sample are phonologically distinct from de-adjectival nominalisers and take the shape of a high vowel /i/ or a homorganic nasal. Muklom differs slightly from this pattern: while the de-verbal nominaliser indeed consists of a high vowel, it is a back vowel and not a front vowel: /u⁰-/.

The prefix /u⁰-/ is not the only element that can derive nouns from verbs, though it is the only marker that precedes the verb; all others follow it. I will discuss the following suffixes: /-te²/, /-nu¹/, /-βa¹/, and /-tɕɨŋ¹/. The first three derivational suffixes can also be used to derive a new noun from another noun (see section 4.2.3). The first suffix, /-te²/, is used to derive actor nouns and appears to have grammaticalised from the lexical word /te²/ 'grandfather' or, as one reviewer suggested, both may have developed from a common source with a related but different meaning. One example is provided in (166). Another example is provided in (167). The gender of the referent can be specified by adding another derivational suffix, either /-nu¹/ for a female or /-βa¹/ for a male. The first developed from the lexical word /nu¹/ 'mother' and the second from the lexical word /βa¹/ 'father'.

(166) /tʰʌ⁰-lun²/ 'rescue' → /tʰʌ⁰-lun²-**te²**/ 'saviour'

(167) /tʌ⁰-tal³/ 'teach' → /tʌ⁰-tal³-**te²**/ 'teacher'
/tʌ⁰-tal³-**te²-nu¹**/ 'female teacher'
/tʌ⁰-tal³-**te²-βa¹**/ 'male teacher'

The derivational suffix /-βa¹/ may also be used to create an actor noun of which the referent can be of either gender, as is exemplified in (168). The quantifier /=hʌl²/ 'very' can be used to modify nouns and adjectives; in this case it modifies a noun.

(168) nʌŋ¹ ɹa² ɹiŋ βa¹ hʌl².
nʌŋ¹=ɹi³=a² ɹiŋ-**βa¹**=hʌl²
2SG=PROX=ABS shout-**person**=very
'You are a very noisy person.' (20151208_04)

A derivational morpheme that turns verbs in to location nouns is /-tɕɨŋ¹/ 'place, location'. Two examples are provided in (169).

(169) /ɟɨp⁰/ 'sleep' → /ɟɨp⁰-tɕɨŋ¹/ 'bed'
/tɔŋ²/ 'sit' /tɔŋ³-tɕɨŋ¹/ 'seat'

4.2.3 Noun to noun

There is a variety of derivational suffixes that can be used to derive a noun from another noun. A selection of the most frequent suffixes is discussed here. First, there are four derivational suffixes which are etymologically related to kinship terms: /-te^{2}/ 'PERS' (=person), /-nu^{1}/ 'F' (=female), /-βa^{1}/ 'M' (=male), and /-sa^{1}/ 'DIM' (=diminutive). The related kinship terms are: /te^{2}/ 'grandfather', /nu^{1}/ 'mother', /βa^{1}/ 'father', and /sa^{1}/ 'child'. The former are considered suffixes rather than bound lexical roots because their meaning has broadened significantly, a sign of grammaticalisation. It should be noted that the suffix /-te^{2}/ has a different meaning depending on context. Sometimes it means 'person belonging to a group of people' or 'person belonging to a place' and sometimes it may mean 'owner'. As mentioned in section 4.2.2, this derivational suffix can also be attached to a verb and then denotes an actor. A few examples of /-te^{2}/ are provided in (170)-(172).

(170) /hɨm^{2}-**te^{2}**/
house-**PERS**
'occupants of the house'

(171) /xɨm^{3}-**te^{2}**/
village-**PERS**
'inhabitants of the village'

(172) /xɨm^{3}-ɟɔŋ^{2}-**te^{2}**/
village-big-**PERS**
'inhabitants of Khimyong[42] village'

The suffix /-nu^{1}/ can be used to specify that the referent is a female and /-βa^{1}/ for a male, as illustrated by (173) and (174). The diminutive of a noun is formed by adding /-sa^{1}/, as exemplified by (175). In the case of /βɔ^{1}/ 'chicken', the extra element /t^{h}aŋ^{3}/ is often inserted before the diminutive suffix: /βɔ^{1}-t^{h}aŋ^{3}-sa^{1}/ 'chick'. This is done to avoid uttering the taboo word /βɔ^{1}-sa^{1}/ which besides 'chick' also means 'penis'.

(173)	/nɔk^{0}/	'friend'	→	/nɔk^{0}-nu^{1}/	'female friend'
	/miʔ^{0}/	'person'		/miʔ^{0}-nu^{1}/	'woman'

[42] The village is named 'Big Village'.

(174)	/nɔk^{0}/	'friend'	→	/nɔk^{0}-βa^{1}/	'male friend'
	/miʔ^{0}/	'person'		/miʔ^{0}-βa^{1}/	'man'

(175)	/ɟɔŋ^{1}bal^{1}/	'insect'	→	/ɟɔŋ^{1}bal^{1}-sa^{1}/	'small insect'
	/hi^{1}/	'dog'		/hi^{1}-sa^{1}/	'puppy'
	/βɔ^{1}/	'chicken'		/βɔ^{1}-sa^{1}/	'chick/penis'
				/βɔ^{1}-t^{h}aŋ^{3}-sa^{1}/	'chick'

There are a few derivational suffixes that encode information about the gender and age of the referent. These suffixes are used in words that refer to animals but at least some are also found in words that denote humans. The first, /-tɕal^{2}/, denotes a very young female. Two examples are provided under (176). The second suffix, /-hʌn^{3}/, denotes a young female which has not given birth yet, as exemplified in (177).

(176)	/hi^{1}/	'dog'	→	/hi^{1}-tɕal^{2}/	'very young female dog'
	/man^{2}/	'bovine'		/man^{2}-tɕal^{2}/	'very young female cow'

(177)	/βɔ^{1}/	'chicken'	→	/βɔ^{1}-hʌn^{3}/	'young hen (not laid eggs yet)'
	/hi^{1}/	'dog'		/hi^{1}-hʌn^{3}/	'young female dog (not given birth yet)'
	/man^{2}/	'bovine'		/man^{2}-hʌn^{3}/	'young female cow (not given birth yet)'

The derivational suffix /-ku^{2}/ denotes older females that have given birth already, as in (178), but may also function as an augmentative suffix, as in (179). The latter function can be compared to the function of 'mother' in the English expression 'the mother of all X'. The first component in the word 'finger', /ɟʌk^{0}/, means 'arm, hand'. This element is not part of the word /si^{2}-ku^{2}/ 'thumb'. In the expression /luk^{0}-tɔŋ-ku^{2}/ 'one large toad/frog', the second component is the root /tɔŋ^{2}/~/tɔŋ^{3}/ 'sit'. The tone on this root in this expression has not yet been determined.

(178)	/man^{2}/	'bovine'	→	/man^{2}-ku^{2}/	'mature cow (given birth)'
	/ʃaʔ^{0}/	'tiger'		/ʃaʔ^{0}-ku^{2}/	'mature tigress (given birth)'
	/βi^{1}/	'grandmother'		/βi^{1}-ku^{2}/	'older lady'

(179)	/luk^{0}/	'toad/frog'	→	/luk^{0}-tɔŋ-ku^{2}/	'one large toad/frog'
	/bʌŋ^{1}/	'tree'		/bʌŋ^{1}-ku^{2}/	'large tree'
	/jʌk^{0}-si^{2}/	'finger'		/si^{2}-ku^{2}/	'thumb'

The last female-denoting suffix that has been observed is /-sal^{2}/. Similar to /-tɕal^{2}/, this derivational suffix is used to refer to a young female animal. It remains to be determined whether these two elements are somehow etymologically related, and whether, for example, borrowing of a loan with a cognate suffix from a related language variety could explain the presence of this strikingly similar pair of suffixes. An example of /-sal^{2}/ is provided in (180).

(180)	/li^{2}/	'buffalo'	→	/li^{2}-sal^{2}/	'young female buffalo'

For males, only two derivational suffixes have been observed so far: /-la^{1}/ and /-pɔŋ^{1}/. Their meaning appears to be identical, i.e. they denote a male animal referent and each combines with a subset of animal names. The suffix /-la^{1}/ can be used, for example, with the animal names in (181) and /-pɔŋ^{1}/ with the animal names in (182). Combinations are partially fixed: some animals, like /mɛŋ^{2}/ 'cat', can take either suffix and some can only take one. Consultants deem the combinations under (183) and (184) incorrect.

(181)	/ʃaʔ^{0}/	'tiger'	→	/ʃaʔ^{0}-la^{1}/	'male tiger'
	/hi^{1}/	'dog'		/hi^{1}-la^{1}/	'male dog'
	/mɛŋ^{2}/	'cat'		/mɛŋ^{2}-la^{1}/	'tomcat'
(182)	/βɔ^{0}/	'chicken'	→	/βɔ^{1}-pɔŋ^{1}/	'rooster'
	/li^{2}/	'buffalo'		/li^{2}-pɔŋ^{1}/	'bull (buffalo)'
	/man^{2}/	'bovine'		/man^{2}-pɔŋ^{1}/	'bull'
	/mɛŋ^{2}/	'cat'		/mɛŋ^{2}-pɔŋ^{1}/	'tomcat'

(183) */man^{2}-la^{1}/
intended: 'bull'

(184) */hi^{1}-pɔŋ^{1}/
intended: 'male dog'

4.2.4 Verb to verb

There is one derivational prefix that can attach to a verb but does not change its word class: the valency changing prefix /tʌ⁰-/~/tʰʌ⁰-/. This prefix can either increase the valency of a verb or decrease it. The different functions of the prefix are discussed and exemplified in section 6.1.7. The conditioning environment of phonological change in the allomorphs is discussed in section 3.4.2.1. If verbs show verb stem alternation, the derived verb always takes Σ_2, the stem which is associated with nominal forms, but fully functions as a verb, taking person indexing and all other verbal markers. A few examples of derivation by means of /tʌ⁰-/~/tʰʌ⁰-/ are provided in (185).

(185)	/mɔ²/	'shake (intr)'	→	/tʰʌ⁰-mɔt⁰/	'shake (caus)'
	/ɹʌn¹/	'tear, rip (trans)'		/tʰʌ⁰-ɹʌn³/	'tear (intr)'
	/ʝɔŋ²/	'be big'		/tʰʌ⁰-ʝɔŋ²/	'enlarge'

4.3 Compounding

Compounding, the topic of the current section, is the most commonly employed word formation strategy in Muklom. Other important word formation strategies include affixation and root allomorphy (see section 4.2). Cross-linguistically, word formation through compounding is a process that is most productive in the realm of nominal morphology (see Lehmann 2000:749) and this is also found to be true for Muklom. The language exhibits three types of compounds. The first, regular compounds, will be discussed in section 4.3.1. The second, coordinate compounds, will be discussed in section 4.3.2. The third type of compound consists of four parts, is euphonic in nature, and often contains elements of which the original meaning is no longer known. This poetic type of compound is referred to in the literature as 'elaborate expression' (see Matisoff 1973b:81-82) and is the topic of discussion in section 4.3.3.

4.3.1 Regular compounds

Common nouns can be underived or derived, simplex or compound. The parts of which nominal compounds are composed can be nouns themselves but can also belong to other word classes. Words that constitute a compound may be from the same or from different word classes. It may be impossible to determine the word class of an element if that element is a root which functions in more than one word class (see section 4.1.1.4). For example, the root /nup⁰/ 'soft' that appears in (186) can function as an adjective and as a verb. A few additional examples of compounds are provided in (187)-(189).

(186) /kʰʌt⁰-nup⁰/
cloth-soft
‘shawl’

(187) /ɟɨp⁰-tɕɨŋ¹/
sleep-place
‘bed’

(188) /ɟa¹-mɨk⁰/
leg-eye
‘ankle’

(189) /tɨn¹-ŋɛl³/
liver-itch
‘jealousy’

Compounds can form a compound with another word. For example, on the basis of the compound /ɹʌŋ² lɔm²/ ‘warm’, consisting of a noun and adjective (or verb), a new compound can be formed by adding another noun, /tɕi²/ ‘liquid’, as illustrated in (190).

(190)	/ɹʌŋ²-lɔm²/	→	/ɹʌŋ²-lɔm²-tɕi²/
	sky-warm		sky-warm-liquid
	‘warm (weather)’		‘perspiration’

4.3.2 Coordinate compounds

A coordinate compound combines two words with related meanings to form an aesthetically pleasing synonym for a simplex expression, or an umbrella term. Coordinate compounds do not seem to be genre-specific, but they may be genre-preferred, as they seem to occur more frequently in narrative texts than in conversation. An example of synonym formation is the expression /ɟuŋ²-ʌ⁰-ɟat⁰/ ‘jungle, forest’, deriving from /ɟuŋ²/ ‘water’ and /ɟat⁰/ ‘jungle’, and an example of umbrella term formation is the expression /li²-ʌ⁰-man²/ ‘cattle’, deriving from /li²/ ‘buffalo’ and /man²/ ‘bovine’. An example of two coordinate compounds in context is provided in (191).

(191) hiʔ⁰ ni³ ɹi³ kɔ³ ɹʌŋ² pʌl³ ɔ³ kɔ³, ʃɔl² ʌ⁰ʃaʔ⁰ lɛ³

hiʔ⁰-ni³=ɹi³ kɔ³ ɹʌŋ²-pʌl³=ɔ³ kɔ³ **ʃɔl²-ʌ⁰-ʃaʔ⁰**=lɛ³

1INCL-DU=PROX PRT sky-night=at PRT **wolf-and-tiger**=FOC

pu:k⁰ ʌ⁰li² lɛ³ sɛ³ ʌŋ² na³ ɟu².

pu:k⁰-ʌ⁰-li²=lɛ³ sɛ³-ʌŋ²-n-a³ ɟu²

elephant-and-buffalo=FOC COS-COP-FUT-3 MIT

‘‘Us two at night. There will be wolves and tigers, elephants and buffalo's already.’’

(20151127_01.ed)

The two elements of coordinate compounds are linked by means of the NP conjunction /ʌ⁰-/ (see section 5.3), though this linking element may be dropped in some of the expressions, perhaps those which are highly frequent, for example /dʌŋ³-ɟʌŋ³/ ‘custom’ (from /dʌŋ³-ʌ⁰-ɟʌŋ³/ ‘custom’), /tsum³-ɹaŋ²/ ‘dress up, decorate’ (from /tsum³-ʌ⁰-ɹaŋ²/ ‘dressing up, decoration’), and /pʰʌk⁰-sʌt⁰/ ‘food’ (from /pʰʌk⁰-ʌ⁰-sʌt⁰/ ‘all types of food’).

While most coordinate compounds are semantically transparent, some have become opaque due to the archaization of one of its elements. These opaque or fossilized words, for example /pɔl²/ in /pɔl²-ʌ⁰-bʌŋ¹/ ‘trees’, can be of particular interest for the reconstruction of earlier stages of the language and for cross-varietal lexical comparison.

A list of all coordinate compounds observed so far is presented in Table 31. The meaning of components in isolation is provided when known. Vowel change may occur in coordinate compounds. For example, the vowel change /ʌ/ → /ɔ/ sometimes occurs in the element /ŋʌm²/ ‘game, meat’, resulting in /ŋɔm²-ʌ⁰-ŋaʔ⁰/ ‘all types of animals’.

coordinate compound	component I	component II	compound meaning
/dʌŋ³-ʌ⁰-ɟʌŋ³/			‘custom’
/ɟuŋ²-ʌ⁰-ɟat⁰/	‘water’	‘jungle, forest’	‘jungle, forest’
/kuʔ⁰-ʌ⁰-mɔl²/	‘festival’	‘Mol festival’	‘Mol festival’
/li²-ʌ⁰-man²/	‘buffalo’	‘bovine’	‘cattle’
/lɨk⁰-ʌ⁰-ŋɨn²/	‘necklace’	‘money’	‘precious metals’
/ŋʌm²-ʌ⁰-ŋaʔ⁰/ ~/ŋɔm²-ʌ⁰-ŋaʔ⁰/	‘game, meat’	‘fish’	‘edible animals’[43]
/pat⁰-ʌ⁰-ɟat⁰/	‘time’		‘a long time ago’

[43] The term includes game and fish but excludes insects.

/pʰi¹-ʌ⁰-βɔ¹/		‘bird’	‘all types of birds’
/pʰʌk⁰-ʌ⁰-sʌt⁰/	‘eat solid food’	‘eat soft food’	‘all types of food’
/pɔl²-ʌ⁰-bʌŋ¹/	‘type of floor beam’[44]	‘tree’	‘trees’
/suŋ³-ʌ⁰-se³/		‘song’	‘song’
/ʃɔl²-ʌ⁰-ʃaʔ⁰/	‘wolf’	‘tiger’	‘predatory mammals’
/ʃɔm¹-ʌ⁰-βaʔ⁰/	‘medicine’	‘bamboo’	‘medicines’
/ʃɔŋ²-ʌ⁰-tɛʌm³/	‘shortage’	‘famine’	‘famine’
/tʰɔŋ²-ʌ⁰-le²/	‘custom, religion’		‘customs, culture’
/tɨn¹-ʌ⁰-tal³/	‘heart, liver’	‘smart’	‘heart and mind’
/tsum³-ʌ⁰-ɹaŋ²/			‘dressing up, decoration’
/tʌk⁰-ʌ⁰-sa³/	‘hurt’		‘sickness’
/tɛɔk⁰-ʌ⁰-βʌk⁰/	‘deer’	‘pig’	‘medium-sized animals’
/puːk⁰-ʌ⁰-li²/	‘elephant’	‘buffalo’	‘large-sized animals’
/ɟʌk⁰-ʌ⁰-ɟa¹/	‘hand’	‘leg’	‘limbs’

Table 31 - Coordinate compounds.

4.3.3 Quadrisyllabic elaborate expressions

Elaborate expressions, a term used by Haas (1964) in reference to Thai, are a well-known areal feature of Mainland Southeast Asian languages (see Williams 2013b:1). They are compound-like expressions which most often consist of four parts and tend to involve some sort of reduplication (see Matisoff 1973b:80-81). Their use is aesthetically motivated. Muklom exhibits a rich inventory of quadrisyllabic elaborate expressions, which have often partially or completely become semantically opaque. All three open word classes, i.e. noun, verb, and adjective, have become incorporated in these compound-like expressions. The expressions are fixed; it is not possible to modify a quadrisyllabic elaborate expression by, for example, changing the order of its syllables or by inserting elements. Quadrisyllabic expressions do not seem to be genre-specific, but they may be genre-preferred, as they seem to occur more frequently in narrative texts than in conversation.

A few examples of variable transparency are provided below. I will provide the meaning of the components where known. Example (192) is semantically fully transparent. The expression in (193) derives from the verb /ɟʌp⁰-ɟa³/ ‘play (of children)’, /-ʃiʔ⁰/ ‘bad’, and possibly /-kʰaʔ⁰/ ‘bitter’. The last component of (194) perhaps represents the verb /xʌt⁰/ ‘fall’. The expression in (195) is used to refer to

[44] The current meaning of the first component, /pɔl²/, is ‘type of floor beam’ but based on inter-varietal comparison the archaic meaning ‘tree’ is reconstructed.

pre-historic times during which things came into existence and disastrous events took place. The first and third components possibly represent the words /pʰʌŋ³/ ‘beginning’ and /mʌt⁰/ ‘destruction’.

(192) /kʰɔ³-puŋ² pa³-ʃaŋ²/
head-white tooth-red
‘thank you’ (lit. ‘white head, red teeth’)

(193) /jʌp⁰-ʃiʔ⁰-ɟa³-kʰaʔ⁰/
‘naughty’

(194) /kɔm²-puŋ²-kaŋ²-xʌt⁰/
‘move without thinking’

(195) /pʰʌŋ³-luŋ²-mʌt⁰-mɛ²/
‘creation and destruction times’

Many quadrisyllabic elaborate expressions involve expressive semi-reduplication: (partial) repetition of one or more syllables. Muklom shows at least the following six rhyming patterns: ABA_1B_1, $ABAB_1$, ABA_1B, ABCB, ABAC, and $ABCB_1$. The symbols A_1 and B_1 stand for partial reduplications of A and B respectively. Examples of the first pattern, ABA_1B_1, are provided under (196). A few examples of the second pattern, $ABAB_1$, are listed under (197) and (198) provides two examples of the third pattern, ABA_1B,.

(196) /bi²-bɔ³-li²-lɔ³/ ‘going up and down (landscape)’
/bɨk⁰-bɔʔ⁰-lɨk⁰-lɔʔ⁰/ ‘going up and down (on cylindrical object)’
/pʰiŋ¹-pʰi²-liŋ²-li³/ ‘living carelessly, free, without worrying about the future, steady’
/tɕi³-tɕu²-ni³-nu²/ ‘wearing wide, loose clothes’

(197) /bi³-bu²-bi³-ba³/ ‘wearing wide, loose clothes’
/bɨk⁰-bɔʔ⁰-bɨk⁰-baʔ⁰/ ‘emotion of feeling uncomfortable in the throat or stomach’
/dɨk⁰-dɔk⁰-dɨk⁰-dak⁰/ ‘direct, fast, and fair transaction’
/kʌ⁰ɹiŋ¹-kʌ⁰ɹuŋ¹/ ‘making noise’

(198) /daŋ^{1}-lik^{0}-saŋ^{1}-lik^{0}/ 'speaking carelessly, ruthless, without mercy'
/t^{h}ik^{0}-huŋ^{1}-sik^{0}-huŋ^{1}/ 'a person who died from an unnatural death'

Examples of the fourth pattern, ABCB, are provided under (199). In the first expression, /ɟʌk^{0}/ means 'hand' and /ɟa^{1}/ means 'leg'. In the second, /pɔl^{2}/ is an archaic word meaning 'tree', /bʌŋ^{1}/ also means 'tree', and /ti^{1}/ means 'small, spherical object'. In the third, /βa^{1}/ means 'father, male', and /se^{3}/ means 'sing, song'. The fourth expression is built on the verb /ɹʌŋ^{1}-tun^{1}/ 'avoid, keep safe from' and in the last, /huŋ^{1}/ is a negative existential, 'there is/are not'.

(199) /ɟʌk^{0}=ma^{3} ɟa^{1}=ma^{3}/ 'skin rash'
/pɔl^{2}-ti^{1}-bʌŋ^{1}-ti^{1}/ 'fruit'
/ɹun^{3}-βa^{1}-se^{3}-βa^{1}/ 'Runhun singer'
/k^{h}iʔ^{0}-tun^{1}-ɹʌŋ^{1}-tun^{1}/ 'be careful'
/t^{h}ik^{0}-huŋ^{1}-ɟuk^{0}-huŋ^{1}/ 'not giving offerings to a deceased person'

Examples of the fifth pattern, ABAC, are listed under (200). The first expression contains the word /t^{h}ʌ^{0}dɨk^{0}/ 'wrap around' and the second expression contains the word /βɔ^{1}/ 'bird'. The third derives from the shorter compound /pat^{0}-ɟa^{3}/ 'surprise' and the element /miʔ^{0}/ 'person'. The fourth also contains the element /miʔ^{0}/ 'person', but in combination with the word /tsɨk^{0}ɹɨk^{0}/ 'disgust'. The following expression consists of /nɨm^{3}-paŋ^{2}/ 'one year ago' and /nɨm^{3}-nɨŋ^{3}/ 'two years ago' and the last consists of /tɕɔ^{2}/ 'fear' and /pan^{2}/ 'break, scatter' with the de-adjectival nominaliser /ʌ^{0}-/.

(200) /t^{h}ʌ^{0}dɨk^{0}-t^{h}ʌ^{0}de^{3}/ 'beat around the bush'
/βɔ^{1}-kip^{0}-βɔ^{1}-bi^{2}/ 'type of bird, announces the coming of news'
/miʔ^{0}-pat^{0}-miʔ^{0}-ɟa^{3}/ 'surprise'
/miʔ^{0}-tsɨk^{0}-miʔ^{0}-ɹɨk^{0}/ 'disgusting'
/nɨm^{3}-paŋ^{2} nɨm^{3}-nɨŋ^{3}/ 'a long time ago'
/ʌ^{0}-tɕɔ^{2} ʌ^{0}-pan^{2}/ 'very much afraid, always afraid'

Examples of the last pattern, ABCB$_{1}$, are provided under (201). The first example is built on the shorter expression /miʔ^{0}-pɔʔ^{0}/ 'a simple person'. The second and third contain the element /nɔ^{1}/ 'younger sibling, baby'. The last expression was not recognised by one of my younger consultants so may be somewhat archaic.

(201) /miʔ^{0}-pɔʔ^{0}-ŋʌm^{2}-ɹɔʔ^{0}/ ‘simple, humble, quiet person’

/nɔ^{2}-li^{2}-k^{h}aŋ^{3}-k^{h}i^{2}/ ‘miscarriage’

/nɔ^{2}-ti^{2}-k^{h}aŋ^{2}-k^{h}i^{2}/ ‘orphan’

/tuŋ^{2}-tʌŋ^{2}-ɹɔ^{3}-ɹʌŋ^{2}/ ‘news, situation’

Not only major syllables are selected for repetition in quadrisyllabic expressions, but also minor syllables (see section 3.3.1). At least three minor syllables can appear as the recurring, rhyming element: 1) /kʌ^{0}/, as illustrated by /kʌ^{0}ɹiŋ^{1} kʌ^{0}ɹuŋ^{1}/ ‘making noise’, 2) /t^{h}ʌ^{0}/ as illustrated by /t^{h}ʌ^{0}dɨk^{0} t^{h}ʌ^{0}de^{3}/ ‘beat around the bush’, and 3) /ʌ^{0}-/ as illustrated by /ʌ^{0}-tɕɔ^{2} ʌ^{0}-pan^{2}/ ‘very much afraid, always afraid’. These data appear to contradict a statement by Williams (2013b:5) that excludes minor syllables from the creation process of aesthetic forms: ‘minor syllables, or presyllables, do not participate in morphophonological processes of grammatical aesthetics in the languages of Mainland Southeast Asia.’

4.4 Wordhood

Where does a word start and where does it end? Word boundaries or wordhood can be defined on different levels: orthography, semantics, morphosyntax, and phonology (see for example Hildebrandt 2015:221 and Basbøll 2000:378). This section will discuss wordhood in Muklom at the level of morphosyntax. The analysis of phonological word, identifiable for example by stress patterns, boundary signals, and word-internal sandhi, remains to be established. It is not yet possible to confidently segment Muklom texts into phonological words. Scholars generally agree that the notion of wordhood is pluralistic, not singular (see for example Haspelmath 2011). First, criteria for wordhood at different levels, e.g. morphosyntax and phonology, do not always align; they may conflict (see Post 2009 for a case study of mismatches in the TB language Galo). Second, grammatical word domains may not converge even within the same language and the same applies to phonological word domains. This section represents a first exploration of morphosyntactic wordhood in Muklom.

The morphosyntactic word is commonly referred to as the grammatical word, where ‘grammatical’ refers to the language component morphosyntax and not to the distinction between grammatical and lexical elements. Indeed, grammatical words may consist of one or more lexical elements, one or more grammatical elements, or a combination of both. Various criteria have been formulated to define grammatical words (see Haspelmath 2011:38). Morphosyntactic criteria for wordhood generally hold good but counterexamples do exist and especially compounds can pose a problem to them (see Basbøll 2000:380-381), leading some to conclude that words can be described only language-specifically and do not constitute a universal category (see Haspelmath 2011:60-61). The criteria which will be discussed here are: free occurrence, mobility, uninterruptibility, promiscuity, and potential pauses.

Other criteria, which are not discussed here and remain to be explored to achieve a more comprehensive analysis, include non-coordinatability, anaphoric-islandhood, and non-extractability. Throughout this dissertation, the second tier of glossed examples divides utterances up into grammatical words by means of spacing (tabs) and in addition indicates morpheme boundaries within grammatical words by means of dashes and equal signs (see section 2.2.4.1).

The classic criterion of wordhood is one that refers to free occurrence: the word constitutes the smallest item spoken in isolation, also known by the phrase 'a minimum free form' (see Bloomfield 1933:178) or 'a minimum utterance' (see Harris 1947:54). The criterion of free occurrence entails that a grammatical word is a unit which can occur as a well-formed utterance, which includes utterances that involve ellipsis. This means, for example, that Muklom adjectives in their basic form do not constitute a grammatical word, as illustrated by (202), while nominalised adjectives do, as illustrated by (203) (see also section 4.1.1.3). Freedom of occurrence correlates with status in the phrase: units which function as phrasal heads, like nominalised adjectives, can form an utterance by themselves, while modifiers like adjectival roots may not be able to.

(202) *-xʌl^{2}.
-good
Intended: 'Good.'

(203) ʌ^{0}-xʌl^{2}.
NMLZ-good
'Good!'; 'Okay!'

In Muklom, grammatical words may vary from a unit as small as a single vowel to units that contain a long string of morphemes. An example of an utterance that consists of one vowel, the affirmative question particle /i^{3}/, is provided in (204). The word /i^{3}/ 'Q.AFF' can be used to mark questions to which an affirmative answer is expected (see section 7.1.3), but can also be used as backchannel, as it is here. Prolific use of this particle is by some consultants perceived as bad style or annoying.

(204) i^{3}.
i^{3}
Q.AFF
'Is that so?' (541)

An example of a long grammatical word is provided in (205). The word consists of a copula, negator, prospective aspect marker and a quotative marker. While the combination /ʌŋ^{2}-mɔʔ^{0}/ can constitute an utterance and perhaps even /ʌŋ^{2}/ by itself, the grammatical markers that follow it cannot stand on their own.

(205) e ʌŋ^{2} mɔʔ^{0} te^{2} ta^{3}.

e **ʌŋ^{2}-m-ɔʔ^{0}-te^{2}=ta^{3}**

EXCLAM **COP-NEG-3-PROSP=QUOT**

‘‘Oh, it won’t be’ (we said).’ (20151127_01.ed)

The next criterion, mobility or fixedness, entails that grammatical words can occur in different positions while units smaller than a grammatical words cannot: within a word, elements occupy a fixed slot. For example, the first two grammatical words in (206) can occur in reverse order, as in (207). However, the enclitic definite marker /=t^{h}/ must always precede the enclitic case marker if present, as in (208), and the reverse, in (209), is not allowed. Likewise, the past tense suffix /-t/ must always precede the person index suffix, as in (210) and the reverse, in (211), is not permitted.

(206) miʔ^{0} nu^{1} t^{h}a^{2} hi^{1} ɛ^{3} kʌk^{0} ta^{1}.

[miʔ^{0}-nu^{1}=t^{h}i^{3}=a^{2}]$_{GW}$ [hi^{1}=ɛ^{3}]$_{GW}$ [kʌk^{0}-t-a^{1}]$_{GW}$

[person-F=DEF=ABS]$_{GW}$ [dog=ERG]$_{GW}$ [bite-PST-3]$_{GW}$

‘A dog bit the woman.’ (20100124-112656)

(207) hi^{1} ɛ^{3} miʔ^{0} nu^{1} t^{h}a^{2} kʌk^{0} ta^{1}.

[hi^{1}=ɛ^{3}]$_{GW}$ [miʔ^{0}-nu^{1}=t^{h}i^{3}=a^{2}]$_{GW}$ [kʌk^{0}-t-a^{1}]$_{GW}$

[dog=ERG]$_{GW}$ [person-F=DEF=ABS]$_{GW}$ [bite-PST-3]$_{GW}$

‘A dog bit the woman.’

(208) [miʔ^{0}-nu^{1}=t^{h}i^{3}=a^{2}]$_{GW}$

[person-F=DEF=ABS]$_{GW}$

‘the woman’

(209) *[miʔ^{0}-nu^{1}=a^{2}=t^{h}i^{3}]$_{GW}$

*[person-F=ABS=DEF]$_{GW}$

Intended: ‘the woman’

(210) [kʌk⁰-t-a¹]GW
[bite-PST-3]GW
‘he/she/it/they bit’

(211) *[kʌk⁰-a¹-t]GW
*[bite-3-PST]GW
Intended: ‘he/she/it/they bit’

While the order of clitics and suffixes is fixed, it is possible for clitics or affixes to intervene between other clitics or affixes. In other words, a grammatical word can be ‘interrupted’ by a clitic or suffix. What is not possible though, and this is the criterion of uninterruptibility, is for a grammatical word to be interrupted by another grammatical word (see Bloomfield 1933:180; Basbøll 2000:380-381). The utterance in (212) consists of a single grammatical word. As illustrated by (213), this word cannot be interrupted by a nominalised adjective, because it constitutes another grammatical word. Modifying nominalised adjectives like /ʌ⁰-ɟɔŋ²/ ‘big’ must be placed before the noun they modify instead of after (see section 5.1.2 and 5.1.4).

(212) hɨm² ɟɔŋ² na³.
[hɨm²-ɟɔŋ²=na³]GW
[house-big=in]GW
‘In a big house.’ (20161223_01)

(213) *hɨm² ʌ⁰ɟɔŋ² na³.
*[hɨm² [ʌ⁰-ɟɔŋ²]GW=na³]GW
*[house [NMLZ-big]GW=in]GW
Intended: ‘In a big house.’

Grammatical words also differ from suffixes and clitics with respect to promiscuity or non-selectivity. Suffixes are the most selective with respect to the types of hosts they may combine with. Clitics, like words, exhibit a much lower level of selectivity. However, clitics differ from grammatical words in that they show high dependence, i.e. they cannot stand in isolation (see the criteria ‘distribution’ and ‘binding’ in Zwicky 1984:152-153).

Potential pauses are another criterion that is often evoked to define grammatical words. Some scholars, however, are of the opinion that pauses do not constitute a good cue for wordhood and state for example that pauses do not (always) reflect language structure or that they are not part of

grammatically well-formed utterances (see Haspelmath 2011:38-39). The pauses that Muklom speakers have been observed to make in recordings sometimes do not align with grammatical wordhood as defined on basis of the above-mentioned criteria. One example of a disconnection is found in the hearsay marker enclitic /=ti^{3}/ (see section 6.1.6.3.6). This element constitutes a unit which is smaller than a grammatical word: it cannot stand by itself as an utterance, it has a fixed position, and cannot be interrupted. Nevertheless, speakers can leave a longish pause between the hearsay marker and preceding discourse, as is illustrated by (214) and the accompanying waveform in Figure 16, which shows a pause between /ʌ^{0}duːk^{0}/ and /=ti^{3}/. In this case I want to disagree with Haspelmath (2011:38) who states that pauses do not part of grammatically well-formed sentences: speakers may pause before /=ti^{3}/ in grammatically well-formed clauses in coherent and well-structured narratives, as in (214). The same applies to the quotative clitic /=ta^{3}/ (see section 6.1.6.3.5): a pause can occur before this element, also in grammatically well-formed utterances.

(214) hi^{1} t^{h}i^{3} lɛ^{3} u^{3} mɨk^{0} t^{h}i^{3} lɛ^{3} i^{3} mʌl^{2} ɛ^{3} ʌ^{0}duːk^{0}... ti^{3}.

hi^{1}=t^{h}i^{3}=lɛ^{3}	u^{3}-mɨk^{0}=t^{h}i^{3}=lɛ^{3}	i^{3}-mʌl^{2}=lɛ^{3}	ʌ^{0}-duːk^{0}=**ti^{3}**
dog=DEF=FOC	3SG.POSS.DIST-eye=DEF=FOC	PROX-like=FOC	NMLZ-blind=**HS**

‘The eyes of the dog were blind like this, they say.’ (20121103_03)

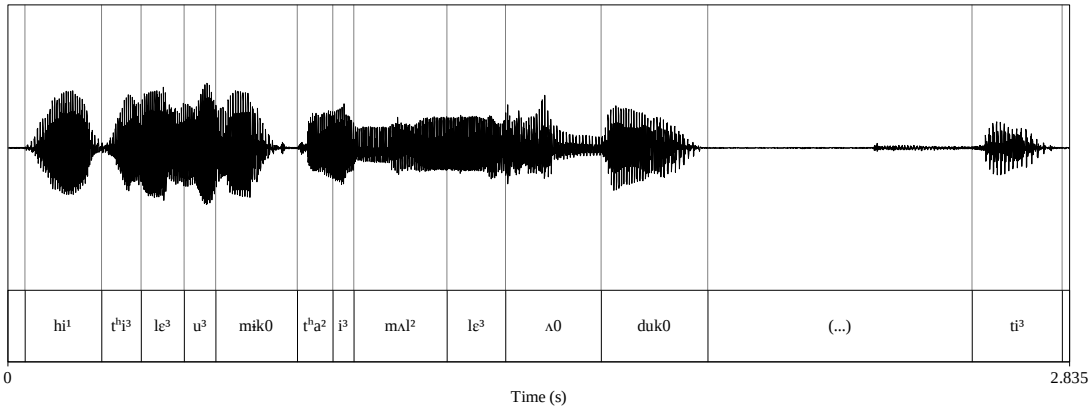

Figure 16 - Example of a pause before the hearsay marker /=ti^{3}/.

5 The noun complex

This chapter discusses the different building blocks of the noun phrase (NP), here understood to consist of the noun and all its modifiers, including attributive adjectives and determiners,[45] and further extends its scope to the adpositional phrase, thereby including the discussion of postpositions such as case markers. The category of noun is here taken to comprise three types: common nouns, proper nouns, and pronouns (see also section 4.1.1.1). Relative clauses are embedded in the NP but because they constitute a clause I have decided to discuss them in the clause chapter (see section 7.2.1.4).

The components of the noun complex are introduced in section 5.1. For each component it is then described which slot they occupy in the noun complex, in section 5.2. Finally, section 5.3 discusses the conjunction of NPs.

5.1 Elements

This section discusses the components of the noun complex, starting with the core of the complex, the head noun (section 5.1.1), followed by all the elements which have a modifying function. These modifiers may differ in scope. Some modify a noun, like modifier nouns and possessor nouns (section 5.1.2), the various determiners (section 5.1.3), adjectives (section 5.1.4), and numerals (5.1.5). Some modify an adjective, like the intensifiers (section 5.1.6). The postpositions take scope over the entire NP (section 5.1.7).

5.1.1 Head noun

This section discusses all elements that can function as head in the NP, whether they be a noun or a pronoun. Common nouns are discussed first, in section 5.1.1.1, followed by proper nouns in section 5.1.1.2, and the last six paragraphs relate to six different types of pronouns: personal pronouns in 5.1.1.3, possessive pronouns in 5.1.1.4, definite and demonstrative pronouns in 5.1.1.5, classifier pronouns in 5.1.1.6, quantifying pronouns in 5.1.1.7, and finally interrogative pronouns in 5.1.1.8.

5.1.1.1 Common noun

Common nouns are all nouns that are not proper nouns. They can be distinguished from proper nouns, and also pronouns, on the basis of a syntactic property: when common nouns or the phrases they head

[45] In generative grammar, this unit is referred to as a determiner phrase (DP) instead of a noun phrase (NP). The adjective phrase (AdjP) is not discussed separately in this dissertation.

are marked for ergative case (see section 5.1.7.1), i.e. when they function as the agent-like argument of a transitive clause, the ergative marker invariantly takes the form of a postposition /=ɛ³/, while the ergative marker shows allomorphy between the two forms /=ɛ³/ and /=a³/ with proper nouns and pronouns. This allomorphy is conditioned by the absence or presence of definite and demonstrative determiners. To show that their absence or presence has no effect on ergative marking with common noun, two examples are provided. Example (215) shows a common noun without definite or demonstrative determiner. The ergative marker /=ɛ³/ directly follows the compound noun /miʔ⁰-nu¹/ 'woman'. In example (216), the demonstrative determiner /=ʃ/ intervenes between the ergative postposition and the compound noun, but no allomorphy occurs; the ergative marker is the same as in (215). Definite and demonstrative determiners are discussed in section 5.1.3.2.

(215) tʰʌ⁰ɟi² miʔ⁰ nu¹ ɛ³ miʔ⁰ βa¹ ʃa² βat⁰ a³.

tʰʌ⁰ɟi²	**miʔ⁰-nu¹=ɛ³**	miʔ⁰-βa¹=ʃ-a²	βat⁰-a³
all	**person-F=ERG**	person-M=DIST=ABS	hit-3

'All the women hit that man.' (B1.88)

(216) tʰʌ⁰ɟi² miʔ⁰ nu¹ ʃɛ³ miʔ⁰ βa¹ βat⁰ a³.

tʰʌ⁰ɟi²	**miʔ⁰-nu¹=ʃi³=ɛ³**	miʔ⁰-βa¹	βat⁰-a³
all	**person-F=DIST=ERG**	person-M	hit-3

'All those women hit a man.' (B1.88)

5.1.1.2 Proper noun

Proper nouns differ from common nouns not only in deictic properties but also in syntax: while the ergative marker is invariantly /=ɛ³/ with common nouns, proper nouns that function as the agent-like argument of transitive clauses can take either /=ɛ³/ or /=a³/ (see also section 5.1.7.1). That is, when no definite or demonstrative determiner intervenes between the noun and the case marker, as shown in (217), proper nouns take the allomorph /=a³/. However, if a definite or demonstrative determiner does intervene, the form /=ɛ³/ must be used, as illustrated by (218) with the definite determiner /=tʰ/. Both are personal names: Nongdam is one of the Muklom consultants and Chengwa is a character from Muklom mythology.

(217) nɔŋ^{1} dam^{2} a^{3} βɔ^{1} tʰa^{2} lɔŋ^{1} ɛ^{3} tɨk^{0} pʌt^{0} tɕʌk^{0} ta^{1}.

nɔŋ^{1}-dam^{2}=a^{3} βɔ^{1}=tʰi^{3}=a^{2} lɔŋ^{1}=ɛ^{3} tɨk^{0} pʌt^{0}-tɕʌk^{0}-t-a^{1}

Nongdam=ERG bird=DEF=ABS stone=with kill[46] throw-PFV-PST-3

'Nongdam threw a stone at the bird and killed it.' (S2.22)

(218) e^{2} tʰɔ^{3} tɕɛŋ^{3} βa^{1} tʰɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3} a^{3} tsʌm^{1} nʌm^{3}

e^{2}tʰɔ^{3} [**tɕɛŋ^{3}-βa^{1}=tʰi^{3}=ɛ^{3}**]$_{A}$ u^{3}-na^{3}=βaŋ^{3} [kɛl^{2}dɨŋ^{2} ni^{3}-a^{3} tsʌm^{1}-nʌm^{3}

and [**Chengwa=DEF=ERG**]$_{A}$ 3SG.POSS-ear=from [worm and paddy-stalk

tsɔŋ^{3} a^{3} tʰa^{2} xʌm^{2} tʰɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

[tsɔŋ^{3}-a^{3}=tʰi^{3}=a^{2}]$_{RelC}$] $_{P}$ xʌm^{2}=tʰi^{3}=ɔʔ^{0} lʌt^{0} kɔʔ^{0}-t-a^{1}

[wear.in.ear-3=DEF=ABS]$_{RelC}$]$_{P}$ mat=DEF=at pull.out give-PST-3

'And Chengwa pulled out of his ear an earthworm and a paddy stalk that he wore in his ear, and placed them on a mat.' (20160106_01.ed)

5.1.1.3 Personal pronoun

The personal pronoun paradigm is presented in Table 32. The singular and plural columns contain forms which, with the exception of first person inclusive, are monosyllabic and monomorphemic. These monosyllabic pronouns are portmanteau morphemes, expressing person, singular or plural number, and in the case of the first person also clusivity: /i^{2}/ stands for first person plural exclusive and /hiʔ^{0}/ for first person plural inclusive. The morpheme /=tʌŋ^{2}/ that appears in the first person inclusive row is a plural marker (see section 5.1.3.4). The plural marker does not combine with the first person inclusive: */i^{3}-tʌŋ^{2}/ is considered ungrammatical by consultants. The plural marker in the inclusive trial and plural forms, however, constitutes an integral part of these pronouns which cannot be dropped. It optionally combines with the second person plural pronoun /nɨm^{1}/ and third person plural pronoun /nɨŋ^{1}/.

The forms in the dual and trial columns are compounds. The first element of these compounds, their core, is identical to the plural forms, and the second element of the compound is either a dual marker /-ni^{3}/, or a trial marker /-tɔm^{2}/. These derive from the adjectival numerals /-ni^{3}/ 'two' and /-tɔm^{2}/ 'three'[47] (see section 5.1.5). They have become integrated into a compound and are therefore transcribed with a

[46] The verb /ti^{3}/~/tɨk^{0}/ typically carries intransitive meaning ('die') and shows stem alternation. However, in multiple-verb predicates, the verb carries a causative meaning ('kill') and does not show stem allomorphy but instead has an invariable root, /tɨk^{0}/ (see section **Error! Reference source not found.** on SVC-like c onstructions).

[47] In Cholim, the word /djim^{2}/ 'three' also grammaticalized into a plural marker that forms an integral part of the plural personal pronouns (S.D. Morey, p.c.).

dash instead of an equal sign. The dual and trial personal pronoun forms are almost entirely predictable: the plural form (last column) forms the base for the dual and trial forms, except with the first person dual inclusive /hiʔ^{0}-ni^{3}/, which must drop the syllable /-tʌŋ^{2}/ of the plural. The fact that the dual and trial forms are not completely predictable does show that the dual and trial constitute an integral part of the personal pronoun paradigm.

	SG	**DU**	**TRI**	**PL**
1EXCL	/ŋa^{1}/	/i^{2}-ni^{3}/	/i^{2}-tɔm^{2}/	/i^{2}/
1INCL		/hiʔ^{0}-ni^{3}/	/hiʔ^{0}-tʌŋ^{2}-tɔm^{2}/	/hiʔ^{0}-tʌŋ^{2}/
2	/nʌŋ^{1}/	/nɨm^{1}-ni^{3}/	/nɨm^{1}-tɔm^{2}/	/nɨm^{1}/
3	/piʔ^{0}/	/nɨŋ^{2}-ni^{3}/	/nɨŋ^{2}-tɔm^{2}/	/nɨŋ^{2}/

Table 32 - Personal pronouns.

The personal pronoun paradigm shows overlap with the paradigm of possessive determiners: the plural forms are phonologically identical to their possessive counterparts. However, the singular forms do not all overlap (see section 5.1.3.1).

All pronouns, including the personal pronouns, occupy the same slot in the NP as common and proper nouns; they function as heads. Like common and proper nouns, personal pronouns can take determiners, as is illustrated by example (5), in which /ŋa^{1}/ 'I' is modified by /=ɹ/, an allomorph of the proximal demonstrative determiner /=ɹi^{3}/.

(219) nʌŋ^{1} a^{3} **ŋa^{1} ɹ**a^{2} βat^{0} p^{h}ʌ^{0}nu^{3} i^{3}?

nʌŋ^{1}=a^{3}	**ŋa^{1}=ɹi^{3}**=a^{2}	βat^{0}-p^{h}ʌ^{0}-n-u^{3}	i^{3}
2SG=ERG	**1SG=PROX**=ABS	hit-INV-FUT-2SG	Q.AFF

'Are you going to hit me (here)?' (20100124-112656)

With respect to case marking, the personal pronouns align with proper nouns: both show allomorphy in the ergative marker. Personal pronouns that function as the agent-like argument of transitive clauses are marked by an allomorph form of the ergative marker, /=a^{3}/, unless a definite or demonstrative determiner intervenes between the personal pronoun and the ergative marker, in which case the default ergative morpheme /=ɛ^{3}/ is used. An example of the former is provided in (220), where the pronoun /piʔ^{0}/ is followed by ergative /=a^{3}/, and an example of the latter is given in (221), where the same pronoun with an intervening definite determiner /=t^{h}/ is followed by the default ergative /=ɛ^{3}/.

(220) piʔ^{0} a^{3} tuŋ^{3} kʰa^{3} ɔ^{3} ʃiŋ^{3} ɛʔ^{0} miʔ^{0} ma^{3} hun^{2} ta^{1}.

piʔ^{0}=a^{3}	tuŋ^{3}	kʰa^{3}=ɔ^{3}	ʃiŋ^{3}	ɛʔ^{0}	miʔ^{0}=ma^{3}	hun^{2}-t-a^{1}
3SG=ERG	cylinder	hollow=in	keep	do	person=DAT	create-PST-3

'She kept it in a hollow cylinder and it changed into a human being.' (20160106_02)

(221) piʔ^{0} tʰɛ^{3} ba^{3} ɟa^{3} ʃìʔ^{0} kʌp^{0} ta^{1} ti^{3}.

piʔ^{0}=tʰi^{3}=ɛ^{3}=ba^{3}	ɟa^{3}-ʃìʔ^{0}	kʌp^{0}-t-a^{1}=ti^{1}
3SG=DEF=ERG=TOP	bad	receive-PST-3=HS

'She took it the wrong way.' (20160106_04)

This morphological rule also applies to the dual personal pronouns. It remains to be confirmed whether the trial forms are affected by it; the current corpus does not contain any examples of trial pronouns that fulfil the role of agent-like argument of a transitive clause. The fact that the rule affects dual pronouns affirms that the adjectival numeral /-ni^{3}/ 'two' has become an integral part of the personal pronoun paradigm as a dual marker and in these compounds no longer has the status of a modifying numeral. An example of ergative allomorph /=a^{3}/ with a dual pronoun is provided in (222). When a definite or demonstrative determiner intervenes between the pronoun and the case marker, as definite /=tʰi^{3}/ does in example (223), the default ergative /=ɛ^{3}/ must be used again.

(222) i^{3} su^{1} ni^{3} ɟɔ^{3}, nɨm^{1} ni^{3} a^{3} haʔ^{0} bɨŋ^{2} kʰɨt^{0} ka^{3} ʃɨn^{2}

i^{3}-su^{1}-ni^{3}	ɟɔ^{3}	**nɨm^{1}-ni^{3}=a^{3}**	haʔ^{0}-bɨŋ^{2}	kʰɨt^{0}	ka^{3}-ʃ-ɨn^{2}
1SG.POSS-grandchild-two	POL	**2PL-DU=ERG**	earth-pit	dig.out	go-DU-2PL

ɟu^{2} ta^{3} ti^{3} bat^{0} ta^{1}.

ɟu^{2}=ta^{3}=ti^{3}	bat^{0}-t-a^{1}
MIT=QUOT=HS	say-PST-3

''My two grandchildren, you should go dig out a pit in the earth' he said.' (20151208_05)

(223) e^{2} tʰɔ^{3} ba^{3} niŋ^{2} ni^{3} tʰɛ^{3} ba^{3} pʌl^{3} tʌŋ^{2} sal^{2} tʌŋ^{2} ba^{3} kʰɨt^{0} ka ɹɔʔ^{0}

e^{2}tʰɔ^{3}=ba^{3}	**niŋ^{2}-ni^{3}=tʰi^{3}=ɛ^{3}**=ba^{3}	pʌl^{3}-tʌŋ^{2}	sal^{2}-tʌŋ^{2}=ba^{3}	kʰɨt^{0}	ka-ɹɔʔ^{0}
and=TOP	**3PL-DU=DEF=ERG**=TOP	night-whole	day-whole=TOP	dig.out	go-CNT

kʰɨt⁰ ka ɹɔʔ⁰.

kʰɨt⁰ ka-ɹɔʔ⁰

dig go-CNT

‘And then the two of them kept on going and digging, all night and all day.’ (20151208_05)

The position in the clause of personal pronouns is the same as of full noun phrases, i.e. pre-verbal with a tendency for the agent-like argument to precede the patient-like argument. Like the vast majority of languages around the world, Muklom does not exhibit ‘pronoun-profusion’: free pronouns do not need to be present in verb phrases, both when a person index is present on the verb and when it is not.

5.1.1.4 Possessive pronoun

Modifying possessives, such as /ba³-/ ‘your (sg)’ (section 5.1.3.1), can be combined with the morpheme /-ɹaŋ³/ ‘BELONG.TO’ to form a possessive pronoun. The syntactic behaviour of possessive pronouns, i.e. their position in the clause and the types of configurations it can occur in, needs to be investigated further. Currently, all tokens in the corpus occur in isolation, except for example (224). This is a nominal clause in which the possessive pronoun /ba³-ɹaŋ³/ ‘yours’ functions as nominal predicate.

(224) tʰʌ⁰ʝi² na² ba³ ɹaŋ³.

tʰʌ⁰ʝi²=ni³=a² **ba³-ɹaŋ³**

all=MED=ABS 2SG.POSS-BELONG.TO

‘All those are yours.’ (S1.31b)

5.1.1.5 Demonstrative pronoun and definite pronoun

The language exhibits one definite pronoun and three demonstrative pronouns, as is shown in Table 33. The pronoun which is labelled ‘definite pronoun’ is an anaphoric pronoun; it is used to refer back to an antecedent in preceding discourse. The deictic centre of the three demonstrative pronouns is the speaker.

DEF	PROX	MED	DIST
/e²-tʰɨ³/	/i³-ɹi³/	/e²-ni³/	/e²-ʃɨ³/

Table 33 - Overview of definite and demonstrative pronouns.

We need to distinguish between demonstrative and definite pronouns that function as head of an NP, the topic of this section, and demonstrative and definite determiners that modify the noun (see section

5.1.3.2). An example of each is provided below. Example (225) contains a token of a demonstrative element that functions as a head: the proximal pronoun /i³-ɹi³/ ‘this (one)’. Example (226) contains an instance of noun modification by demonstrative determiners: the preposed proximal determiner /i³-ɹi³/ ‘this’ and a postposed proximal determiner /=ɹi³/ ‘this’ modify the noun /hi¹/ ‘dog’. The preposed proximal marker /i³-ɹi³/ in (226) and the proximal pronoun /i³-ɹi³/ in (225) are phonologically identical but differ in syntactic function, as these two examples illustrate. Double determination as exemplified in (226) will be discussed in section 5.1.3.2.

(225) tɛʌm² ʌŋ² a³ i³ ɹi³?

tɛʌm² ʌŋ²-a³ **i³-ɹi³**

what COP-3 **PROX-PROX**

‘What is this?’ (20120218_03)

(226) i³ ɹi³ hi¹ ɹi³!

i³-ɹi³ hi¹**=ɹi³**

PROX-PROX dog=PROX

‘You dog! (lit. ‘This dog!’)’ (S2.9)

The demonstrative and definite pronouns are bimorphemic words. The first morpheme is either the proximal marker /i³-/ as in /i³-ɹi³/ ‘this’ in (225), or the non-proximal marker /e²-/ as in /e²-ʃì³/ ‘that’ in (227). The deictic morphemes /i³-/ and /e³-/ are bound roots, they cannot occur in isolation. These markers are comparable to the proximal /a/ and distal /i/ morphemes that form a part of the demonstrative paradigm in Hakhun, a related language variety (Boro 2017:156), though the Hakhun system stops at this two way distinction, where Muklom makes a further three way distinction in the second morpheme of the demonstrative pronoun, as will be discussed below.

(227) tɛʌm² laŋ² pʰʌk⁰ sʌt⁰ ma³ nuk⁰ u³,

tɛʌm²-laŋ² pʰʌk⁰-sʌt⁰=ma³ nuk⁰-u³

what food.solid-food.soft=DAT like-2SG

e² ʃì³ pʰʌk⁰ saʔ⁰ u³ ta³.

e²-ʃì³ pʰʌk⁰-saʔ⁰-u³=ta³

NPROX-DIST eat.solid-eat.soft-2SG=QUOT

‘Whatever food you like, eat that.’ (20161223_01)

Four different markers can occur as second morpheme in these pronouns. The first is the anaphoric or definite marker /=tʰi³/, and three remaining morphemes are the demonstrative markers /=ɹi³/ 'proximal', /=ni³/ 'medial', and /=ʃi³/ 'distal'. They combine with aforementioned demonstrative elements /i³-/ and /e²-/ to form the definite pronoun /e²-tʰi³/ as in (228), and the demonstrative pronouns /i³-ɹi³/ 'this' as in (225), /e²-ni³/ 'that' as in (229), and /e²-ʃi³/ 'that' as in (227). The combination of the first and the second element is not free, they are fixed compounds: the proximal marker /=ɹi³/ only co-occurs with the proximal element /i³-/ in pronoun form, while the definite marker and the medial and distal must take the non-proximal marker /e²-/ in pronoun forms. It appears unlikely that /i³-/ and /e²-/ are allomorphs of the same morpheme, where /i³-/ would hypothetically be triggered by the following rhotic, because they differ not only in vowel quality, but also in tone.

(228) e² tʰi³ mʌl² ʌŋ² ta¹ mʌn¹ pʰʌn³.

e²-tʰi³=mʌl²	ʌŋ²-t-a¹	mʌn¹-pʰʌn³
NPROX-DEF=like	COP-PST-3	story

'The story was like that.' (20160106_02)

(229) e² ni³ ma³ bat⁰ u³!

e²-ni³=ma³	bat⁰-u³
NPROX-MED=DAT	say-2SG

'Say it to that one (person)!' (B1.73)

The deictic centre in this three-way demonstrative system is the speaker, not the addressee. This is illustrated by example (230). From the narrative that surrounds this utterance it becomes clear that a man has given a bird to two orphan children. After giving the bird, the man addresses the children, and he uses distal demonstratives to refer to the bird, which is now located away from him and near the addressees. This example contains modifying demonstratives, not the independent pronoun.

(230) e² ʃi³ βɔ¹ ʃa² ɹiŋ² a³ ɟɔ³, nɨm¹ ni³

e²-ʃi³	βɔ¹**=ʃi³=a²**	ɹiŋ²-a³=ɟɔ³	nɨm¹-ni³
NPROX-DIST	bird**=DIST=ABS**	make.noise-3=COND	1PL-DU

haʔ^{0} bɨŋ^{2} mɔŋ^{2} na^{3} kʌ^{0}lɔ^{2} nɔp^{0} tɕɨŋ^{1} ɟu^{2} ta^{3}, bat^{0} ta^{1} ti^{3}.

haʔ^{0}-bɨŋ^{2}-mɔŋ^{2}=na^{3}	kʌ^{0}lɔ^{2}	nɔp^{0}-tɕɨŋ^{1}	ɟu^{2}=ta^{3}	bat^{0}-t-a^{1}=ti^{3}
earth-pit-inside=in	fast	go.inside-OBL	HORT=QUOT	say-PST-3=HS

‘‘When that bird makes a sound, you two must quickly go inside’, he said.’ (20151208_05)

The definite and demonstrative pronouns can both be followed by postpositions (see section 5.1.7). The demonstrative pronouns can take any postposition, but it seems that the use of postpositions with the definite pronoun is restricted by a phonological rule. Muklom postpositions can be divided into two groups: 1) postpositions that start with a consonant, which is the majority, and 2) a set of five postpositions which lack an onset. The definite pronoun /e^{2}-t^{h}i^{3}/ does not seem to combine with any of the onset-less postpositions, but it freely combines with postposition that do have an initial consonant. The demonstrative pronouns, on the other hand, do combine with the onset-less postpositions, as is shown in Table 34.

postposition	**DEF**	**PROX**	**MED**	**DIST**
Ø	/e^{2}-t^{h}i^{3}/	/i^{3}-ɹi^{3}/	/e^{2}-ni^{3}/	/e^{2}-ʃi^{3}/
ERG	-	/i^{3}-ɹ=ɛ^{3}/	/e^{2}-n=ɛ^{3}/	/e^{2}-ʃ=ɛ^{3}/
ABS	-	/i^{3}-ɹ=a^{2}/	/e^{2}-n=a^{2}/	/e^{2}-ʃ=a^{2}/
with (instr)	-	/i^{3}-ɹ=ɛ^{3}/	/e^{2}-n=ɛ^{3}/	/e^{2}-ʃ=ɛ^{3}/
at (weak)	-	/i^{3}-ɹ=ɔ^{3}/	/e^{2}-n=ɔ^{3}/	/e^{2}-ʃ=ɔ^{3}/
at (strong)	-	/i^{3}-ɹ=ɔʔ^{0}/	/e^{2}-n=ɔʔ^{0}/	/e^{2}-ʃ=ɔʔ^{0}/

Table 34 - Definite and demonstrative pronouns with V(C)-postpositions.

Table 34 provides an overview of all the definite and demonstrative pronouns and the onset-less postpositions they combine with. The second element of the demonstrative pronoun compounds show allomorphy: proximal /=ɹi^{3}/~/=ɹ/, medial /=ni^{3}/~/=n/, distal /=ʃi^{3}/~/=ʃ/. Whenever a demonstrative pronoun is followed by an onset-less postposition, its final vowel /i/ and tone 3 are dropped while the tone and vowel of the following postposition are retained. For example, the proximal marker /=ɹi^{3}/ combines with the absolutive case postposition /=a^{2}/ into the syllable /ɹa^{2}/ in (231).

(231) nʌŋ^{1} a^{3} i^{3} **ɹa^{2}** ɹim^{3} tɕɨŋ^{1} ta^{3}.

nʌŋ^{1}=a^{3}	**i^{3}-ɹi^{3}=a^{2}**	ɹim^{3}-tɕɨŋ^{1}=ta^{3}
2SG=ERG	**PROX-PROX=ABS**	tame-OBL=QUOT

‘‘You must tame this one (bird)’ he said.’ (20160106_01.ed)

As Table 34 shows, demonstrative pronouns take the regular ergative marker /=ɛ^{3}/, and not the allomorph /=a^{3}/ which is found with proper names and personal pronouns (see also section 5.1.7.1.1). An example of a proximal pronoun with ergative marking is presented in (232).

(232) i^{3} ɹɛ^{3} bat^{0} ta^{1} i^{3}?

i^{3}-ɹi^{3}=ɛ^{3}	bat^{0}-t-a^{1}	i^{3}
PROX-PROX=ERG	say-PST-3	Q.AFF

'Did this one say it?' (B1.74)

Reportedly, only a few languages in the TB branch have developed definite marking (see LaPolla 2017a:46) and Muklom is one of them, exhibiting both an independent definite pronoun and a modifying definite marker. The demonstrative markers show a relatively high degree of transparency; they are decomposable into smaller meaningful elements and form a regular paradigm. This might suggest that the time depth of the demonstrative system is relatively shallow. In other words, we could be looking at a fairly recent innovation. This is especially relevant for the reconstruction of the development of the Tangsa languages and related language groups in future research, since shared innovations are one of the main parameters on which genetic classification should be based.

5.1.1.6 Classifier pronoun

Sometimes, counted nouns (noun-numeral) are accompanied by measure words, i.e. numeral classifiers. Unlike many more eastward Asian languages that have a rich and more consistent use of classifiers, these words occur only marginally in Muklom. Numeral classifiers are not obligatory in this language, nouns can be counted without a classifier being present. So far, the following six have been observed: 1) /liŋ^{1}/ denotes a complete, long object, 2) /tuŋ^{3}/ denotes cylindrical objects, 3) /t^{h}aʔ^{0}/ is another classifier that denotes long objects, 4) /lɔ^{1}/ denotes thin, flat objects such as clothes, 5) /k^{h}ɔ^{1}/ denotes a piece of bamboo cut in half once lengthwise, and 6) /βa^{1}/ is a general classifier which does not seem to correlate with shape.

We must distinguish between classifiers that function as an independent pronoun, the topic of this section, and those that function as modifier, i.e. as classifier determiner (see section 5.1.3.3). The order of elements is CLF-NUM, which is the typical order for Boro-Garo languages (see Wood 2008:14) that like Muklom belong to the Sal group but is not very common cross-linguistically. Example (233) shows a construction with a classifier determiner. The counted noun is /ŋaʔ^{0}/ 'fish', followed by classifier /liŋ^{1}/, and numeral /-tɔm^{2}/ 'three'.

(233) ŋaʔ^{0} liŋ^{1} tɔm^{2}.

ŋaʔ^{0} **liŋ^{1}**-tɔm^{2}

fish **CLF**-three

'Three lengthy, complete fishes.' (B1.127)

This section, however, discusses the independent classifier pronoun. When the counted noun is dropped, the classifier will take over the position as head of the NP from the counted noun.[48] This is the classifier pronoun, which like other pronouns has properties in common with nouns, such as being able to be modified by a determiner or a numeral (see section 4.1.1.1). An example of a classifier pronoun with a determiner, or in this case double determination (see section 5.1.3.2), is provided in (234). The general classifier /βa^{1}/, which despite the fact that it finds its lexical origin in the word /βa^{1}/ 'father' can denote both animate and inanimate referents, is here modified by the demonstrative determiner /i^{3}-ɹi^{3}/ on the left and by /=ɹi^{3}/ on the right.

(234) i^{3} ɹi^{3} βa^{1} ɹa^{2} bɔ^{3}?

i^{3}-ɹi^{3} **βa^{1}**=ɹi^{3}=a^{2}=bɔ^{3}

PROX-PROX **CLF**=PROX=ABS=Q.PLR

'This one?' (S2.76)

An example of a classifier pronoun with numeral is provided in (235), which contains the classifier /tʰaʔ^{0}/ that denotes certain types of long objects. According to consultant CTT, the counted noun is more often left unmentioned than not in the case of this classifier.

(235) tʰaʔ^{0} ɹɔk^{0} bʌ^{0}ŋa^{3}.

tʰaʔ^{0} ɹɔk^{0}-bʌ^{0}ŋa^{3}

CLF unit.of.ten-five

'Fifty pieces.' (CTT.lexicon)

The following anecdote shows how the deletion of a counted noun may lead to confusion on the side of the hearer. I once witnessed a man entering the kitchen area, asking a woman who was sitting next to the fire to hand him the /tuŋ^{1}/, which is a classifier for cylindrical objects. There were three objects sitting next to the fire that met that description: a blow pipe and two bottles. She handed him the first

[48] In other words, I propose a headed surface structure. As a reviewer points out, an alternate analysis is possible according to which the counted noun is underlyingly present as head and this head is ellipsed at the surface level. I prefer my current analysis because of its simplicity: the underlying and surface level align.

object, to which he replied he meant the other ‘cylinder’, so she took out the second object, but again this was not what the man had come looking for, so he asked again for the other one. Finally, the woman was able to hand him the object he had been referring to and he went off with it.

There are various elements that express shape in the language, but not all of them are classifiers. If classifiers are omitted, the basic meaning of an expression is retained. However, if a noun that describes a shape but is not a classifier is deleted, the meaning of the expression will change considerably. Of the above mentioned classifiers, /tuŋ^{3}/ often behaves like a normal shape-noun with the meaning ‘cylinder’. We must distinguish between the grammatical element, the classifier /tuŋ^{3}/, and the lexical element /tuŋ^{3}/ as in (236) below. If we remove the last element from (236), the meaning would change from ‘blow pipe’ to something like ‘blowing fire’.

(236) βʌl^{1} mɔt^{0} tuŋ^{1}.
βʌl^{1}-mɔt^{0}-**tuŋ^{1}**
fire-blowing-**cylinder**
‘Blowing pipe.’ (S1.14)

Another example is the element /ti^{1}/, which denotes a round, spherical object, and can be translated depending on context as ‘tip’, exemplified by (237) and (238), ‘pill’ as in (239) or ‘round piece’ as in (240), or ‘fruit’ as in (241) and is not a classifier but a noun. In these five examples, the noun is part of a nominal compound, as /tuŋ^{1}/ is in example (236). If we remove /ti^{1}/ from the nominal compounds, the meaning changes from ‘tip of the nose’ to ‘nose’, from ‘nipple’ to ‘breast’, from ‘pill’ to ‘medicine’, from ‘pebble’ to ‘stone’ respectively. The last case, (241), is a more complex, since /nap^{0}-/ does not seem to occur in isolation, but always combines with a second component such as /nap^{0}-bʌŋ^{1}/ ‘banana tree’. It is proposed that /nap^{0}/ refers to an abstract referent, the species ‘banana’.

(237) k^{h}uŋ^{1} ti^{1}.
k^{h}uŋ^{1}-**ti^{1}**
nose-**tip**
‘Tip of the nose.’ (S2.31)

(238) puŋ^{2} ti^{1}.
puŋ^{2}-**ti^{1}**
breast-**tip**
‘Nipple.’ (B1.25)

(239) ʃɔm^{1} ti^{1}.
ʃɔm^{1}-**ti^{1}**
medicine-**pill**
‘Pill.’ (S1.37)

(240) lɔŋ^{1} ti^{1}.
lɔŋ^{1}-**ti^{1}**
stone-round.piece
‘Pebble.’ (B1.104)

(241) nap^{0} ti^{1}.
nap^{0}-**ti^{1}**
banana-**fruit**
‘Banana.’ (20121103_04)

The noun /ti^{1}/ ‘piece, spherical object’ does not exclusively occur as the second element of a nominal compound, it may also occur as a nominal head by itself, as is exemplified by (242). This phrase can be used to refer to, for example, one momo or one pill.

(242) ti^{1} ʃɛ^{1}.
ti^{1}-ʃɛ^{1}
spherical.object-one
‘One piece.’ (S3.4)

5.1.1.7 Quantifying pronoun

Quantifiers can be divided into two groups: 1) quantifying pronouns that act as the head of an NP, the topic of this section, and 2) quantifying determiners that modify a noun, which are discussed in section 5.1.3.4. Quantifying pronouns act as head of an NP and just like common and proper nouns may take postpositions, including case marking, and determiners.

The following quantifying pronouns have been observed so far: /tʰʌ^{0}ʝi^{2}/ ‘all, every’, /tʰʌ^{0}-ni^{3}/ ‘both’, and /tɕʌm=tʰɔʔ^{0}/ ‘anything’, each of which will be discussed in this section. Of these forms, /tʰʌ^{0}ʝi^{2}/ ‘all,

every' additionally functions as a modifying quantifier, and perhaps also /tʰʌ⁰-ni³/ 'both'.[49] These two quantifying determiners and others will be discussed in section 5.1.3.4, but this section will be restricted to the independent quantifying pronouns.

Example (243) contains a token of the first quantifying pronoun: /tʰʌ⁰ʝi²/ 'all, every'. Like other nominal elements, it may be modified by determiners and postpositions, in this case the definite determiner /=tʰ/ and case marker /=a²/, as shown in example (243). Quantifying pronouns like /tʰʌ⁰ʝi²/ take the regular ergative marker /=ɛ³/, as illustrated by (244), and not its allomorph /=a³/, which is used with proper nouns and personal pronouns (see section 5.1.7.1).

(243) tʰʌ⁰ʝi² tʰa² tʌ⁰tʰuŋ¹ ta¹.

tʰʌ⁰ʝi²=tʰi³=a² tʌ²-tʰuŋ¹-t-a¹

all=DEF=ABS CAUS-gather-PST-3

'They all gathered.' (20151208_04)

(244) tʰʌ⁰ʝi² ɛ³ tɨl² saʔ⁰ ti¹.

tʰʌ⁰ʝi²=ɛ³ tɨl² saʔ⁰-t-i¹

all=ERG rice eat-PST-1PL

'We all have eaten rice.' (20121103_04)

To express the sense 'every, all', two strategies are available. First, we can use the quantifying pronoun /tʰʌ⁰ʝi²/ 'all', as discussed above, and second, we can reduplicate the head noun. An example of the latter is provided in (245). Reduplication of the noun combined with a postposition results in a distributive meaning, as is exemplified by (246), a clause which has been taken from a story about the coming into existence of the different languages of the earth. In this story, a woman gives birth to a multitude of children all at once. She teaches each of them a different language.

(245) u⁰pʰʌn² u⁰pʰʌn² miʔ⁰ ɹi³.

u⁰-pʰʌn² u⁰-pʰʌn² miʔ⁰=ɹi³

NMLZ-type NMLZ-type person=INFER

'All types of people.' (541)

[49] No example of /tʰʌ⁰-ni³/ 'both' as a modifying quantifier has been recorded so far, but since other distributive numeral quantifiers do occur as a modifying quantifier in the corpus, it is not unlikely that /tʰʌ⁰-ni³/ 'both' can occur as a modifier.

(246) ɹa^{0} tʰa^{2} miʔ^{0} ma^{3} miʔ^{0} ma^{3} ɹaʔ^{0} ʌŋ^{2} ɛʔ^{0} [...]

ɹaʔ^{0}=tʰi^{3}=a^{2} **miʔ^{0}=ma^{3}** **miʔ^{0}=ma^{3}** ɹaʔ^{0} ʌŋ^{2} ɛʔ^{0}

speech=DEF=ABS **person=DAT** **person=DAT** speak AUX do

'Speaking a language to each person […]' (541)

The pronoun /tʰʌ^{0}-ni^{3}/ 'both' consists of a distributive prefix /tʰʌ^{0}-/ plus the numeral /-ni^{3}/ 'two'. The distributive prefix can attach to the numerals 2-4, and perhaps also to higher numerals, but this is not attested in the current corpus. These distributive numerals can function both as a quantifying pronoun, as illustrated in example (247), and as a quantifying determiner (section 5.1.3.4). The third person index in example (247) is used to express a generic sense, not to refer to a specific third person referent (see section 6.1.2), hence the generic 'one' in the translation. The corpus contains tokens of a pronominally used distributive numeral /tʰʌ^{0}-ni^{3}/ 'both', but not of a pronominally used /tʰʌ^{0}-tɔm^{2}/ 'each of the three' or /tʰʌ^{0}-bʌ^{0}li^{3}/ 'each of the four'.

(247) tʰʌ^{0}ni^{3} ma^{3} ʝɨn^{3} ɹaʔ^{0} a^{3}.

tʰʌ^{0}-ni^{3}=ma^{3} ʝɨn^{2} ɹaʔ^{0}-a^{3}

DISTR-two=for ABIL say-3

'One can say it for both.' (20161223_02)

Another independent quantifier is /tɕʌm=tʰɔʔ^{0}/ 'anything' (lit. 'what also'), which together with a negator on the verb or with the negative existential, gives the meaning 'nothing' as is illustrated by example (248), (249), and (250). The first, (248), is a response to the question 'What are you doing?'

(248) tɕʌm tʰɔʔ^{0} ʌŋ^{2} mɔʔ^{0}.

tɕʌm=tʰɔʔ^{0} ʌŋ^{2}-m-ɔʔ^{0}

what=also COP-NEG-3

'Nothing.' (S1.51)

(249) βa^{1} pɔʔ^{0} βa^{1} baŋ^{2} tɕʌm tʰɔʔ^{0} sʌm^{1} mɔʔ^{0}.

βa^{1}-pɔʔ^{0}-βa^{1}-baŋ^{2} **tɕʌm=tʰɔʔ^{0}** sʌm^{1}-m-ɔʔ^{0}

father-simple-father-tasteless **what=also** know-NEG-3

'A simple man knows nothing.' (S2.51)

(250) tɕʌm tʰɔʔ⁰ ʌ⁰huŋ¹ ʌŋ² ta¹.

tɕʌm=tʰɔʔ⁰ ʌ⁰-huŋ¹ ʌŋ²-t-a¹

what=also NMLZ-NEXIST COP-PST-3

'There was nothing.' (B1.146)

5.1.1.8 Interrogative pronoun

The following interrogative pronouns have been observed in Muklom: 1) /u³tʌŋ²/ 'who', 2) /ba³ɹi²/ 'which/what', 3) /tɕʌm¹/~/tɕʌm²/ 'which/what', 4) /tɕʌm²lʌŋ²/ 'which/what', and 5) /tɕʌm²-tan³/ 'how much/many'. The second syllable of the interrogative pronoun /tɕʌm²lʌŋ²/ is sometimes reduplicated, as illustrated by (251). At least some of the interrogative forms can also function as interrogative determiners (see section 5.1.1.7). The interrogative form /ba³ɹi²/ 'which/what' can further be found in the quantifying determiner construction /ba³ɹi²…=tʰɔʔ⁰/ 'which/whatever' (see section 5.1.3.4).

(251) tɕʌm² lʌŋ² lʌŋ²?!

tɕʌm²lʌŋ²-lʌŋ²

what-REDUP

'What?!' (S2.30)

Like other NP heads, interrogative pronouns can combine with postpositions, including the ergative, absolutive and dative case postpositions. A few examples containing interrogative pronouns are presented below, each with a different postposition. In (252), the interrogative pronoun /tɕʌm²lʌŋ²/ 'which/what' is followed by the oblique postposition /=na³/ 'in'. In (253), the non-personal interrogative pronoun /tɕʌm²/ 'which/what' is followed by the dative postposition /=ma³/ and the meaning of these combined elements is 'why'. Involvement of a first person entity can be inferred from the presence of an inverse marker on the verb and singularity of this first person entity can be inferred from the context from which this example is taken, hence the translation 'to me'. In (254), the pronoun /tɕʌm²-tan³/ 'how much/many' is used in predicate position and receives an absolutive postposition /=a²/. Unlike personal pronouns and proper nouns, interrogative pronouns take the regular ergative marker /=ɛ³/, and not its allomorph /=a³/ (see section 5.1.7.1.1), as is illustrated by (255).

(252) βɔ^{1} tʰi^{3} tɕʌm^{2} lʌŋ^{2} na^{3} tɔŋ^{2} a^{3}?

βɔ^{1}=tʰi^{3} **tɕʌm^{2}lʌŋ^{2}=na^{3}** tɔŋ^{2}-a^{3}

chicken-DEF what-in sit-3

'What does the chicken sit on?' (B1.147)

(253) tɕʌm^{2} ma^{3} ɹaʔ^{0} pʰu^{3}?

tɕʌm^{2}=ma^{3} ɹaʔ^{0}-pʰ-u^{3}?

what=DAT speak-INV-2SG

'Why do you say this to me?' (20151208_05)

(254) nɨm^{1} tɕʌm^{2} tan^{3} a^{2} ba^{3} hɨm^{2} na^{3}?

nɨm^{1} **tɕʌm^{2}-tan^{3}=a^{2}** ba^{3}-hɨm^{2}=na^{3}

2PL **what-much=ABS** 2SG.POSS-house=in

'How many are you at home?' (S1.39)

(255) u^{3} tʌŋ^{2} ɛ^{3} ɹe^{2} ɹʌŋ^{3} tɕʌk^{0} ta^{1}?

u^{3}tʌŋ^{2}=ɛ^{3} ɹe^{2}ɹʌŋ^{3}-tɕʌk^{0}-t-a^{1}

who=ERG do-PFV-PST-3

'Who has done it?' (B1.65)

It appears only the personal interrogative can take a definite or demonstrative determiner. Example (256) illustrates how the personal interrogative is /u^{3}tʌŋ^{2}/ 'who' can combine with the definite determiner and a case marker. Some speakers pronounce the word /u^{3}tʌŋ^{2}/ as /i^{3}tʌŋ^{2}/, with a high front vowel as in (256).

(256) i^{3} tʌŋ^{2} tʰa^{2} i^{3} tʌŋ^{2} ɛ^{3} βat^{0} ta^{1}?

i^{3}tʌŋ^{2}**=tʰi^{3}=a^{2}** i^{3}tʌŋ^{2}**=ɛ^{3}** βat^{0}-t-a^{1}

who**=DEF=ABS** who**=ERG** hit-PST-3

'Who has hit whom?' (B1.147)

When asking after someone's name, the personal interrogative must be used as well, literally 'Who is your name?' as in example (257). While here functioning as head, the question word /u^{3}tʌŋ^{2}/ may be used as a modifying element as well. It will then modify an NP that has a human referent (see section 5.1.3.5).

(257) ba^{3} miŋ^{3} i^{3} tʌŋ^{2} a^{2}?

ba^{3}-miŋ^{3} **i^{3}tʌŋ^{2}**=a^{2}

2SG.POSS-name **who**=ABS

'What is your name?' (lit. 'Who is your name?') (S1.26)

The non-personal interrogative pronoun /ba^{3}ɹi^{2}/ 'which/what' maybe derives from an interrogative element /ba^{3}-/ and the proximal marker /=ɹi^{3}/. The first syllable, /ba^{3}-/, occurs in a few other interrogative words as well: /ba^{3}luk^{0}ɔ^{1}/ 'when', /ba^{3}-na^{3}/ 'where', /ba^{3}-nʌŋ^{3}/ 'to where', and /ba^{3}-nʌŋ^{3}-βaŋ^{3}/ 'from where'. It should be noted that the second syllable differs in tone from the proximal demonstrative element /=ɹi^{3}/. If an etymological connection exists between the two, then some type of tone change must have taken place in one of the two. The last vowel of the non-personal interrogative pronoun /ba^{3}ɹi^{2}/ 'which/what' is elided in front of an onset-less postposition, including the ergative and absolutive case markers (see section 5.1.1.5). An example without elision is provided in (258). An overview of postpositions that trigger elision of the preceding vowel is provided in Table 35.

(258) ba^{3} ɹi^{2} ma^{3} nuk^{0} u^{3}.

ba^{3}ɹi^{2}=ma^{3} nuk^{0}-u^{3}

which=DAT like-2SG

'(Take) which you like.' (lit. 'To which you like.') (S2.4)

postposition	interrogative	English
Ø	/ba^{3}ɹi^{2}/	'which/what'
ERG	/ba^{3}ɹ=ɛ^{3}/	'which/what'
ABS	/ba^{3}ɹ=a^{2}/	'which/what'
with (instr)	/ba^{3}ɹ=ɛ^{3}/	'with which/what'
at (weak)	/ba^{3}ɹ=ɔ^{3}/	'in which/what'
at (strong)	/ba^{3}ɹ=ɔʔ^{0}/	'in which/what'

Table 35 - The non-personal interrogative pronoun with (C)V postpositions.

5.1.2 Modifier noun and possessor noun

Noun-noun structures follow the order modifier-modified and genitive-head. Typologically this is not surprising, since verb-final languages have a tendency to place the genitive modifier before the

possessed noun. According to LaPolla (2017a:46), all ST languages would exhibit this order. An example of the combination modifier noun-modified noun, a word compound, is provided in (259).

(259) ɟuŋ^{2} sa^{3} βʌt^{0}.
ɟuŋ^{2}-sa^{3}βʌt^{0}
water-leech
'Water leech.' (20100124-104250)

Example (259) contains two underived nouns, but modifier nouns may also be derived, as is illustrated by the phrase /ʌ^{0}-ɟɔŋ^{2} mɛŋ^{2}/ 'a cat, a big one' in (260), which contains a noun that is derived from the adjective /-ɟɔŋ^{2}/ by means of the nominalizing prefix /ʌ^{0}-/. Nominalised adjectives express restrictive modification when used as modifier nouns (see section 5.1.4). The restrictive sense that this construction encodes, is in the English translation of the example conveyed by the definite article. De-adjectival modifier nouns can be stacked. In (261), for example, the noun /miʔ^{0}/ 'person' is modified by three.

(260) piʔ^{0} ɹa^{2} ʌ^{0}ɟɔŋ^{2} mɛŋ^{2} ma^{3} tɕɔ^{2} ta^{1}.

piʔ^{0}=ɹi^{3}=a^{2}	**ʌ^{0}-ɟɔŋ^{2}**	**mɛŋ^{2}**=ma^{3}	tɕɔ^{2}-t-a^{1}	
3SG=PROX=ABS	**NMLZ-big**	**cat**=DAT	fear-PST-3	

'He was afraid of the big cat.' (B1.35)

(261) ŋa^{1} a^{3} ʌ^{0}luːk^{0} ʌ^{0}ɟɔŋ^{2} ʌ^{0}puŋ^{2} miʔ^{0} k^{h}i^{3} tʌŋ^{1}.

ŋa^{1}=a^{3}	**ʌ^{0}-luːk^{0}**	**ʌ^{0}-ɟɔŋ^{2}**	**ʌ^{0}-puŋ^{2}**	miʔ^{0}	k^{h}i^{3}-t-ʌŋ^{1}
1SG=ABS	**NMLZ-tall**	**NMLZ-big**	**NMLZ-white**	person	see-PST-1SG

'I saw the tall, big, white person.' (B1.148)

Finally, example (262) contains an instance of genitive-head structure in the phrase /nu^{1}-βa^{1} mʌn^{1}-p^{h}ʌn^{3}/ 'the story of our ancestors', where the genitive or possessor compound noun /nu^{1}-βa^{1}/ 'ancestors (lit. mother father)' precedes the possessed compound noun /mʌn^{2}-p^{h}ʌn^{3}/ 'story'.

(262) nu^{1} βa^{1} mʌn^{1} pʰʌn^{3} ʌŋ^{2} ta^{1} ɔ^{3}.

nu^{1}-βa^{1} mʌn^{1}-pʰʌn^{3} ʌŋ^{2}-t-a^{1} ɔ^{3}

mother-father story COP-PST-3 MIT

'That was the story of the ancestors.' (20121103_03)

5.1.3 Determiners

This section discusses six types of determiners (see section 4.1.2.2): the possessive determiner (section 5.1.3.1), the demonstrative determiner and the definite determiner (section 5.1.3.2), the classifier determiner (section 5.1.3.3), the quantifying determiner (section 5.1.3.4), and the interrogative determiner (section 5.1.3.5). The slots that these determiners occupy differ: some precede the noun they modify (possessive, interrogative), others follow the noun they modify (classifier, quantifier), and yet others can do either (demonstrative, definite). These are all modifying components of the NP. Pronominal counterparts that function as heads, for example the demonstrative pronoun, are discussed under section 5.1.1.

5.1.3.1 Possessive determiner

The language exhibits both modifying possessives and possessive pronouns which function as heads. The former are discussed in the current section. They constitute the basic possessive paradigm, on which pronominal forms are built by means of the addition of an extra element /-ɹaŋ^{3}/ (section 5.1.1.4). The possessive determiner, discussed here, precedes the head noun. The forms are listed in Table 36. The possessive determiner paradigm shows a large overlap with the paradigm of the personal pronoun (section 5.1.1.3). All differences, i.e. suppletive forms, are confined to the column which contains the singular forms: 1) the first person pronoun is /ŋa^{1}/, while the possessive determiner is /i^{3}-/, 2) the second person pronoun is /nʌŋ^{1}/, while the possessive determiner is /ba^{3}-/, and 3) the third person pronoun is /piʔ^{0}/, while we find that either /piʔ^{0}/ or the alternative form /u^{3}-/ can be used in the possessive paradigm. The forms with the adjectival numerals two and three are largely predictable: the dual and trial forms are based on the plural form in the last column, except for /hiʔ^{0}-ni^{3}/, the first person dual inclusive, which drops the syllable /tʌŋ^{2}/ of the plural.

	SG	DU	TRI	PL
1EXCL	/i^{3}-/	/i^{2}-ni^{3}/	/i^{2}-tɔm^{2}/	/i^{2}/
1INCL		/hiʔ^{0}-ni^{3}/	/hiʔ^{0}-tʌŋ^{2}-tɔm^{2}/	/hiʔ^{0}-tʌŋ^{2}/
2	/ba^{3}-/	/nɨm^{1}-ni^{3}/	/nɨm^{1}-tɔm^{2}/	/nɨm^{1}/
3	/piʔ^{0}/~/u^{3}-/	/nɨŋ^{2}-ni^{3}/	/nɨŋ^{2}-tɔm^{2}/	/nɨŋ^{2}/

Table 36 - Possessive determiners.

For one possessive determiner from each column of the table, examples are provided below.

(263) i^{3} hɨm^{2} ʃɔʔ^{0} sin^{3} βʌŋ^{1} u^{3}.

i^{3}-hɨm^{2}=ʃ=ɔʔ^{0} sin^{3} βʌŋ^{1}-u^{3}

1SG.POSS-house=DIST=at see go.up-2SG

‘Come have a look in my house!’ (20161223_01)

(264) nɨŋ^{2} ni^{3} hɨm^{2}.

nɨŋ^{2}-ni^{3} hɨm^{2}

3PL.POSS-DU house

‘The house of them two.’ (20170224_01)

(265) hiʔ^{0} tʌŋ^{2} tɔm^{2} hɨm^{2}.

hiʔ^{0}-tʌŋ^{2}-tɔm^{2} hɨm^{2}

1INCL.POSS-PL-TRI house

‘The house of the three of us.’ (20170224_01)

(266) tɛʌm^{2} tan^{3} miʔ^{0} a^{2} nɨm^{1} hɨm^{2} na^{3}?

tɛʌm^{2}=tan^{3} miʔ^{0}=a^{2} **nɨm^{1}** hɨm^{2}=na^{3}

what=as.much.as person=ABS **2PL.POSS** house=in

‘How many people are there in your house?’ (20120218_03)

The morphological status of possessive determiners is not uniform. Three of the forms in Table 36, /i^{3}-/ ‘my’, /ba^{3}-/ ‘your’, and /u^{3}-/ ‘his, her, its’ cannot occur in isolation, they are bound morphemes that attach to the following noun. The rest of the forms in Table 36 can occur in isolation, though a slight difference in meaning exists between isolated and non-isolated forms. For example, /nɨŋ^{2}/ has possessive meaning (‘their’) when modifying a noun but no possessive meaning (‘they’) when

occurring in isolation. If possessive meaning needs to be retained, /-ɹaŋ^{3}/ must be added to form a possessive pronoun, e.g. /nɨŋ^{2}-ɹaŋ^{3}/ ‘theirs’ (see section 5.1.1.4). For the plural forms we find further evidence of their unbound status: distributive quantifiers may stand between them and the modified noun. In (267), for example, distributive quantifier /tʰʌ^{0}-bʌ^{0}li^{3}/ ‘each four’ stands between the possessive determiner /i^{2}/ ‘our’ and the modified noun /hɨm^{2}/ ‘house’.

(267) i^{2} tʰʌ^{0}bʌ^{0}li^{3} hɨm^{2}.

i^{2}	**tʰʌ^{0}-bʌ^{0}li^{3}**	hɨm^{2}
1EXCL.POSS	**DISTR-four**	house

‘The house of each of us four.’ (20170224_01)

For the third person singular possessive, one can chose between two forms which are etymologically unrelated: /piʔ^{0}/ and /u^{3}-/. Both are seen to occur with inalienable possession in the current annotated corpus: with body parts, blood relatives, and relatives through marriage. Therefore, alienability does not seem to play a role. It has been suggested by consultants that there is a semantic distinction between these two possessive determiners. The bound form, /u^{3}-/, would denote possession by a distal referent, while the first, /piʔ^{0}/, would refer to a possessor which is near. I have also observed /u^{3}-/ being used with generic referents. An example of this is provided in (268) and (269), both encountered in a video which a Muklom speaker uploaded to Facebook in May 2018 on the occasion of Mother’s Day. The plural marker /=tʌŋ^{2}/ in example (269) makes clear that the reference is to mothers in general, not to a mother of one specific person. It remains to be determined whether generic /u^{3}-/ is restricted to kinship terms or occurs freely with all noun types.

(268) i^{3} ɹi^{3} se^{3} ɹa^{2} u^{3} nu^{1} ma^{3} tɨn^{1} mʌt^{0} se^{3}.

i^{3}-ɹi^{3}	se^{3}=ɹ=a^{2}	**u^{3}-nu^{1}=ma^{3}**	tɨn^{1}-mʌt^{0}-se^{3}
PROX-PROX	song=PROX=ABS	**3SG.POSS-mother=DAT**	heart/liver-perish-song

‘This song is a love song for one’s mother.’ (FB post)

(269) ɹɛʔ^{0} ŋa^{1} a^{3} i^{3} ɹi^{3} se^{3} ɹa^{2} u^{3} nu^{1} tʌŋ^{2} ma^{3}

ɹɛʔ^{0}	ŋa^{1}=a^{3}	i^{3}-ɹi^{3}	se^{3}=ɹ=a^{2}	**u^{3}-nu^{1}=tʌŋ^{2}**=ma^{3}
then	1SG=ERG	PROX-PROX	song=PROX=ABS	**3SG.POSS-mother=PL**=DAT

se kɔ^{3} βan^{3} ʌŋ^{3}.

se kɔ^{3}-βan^{3}-ʌŋ^{3}

sing will-COS-1SG

‘Now then, I will sing this song for the mothers.’ (FB post)

No distinction is made between alienable and inalienable possession in the other possessive determiners. For example, possession of a house and of an eye is expressed by means of the same first person singular possessive determiner /i^{3}-/ ‘my’ in (270) and (271). Also, Muklom also does not grammatically encode other distinctions such as permanent versus temporary possession or present versus past possession in the possessive determiner paradigm.

(270) i^{3} hɨm^{2}.

i^{3}-hɨm^{2}

1SG.POSS-house

‘My house.’ (20170224_01)

(271) i^{3} mɨk^{0}.

i^{3}-mɨk^{0}

1SG.POSS-eye

‘My eye.’ (20151020_01)

Finally, it should be mentioned that some Tangsa varieties have a nominalizer and third person possessive determiner that are homophonous, for example Muishaung /ə-/ (Morey 2019a:43, 47). In Muklom, the deverbal nominalizer /u^{0}-/ (see section 4.2.2) and the possessive determiner /u^{3}-/ are near homophones.

5.1.3.2 Demonstrative and definite determiner

As mentioned above (section 5.1.1.5), the language has one anaphoric marker which is throughout this dissertation referred to as the ‘definite’ marker, /=t^{h}i^{3}/, and a set of three demonstrative markers, /=ɹi^{3}/ ‘proximal’, /=ni^{3}/ ‘medial’, and /=ʃi^{3}/ ‘distal’. Unlike the demonstrative pronoun and definite pronouns (section 5.1.1.5), demonstrative and definite determiners cannot be used to replace a full NP. Instead, they are modifying elements that constitute part of an NP. The demonstrative and the definite modifiers occupy the same slots in the NP and morphosyntactically interact in the same manner with case markers and postpositions. For this reason, they will be discussed in tandem here.

The definite determiner /=tʰi³/ is exemplified by (272), and an example of the proximal demonstrative /=ɹi³/ is provided in (273), medial /=ni³/ in (274), and distal /=ʃi³/ in (275). The final vowel /i/ of these determiners drops in front of a case marker and it is the tone of the case marker that is retained. For example, in (275), distal /=ʃi³/ + absolutive /=a²/ gives /=ʃ=a²/ (distal-absolutive).

(272) hi¹ tʰi³ lɛ², u³ mɨk⁰ tʰi³ lɛ² i³ mʌl² ɛʔ⁰ ʌ⁰-duk⁰ ti³.

hi¹**=tʰi³**=lɛ² u³-mɨk⁰**=tʰi³**=lɛ² i³-mʌl² ɛʔ⁰ ʌ⁰-duk⁰=ti³

dog=**DEF**=FOC 3SG.POSS-eye=**DEF**=FOC PROX-like do NMLZ-blind=HS

'The dog, its eyes are blind like this.' (20121103_03)

(273) i³ ɹɛʔ⁰ u³ him² te² βa¹ tʰɛ³ tɨl² ɹi³ mɛ³ saʔ⁰ u³.

i³ɹɛʔ⁰ u³-him²-te²-βa¹=tʰi³=ɛ³ tɨl²**=ɹi³** mɛ³ saʔ⁰-u³

then 3SG.POSS-house-PERS-M=DEF=ERG rice=**PROX** ABIL eat-2SG

''You can eat this rice', said her husband.' (20160106_04)

(274) e² ni³ mɛŋ² ni³ pʰʌn³ tɕʌk⁰ u³!

e²-ni³ mɛŋ²**=ni³** pʰʌn³-tɕʌk⁰-u³

NPROX-MED cat=**MED** chase-PFV-2SG

'Chase that cat away!' (B1.18)

(275) e² ʃi³ mɛŋ² ʃa² ʌ⁰puŋ².

e²-ʃi³ mɛŋ²**=ʃ=a²** ʌ⁰-puŋ²

NPROX-DIST cat=DIST=ABS NMLZ-white

'That cat is white.' (B1.73)

As the last two examples show, demonstrative and definite determiners can precede and follow the noun simultaneously. These constructions constitute a single NP, not two. Simultaneous double determination is found in an number of other TB languages (see Dryer 2017:74; LaPolla 2017b:12). LaPolla (2017a:47) reconstructs demonstrative-head as the PTB and also Proto-Sino-Tibetan order, but at the same time states that this hypothesis is controversial (LaPolla 2017b:12).

In Muklom, a noun can be modified by a combination of preposed and postposed determiner as in (275), or by a single postposed determiner, as in (273), or by a single preposed determiner, as in (276) below. For each of the four determiners, the construction N-Det is most commonly encountered; it outnumbers the constructions Det-N and Det-N-Det by far in the current corpus. The former construction, with a preposed demonstrative but without a postposed determiner, appears to occur only

when the noun is followed by a postposition, like /=ɔʔ⁰/ ‘at’ in (276). The latter construction, with double determination, highlights the modified noun.

(276) e² tʰi³ pat⁰ ɔʔ⁰.

e²-tʰi³ pat⁰=ɔʔ⁰

NPROX-DEF era=at

‘In that era.’ (B1.96)

Languages with double determination sometimes have identical determiners on either side of the noun, for example in Phom (Bano 2017:37) and Galo (Post 2009:955), but the two elements may also differ in shape, for example in Nishi (Hamilton 1900:20, quoted by Dryer 2017:74), and in Muklom. The determiners on either side of the noun in Muklom are slightly different: the forms that precede the noun contain an extra morpheme. The determiners /=ɹi³/, /=ni³/, /=ʃi³/, and /=tʰi³/ never occur in isolation when they precede a noun, i.e. the extra morpheme is obligatory. A preceding determiner must combine with either a proximal marker /i³-/ or a non-proximal marker /e²-/, as laid out in Table 37. The symbol N stands for ‘(modified) noun’. These combinations are fixed, meaning that the determiner /=ɹi³/ can only combine with proximal /i³-/, while the determiners /=tʰi³/ /=ni³/ and /=ʃi³/ only combine with non-proximal /e²-/. It appears unlikely that /i³-/ and /e²-/ are allomorphs of the same morpheme, where /i³-/ would hypothetically be triggered by the following rhotic, because they differ not only in vowel quality, but also in tone. An example of each pre-posed determiner is provided below the table.

determiner	gloss	English
i³-ɹi³ N	PROX-PROX	‘this’
e²-ni³ N	NPROX-MED	‘that (med.)’
e²-ʃi³ N	NPROX-DIST	‘that (dist.)’
e²-tʰi³ N	NPROX-DEF	‘the’

Table 37 - Preposed demonstrative and definite determiners.

(277) i³ ɹi³ pɨl² puŋ³ ɹa² naʔ⁰ ɹi² xʌl² a³.

i³-ɹi³ pɨl²-puŋ³=ɹi³=a² naʔ⁰ɹi² xʌl²-a³

PROX-PROX flower=PROX=ABS very good-3

‘This flower is very beautiful.’ (20121105_07)

(278) e^{2} ni^{3} mɛŋ^{2} ni^{3} p^{h}ʌn^{3} tɕʌk^{0} u^{3}!

e^{2}-ni^{3} mɛŋ^{2}=ni^{3} p^{h}ʌn^{3}-tɕʌk^{0}-u^{3}

NPROX-MED cat=MED chase-PFV-2SG

'Chase that cat away!' (B1.18)

(279) e^{2} ʃi^{3} mɛŋ^{2} ʃa^{2} ʌ^{0}puŋ^{2}.

e^{2}-ʃi^{3} mɛŋ^{2}=ʃi^{3}=a^{2} ʌ^{0}-puŋ^{2}

NPROX-DIST cat=DIST=ABS NMLZ-white

'That cat is white.' (B1.73)

(280) e^{2} t^{h}i^{3} hɔmɔi t^{h}i^{3} βaŋ^{3}.

e^{2}-t^{h}i^{3} hɔmɔi=t^{h}i^{3}=βaŋ^{3}

NPROX-DEF time[50]=DEF=from

'From that time on.' (S1.69)

The postposed determiners do not take /i^{3}-/ or /e^{2}-/, but unlike the preposed determiners, they have phonologically reduced allomorphs in front of postpositions that start with a vowel. Table 38 shows an overview of the postposed demonstrative and definite determiners. The letter N again signifies the position of the noun.

determiner	gloss	English
N =ɹi^{3} ~ =ɹ	PROX	'this'
N =ni^{3} ~ =n	MED	'that (med.)'
N =ʃi^{3} ~ =ʃ	DIST	'that (dist.)'
N =t^{h}i^{3} ~ =t^{h}	DEF	'the'

Table 38 - Postposed demonstrative and definite determiners.

The reduced forms /=ɹ/, /=n/, /=ʃ/, and /=t^{h}/ occur when the NP is followed by a postposition which starts with a vowel. There are five such postpositions. The first two are case markers: absolutive /=a^{2}/ and ergative /=ɛ^{3}/~/=a^{3}/ (see section 5.1.7.1). The former is illustrated above in (275) and (277), and an example of an ergative case marker with a reduced postposed determiner is provided below in (281), where /miʔ^{0}-βa^{1}/ 'man' is followed by the reduced allomorph of the definite marker /=t^{h}/ and ergative /=ɛ^{3}/.

[50] Assamese loan.

(281) e^{2} t^{h}ɔ^{3} ba^{3} miʔ^{0} βa^{1} **t^{h}ɛ^{3}** ba^{3} sʌm^{2} mɔʔ^{0} na u^{3} sa^{1}

e^{2}t^{h}ɔ^{2}=ba^{3}	miʔ^{0}-βa^{1}**=t^{h}i^{3}=ɛ^{3}**=ba^{3}	sʌm^{2}-m-ɔʔ^{0}	na	u^{3}-sa^{1}
and=TOP	person-M**=DEF=ERG**=TOP	know-NEG-3	EXCLAM	3SG.POSS-child

mɨk^{0} tʌŋ^{2} t^{h}a^{2} lɛ^{3} p^{h}ʌk^{0} sʌt^{0} tɨk^{0} ta^{1} ʃi^{3}.

mɨk^{0}=tʌŋ^{2}=t^{h}i^{3}=a^{2}=lɛ^{3}	p^{h}ʌk^{0}-sʌt^{0}	tɨk^{0}-t-a^{1}=ʃi^{3}
eye=PL=DEF=ABS=FOC	eat.solid-eat.soft	kill-PST-3=DIST

‘And the man did not know that she had killed their child to eat its eyes.’ (20151208_05)

The remaining three postpositions that lack an onset and thus occur with the reduced forms of the postposed demonstrative and definite determiners are /=ɔ^{3}/ and /=ɔʔ^{0}/ ‘at, in, on’, which express general location in space or time, and /=ɛ^{3}/ ‘with’, which has an instrumental meaning (see section 5.1.7.2). The locatives /=ɔ^{3}/ and /=ɔʔ^{0}/ are illustrated by (282) and (283) respectively, and instrumental /=ɛ^{3}/ ‘with’ by example (284). The instrumental is phonologically identical to the most common allomorph of the ergative marker, /=ɛ^{3}/ (see also section 5.1.7.1.1).

(282) nɨm^{1} hɨm^{2} **ɹɔ^{3}** ŋʌm^{2} ham^{2} bɔ^{3} tɨŋ^{2} a^{3}.

nɨm^{1}	hɨm^{2}**=ɹi^{3}=ɔ^{3}**	ŋʌm^{2}	ham^{2}=bɔ^{3}	tɨŋ^{2}-a^{3}
2PL.POSS	house**=PROX=at**	meat	smell=indeed	smell-3

‘The smell of meat is coming from your house.’ (20160106_02)

(283) i^{3} hɨm^{2} ʃɔʔ^{0} sin^{3} βʌŋ^{1} u^{3}.

i^{3}-hɨm^{2}**=ʃi^{3}=ɔʔ^{0}**	sin^{3}	βʌŋ^{1}-u^{3}
1SG.POSS-house**=DIST=at**	see	go.up-2SG

‘Come have a look in my house!’ (20161223_01)

(284) βʌl^{1} t^{h}ɛ^{3} tʌ^{0}k^{h}am^{2} ta^{1} ti^{3}.

βʌl^{1}**=t^{h}i^{3}=ɛ^{3}**	tʌ^{0}-k^{h}am^{2}-t-a^{1}=ti^{3}
fire**=DEF=with**	CAUS-burn-PST-3=HS

‘He burned them with the fire.’ (20151208_05)

All onset-less postpositions have triggered the same phonological reduction in the preceding demonstrative or definite determiner: the vowel /i/ of the determiner is dropped and the tone of the

postposition is retained (although technically, where the tone of the postposition is identical to that of the determiner, namely tone 3, we cannot determine from which element the retained tone derives).

The demonstrative and definite determiners are the only elements that show allomorphy when followed by a postposition with the syllable structure V(C). Other elements such as nouns, adjectives or numerals that end in a vowel do not drop their final vowel preceding an onset-less postposition. For example, the coda-less noun /ɹu^{1}/ 'rope' in (285) retains its vowel preceding /=ɛ^{3}/ 'with' and so does the numeral /bʌ^{0}ŋa^{3}/ 'five' in (286) preceding the postposition /=ɔʔ^{0}/ 'at'. The final two examples, (287) and (288), demonstrates that vowel quality is not a factor in this: the relational noun /ʝi^{3}/ 'back' ends in /i^{3}/, just like the full forms of the demonstrative and definite determiners, but vowel elision does not take place.

(285) ɹu^{1} ɛ^{3} k^{h}ʌk^{0} tu^{1}.

ɹu^{1}=ɛ^{3} k^{h}ʌk^{0}-t-u^{1}

rope=with wrap-PST-2SG

'You wrapped it with a rope.' (B1.59)

(286) haʔ^{0} sɔŋ^{3} bʌ^{0}ŋa^{3} ɔʔ^{0}.

haʔ^{0}-sɔŋ^{3} **bʌ^{0}ŋa^{3}=ɔʔ^{0}**

village **five=at**

'In five villages.' (20161223_01)

(287) tɨl^{2} saʔ^{0} ʝi^{3} ɔ^{3} lɨŋ^{2} nʌŋ^{3} ta^{3}.

tɨl^{2} saʔ^{0} **ʝi^{3}=ɔ^{3}** lɨŋ^{2}-n-ʌŋ^{3}=ta^{3}

rice eat.soft **back=at** drink-FUT-1SG=QUOT

''After eating rice, I will drink' they say.' (20161223_02)

(288) e^{2} t^{h}ɔ^{3} tɨl^{2} saʔ^{0} ʝi^{3} ɔʔ^{0} lɨŋ^{2} nʌŋ^{3}.

e^{2}t^{h}ɔ^{3} tɨl^{2} saʔ^{0} **ʝi^{3}=ɔʔ^{0}** lɨŋ^{2}-n-ʌŋ^{3}

and rice eat.soft **back=at** drink-FUT-1SG

'And after eating rice, I will drink.' (20161223_02)

It is perhaps not surprising that the phonological change has affected only the demonstrative and definite markers, since they are highly grammaticalized elements and are more prone to phonological erosion than lexical elements such as nouns and adjectives.

The full forms of the demonstrative and definite determiners, /=ɹi^{3}/, /=ni^{3}/, /=ʃi^{3}/, and /=tʰi^{3}/, must be used when a postposition does have an onset. An example is provided in (289), where the postposed definite determiner /=tʰi^{3}/ is followed by the postposition /=nʌŋ^{3}/ 'to'.

(289) nɔ^{2} ti^{2} sa^{1} ni^{3} hɨm^{2} tʰi^{3} nʌŋ^{3} tʰu^{3} ɛʔ^{0} [...]

nɔ^{2}-ti^{2}-sa^{1}-ni^{3} hɨm^{2}**=tʰi^{3}=nʌŋ^{3}** tʰu^{3} ɛʔ^{0}

orphan-DIM-two house**=DEF=to** arrive do

'Having arrived at the house of the two orphans […]' (20160106_01)

The non-reduced forms also must be used when the postposed determiner is not followed by any postposition. Absolutive case marking is differential (section 5.1.7) both in NPs that are not modified by determiners and in NPs that are, hence we can encounter non-reduced determiners on NPs that are acting as the single argument of an intransitive clause, exemplified by (290), or as the patient-like argument of a transitive clause, exemplified by (291).

(290) βɔ^{1} tʰi^{3} tɕʌm^{2} lʌŋ^{2} na^{3} tɔŋ^{2} a^{3}?

βɔ^{1}**=tʰi^{3}** tɕʌm^{2}-lʌŋ^{2}=na^{3} tɔŋ^{2}-a^{3}

chicken[51]**=DEF** what=in sit-3

'On what does the chicken sit?' (B1.147)

(291) mɨk^{0} tʰi^{3} kʌp^{0} ta^{1}.

mɨk^{0}**=tʰi^{3}** kʌp^{0}-t-a^{1}

eye**=DEF** find-PST-3

'She found the eye.' (20160106_02)

It may be worth noting that preceding the focus marker /=lɛ^{3}/ (see section 8.3.2) and assumptive modality marker /=laŋ^{2}/ (see section 6.1.6.3.4), we find in the vast majority of cases an NP that is not marked for case. These markers may occur in different constructions, for example in a sentence-final after-thought phrase as in (292), or in a sentence-initial focus phrase as in (293). The change from tone 3 to 2 on /=lɛ^{3}/ 'FOC' in example (292) is perhaps an effect of intonation. The marker /=laŋ^{2}/ is sometimes reduplicated like in example (294). Although much less frequently encountered, it is possible for a focus clitic to be combined with an absolutive case marker, as illustrated by (295) and (296).

[51] The word /βɔ^{1}/ can refer to a bird of any type but can also be used to refer to a particular type of bird, namely 'chicken', without the need to add further specification.

(292) ʃɔl^{2} ɟʌm^{2} ɔʔ^{0} tat^{0} ɹup^{0} kɔ^{3} lɛ^{3}, ʃɔl^{2} t^{h}i^{3} lɛ^{2}.

ʃɔl^{2}-ɟʌm^{2}=ɔʔ^{0} tat^{0} ɹup^{0}=kɔ^{3}lɛ^{3} ʃɔl^{2}**=t^{h}i^{3}=lɛ^{3}**

wolf-company=at try unite=because wolf=**DEF=FOC**

'With the wolf, since he tried to team up with the wolf.' (20151208_04)

(293) mɔl^{2} ni^{3} lɛ^{3}, i^{3} βi^{1} e^{3}?

mɔl^{2}**=ni^{3}=lɛ^{3}** i^{3}-βi^{1}=e^{3}

Mol=**MED=FOC** 1SG.POSS-grandmother=VOC

'How about the festival of Mol, grandmother?' (541)

(294) hi^{1} t^{h}i^{3} laŋ^{2} laŋ^{2} i^{3} mʌl^{2} ʌŋ^{2} ta^{1}.

hi^{1}**=t^{h}i^{3}=laŋ^{2}=laŋ^{2}** i^{3}-mʌl^{2} ʌŋ^{2}-t-a^{1}

dog=**DEF=indeed=indeed** PROX-like be-PST-3

'The dog was like that.' (20121103_03)

(295) e^{2} t^{h}ɔ^{3} ba^{3} miʔ^{0} βa^{1} t^{h}ɛ^{3} ba^{3} sʌm^{2} mɔʔ^{0} na u^{3} sa^{1}

e^{2}t^{h}ɔ^{3}=ba^{3} miʔ^{0}-βa^{1}=t^{h}i^{3}=ɛ^{3}=ba^{3} sʌm^{2}-m-ɔʔ^{0} na u^{3}-sa^{1}

and=TOP person-M=DEF=ERG=TOP know-NEG-3 EXCLAM 3SG.POSS-child

mɨk^{0} tʌŋ^{2} t^{h}a^{2} lɛ^{3} p^{h}ʌk^{0} sʌt^{0} tɨk^{0} ta^{1} ʃi^{3}.

mɨk^{0}=tʌŋ^{2}**=t^{h}i^{3}=a^{2}=lɛ^{3}** p^{h}ʌk^{0}-sʌt^{0} tɨk^{0}-t-a^{1}=ʃi^{3}

eye=PL**=DEF=ABS=FOC** eat.solid-eat.soft kill-PST-3=DIST

'And the man did not know that she had killed their child to eat its eyes.' (20151208_05)

(296) k^{h}ɔ^{2} tuk^{0} t^{h}a^{2} lɛ^{3} ɟɨn^{3} tɕu^{3} ka^{1} ta^{1} ti^{3}.

k^{h}ɔ^{2}-tuk^{0}**=t^{h}i^{3}=a^{2}=lɛ^{3}** ɟɨn^{3} tɕu^{3} ka^{1}-t-a^{1}=ti^{3}

head-weight[52]**=DEF=ABS=FOC** HAB request go-PST-3=HS

'They used to come and ask for the compensation.' (20151208_05)

Another environment in which we find full forms of the demonstrative and definite determiner are utterances that consist of a single NP, including exclamations of discontent, as illustrated by (297),

[52] The expression /k^{h}ɔ^{2}-tuk^{0}/ 'head weight' refers to the payment of a fine, in money or goods, to the family of a person that has fallen victim to murder.

which was overheard on multiple occasions when the house cat tried to steal food from plates during meal time.

(297) i^{3} ɹi^{3} mɛŋ^{2} ɹi^{3}!

i^{3}-ɹi^{3} mɛŋ^{2}**=ɹi^{3}**

PROX-PROX cat=**PROX**

'This damn cat!' (lit. 'This cat!') (B1.18)

This example shows that the proximal marker can convey a pejorative connotation, which is further exemplified by (298) and (299), in which the reference is to ill-behaved humans instead of a cheeky pet. The proximal marker is used when the referent is in close proximity to the speaker, but also when the referent, here the object of scolding, is discourse-prominent but not necessarily nearby.

(298) i^{3} ɹi^{3} hi^{1} ɹi^{3}!

i^{3}-ɹi^{3} hi^{1}**=ɹi^{3}**

PROX-PROX dog=**PROX**

'You dog!' (lit. 'This dog!')' (S2.9)

(299) i^{3} ɹi^{3} βʌk^{0} ɹi^{3}!

i^{3}-ɹi^{3} βʌk^{0}**=ɹi^{3}**

PROX-PROX pig=**PROX**

'You pig!' (lit. 'This pig!') (S2.9).

Finally, we find non-reduced forms of the determiners in comparative constructions, as illustrated by (300). The phrase /i^{3}-ɹi^{3}=ni^{3}=ɹi^{3}/ 'these two' again is a single NP.

(300) i^{3} ɹi^{3} ni^{3} ɹi^{3} ʌ^{0}ʝɔŋ^{2}.

i^{3}-ɹi^{3}=ni^{3}**=ɹi^{3}** ʌ^{0}-ʝɔŋ^{2}

PROX-PROX=two=**PROX** NMLZ-big

'The bigger of the two.' (20160106_04)

When two NPs are conjoined (see also section 5.3), the postposed determiner will be placed after the second NP only, not repeated after each. This applies both to nouns that are linked by means of the productive conjunction /ni^{3}/~/ni^{3}a^{3}/ and to nouns linked by the fossilized conjunction /ʌ^{0}-/, as is illustrated by /ɹʌŋ^{2} ni^{3} haʔ^{0}/ 'sky and earth' in (301) and /ŋʌm^{2}-ʌ^{0}-ŋaʔ^{0}/ (302). The latter example is

taken from a story that is part of the Muklom oral mythology. Once upon a time, all creatures lived together. The narrator tells us in (302) that after the humans obtained fire, the animal species became separated from one another.

(301) ɹʌŋ^{2} ni^{3} haʔ^{0} tʰa^{2} ʌ^{0}ɹɛl^{3} hʌl^{2} na^{3} ʌŋ^{2} ta^{1} ti^{3} ɹi^{3}.

ɹʌŋ^{2} ni^{3} haʔ^{0}**=tʰi^{3}=a^{2}** ʌ^{0}-ɹɛl^{3}=hʌl^{2}=na^{3} ʌŋ^{2}-t-a^{1}=ti^{3}=ɹi^{3}

sky and earth=**DEF=ABS** NMLZ-near=very=in COP-PST-3=HS=INF

'The sky and the earth were in very close proximity, you see.' (20151208_05)

(302) ŋʌm^{2} ʌ^{0} ŋaʔ^{0} tʰa^{2} e^{2} ʃi^{3} βaŋ^{3}

ŋʌm^{2}-ʌ^{0}-ŋaʔ^{0}**=tʰi^{3}=a^{2}** e^{2}-ʃi^{3}=βaŋ^{3}

game-and-fish=**DEF=ABS** NPROX-DIST=from

tʰʌ^{0}dʌn^{3} tɕu^{3} βʌŋ^{1} ta^{1} sɛ^{3} tʰa^{2} bat^{0} a^{3}.

tʰʌ^{0}-dʌn^{3}-tɕu^{3}-βʌŋ^{1}-t-a^{1}=sɛ^{3}=tʰi^{3}=a^{2} bat^{0}-a^{3}

RECIP-separate-away-go.up-PST-3=COMP=DEF=ABS say-3

'They say that from that moment the animals became separated from one another.' (20151208_04)

So far, all presented examples of double determination have shown combinations of preposed and postposed determiners of the same category. That is, preposed proximal with postposed proximal, preposed distal with postposed distal and so on. The language does, however, allow to combine determiners from different categories in one NP, as demonstrated by (303). The noun /sa^{1}/ 'child' is preceded by the distal determiner /e^{2}-ʃi^{3}/ 'that' and followed by the definite determiner /=tʰ=ɛ^{3}/ 'the'.

(303) e^{2} ʃi^{3} sa^{1} tʰɛ^{3} miʔ^{0} nu^{1} sa^{1} tʰa^{2} kʰi^{3} ta^{1}.

e^{2}-ʃi^{3} sa^{1}**=tʰi^{3}=ɛ^{3}** miʔ^{0}-nu^{1}-sa^{1}=tʰi^{3}=a^{2} kʰi^{3}-t-a^{1}

NPROX-DIST child=**DEF=ERG** person-F-DIM=DEF=ABS see-PST-3

'That child saw the girl.' (20121104_07)

There are a few examples of the combination distal-noun-definite in the current corpus, but no examples of other combinations. It has yet to be determined whether other mixed double determiners do occur, and in which order they can occur, for example whether the inverse of (303) occurs, i.e. DEF-noun-DIST.

In all the examples provided in this section so far, the demonstrative and definite determiners modify common nouns. It should be pointed out though that they may also modify subcategories of the word class noun that are intrinsically definite, i.e. pronouns and proper nouns. I will describe a few of the configurations that have been observed so far: 1) personal pronoun with demonstrative or definite determiner, 2) demonstrative pronoun with demonstrative determiner, and 3) proper noun with demonstrative or definite determiner.

First, post-noun demonstrative and definite determiners can combine with personal pronouns. An example of a proximal marker with a personal pronoun is provided in (304). This utterance is taken from a recording of an explanatory myth about how women acquired the technique for giving birth. The woman who is quoted in this example does not know how to give birth yet and is afraid she will die.

(304) ŋa^{1} ɹa^{2} u^{0}tɨk^{0} ʌŋ^{2} nʌŋ^{3} ta^{3}.

ŋa^{1}=ɹi^{3}=a^{2} u^{0}-tɨk^{0} ʌŋ^{2}-n-ʌŋ^{3}=ta^{3}

1SG=PROX=ABS NMLZ-die COP-FUT-1SG=QUOT

‘‘I am going to die’ she said.’ (20160107_08)

An example of a distal marker with a personal pronoun is found in (305), where the dual pronoun /niŋ^{2}-ni^{3}/ ‘the two of them’ is modified by distal /=ʃ/ after initial use of proximal /=ɹ/ with /βʌl^{1}/ ‘fire’ and /ɟuŋ^{2}/ ‘water’. This utterance is taken from a story that explains why fire can be created with the use of stone (flint) and wood: fire and water once battled one another and when water won the fight, fire fled into stone and wood.

(305) βʌl^{1} ɹa^{2}, ɟuŋ^{2} ɹa^{2}, niŋ^{2} ni^{3} ʃa^{2} tʌ^{0}k^{h}ʌt^{0} ta^{1}.

βʌl^{1}=ɹi^{3}=a^{2} ɟuŋ^{2}=ɹi^{3}=a^{2} **niŋ^{2}-ni^{3}=ʃi^{3}**=a^{2} tʌ^{0}-k^{h}ʌt^{0}-t-a^{1}

fire=PROX=ABS water=PROX=ABS **3PL-DU=DIST**=ABS RECIP-be.angry[53]-PST-3

‘Fire, water, the two of them fought one another.’ (20151208_04)

The combination that is found most frequently in the corpus is of the personal pronoun and definite marker. This configuration appears to signal topic-shift. Example (306), where third person singular /piʔ^{0}/ is modified by definite /=t^{h}/, is taken from a story about a husband and wife and the topic shifts back and forth between them. Neither the third person singular pronoun nor any other pronoun

[53] The root /k^{h}ʌt^{0}/ without prefix means ‘to be angry’, but in combination with the valency-changing prefix, the verb appears to denote not merely the state of being angry but rather the act of fighting.

distinguishes gender, which may explain the prolific use of what appears to be a topic-shift definite marker with personal pronouns.

(306) piʔ^{0} t^{h}ɛ^{3} ba^{3} ja^{3} ʃìʔ^{0} kʌp^{0} ta^{1} ti^{3}.

piʔ^{0}=t^{h}i^{3}=ɛ^{3}=ba^{3} ja^{3}-ʃìʔ^{0} kʌp^{0}-t-a^{1}=ti^{3}

3SG=DEF=ERG=TOP bad receive-PST-3=HS

'She took it the wrong way.' (20160106_04)

Second, a postposed demonstrative determiner may be added to a demonstrative pronoun. In the corpus, this is only attested with demonstrative pronouns that carry an absolute case marker /=a^{2}/: /i^{3}-ɹ=a^{2}/ 'this' as illustrated by (307) and (310), /e^{2}-n=a^{2}/ 'that (med.)' as in (308), and /e^{2}-ʃ=a^{2}/ 'that (dist.)' as in (309). Other demonstrative pronouns with a postposition, such as the ergative marker /=ɛ^{3}/ in /i^{3}-ɹ=ɛ^{3}/ 'this', or the locative postposition /=ɔʔ^{0}/ in /i^{3}-ɹ=ɔʔ^{0}/ 'here', have not yet been observed taking a postposed demonstrative determiner. The first three examples are nominal clauses, but this type of construction is not limited to verb-less clauses: example (310) is a verbal clause with the same combination of demonstrative pronoun and determiner, /i^{3}-ɹ=a^{2}=ɹi^{1}/ 'this one', as the nominal clause in (307).

(307) mɛŋ^{2} i^{3} ɹa^{2} ɹi^{3}.

mɛŋ^{2} i^{3}-ɹi^{3}=a^{2}=ɹi^{3}

cat PROX-PROX=ABS=PROX

'This one is the cat.' (B1.27)

(308) mɛŋ^{2} e^{2} na^{2} ni^{3}.

mɛŋ^{2} e^{2}-ni^{3}=a^{2}=ni^{3}

cat NPROX-MED=ABS=MED

'That one is the cat.' (B1.27)

(309) mɛŋ^{2} e^{2} ʃa^{2} ʃì^{3}.

mɛŋ^{2} e^{2}-ʃì^{3}=a^{2}=ʃì^{3}

cat NPROX-DIST=ABS=DIST

'That one is the cat.' (B1.27)

(310) i^{3} ɹa^{2} ɹi^{3} pe^{2} u^{3}.

i^{3}-ɹi^{3}=a^{2}=ɹi^{3} pe^{2}-u^{3}

PROX-PROX=ABS=PROX take-2SG

'Take this one!' (B1.126)

In examples (307)-(310), the demonstrative category of the pronoun and the determiner is that same. That is, the proximal pronoun goes together with the proximal determiner, medial pronoun with medial determiner, and distal pronoun with distal determiner. All occurrences of demonstrative pronoun plus demonstrative determiner in the corpus follow this pattern so far.

The use of the demonstrative determiners with demonstrative pronouns is optional. Consultants provide similar utterances with demonstrative pronouns that are not modified by a further demonstrative determiner. The utterance in (311), for example, is the determiner-less version of the utterance in (310). Since the use of a demonstrative determiner with demonstrative pronouns is optional, the extra demonstrative determiner is perhaps employed to emphasize the demonstrative pronoun, that is, motivated by pragmatics.

(311) i^{3} ɹa^{2} pe^{2} u^{3}.

i^{3}-ɹi^{3}=a^{2} pe^{2}-u^{3}

PROX-PROX=ABS take-2SG

'Take this one!' (B1.126)

The postposed demonstrative determiners in these configurations appear either in full form, i.e. /=ɹi^{3}/, /=ni^{3}/, and /=ʃi^{3}/ as illustrated by examples (307)-(310) above, or as the phonologically reduced allomorph /=ɹ/, /=n/, and /=ʃ/. The latter is only attested with the postposition /=ɔʔ^{0}/ 'in, at' in the corpus, as is exemplified by (312) and (313).

(312) i^{3} ɹa^{2} ɹɔʔ^{0} tɔŋ^{2} u^{3}.

i^{3}-ɹi^{3}=a^{2}=ɹi^{3}=ɔʔ^{0} tɔŋ^{2}-u^{3}

PROX-PROX=ABS=PROX=at sit-2SG

'Sit here!' (20121103_04)

(313) i³ ɹa² ɹɔʔ⁰, ʃɔt⁰ kat⁰ ɹɔʔ⁰ xʌŋ¹ ɨn² ʝu² ta³.

i³-ɹi³=a²=ɹi³=ɔʔ⁰ ʃɔt⁰kat⁰=ɹi³=ɔʔ⁰ xʌŋ¹-ɨn² ʝu²=ta³

PROX-PROX=ABS=PROX=at shortcut[54]=PROX=at go.up-2PL MIT=QUOT

''Go up through here, through this shortcut' he said.' (20151127_01)

It is unclear why the demonstrative pronouns take absolutive case marking here, since they do not represent a patient-like argument or part of a nominal phrase, the two situations in which we would expect absolutive case marking. Rather, we would expect the neutral form with a demonstrative determiner and locative marker, /i³-ɹi³=ɹ=ɔʔ⁰/ 'here', or simply the demonstrative pronoun with locative, /i³-ɹ=ɔʔ⁰/ 'here'. Although the latter has been observed frequently, for example in (314), showing that also in this configuration the determiner is optional, the former has not been observed so far.

(314) i³ ɹɔʔ⁰ tɔŋ βʌn³ i³.

i³-ɹi³=ɔʔ⁰ tɔŋ-βʌn³-i³

PROX-PROX=at sit-COS-1PL

'We sit here.' (20170122_03)

Third, all postposed demonstrative and definite markers can modify proper nouns, both in verbal and in nominal clauses. An example of a proximal marker with a proper noun, or two conjoined proper nouns to be precise, is provided in (315), a verbal clause. Example (316) shows a medial marker with a proper noun in a nominal clause. These two examples contain personal names, but the postposed determiners also combine with place names, such as 'Jerusalem' in example (317), which is modified by a distal marker.

(315) sɛŋ³ pʰʌŋ² ni³a³ ni mi² ɹa² lɨŋ³ xiŋ³ a³.

sɛŋ²-pʰʌŋ² **ni³a³** **ni-mi²=ɹi³**=a² lɨŋ³-xiŋ³-a³

Sengphang **and** **Nemi=PROX**=ABS around[55]-walk-3

'Sengphang and Nemi walk around.' (B1.62)

[54] English loan.

[55] The element /lɨŋ³-/ 'around' appears to be a bound root, it cannot stand by itself. Also, according to consultant CTT, it cannot function as a verb, i.e. /lɨŋ³-/ cannot directly be followed by a person index.

(316) mika na^{2} nɛdɛɹlɛn te^{2} nu^{1} bɔ^{3}.

mika=ni^{3}=a^{2} nɛdɛɹlɛn-te^{2}-nu^{1}=bɔ^{3}

Mika=MED=ABS Netherlands-PERS-F=indeed

'Mika is indeed Dutch.' (B1.58)

(317) βʌŋ^{1} i^{3} ɟeɹusʌlɛm ʃi^{3} nʌŋ^{3}.

βʌŋ^{1}-i^{3} **ɟeɹusʌlɛm=ʃi^{3}**=nʌŋ^{3}

go.up-1PL **Jerusalem=DIST**=to

'Let's go up to Jerusalem.' (20170122_02)

As with personal pronouns, the definite marker /=t^{h}i^{3}/~/=t^{h}/ in combination with proper names appears to signal topic-shift. The name that is marked with definite /=t^{h}/ in example (318) refers to the mythical figure Chengwa, a man from the sky. In the directly preceding clause, the agents were two orphans and Chengwa was not mentioned. It should be mentioned, though, that a personal name is sometimes modified by a definite marker in two subsequent utterances, which may suggest that the function of the definite marker with proper nouns is broader than just topic-shift.

(318) e^{2} t^{h}ɔ^{3} tɕɛŋ^{3} βa^{1} t^{h}ɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3} a^{3} tsʌm^{1} nʌm^{3}

e^{2}t^{h}ɔ^{3} **tɕɛŋ^{3}-βa^{1}=t^{h}i^{3}**=ɛ^{3} u^{3}-na^{3}=βaŋ^{3} kɛl^{2}dɨŋ^{2} ni^{3}a^{3} tsʌm^{1}-nʌm^{3}

and **Chengwa=DEF**=ERG 3SG.POSS-ear=from worm and paddy-stalk

tsɔŋ^{3} a^{3} t^{h}a^{2} xʌm^{2} t^{h}ɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

tsɔŋ^{3}-a^{3}=t^{h}i^{3}=a^{2} xʌm^{2}=t^{h}i^{3}=ɔʔ^{0} lʌt^{0} kɔʔ^{0}-t-a^{1}

wear.in.ear-3=DEF=ABS mat=DEF=at pull.out give-PST-3

'And Chengwa took the earthworm and the paddy stalk, which he was wearing in his ear, and placed them on the mat.' (20160106_01.ed)

5.1.3.3 Classifier determiner

Classifiers occur marginally in the language. The classifier determiners are identical in phonological form to the classifier pronouns (see section 5.1.1.6). The classifier determiner follows the noun which it modifies and if a numeral is present, the classifier will stand between the modified noun and the numeral. Classifiers are subsumed under the part of speech of determiner when modifying a noun and are considered pronouns when acting as the head of an NP. The latter occurs when the counted noun is dropped (see section 5.1.1.6). The slot that classifier determiners occupy in the NP is the same as

adjectives, but unlike adjectives, they cannot be nominalized by means of the prefix /ʌ⁰-/. For some classifiers it has been determined that they are unbound roots, i.e. they can stand alone, and for the others I for now assume that their morphological status is the same.

The first classifier, /liŋ¹/, denotes a complete, long object such as a long piece of bamboo that has not been cut lengthwise yet (319), or a complete, lengthy fish (320). It may also accompany a unit of time, mapping the idea of length from the domain of space onto the more abstract domain of time, as exemplified in (321), (322), and (323).

(319) βaʔ⁰ liŋ¹ ni³.
βaʔ⁰ **liŋ¹**-ni³
bamboo **CLF**-two
'Two long bamboo stems.' (B1.127)

(320) ŋaʔ⁰ liŋ¹ tɔm².
ŋaʔ⁰ **liŋ¹**-tɔm²
fish **CLF**-three
'Three lengthy fishes.' (B1.127)

(321) paŋ³ liŋ¹ ʃɛ¹.
paŋ³ **liŋ¹**-ʃɛ¹
year **CLF**-one
'One year.' (B1.134)

(322) ɟa³ pi² liŋ¹ ʃɛ¹.
ɟa³pi² **liŋ¹**-ʃɛ¹
month **CLF**-one
'One month.' (B1.133)

(323) sal² liŋ¹ ʃɛ¹.
sal² **liŋ¹**-ʃɛ¹
day **CLF**-one
'One day.' (B1.134)

Das Gupta (1980:7) reports the presence of a marker <lung> that 'denotes plurality', which he lists along with a few other grammatical markers but does not occur in any of the example clauses that he

provides. What Das Gupta is referring to is likely to be the classifier /luŋ¹/, which functions as a classifier and not as a plural marker in the data I have collected. We can tell that /luŋ¹/ is a classifier and not a plural marker, at least not synchronically, because it can co-occur with the plural marker /=tʌŋ²/, as exemplified by (324), and it would be odd to have double plural marking by two different markers. According to consultant CTT, this classifier is not used often. A second example of the classifier is provided in (325). Perhaps due to infrequent use of the classifier, the consultant found it hard to explain its meaning. The form /luŋ¹/ could be related to the classifier /liŋ¹/, but it would have to be determined in which way they are linked. Allophony between /i/ and /u/ does not seem a likely explanation, since, unlike /ɨ/~/u/ alternation, this alternation has not been observed to occur.

(324) mi² te² luŋ¹ tʌŋ² sɨm¹ ɹik⁰ ma³ ka¹ ta¹.

mi²te²	**luŋ¹=tʌŋ²**	sɨm¹	ɹik⁰=ma³	ka¹-t-a¹
Maitai[56]	**CLF=PL**	salt	buy=DAT	go-PST-3

'The Maitais came to buy salt.' (B1.133)

(325) nɨŋ² luŋ¹ tʰɛ³ pʰʌk⁰ saʔ⁰ tɕʌk⁰ ɛʔ⁰ ɟɔl tɕu³ βʌŋ¹ ta¹.

nɨŋ²	**luŋ¹**=tʰi³=ɛ³	pʰʌk⁰-saʔ⁰-tɕʌk⁰	ɛʔ⁰	ɟɔl-tɕu³-βʌŋ¹-t-a¹
3PL	**CLF**=DEF=ERG	eat.solid-eat.soft-PFV	do	run-away-go.up-PST-3

'They ran off after eating.' (B1.126)

The second classifier, /kʰɔ¹/, denotes a piece of bamboo cut in half once lengthwise, exemplified in (326).

(326) βaʔ⁰ kʰɔ¹ ʃɛ¹.

βaʔ⁰	**kʰɔ¹**-ʃɛ¹	
bamboo	**CLF**-one	

'One piece of bamboo, cut lengthwise.' (B1.134)

The third, /tʰaʔ⁰/, is another classifier that denotes long objects. This one includes trees (327), sticks (328), and knives (329).

[56] The Maitai are a Tangsa subtribe.

(327) bʌŋ^{1} tʰaʔ^{0}.

bʌŋ^{1} **tʰaʔ^{0}**

tree **CLF**

‘A tree.’ (CTT.lexicon)

(328) kan^{2} tʰaʔ^{0}.

kan^{2} **tʰaʔ^{0}**

stick **CLF**

‘A stick.’ (20100124-104250)

(329) ɟan^{2} tʰaʔ^{0}.

ɟan^{2} **tʰaʔ^{0}**

knife **CLF**

‘A knife.’ (CTT.lexicon)

The fourth classifier, /lɔ^{1}/, denotes flat objects such as clothes, as exemplified in (330). The classifier is here reduplicated, possibly to indicate distributive action ‘one to each relative’ or to add emphasis to the theme argument.[57]

(330) kʰʌt^{0} lɔ^{1} lɔ^{1} ʃɛ^{1} tʰɔʔ^{0} kɔʔ^{0} mɔʔ^{0} piʔ^{0} ɟun^{1} te^{2} ma^{3}.

kʰʌt^{0}	**lɔ^{1}-lɔ^{1}**-ʃɛ^{1}=tʰɔʔ^{0}	kɔʔ^{0}-m-ɔʔ^{0}	piʔ^{0}	ɟun^{1}te^{2}=ma^{3}
cloth	**CLF-CLF**-one=also	give-NEG-3	3SG.POSS	relative=DAT

‘He does not even give one piece of clothing to his (poor) relatives.’ (B1.134)

The fifth classifier, /tuŋ^{3}/, denotes cylindrical objects. The cylinder may be closed on one or both sides or may be open. This classifier seems to draw attention to the inside of the object, as a container of a liquid, for example, or as a shape that allows movement through its hollow inside. The latter is exemplified in (331).

[57] If reduplication of the quantifier carries a distributive sense here, then this closely resembles distributive reduplication of the numeral. An example of the latter can be found in line (119) of text 2.

(331) ɟuʔ^{0} pɔ^{2} βaʔ^{0} tuŋ^{3} na^{3} liŋ a^{3}.

ɟuʔ^{0}pɔ^{2}	βaʔ^{0}	**tuŋ^{3}**=na^{3}	liŋ-a^{3}
grey.mouse	bamboo	**CLF**=in	crawl-3

'The grey mouse crawls along the inside of a piece of bamboo.' (B1.150)

The sixth classifier, /βa^{1}/, is the most generally applicable of the classifiers and does not seem to correlate with shape. It can be used for both animate and inanimate referents, despite the animate nature of its lexical source, /βa^{1}/ 'father'. An example of /βa^{1}/ with an inanimate referent is provided in (332), where it modifies the noun /lʌm^{2}/ 'road'.

(332) ba^{3} ɹi^{2} lʌm^{2} βa^{1} ʃa^{2} p^{h}ʌn^{2} u^{3}?

ba^{3}ɹi^{2}	lʌm^{2}	**βa^{1}**=ʃi^{3}=a^{2}	p^{h}ʌn^{2}-u^{3}
which	road	**CLF**=DIST=ABS	follow-2SG

'Which road do you follow?' (C63186t)

5.1.3.4 Quantifying determiner

This section discusses the following modifying quantifiers: plural marker /=tʌŋ^{2}/, /t^{h}ʌ^{0}ɟi^{2}/ 'all', /ba^{3}ɹi^{2}…=t^{h}ɔʔ^{0}/ 'which/whatever', /=βɛʔ^{0}/ 'every' (time units), /ʌ^{0}-ni^{3}-tɔm^{2}/ 'a few, some', /tɕɛn^{3}/ 'alone', /=hʌl^{2}/ 'very', and the distributive 'numeral quantifiers' /t^{h}ʌ^{0}-ni^{3}/ 'both', /t^{h}ʌ^{0}-tɔm^{2}/ 'each of the three', and /t^{h}ʌ^{0}-bʌ^{0}li^{3}/ 'each of the four'. Some of these can additionally function as head of an NP (see section 5.1.1.7): /t^{h}ʌ^{0}ɟi^{2}/ 'all', /ba^{3}ɹi^{2}…=t^{h}ɔʔ^{0}/ 'which/whatever', and of the distributive quantifiers at least /t^{h}ʌ^{0}-ni^{3}/ 'both'. Although all quantifying determiners are grouped together under one section here, it should be noted that even though they may from a group functionally, formally they do not constitute a homogeneous group since they occupy different slots. Formally, we can distinguish three types of quantifying determiners. The first type is post-head; these determiners follow the noun they modify. Post-head quantifiers include plural marker /=tʌŋ^{2}/, /=βɛʔ^{0}/ 'every', /ʌ^{0}-ni^{3}-tɔm^{2}/ 'a few, some', /tɕɛn^{3}/ 'alone', and /=hʌl^{2}/ 'very'. The second type can either precede or follow the noun: /t^{h}ʌ^{0}ɟi^{2}/ 'all' and the distributive numeral quantifiers. The third type is the circumplace determiner construction /ba^{3}ɹi^{2}…=t^{h}ɔʔ^{0}/ 'which/whatever'. Another feature that makes the quantifiers a heterogeneous group is reduplication: only /tɕɛn^{3}/ 'alone' and none of the other above-mentioned quantifiers is regularly reduplicated. Although these words behave differently formally, they are grouped together here based on their functional similarities.

The first in the list, plural marker /=tʌŋ^{2}/, follows the noun stem and, if present, precedes a post-posed definite or demonstrative marker that modifies the noun, as illustrated by (333). Plurality is only

optionally marked by the speaker.[58] It may be worth pointing out that animacy does not play a limiting role in plural marking: both animate referents or parts of animate referents, such as human beings (334), their body parts (333), and inanimate referents such as foodstuff (335), can be marked as plural with /=tʌŋ²/.

(333) u³ sa¹ mɨk⁰ tʌŋ² tʰa² tʰun³ lʌt⁰ pʰʌk⁰ tɕʌk⁰.

u³-sa¹	mɨk⁰**=tʌŋ²**=tʰi³=a²	tʰun³ lʌt⁰	pʰʌk⁰-tɕʌk⁰
3SG.POSS-child	eye=**PL**=DEF=ABS	finish pull.out	eat-PFV

'She had pulled out the eyes of her child and had finished eating them.' (20151208_05)

(334) u³ sa¹ tʌŋ² tʰa² pan³ pʰɔk⁰ ɛʔ⁰, tʌ⁰pʰʌl³ tɕu³ βʌŋ¹ ta¹.

u³-sa¹**=tʌŋ²**=tʰi³=a²	pan³	pʰɔk⁰	ɛʔ⁰	tʌ⁰-pʰʌl³-tɕu³-βʌŋ¹-t-a¹
3SG.POSS-child=**PL**=DEF=ABS	scatter	explode	do	INTR-distribute-away-go.up-PST-3

'Her children burst out and were scattered around.' (20160106_01)

(335) ʌ⁰kʰaʔ⁰ ʌ⁰kʰaʔ⁰ tʌŋ².

ʌ⁰-kʰaʔ⁰	ʌ⁰-kʰaʔ⁰**=tʌŋ²**
NMLZ-bitter	NMLZ-bitter=**PL**

'Bitter things.' (B1.157)

The quantifying determiner /tʰʌ⁰ʝi²/ 'all' is sometimes placed before the modified noun (336), and sometimes after (337). The scope of the quantifier appears to be the same between the two examples: /tʰʌ⁰ʝi²/ 'all' is in both part of the NP, because both are marked by the distal demonstrative, which is itself part of the NP, and followed by a case marker. It is not clear yet what, if any, semantic difference or difference in information structure is expressed by the variation in order.

(336) tʰʌ⁰ʝi² miʔ⁰ nu¹ ʃa² tɔŋ² a³.

tʰʌ⁰ʝi²	miʔ⁰-nu¹=ʃɨ³=a²	tɔŋ²-a³
all	person-F=DIST=ABS	sit-3

'All those women sit.' (B1.88)

[58] With exception of the plural marker /=tʌŋ²/ in the inclusive plural pronoun /hi⁴-tʌŋ²/, which constitutes an integral component of the pronoun.

(337) miʔ^{0} nu^{1} tʰʌ^{0}ʝi^{2} ʃa^{2} tɔŋ^{2} a^{3}.

miʔ^{0}-nu^{1}	**tʰʌ^{0}ʝi^{2}**=ʃi^{3}=a^{2}	tɔŋ^{2}-a^{3}
person-F	**all**=DIST=ABS	sit-3

'All those women sit.' (B1.88)

A post-head /tʰʌ^{0}ʝi/ 'all' does not always fall inside the NP, however. In (338), for example, the case marker /-a^{3}/ precedes the quantifier, so we could argue that the latter is here functioning as an adverb rather than a determiner that modifies the pronoun. The case marker /=a^{3}/ in this clause is an allomorph of the ergative marker /=ɛ^{3}/. The allomorph /=a^{3}/, not to be confused with absolutive marker /=a^{2}/, is used with pronouns and proper nouns. Common nouns take the regular marker /=ɛ^{3}/ (see section 5.1.7.1.1).

(338) nɨm^{1} a^{3} tʰʌ^{0}ʝi^{2} tɨl^{2} saʔ^{0} mɨn^{1}.

nɨm^{1}=a^{3}	**tʰʌ^{0}ʝi^{2}**	tɨl^{2}	saʔ^{0}-m-ɨn^{1}
2PL=ERG	**all**	rice	eat.soft-NEG-2PL

'You all do not eat rice.' (20121103_04)

It is possible for pronouns to be modified by /tʰʌ^{0}ʝi^{2}/; not all constructions with pronouns are structured as in example (338). The quantifying determiner can again either precede the pronoun, as exemplified in (339), or follow the pronoun, as in (340). If a demonstrative or definite determiner intervenes between a pronoun and the ergative case marker, like in example (306) above, the case marker reverts back to its regular form /=ɛ^{3}/, which is used with common nouns and all pronouns except the personal pronouns. The word /tʰʌ^{0}ʝi^{2}/ functions as a determiner in example (340), but is followed by the allomorph /=a^{3}/ even though it intervenes between the pronoun and the ergative case marker.

(339) tʰʌ^{0}ʝi^{2} nɨm^{1} a^{3} tɨl^{2} saʔ^{0} tɨn^{1}.

tʰʌ^{0}ʝi^{2}	nɨm^{1}=a^{3}	tɨl^{2}	saʔ^{0}-t-ɨn^{1}
all	2PL=ERG	rice	eat.soft-PST-2PL

'You all have eaten rice.' (20121103_04)

(340) i² tʰʌ⁰ʝi² a³ nʌŋ¹ ɹa² [...][59] βat⁰ pʰʌ⁰ni³.

i²	**tʰʌ⁰ʝi²**=a³	nʌŋ¹=ɹi³=a²	βat⁰-pʰʌ⁰-n-i³
1EXCL	**all**=ERG	2SG=PROX=ABS	hit-INV-FUT-1PL

'We all will hit you.' (20100124-112656)

It is even possible to have two ergative markers in the same clause, as illustrated by example (341), where the pronoun is followed by the ergative marker /=a³/ and the quantifier by the regular ergative form /=ɛ³/. This example was uttered in a controlled elicitation setting, but the consultant spoke clearly and did not stumble. Because NPs can take no more than one case marker (5.1.7.1), we know that there must be two agent-like NPs in this clause. We are dealing with two NPs here: the first is /nɨm¹/ 'you (pl)' and the second is /tʰʌ⁰ʝi²/ 'all', an appositive NP. In this example, /tʰʌ⁰ʝi²/ functions as a quantifying pronoun (see section 5.1.1.7) and quantifier pronouns take the default form of the ergative marker, /=ɛ³/.

(341) nɨm¹ a³ tʰʌ⁰ʝi² ɛ³ tɨl² saʔ⁰ ɨn².

nɨm¹**=a³**	tʰʌ⁰ʝi²**=ɛ³**	tɨl³	saʔ⁰-ɨn²
2PL**=ERG**	all**=ERG**	rice	eat.soft-2PL

'You, all, eat rice.' (20121103_04)

It is possible to stack another determiner on top of /tʰʌ⁰ʝi²/, for example the proximal demonstrative determiner /=ɹi³/, as shown in (342). Consultant TT, who uttered this example, did not employ the usual, reduced form of the proximal marker /=ɹ/ in front of the ergative case postposition (see section 5.1.1.5), while he does use the reduced forms of the demonstrative and definite determiners in front of the absolutive case postposition throughout the recording.[60]

(342) i² tʰʌ⁰ʝi² **ɹi³** ɛ³ βat⁰ pʰʌ⁰ni³.

i²	tʰʌ⁰ʝi²**=ɹi³**=ɛ³	βat⁰-pʰʌ⁰-n-i³	
1EXCL	all**=PROX**=ERG	hit-INV-FUT-1PL	

'We all will hit you.' (20100124-112656)

The quantifier /tʰʌ⁰ʝi²/ has a sesquisyllabic structure and the first syllable, /tʰʌ⁰/, is homophonous with the distributive prefix (see section 5.1.1.7) and the valency changing prefix (see section 6.1.7). It remains to be determined whether there is any etymological connection between them.

[59] The speaker first says /βat pʰʌ⁰nu³/, then quickly corrects this to /βat pʰʌ⁰ni³/.
[60] This recording was made by Stephen Morey in 2010. I have not met this speaker. The use of a non-reduced demonstrative determiner in front of an ergative postposition might reflect dialectal variation.

The third quantifying determiner on the list is /ba^{3}ɹi^{2}…=tʰɔʔ^{0}/ ‘which/whatever’. In example (343) it modifies the following noun /lʌm^{2}/ ‘road’.

(343) ba^{3} ɹi^{2} lʌm^{2} nʌŋ^{3} tʰɔʔ^{0} ka^{1} ɹɔʔ^{0} ʌŋ^{2} na^{3}.

ba^{3}ɹi^{2} lʌm^{2}=nʌŋ^{3}**=tʰɔʔ^{0}** ka^{1}-ɹɔʔ^{0} ʌŋ^{2}-n-a^{3}

which road=to**=any** go-CNT AUX-FUT-3

‘He will keep on going in whatever direction.’ (lit. ‘to whatever road’) (20170124_01)

The quantifier /=βɛʔ^{0}/ ‘every’ follows the noun, as is illustrated by example (344). This quantifier seems to be limited to expressions of time, as it occurs in the corpus only with words like /sal^{2}/ ‘day’, /ɟuk^{0}/ ‘time’, and /dɔ^{1}bat^{0}/ ‘Sunday’.

(344) mɛŋ^{2} ɟuk^{0} βɛʔ^{0} e^{2} nɔ^{3} xiʔ^{0} a^{3}.

mɛŋ^{2} ɟuk^{0}**=βɛʔ^{0}** e^{2}-ni^{3}=ɔ^{3} xiʔ^{0}=a^{3}

cat time**=every** NPROX-MED=at defecate-3

‘The cat defecates there every time.’ (B1.61)

The quantifier /ʌ^{0}-ni^{3}-tɔm^{2}/ ‘a few, some’ is a compound word which derives from the numerals /ʌ^{0}-ni^{3}/ ‘two’ and /ʌ^{0}-tɔm^{2}/ ‘three’ (see section 5.1.5). Only this combination of numerals will carry this meaning, other combinations of numerals will not.

(345) tɨl^{2} ʌ^{0}ni^{3} tʌm^{2} βe^{3} kɔʔ^{0} pʰu^{3}.

tɨl^{2} **ʌ^{0}-ni^{3}-tɔm^{2}** βe^{3}-kɔʔ^{0}-pʰ-u^{3}

rice **two-three** ITER-give-INV-2SG

‘Give me a little bit more rice.’ (20121105_11)

The pronunciation of the next quantifier on the list, /tɕɛn^{3}/ ‘alone’, varies between speakers. Speakers are aware of this and disagree on what the correct form is. Some consultants say [tɕɨn^{3}] instead and yet others pronounce [tɕʌn^{3}] ‘alone’. All three varieties were heard in Kuttom village. In the corpus, this quantifier occurs more often reduplicated than non-reduplicated. An example of reduplication is provided in (346), and (347) shows the quantifier without reduplication.

(346) pʰʌ⁰lʌp⁰ tɕɛn³ tɕɛn³ lɨŋ² i³.

pʰʌ⁰lʌp⁰	**tɕɛn³**	**tɕɛn³**	lɨŋ²-i³
tea	**alone**	**alone**	drink-1PL

'We drink only tea (there are no biscuits).' (S1.35)

(347) nʌŋ¹ tɕɛn³ βʌŋ¹ tu¹ i³?

nʌŋ¹	**tɕɛn³**	βʌŋ¹-t-u¹	i³
2SG	**alone**	go.up-PST-2SG	Q.AFF

'Did you go alone?' (S2.53)

The morpheme /tɕɛn³/ also features in comparative constructions, where it means 'equally' or 'both'. For now, it is proposed that they represent two different senses of the same lexical entry, but they might turn out to be etymologically unrelated homophones. Two examples of /tɕɛn³/ 'equally' are provided in (348) and (349). It has not been determined whether the quantifier with the sense 'equally' can be reduplicated in the same manner as 'alone' often is.

(348) alu ni³ tuŋ¹ ɹa² ʌ⁰pɨŋ¹ tɕɛn³.

alu	ni³	tuŋ¹=ɹi³=a²	ʌ⁰-pɨŋ¹	**tɕɛn³**
potato[61]	and	taro=PROX=ABS	NMLZ-tasty	**equally**

'Potato and taro are equally tasty.' (S2.33)

(349) muk⁰ lɔm² ɹaʔ⁰ ni³ aɹabik⁰ ɹaʔ⁰ ɹa² ʌ⁰xʌl² tɕɛn³.

muk⁰lɔm²	ɹaʔ⁰	ni³	aɹabik⁰	ɹaʔ⁰=ɹi³=a²	ʌ⁰-xʌl²	**tɕɛn³**
Muklom	speech	and	Arabic	speech=PROX=ABS	NMLZ-good	**equally**

'The Muklom language and the Arabic language are equally good.' (S2.33)

The quantifier /=hʌl²/ 'very', like the other quantifying determiners discussed here, modifies only nouns, not adjectives. It can be used in combination with nominalised adjectives and it often is. An example is provided in (350), where /=hʌl²/ 'very' modifies the noun /ʌ⁰-ɹɛl³/ 'proximity'.

[61] Indo-Aryan loan.

(350) ɹʌŋ^{2} ni^{3} haʔ^{0} tʰa^{2} ʌ^{0}ɹɛl^{3} hʌl^{2} na^{3} ʌŋ^{2} ta^{1} ti^{3} ɹi^{3}.

ɹʌŋ^{2} ni^{3} haʔ^{0}=tʰi^{3}=a^{2} **ʌ^{0}-ɹɛl^{3}=hʌl^{2}** ʌŋ^{2}-t-a^{1}=ti^{3}=ɹi^{3}

sky and earth=DEF=ABS **NMLZ-near=very** COP-PST-3-HS-INFER

'The sky and earth were in close proximity.' (20151208_05)

Last to be discussed are the distributive determiners. The distributive prefix /tʰʌ^{0}-/ can be added to numerals, at least to 'three' and 'four' but possibly to more, in order to form a distributive quantifying determiner: /tʰʌ^{0}-tɔm^{2}/ 'each of the three', or /tʰʌ^{0}-bʌ^{0}li^{3}/ 'each of the four'. In the current corpus we also find /tʰʌ^{0}-ni^{3}/ 'both', but only as a head, i.e. as distributive quantifying pronoun (section 5.1.1.7). It is not unlikely, however, that it can function as a modifier as well. An example of /tʰʌ^{0}-tɔm^{2}/ 'each of the three' and /tʰʌ^{0}-bʌ^{0}li^{3}/ 'each of the four' is provided in (351) and (352) respectively. When the distributive quantifier modifies a common or proper noun, it precedes the noun it modifies. For example, /tʰʌ^{0}-bʌ^{0}li^{3}/ 'each of the four' precedes /nap^{0}-ti^{1}/ 'banana' in example (352). However, when the distributive quantifier modifies a pronoun, it follows the pronoun it modifies, like /tʰʌ^{0}-tɔm^{2}/ 'each of the three' follows /nɨm^{1}/ 'you (pl)' in example (351), but the number of tokens in the corpus is low, so more evidence is needed to confirm whether the variation in order is free or indeed syntactically conditioned.

(351) nɨm^{1} tʰʌ^{0}tɔm^{2} ka^{1} tɔm^{2} tɨn^{1}.

nɨm^{1} **tʰʌ^{0}-tɔm^{2}** ka^{1}-tɔm^{2}-t-ɨn^{1}

2PL **DISTR-three** go-TRI-PST-2PL

'Each of you three went.' (20170224_01)

(352) tʰʌ^{0}bʌ^{0}li^{3} nap^{0} ti^{1} saʔ^{0} ta^{1}.

tʰʌ^{0}-bʌ^{0}li^{3} nap^{0}-ti^{1} saʔ^{0}-t-a^{1}

DISTR-four banana-fruit eat-PST-3

'She ate each of the four bananas.' (MessagesExtracts_2018)

Not only can a distributive quantifier modify a pronoun or a common noun, but it can also modify a possessive determiner. An example of this configuration is presented in (353), where /tʰʌ^{0}-bʌ^{0}li^{3}/ 'each of the four' further specifies the possessive /i^{2}/ 'our (excl)'.

(353) i^{2} tʰʌ^{0}bʌ^{0}li^{3} hɨm^{2}.

i^{2}	**tʰʌ^{0}-bʌ^{0}li^{3}**	hɨm^{2}
1EXCL.POSS	**DISTR-four**	house

'The house of each of us four.' (20170224_01)

5.1.3.5 Interrogative determiner

As mentioned in section 5.1.1.8, interrogative forms like /u^{3}tʌŋ^{2}/ 'who' and /ba^{3}ɹi^{2}/ 'which/what' not only function as pronouns, but also as modifiers. An example of the personal interrogative determiner is provided in (354), where /u^{3}tʌŋ^{2}/ 'who' modifies the compound noun /miʔ^{0}-βa^{1}-sa^{1}/ 'boy'. In the following example, (355), the non-personal interrogative determiner /ba^{3}ɹi^{2}/ modifies the following noun, /lʌm^{2}/ 'road'.

(354) e^{2} ʃì^{3} miʔ^{0} nu^{1} ɛ^{3} u^{3} tʌŋ^{2} miʔ^{0} βa^{1} sa^{1} βat^{0} ta^{1}?

e^{2}-ʃì^{3}	miʔ^{0}-nu^{1}=ɛ^{3}	**u^{3}tʌŋ^{2}**	miʔ^{0}-βa^{1}-sa^{1}	βat^{0}-t-a^{1}
NPROX-DIST	person-F=ERG	**who**	person-M-DIM	hit-PST-3

'Which boy did that woman hit?' (B1.147)

(355) ba^{3} ɹi^{2} lʌm^{2} βa^{1} ʃa^{2} pʰʌn^{2} u^{3}?

ba^{3}ɹi^{2}	lʌm^{2}	βa^{1}=ʃì^{3}=a^{2}	pʰʌn^{2}-u^{3}
which	road	CLF=DIST=ABS	follow-2SG

'Which road do you follow?' (C63186t)

5.1.4 Adjectives

Muklom shows the order noun-adjective. The reverse order, adjective-noun, has not been observed to occur. The language thus follows the tendency of eastern TB languages to exhibit noun-adjective order, as opposed to the order adjective-noun that western TB languages tend to have (Dryer 2017:73). LaPolla (2017a:47) proposes that PST had the order noun-adjective. The 'western' order seems to be due to Indic influence. The order of noun and adjective may be a sign of Muklom not having a past of strong Indosphere influence. An example of a noun and modifying adjective is provided in (356). This construction is fully productive; nouns and adjectives can be combined freely in this manner without any known lexical restrictions. Since adjectives do not seem to be able to stand alone, they are glossed as bound lexical roots. Only adjectives which have been nominalised by means of the nominalising prefix /ʌ^{0}-/ can stand alone; they do constitute a grammatical word.

(356) man^{2} k^{h}i^{2}.

man^{3}-**k^{h}i^{2}**

cow-**grey**

‘A grey cow.’ (20151020_01)

It seems that noun-adjective constructions involve non-restrictive modification. Restrictive modification can be achieved by nominalising the adjective and placing it in front of the noun, where it functions as a modifier noun (see section 5.1.2). Two examples of restrictive modification are presented below in (357) and (358). The restrictive sense that this construction encodes, is in the English translation of the examples conveyed by the definite article.

(357) ʌ^{0}k^{h}i^{2} man^{2}.

ʌ^{0}-k^{h}i^{2} man^{2}

NMLZ-grey cow

‘The grey cow.’ (20151020_01)

(358) piʔ^{0} ɹa^{2} ʌ^{0}ɟɔŋ^{2} mɛŋ^{2} ma^{3} tɕɔ^{2} ta^{1}.

piʔ^{0}=ɹi^{3}=a^{2} **ʌ^{0}-ɟɔŋ^{2}** mɛŋ^{2}=ma^{3} tɕɔ^{2}-t-a^{1}

3=PROX=ABS **NMLZ-big** cat=DAT fear-PST-3

‘He was afraid of the big cat.’ (B1.35)

The numerals one to three in their core form, i.e. without the prefix /ʌ^{0}-/, behave like adjectives (see section 5.1.5) and follow the noun they modify. If a post-noun demonstrative or definite determiner is present, the adjectival numerals /-ʃɛ^{1}/ ‘one’, /-ni^{3}/ ‘two’, and /-tɔm^{2}/ ‘three’ stand between the noun and the determiner, as in example (359). This utterance is taken from a story about a village that is annihilated. The interlocutor is asking the storyteller here to confirm that the life of two orphan children was spared.

(359) i³ ɹi³ nɔ² ti² sa¹ ni³ ɹa² hun³ ʌŋ² mɔʔ⁰ i³?

i³-ɹi³ nɔ²-ti²-sa¹-**ni³=ɹi³**=a² hun³ ʌŋ²-m-ɔʔ⁰ i³

PROX-PROX orphan-DIM-**two=PROX**=ABS really COP-NEG-3 Q.AFF

'Not these two orphans, right?' (541)

The numerals one to three can also be used in their nominalized form, which is derived by means of the de-adjectival nominalizing prefix /ʌ⁰-/: /ʌ⁰-ʃɛ¹/ 'one', /ʌ⁰-ni³/ 'two', and /ʌ⁰-tɔm²/ 'three'. When a nominal numeral functions as a modifier noun, it will again precede the modified noun. This is the order we would expect from any modifier noun (section 5.1.2). An example of a modifying nominal number is provided in (360). The restrictive modification that is encoded by this construction is conveyed by 'that' in the English translation of this example.

(360) ʌ⁰ʃɛ¹ hɨm².

ʌ⁰-ʃɛ¹ hɨm²

NMLZ-one house

'That one house.' (20120218_02)

The nominalized numeral can also function as an appositive NP and in that case will follow the noun, as is illustrated by example (361). Clearly, the numeral /ʌ⁰-ʃɛ/ 'one' stands outside of the first NP, since both the determiner /=tʰ/, which closes off the NP, and the case postposition /=a²/, which is not considered part of the NP, intervene between the noun and the numeral.

(361) ɟan² tɔŋ sa¹ tʰa² ʌ⁰ʃɛ¹ kɔʔ⁰ ʃɪŋ.

ɟan²-tɔŋ-sa¹**=tʰi³=a²** **ʌ⁰-ʃɛ¹** kɔʔ⁰ ʃɪŋ

dao[62]-DIM**=DEF=ABS** **NMLZ-one** give keep

'He gave a small dao, one.' (20151208_05)

5.1.5 Numerals

Numerals do not constitute a homogeneous part of speech in Muklom (see section 4.1.1.5). They are here grouped together because they share the same semantic field but formally they should be divided into at least two categories, adjectives and nouns, and perhaps a third category, modifying quantifiers. The word class of modifying quantifiers admittedly also suffers from formal heterogeneity, but

[62] A dao (from Chinese) is a long, heavy chopping knife or sword-knife.

functionally we can and will for the purpose of the discussion group numerals together, whether they function as adjective, noun, or quantifying determiner.

The numerals one to ten, listed in Table 39, are similar in that 1) they are disyllabic, and 2) their first syllable is a prefix(-like) element: /ʌ⁰-/, /ʌ⁰/, /bʌ⁰/, /tʰʌ⁰/, or /sʌ⁰/. They are different in that only the first three numerals can occur without their prefix while four to ten cannot, which is good evidence that the 'prefixes' on numerals do not all have the same function and status: the first syllable of the numerals 1, 2, and 3 are synchronically prefixes, while in the numerals 4 up to and including 10 they are historically prefixes but synchronically these numerals are monomorphemic.

1	/ʌ⁰-ʃɛ¹/	**6**	/tʰʌ⁰ɹɔk⁰/
2	/ʌ⁰-ni³/	**7**	/sʌ⁰nʌt⁰/
3	/ʌ⁰-tɔm²/	**8**	/ʌ⁰ʃʌt⁰/
4	/bʌ⁰li³/	**9**	/ʌ⁰kʰu¹/
5	/bʌ⁰ŋa³/	**10**	/ʌ⁰si²/

Table 39 - Numerals one up to and including ten.

As mentioned in section 5.1.4, the first three numerals are adjectives. Their 'optional prefix' is in fact the common de-adjectival nominalizing prefix /ʌ⁰-/ (see section 4.2.1). Examples of the first three numerals as adjectives without prefix are presented in (362)-(364). Since the forms /-ʃɛ¹/ 'one', /-ni³/ 'two', and /-tɔm²/ 'three' do not occur in isolation, they are glossed as bound lexical roots.

(362) saŋ² ʃɛ¹.
saŋ²-**ʃɛ¹**
rupee-**one**
'One rupee.' (20160107_04)

(363) nɔ² ti² sa¹ ni³ hɨm² tʰi³ nʌŋ³ tʰu³ ɛʔ⁰ [...]
nɔ²-ti²-sa¹-**ni³** hɨm²=tʰi³=nʌŋ³ tʰu³ ɛʔ⁰
orphan-DIM-**two** house=DEF=to arrive do
'Having arrived at the house of the two orphans […]' (20160106_01)

(364) tʌk^{0} tɔm^{2}.

tʌk^{0}-**tɔm^{2}**

time-**three**

‘Three times.’ (B1.11)

The numerals four up to and including ten do not drop their initial minor syllable when they modify a preceding noun, as was the case in the above three utterances, and neither can these sesquisyllabic forms take the nominalizing prefix /ʌ^{0}-/. Example (365) shows that /bʌ^{0}li^{3}/ ‘four’ does not drop its initial syllable /bʌ^{0}/ when modifying the noun /ɟa^{3}/ ‘time’. The numerals eight to ten contain a minor syllable which is homophonous with the de-adjectival nominalizer, but this syllable also does not drop, as is example (366) illustrates. It remains to be determined whether the numerals four and up should be counted among the word class adjective or quantifying determiner.

(365) ɟa^{3} bʌ^{0}li^{3}.

ɟa^{3} **bʌ^{0}li^{3}**

time **four**

‘Four times.’ (B1.128)

(366) sal^{2} ʌ^{0}si^{2}.

sal^{2} **ʌ^{0}si^{2}**

day **ten**

‘Ten days.’ (S1.38)

While numerals perhaps more frequently function as modifiers, they may also function as a head, i.e. as a head noun. In example (367), the head noun /ʌ^{0}-ni^{3}/ ‘three’ is modified by the distal demonstrative /=ʃ/ and carries the absolutive marker /=a^{2}/.

(367) ʌ^{0}ni^{3} ʃa^{2} ʌŋ^{2} ta^{1}.

ʌ^{0}-ni^{3}=ʃi^{3}=a^{2} ʌŋ^{2}-t-a^{1}

NMLZ-two=DIST=ABS COP-PST-3

‘There were two (types).’ (20151208_01).

The numerals four and up mostly follow the noun they modify, as illustrated again by example (368), where numeral /bʌ^{0}li^{3}/ ‘four’ follows the noun it modifies, /ɟa^{3}pi^{2}/ ‘month’. Further, if a classifier is present, it will stand between the noun and the numeral, as is exemplified in (369). The common order

of the noun and numeral, i.e. noun-numeral, aligns with the overwhelming majority of contemporary TB languages (see Dryer 2008:51, 2017:74), and the same order is also reconstructed for PST (see LaPolla 2017a:47). However, in Muklom, it is with the numerals four and up also possible to use the reverse order, numeral-noun, and the current annotated corpus contains a few instances of this order. An example is provided in (370). It is still unclear exactly how the difference in order affects meaning but perhaps restrictive modification or identifiability of the referents is a factor in this, parallel to the pre-posed nominalised numerals one, two, and three (see section 5.1.4).

(368) βʌk⁰ ɹa² ʝa³ pi² bʌ⁰li³ βaŋ³ sɛ³ ɹim² i³.

βʌk⁰=ɹi³=a² **ʝa³pi²** **bʌ⁰li³**=βaŋ³ sɛ³-ɹim²-i³

pig=PROX=ABS **month** **four**=from DUR-tame-1PL

'Since four months we have been taking care of this pig.' (B1.132)

(369) ʝa³ pi² liŋ¹ ʃɛ¹.

ʝa³pi² liŋ¹-ʃɛ¹

month CLF-one

'One month.' (B1.133)

(370) ʌ⁰si² miʔ⁰.

ʌ⁰si² miʔ⁰

ten person

'Ten people.' (20120218_02)

With respect to the syllable structure of the numerals in Muklom, it can be pointed out that TB languages often have sesquisyllabic numerals, and this structure goes back to at least the level of PTB: Benedict (1972:passim) reconstructs the numerals from 2 to 9 with prefix-like elements that do not seem to carry a specific meaning. The prefixal elements are often cognate between languages, but may be distributed differently among the numerals of each language, which is the result of paradigmatic levelling and re-differentiation of the numeral paradigm throughout the history of TB languages (see Matisoff 1997:3). In Tangsa data collected so far (see Morey 2019a:44), the following pattern emerges: 1) the numerals one to three share the same prefix-like element within the same variety, but these are not always cognate between varieties, 2) the prefix-like element in the numerals 4 and 5 is always /bə-/ or a cognate form, 3) the prefix-like element for 7, /sʌ⁰-/ in Muklom, shows more diversity across varieties. The numeral 7 also shows more variety in its root morpheme across Tangsa. Comparing contemporary Muklom forms with PTB reconstructed numerals, we can conclude that the prefixes on

the numerals 4, 6, and 7 appear to be retained,[63] while the prefixes of numerals 1-3 and 8-10, all /ʌ⁰-/, seem to reflect an innovation through partial paradigmatic levelling. In some varieties, for example Khalak and Lungkhi, levelling has extended even further to include the numerals 6-7 (S.D. Morey, p.c.).

The vast majority of contemporary TB languages exhibits a decimal number system, some with remnants of older non-decimal systems (see Mazaudon 2010). Muklom exhibits a purely decimal number system. The teen numbers are formed by combining /ʌ⁰si²/ 'ten' with the numerals 1-9, in the order ten-units as is shown in Table 40. There is no linking morpheme after the ten or after the unit contrary to what has been observed in numerous other TB languages, including Muishaung Tangsa (see Matisoff 1997:32). The prefixes of the units (see Table 39) are not dropped, which is not surprising for the higher numerals 4-9 because they never drop their prefix, but is significant for the lower numerals 1-3 which do lose their prefix under certain circumstances, namely when modifying a preceding noun.

10	/ʌ⁰si²/	**15**	/ʌ⁰si² bʌ⁰ŋa³/
11	/ʌ⁰si² ʌ⁰-ʃɛ¹/	**16**	/ʌ⁰si² tʰʌ⁰ɹɔk⁰/
12	/ʌ⁰si² ʌ⁰-ni³/	**17**	/ʌ⁰si² sʌ⁰nʌt⁰/
13	/ʌ⁰si² ʌ⁰-tɔm²/	**18**	/ʌ⁰si² ʌ⁰ʃʌt⁰/
14	/ʌ⁰si² bʌ⁰li³/	**19**	/ʌ⁰si² ʌ⁰kʰu¹/

Table 40 - Ten and the teen numerals.

Numerals that are a multiple of ten contain the element /ɹɔk⁰-/, '-ty' in English, which differs from the numeral /ʌ⁰si²/ 'ten' and must be considered a bound root as it does not occur in isolation. The feature of having two etymologically unrelated forms for the numeral 10 and '-ty' is also found in certain other TB languages, for example Nocte and Maring (see Matisoff 1997:41; Barbora et al. 2015:169). An overview of ten and its multiples up to 100 in Muklom is provided in Table 41. The last numeral in this table is not based on /ɹɔk⁰-/ but has its own root /ʃa³/ 'hundred'.

[63] The following are the PTB numerals 1-10 as reconstructed by Benedict (1972): *it/*kat/*g-t(y)ik 'one', *g-ni-s 'two', *g-sum 'three', *b-liy 'four', *l-ŋa 'five', *d-ruk 'six', *s-nis 'seven', *b-r-gyat~*b-g-ryat 'eight', *d-kuw~*d-gaw 'nine', and *gip/*ts(y)i(y)~*tsyay 'ten'.

10	/ʌ⁰si²/	**60**	/ɹɔk⁰-tʰʌ⁰ɹɔk⁰/
20	/ɹɔk⁰-ni³/	**70**	/ɹɔk⁰-sʌ⁰nʌt⁰/
30	/ɹɔk⁰-tɔm²/	**80**	/ɹɔk⁰-ʌ⁰ʃʌt⁰/
40	/ɹɔk⁰-bʌ⁰li³/	**90**	/ɹɔk⁰-ʌ⁰kʰu¹/
50	/ɹɔk⁰-bʌ⁰ŋa³/	**100**	/ʃa³/~/ʃa³-ʃɛ¹/~/ʃa³ ʌ⁰-ʃɛ¹/

Table 41 - Ten and multiples of ten.

The numerals 20 and 30 contain the adjectival forms of the numerals 2 and 3, /-ni³/ 'two' and /-tɔm²/ 'three', without the nominalizing prefix /ʌ⁰-/. The higher numbers, 4-9, all retain their prefixes in multiple of ten-formations.

The highest numeral in Table 41 can be expressed either by its monomorphemic form as /ʃa³/ 'hundred', or by the complex form /ʃa³ ʃɛ¹/~/ʃa³ ʌ⁰-ʃɛ¹/ 'one hundred', where the low numeral takes on either the adjectival form without nominalizer, /ʃɛ¹/ 'one', or the nominalized form, /ʌ⁰-ʃɛ¹/ 'one'. This variation between non-nominalized and nominalized forms is also found with the numerals 2 and 3 when they combine with /ʃa³/ 'hundred' to express a multiple of 100. The word /ʃa³/ 'hundred' combines freely either with prefix-less forms of 2 and 3 or with its nominalized counterparts that do carry the prefix /ʌ⁰-/. This contrasts with /ɹɔk⁰-/ 'ten': the numerals 2 and 3 must always appear without the nominalizing prefix /ʌ⁰-/ when combining with /ɹɔk⁰-/ 'ten' to express a multiple of 10, i.e. /ɹɔk⁰-ni³/ 'twenty' and /ɹɔk⁰-tɔm²/ 'thirty'. Examples of non-nominalized numerals 1-3 in multiples of 100 are provided in examples (371)-(373).

(371) ʃa³ ʃɛ¹.
ʃa³-**ʃɛ¹**
hundred-**one**
'One hundred.' (20100124-105300)

(372) ʃa³ ni³.
ʃa³-**ni³**
hundred-**two**
'Two hundred.' (S1.28)

(373) ʃa^{3} tɔm^{2}.

ʃa^{3}-**tɔm^{2}**

hundred-**three**

‘Three hundred.’ (S1.28)

The construction without nominalizer, as in (371)-(373), is used more frequently. This is perhaps not surprising, since the use of nominalized forms may lead to ambiguity. An example of a nominalized form, /ʌ^{0}-ʃɛ^{1}/ ‘one’, with /ʃa^{3}/ ‘hundred’ is shown in (374). We can tell that the speaker intends to convey the meaning ‘one hundred’ and not the meaning ‘a hundred and one’, because of the disambiguating context: /ʃa^{3} ʌ^{0}-ʃɛ^{1}/ is directly followed by /ʌ^{0}si^{2} ʌ^{0}-ʃɛ^{1}/ ‘eleven’. The same speaker also utters nominalized forms for ‘two hundred’ and ‘three hundred’, as shown in example (375) and (376). Example (375) can mean both ‘two hundred’ and ‘hundred and two’, and similarly, example (376) can mean both ‘three hundred’ and ‘hundred and three’, but since these examples are taken from a controlled elicitation session where the speaker is translating English prompts into Muklom, we know that the intended meaning is ‘two hundred’ and ‘three hundred’. Examples (371)-(373), on the other hand, are not ambiguous.

(374) ʃa^{3} ʌ^{0}ʃɛ^{1} ʌ^{0}si^{2} ʌ^{0}ʃɛ^{1}.

ʃa^{3}	**ʌ^{0}-ʃɛ^{1}**	ʌ^{0}si^{2}	ʌ^{0}-ʃɛ^{1}
hundred	**NMLZ-one**	ten	NMLZ-one

‘One hundred and eleven.’ (20121105_06)

(375) ʃa^{3} ʌ^{0}ni^{3}.

ʃa^{3}	**ʌ^{0}-ni^{3}**
hundred	**NMLZ-two**

‘Two hundred.’ (20121105_05)

(376) ʃa^{3} ʌ^{0}tɔm^{2}.

ʃa^{3}	**ʌ^{0}-tɔm2**
hundred	**NMLZ-three**

‘Three hundred.’ (20121105_05)

The numerals between 10 and 100 are predictable based on Table 39 and Table 40: all numerals are multimorphemic, the order of elements is ten-unit, and there is no linking morpheme. This is illustrated by example (377), where the multiple of ten /ɹɔk^{0}-bʌ^{0}li^{3}/ ‘forty’ precedes the unit numeral /bʌ^{0}ŋa^{3}/ ‘five’.

(377) paŋ^{3} ɹɔk^{0} bʌ^{0}li^{3} bʌ^{0}ŋa^{3}.

paŋ^{3} ɹɔk^{0}-bʌ^{0}li^{3} bʌ^{0}ŋa^{3}

year unit.of.ten-four five

'Forty-five years.' (542)

The highest number that has been encountered is /ha^{3}ɟat^{0}/ 'thousand', exemplified in (378). This word is an Indo-Aryan loan, perhaps from Assamese /hazar/ 'thousand'. Muklom does not allow a rhotic in coda position and in various loans we find that /r/ has been changed to /t/ to fit the phonological structure of the language. Example (379) shows an alternative word for 'thousand', /hɨŋ^{2}/. Not all consultants are familiar with this second word, which may indicate that newcomer /ha^{3}ɟat^{0}/ is pushing /hɨŋ^{2}/ out of the lexicon. The etymology of /hɨŋ^{2}/ is less clear. Benedict (1972:220) suggests PTB *s-toŋ, of which for example Written Burmese /thoŋ/ is a reflex. Matisoff adds to this an additional reconstructed etymon *s-riŋ~*s-raŋ and discusses the possibility of a relationship between this etymon and *s-r/liŋ~s-r/lyaŋ 'ten' (Matisoff 1997:27) or *m-liŋ 'hundred' (Matisoff 1997:61). At the same time, in Shan and in the Tai languages of Northeast India, all non-TB languages, we find words that look suspiciously similar to the Muklom form, for example /heŋ^{6}/ 'thousand' in Tai Phake and /hiŋ^{1}/ 'thousand' in Aton (Tai) (see Morey 2005:241). Morey (2010:315) suggests the direction of borrowing is from Tai into Tibeto-Burman.[64]

(378) hɔl^{3} dap^{0} βaŋ^{3} ŋɨn^{2} ha^{3} ɟat^{0} ʃɛ^{1} lʌt^{0} kɔʔ^{0} tʌŋ^{1}.

hɔl^{2}-dap^{0}=βaŋ^{3} ŋɨn^{2} **ha^{3}ɟat^{0}**-ʃɛ^{1} lʌt^{0} kɔʔ^{0}-t-ʌŋ^{1}

pocket=from money **thousand**-one pull.out give-PST-1SG

'I took one thousand rupees from my pocket and gave it.' (B1.133)

(379) hɨŋ^{2} ʃɛ^{1}.

hɨŋ^{2}-ʃɛ^{1}

thousand-one

'One thousand.' (20121105_06)

The last topic to be discussed is the idiomatic use of the numerals 2 and 3. When combined as in (380), these numerals mean 'a little, a few'. The first takes the nominalized form with prefix, /ʌ^{0}-ni^{3}/ 'two', while the second appears in adjectival form without prefix, /-tɔm^{2}/ 'three'. The lack of a prefix on /-tɔm^{2}/

[64] To be precise: Morey (2010:315) suggests that Turung Singpho /hiŋ^{2}/ derives from Tai Aiton /hiŋ^{1}/.

is perhaps the result of phonological reduction in this fixed expression. What is definitely a phonological change is the change in vowel quality /ɔ/→/ʌ/ that may occur the word /-tɔm^{2}/ as is illustrated by (381).

(380) ʌ^{0}ni^{3} tɔm^{2}.
ʌ^{0}-ni^{3}-tɔm^{2}
two-three
'A little bit.' (20121105_11)

(381) til^{2} **ʌ^{0}ni^{3} tʌm^{2}** βe^{3} kɔʔ^{0} p^{h}u^{3}.

til^{2}	**ʌ^{0}-ni^{3}-tɔm^{2}**	βe^{3}-kɔʔ^{0}-p^{h}-u^{3}
rice	**two-three**	ITER-give-INV-2SG

'Give me a little bit more rice.' (20121105_11)

5.1.6 Intensifiers

The language exhibits a large collection of intensifiers that are placed after the adjective and function to evoke a vivid impression of a sensory perception, i.e. ideophonic intensifiers. These intensifiers are similar in meaning to the quantifying determiner /=hʌl^{2}/ 'very'. For example, /-puŋ^{2}/ means 'white' and /-puŋ^{2} bɔŋ^{1} bɔŋ^{1}/ 'very white'. However, while /=hʌl^{2}/ only modifies nouns (see section 5.1.3.4), intensifiers only modify adjectives. The use of these reduplicated intensifiers is at least in part motivated by aesthetic reasons (see Williams 2013b). Ideophonic adjective intensifiers have been reported to occur in other TB languages, see for example Van Dam (2018b) on colour adjective intensifiers in a sample of Tangsa varieties and Modi and Post (2021:195-196) on adjective intensifiers in Adi (Tani) and Milang (unassigned TB). Muklom adjectives and intensifiers do not combine in random manner. Instead, every intensifier can combine with one fixed adjective or fixed set of adjectives, and adjectives can combine with one fixed intensifier or fixed set of intensifiers. In other words, these combinations are lexically determined. When an intensifier combines with more than one adjective, the adjectives sometimes appear to be semantically relatable to one another, such as 'rotting' and 'soft', and sometimes not, such as 'sweet' and 'grey'. The following table lists all intensifiers observed so far, and the adjectives they appear with in the corpus.

adjective	**intensifier**	**English**		**adjective**	**intensifier**	**English**
/-lɔm^{2}/	/bi^{2} bi^{2}/	'warm'		/-nan^{3}/	/su^{2} su^{2}/	'dirty'

/-nʌm^{2}/; /-pit^{0}/	/bɔk^{0} bɔk^{0}/	‘rotting’; ‘soft’		/-dal^{1}/	/ʃɔk^{0} ʃɔk^{0}/	‘rough’
/-puŋ^{2}/; /-k^{h}i^{2}/	/bɔŋ^{1} bɔŋ^{1}/	‘white’; ‘grey’		/-kiʔ^{0}/	/ʃu^{2} ʃu^{2}/	‘cold’
/-mʌk^{0}/; /-k^{h}aʔ^{0}/; /tsan^{1}/	/dɨk^{0} dɨk^{0}/	‘black’; ‘bitter’; ‘hard’		/-min^{2}/	/tak^{0} tak^{0}/	‘yellow’
/-sɨm^{2}/	/dɨŋ^{1} dɨŋ^{1}/	‘sweet’, ‘salty’ (?)		/-hʌm^{2}/	/tat^{0} tat^{0}/	‘brown’
/-nʌk^{0}/; /-pɨl^{1}/	/dɨŋ^{2} dɨŋ^{2}/	‘dark’; ‘green’		/-min^{2}/	/ti^{3} ti^{3}/	‘yellow’
/-puŋ^{2}/	/ɟaŋ^{2} ɟaŋ^{2}/	‘white’		/-hʌm^{2}/; /-ʃaŋ^{2}/	/tɔk^{0} tɔk^{0}/	‘brown’; ‘red’
/-nup^{0}/	/ɟɔk^{0} ɟɔk^{0}/	‘soft’		/-hʌm^{2}/	/tɔŋ tɔŋ/	‘brown’
/-ɹam^{2}/	/kɛk^{0} kɛk^{0}/	‘thin’		/-k^{h}am^{2}/	/tuŋ^{1} tuŋ^{1}/	‘hot’
/-k^{h}iŋ^{3}/	/lip^{0} lip^{0}/	‘shiny’		/-ʃaŋ^{2}/	/t^{h}ʌŋ^{1} t^{h}ʌŋ^{1}/	‘red’
/-sɨm^{1}/; /-k^{h}i^{2}/	/lɨk^{0} lɨk^{0}/	‘blue’; ‘grey’		/-pɨl^{1}/	/tɕɨt^{0} tɕɨt^{0}/	‘green’
/-tɔm^{1}/	/lɔk^{0} lɔk^{0}/	‘round’		/-baŋ^{2}/	/tɕu^{3} tɕu^{3}/	‘diluted’
/-tɨm^{2}/	/mʌŋ^{2} mʌŋ^{2}/	‘pleasant smell’		/-puŋ^{2}/	/tsaʔ^{0} tsaʔ^{0}/	‘white’
/-hʌm^{2}/	/pʌt^{0} pʌt^{0}/	‘brown’		/-sɨm^{2}/	/tsɨk^{0} tsɨk^{0}/	‘sweet’
/-ʃaŋ^{2}/	/pɔk^{0} pɔk^{0}/	‘red’		/-kiʔ^{0}/; /-k^{h}i^{2}/; /-xi^{2}/	/tsɔk^{0} tsɔk^{0}/	‘cold’; ‘grey’; ‘sour’
/-baŋ^{2}/	/pɔt^{0} pɔt^{0}/	‘diluted’		/-sɨm^{2}/; /-k^{h}i^{2}/	/tsɔŋ^{1} tsɔŋ^{1}/	‘sweet’; ‘grey’
/-saŋ^{3}/	/put^{0} put^{0}/	‘clean’		/-xi^{2}/	/tsu^{3} tsu^{3}/	‘sour’
/-puŋ^{2}/	/ɹaŋ^{2} ɹaŋ^{2}/	‘white’		/-siŋ^{1}/	/βa^{2} βa^{2}/	‘stink’
/-ʃɔp^{0}/	/ɹʌk^{0} ɹʌk^{0}/	‘tangled’		/-ʃaŋ^{2}/; /-puŋ^{2}/	/βat^{0} βat^{0}/	‘red’; ‘white’
/-tɨŋ^{2}/	/sʌk^{0} sʌk^{0}/	‘smell’		/-lɔ^{1}/	/βi^{2} βi^{2}/	‘far’
/-mʌk^{0}/	/sɨm^{2} sɨm^{2}/	‘black’		/-k^{h}a^{3}/	/βi^{3} βi^{3}/	‘wide’

Table 42 - Intensifiers with adjectives.

For most intensifiers, no other meaning but an intensifying function could be established, but at least three have been found to not only intensify meaning but also add a certain sense to the expression. The first, /-sɨm^{2} tsɔŋ^{1} tsɔŋ^{1}/, does not simply mean ‘very sweet’, but rather ‘very sweet and juicy’, thus /tsɔŋ^{1}

tsɔŋ^{1}/ must express a sense of ‘juiciness’ when modifying this adjective. The second example, /-puŋ^{2} ɟaŋ^{2} ɟaŋ^{2}/, means not just ‘very white’, but ‘very shiny/bright white’. Third, the element /lip^{0}/ from the expression /-k^{h}iŋ^{3} lip^{0} lip^{0}/ ‘very shiny’ also occurs as an independent lexeme meaning ‘shine’ or ‘lightning’. While some forms carry independent meaning and can be linked to a lexical source, adjective intensifiers synchronically predominantly do not represent independently meaningful forms but rather only serve to intensify the meaning of the adjective they modify. Exactly the same was found to be the case for the two distantly related languages Adi and Milang (see Modi and Post 2021:204).

There appears to be some variation in intensifier inventories between speakers of Muklom, which must be due to inter-speaker variation or more generally, dialectal variation or generational differences. For example, some of the intensifiers provided by consultants from Kuttom, as in the expression /-hʌm^{2} pʌt^{0} pʌt^{0}/ ‘very purple’ uttered by consultant MC, were not recognized by consultant CTT from the Changlang Town area. The latter is younger than the former.

There do not appear to be any phonological correlations between the adjective and the intensifiers it takes. Syllables of different tones seem to combine freely, and vowel harmony does not appear to play a role in the formation of adjective-intensifier constructions. Table 43 provides an overview of all combinations of vowels in the adjective (V_{adj}) and vowel in the intensifier (V_{intens}) that are attested in the corpus.

V_{intens} / **V_{adj}**	**/i/**	**/ɛ/**	**/a/**	**/ʌ/**	**/ɔ/**	**/u/**	**/ɨ/**
/i/	+		+		+	+	
/ɛ/							
/a/	+	+		+	+	+	+
/ʌ/			+		+		+
/ɔ/	+			+	+		
/u/			+	+	+		
/ɨ/			+	+	+		+

Table 43 - Vowel combinations between adjective and intensifier.

5.1.7 Postpositions

Muklom exhibits exclusively postpositions, there are no prepositions. The postpositions can be divided into two categories: 1) postpositions which mark core arguments, i.e. constituents that may trigger person indexing on the verb and 2) postpositions that mark oblique arguments, i.e. constituents that cannot trigger person indexing on the verb (see section 6.1.2). There are three postpositions which mark

core arguments: ergative /=ɛ^{3}/~/=a^{3}/, absolutive /=a^{2}/, and dative /=ma^{3}/. These will be discussed in section 5.1.7.1. The second category of postpositions is larger than the first: there are ten postpositions which mark oblique arguments. In addition to this, there are at least 25 fixed collocations of relational noun plus postposition that express position, orientation, direction, and manner. These will be discussed in section 5.1.7.2.

5.1.7.1 Core arguments

I define core arguments as those arguments which can trigger person indexing on the verb. This does not include inverse marking on the verb. Possessors, for example, are not considered core arguments for our purpose: they may trigger inverse marking, but never person indexing (see section 6.1.2). Core argument NPs can be marked by means of a postposition, all of which are monomorphemic and monosyllabic. This postposition has scope over the whole NP and a maximum of one case marker present per NP. In other words, double case marking and case stacking do not occur. Case is marked on the right edge of the phrase, not on the head, unless of course there are no other elements to the right of the head.

The ergative and dative postpositions are non-differential, i.e. all agent-like (A) arguments of transitive clauses must be marked with an ergative postposition and all recipient-like (R) arguments of ditransitive clauses must be marked with a dative postposition. Absolutive marking, on the contrary, is differential; not all single (S) arguments of intransitive clauses, patient-like (P) arguments of transitive clauses, and theme (T) arguments of ditransitive clauses receive an absolutive postposition. Ergative /=ɛ^{3}/~/=a^{3}/ will be discussed in section 5.1.7.1.1, absolutive /=a^{2}/ in section 5.1.7.1.2, and dative /=ma^{3}/ in section 5.1.7.1.3.

5.1.7.1.1 Ergative case postposition

The function of the first postposition, ergative /=ɛ^{3}/~/=a^{3}/, is to mark the A argument of a transitive clause, as exemplified by (382), in which /ʃaʔ^{0}/ ‘tiger’ fulfils the syntactic role of agent-like argument and /tɕɔk^{0}/ ‘deer’ the syntactic role of patient-like argument. This postposition cannot be used with the S argument of an intransitive clause. Muklom can be counted among the TB languages which show ergative-instrumental syncretism (see Matisoff 1991:494; Coupe 2011:27): the first allomorph of the ergative postposition is identical to the postposition /=ɛ^{3}/ ‘with (instr)’ (see section 5.1.7.2), and the second allomorph /=a^{3}/ is identical a postposition which expresses location in time (see section 5.1.7.2).

(382) ʃaʔ^{0} ɛ^{3} tɕɔk^{0} kʌk^{0} ta^{1}.

[ʃaʔ^{0}=**ɛ^{3}**]$_{A}$ [tɕɔk^{0}]$_{P}$ kʌk^{0}-t-a^{1}

[tiger=**ERG**]$_{A}$ [deer]$_{P}$ bite-PST-3

'A tiger bit a deer.' (SDM31-2009)

In Muklom, ergative case marking is non-differential and the language thus deviates from the general tendency of TB languages to exhibit differential or 'pragmatic' agentive marking (see DeLancey 2011b:9). The following two examples serve to show that highly topical and indefinite NPs alike take ergative marking. In the portion of text in (383), Chengwa is a highly topical entity and is referred to three times: twice by his name and once as 'grandfather'. In the last utterance, the proper name Chengwa functions as an A argument and is marked with ergative case /=ɛ^{3}/, attached to the preceding definite marker /=t^{h}i^{3}/. Example (384) represents the beginning of a story; the characters have not been introduced yet. The A argument /ŋʌm^{2}/ 'game, animals' is newly introduced, carries no definite or demonstrative determiner, but must be marked with ergative case /=ɛ^{3}/.

(383) e^{2} t^{h}a^{2} t^{h}aŋ^{3} a^{3} tɕɛŋ^{3} βa^{1} t^{h}a^{2} xɨm^{3} te^{2} ma^{3} tat^{0}

e^{2}-t^{h}i^{3}=a^{2} t^{h}aŋ^{3}=a^{3} tɕɛŋ^{3}-βa^{1}=t^{h}i^{3}=a^{2} xɨm^{3}-te^{2}=ma^{3} tat^{0}

NPROX-DEF=ABS now=at Chengwa=DEF=ABS village-PERS=DAT try

tɨm^{3} xiŋ^{3} kɔ^{3} ɛʔ^{0} nam^{2} tsɔŋ^{1} t^{h}ɛ^{3} tʌŋ^{1} k^{h}ʌk^{0} ta^{1}.

tɨm^{3} xiŋ^{3} kɔ^{3}ɛʔ^{0} nam^{2}-tsɔŋ^{1}=t^{h}i^{3}=ɛ^{3} tʌŋ^{1} k^{h}ʌk^{0}-t-a^{1}

go.around walk because grass-bundle=DEF=with obstruct wrap-PST-3

'Then, because Chengwa tried to go around and walk up to the villagers, they wrapped a grass bundle to block (their houses).'[65]

e^{2} t^{h}ɔ^{3} tɕʌm^{2} ma^{3} ta^{3} kɔ^{3} ɛʔ^{0} nɔ^{2} ti^{2} sa^{1} ni^{3} hɨm^{2} nʌŋ^{3} t^{h}u^{3} ɛʔ^{0},

e^{2}t^{h}ɔ^{3} tɕʌm^{2}ma^{3}ta^{3}kɔ^{3}ɛʔ^{0} nɔ^{2}ti^{2}-sa^{1}-ni^{3} hɨm^{2}=nʌŋ^{3} t^{h}u^{3} ɛʔ^{0}

and because orphan-DIM-two house=to arrive do

i^{3} te^{2} ɔ^{2}, tuŋ^{1} ʌ^{0}tsʌm^{1} kɔʔ^{0} p^{h}u^{3} ta^{3} bat^{0} ɛʔ^{0},

i^{2} te^{2}=ɔ^{2} tuŋ^{1}-ʌ^{0}-tsʌm^{1} kɔʔ^{0}-p^{h}-u^{3}=ta^{3} bat^{0} ɛʔ^{0}

1EX.POSS grandfather=VOC taro-and-paddy give-INV-2SG=QUOT say do

[65] The ritually wrapped grass bundle mentioned here marks a house as off-limits to visitors. Only residents are allowed in the house.

tuŋ^{1} ʌ^{0}tsʌm^{1}.

tuŋ^{1}-ʌ^{0}-tsʌm^{1}

taro-and-paddy

‘And because he arrived at the house of two orphans, they said, ‘Oh grandfather, give us taro and paddy, taro and paddy, taro and paddy.’’

e^{2} t^{h}ɔ^{3} tɕɛŋ^{3} βa^{1} t^{h}ɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3}a^{3} tsʌm^{1} nʌm^{3}

e^{2}t^{h}ɔ^{3}	**tɕɛŋ^{3}-βa^{1}=t^{h}i^{3}=ɛ^{3}**	u^{3}-na^{3}=βaŋ^{3}	kɛl^{2}dɨŋ^{2}	ni^{3}a^{3}	tsʌm^{1}-nʌm^{3}
and	**Chengwa=DEF=ERG**	3SG.POSS-ear=from	earthworm	and	paddy-stalk

tsɔŋ^{3} a^{3} t^{h}a^{2} xʌm^{2} t^{h}ɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

tsɔŋ^{3}-a^{3}=t^{h}i^{3}=a^{2}	xʌm^{2}=t^{h}i^{3}=ɔʔ^{0}	lʌt^{0}	kɔʔ^{0}-t-a^{1}
wear.in.ear-3=DEF=ABS	mat=DEF=at	pull.out	give-PST-3

‘And Chengwa pulled out of his ears an earthworm and a paddy stalk that he was wearing in them and placed them on a mat.’ (20160106_01.ed)

(384) p^{h}ʌŋ^{3} p^{h}ʌŋ^{3} t^{h}ɔʔ^{0} t^{h}a^{2} ŋʌm^{2} ɛ^{3} ɟɨn^{3} tɨk^{0} tɨp^{0} ɟɔ^{3}

p^{h}ʌŋ^{3}	p^{h}ʌŋ^{3}=t^{h}i^{3}=ɔʔ^{0}=t^{h}i^{3}=a^{2}	**ŋʌm^{2}=ɛ^{3}**	ɟɨn^{3}	tɨk^{0}	tɨp^{0}=ɟɔ^{3}
beginning	beginning=DEF=in=DEF=ABS	**game=ERG**	ABIL	die	pound=COND

ŋʌm^{2} ɛ^{3} lɛ^{3} p^{h}ʌk^{0}.

ŋʌm^{2}=ɛ^{3}=lɛ^{3}	p^{h}ʌk^{0}
animal=ERG=FOC	eat.hard

‘In the beginning, if animals were able to pound (their prey) to death, they would eat.’ (20151208_04)

An example of a geographically close TB language which does show differential agentive marking is Singpho (see Morey 2010). Languages that like Muklom show the minority pattern, i.e. non-differential marking, do not necessarily cluster together; they are distributed across different branches of TB and are found in regions which may be geographically distant from one another (see DeLancey 2011b:10), for example in Mizo in Mizoram (see Chhangte 1989:96), Chang in Nagaland (see Coupe 2011:40), and in Newari in Nepal (see Genetti 2007:106).

In controlled elicitation, unmarked A arguments occur on a few occasions, but this appears to be caused solely by hesitation or by interference from the language of communication, English. An example of an unmarked A in controlled elicitation is provided in (385). The speaker pauses after the

noun phrase that should have been marked as ergative, /miʔ^{0}-βa^{1}-sa^{1}/ ‘boy’, an indication that the failure to insert a case marker is due to hesitation. When the speaker then tries again to translate the English prompt in (386), he repairs himself and inserts an ergative marker /=ɛ^{3}/. He also changes the word order from the default SOV to OSV.

(385) *miʔ^{0} βa^{1} sa^{1} ŋa^{1} t^{h}-a^{2} βat^{0} t-a^{1}.

miʔ^{0}-βa^{1}-sa^{1}	ŋa^{1}=t^{h}i^{3}=a^{2}	βat^{0}-t-a^{1}
person-M-DIM	1SG=DEF=ABS	hit-PST-3

Intended: ‘A boy hit me.’ (20121103_04)

(386) ŋa^{1} t^{h}a^{2} miʔ^{0} βa^{1} sa^{1} nɛ^{3} βat^{0} ta^{1}.

ŋa^{1}=t^{h}i^{3}=a^{2}	miʔ^{0}-βa^{1}-sa^{1}=ni^{3}**=ɛ^{3}**	βat^{0}-t-a^{1}
1SG=DEF=ABS	person-M-DIM=MED**=ERG**	hit-PST-3

‘The boy hit me.’ (20121103_04)

The ergative postposition consists of a vowel. When a postposition that does not start with a consonant is preceded by a demonstrative or definite determiner, the reduced form of the determiner must be used, i.e. the allomorph without a vowel /i/ (see section 5.1.3.2). An example is provided in (387), where ergative /=ɛ^{3}/ attaches to the allomorph /=t^{h}/ of the definite marker /=t^{h}i^{3}/~/=t^{h}/. This morphophonological rule only affects demonstrative and definite determiners, and not any other elements. For example, when the ergative marker directly follows the noun /hi^{1}/ ‘dog’, as in (388), the rhyme /i/ does not drop nor does the noun lose its tone.

(387) miʔ^{0} nu^{1} **t^{h}ɛ^{3}** miʔ^{0} βa^{1} t^{h}a^{2} βat^{0} ɛʔ^{0} ɟɔl^{2} ta^{1}.

miʔ^{0}-nu^{1}**=t^{h}i^{3}=ɛ^{3}**	miʔ^{0}-βa^{1}=t^{h}i^{3}=a^{2}	βat^{0}	ɛʔ^{0}	ɟɔl^{2}-t-a^{1}
person-F**=DEF=ERG**	person-M=DEF=ABS	hit	do	run-PST-3

‘The woman hit the man and ran.’ (S2.20)

(388) miʔ^{0} nu^{1} t^{h}a^{2} **hi^{1} ɛ^{3}** kʌk^{0} ta^{1}.

miʔ^{0}-nu^{1}=t^{h}i^{3}=a^{2}	**hi^{1}=ɛ^{3}**	kʌk^{0}-t-a^{1}
person-F=DEF=ABS	**dog=ERG**	bite-PST-3

‘A dog bit the woman.’ (20100124-112656)

The ergative marker /=ɛ^{3}/ has an allomorph /=a^{3}/. This allomorph occurs with personal pronouns and proper nouns. Other types of nouns, i.e. common nouns but also pronouns that are not personal

pronouns, like the definite and demonstrative pronouns (see section 5.1.1.5) and interrogative pronouns (see section 5.1.1.8), take the regular marker /=ɛ³/. There are no occurrences of possessive pronouns and classifier pronouns with ergative marking in the current corpus, which is not surprising because their referents tend to be inanimate or animals which are no longer alive, such as fish caught from the water. We do not know yet which allomorph these would take if it is possible for them to take ergative marking at all.

The allomorph /=a³/ might be a retention from an older alignment system that has been replaced by a new one in the domain of common nouns and the other pronouns but not in the domain of personal pronouns and proper nouns. Personal pronoun paradigms do cross-linguistically tend to be a more conservative pocket of language and may be the last to be affected by linguistic innovation. As one reviewer pointed out, topicality and agentivity might also play a role in this: pronouns and names on average score higher on topicality and agentivity compared to common nouns. The older alignment system might for example have been agentive-non-agentive, or nominative-accusative.

An example of the ergative postposition /=a³/ with a personal pronoun is provided in (389), and in (390) a proper noun. The allomorph /=a³/ is never found in combination with a demonstrative or definite determiner: whenever a personal pronoun or a proper noun is modified by such a determiner, the regular form of the ergative marker must be used, as is illustrated by example (391), in which the regular ergative marker /=ɛ³/ follows the definite marker /=tʰ/. The function of adding a definite marker to a personal pronoun or proper noun appears to be signalling of contrastive topic-shift (see section 5.1.3.2).

(389) nʌŋ¹ a³ tɨl² saʔ⁰ mu¹.

nʌŋ¹**=a³** tɨl² saʔ⁰-m-u¹

2SG**=ERG** rice eat.soft-NEG-2SG

‘You do not eat rice.’ (20121103_04)

(390) nɔŋ¹ dam² a³ βɔ¹ tʰa² lɔŋ¹ ɛ³ tɨk⁰ pʌt⁰ tɕʌk⁰ ta¹.

nɔŋ¹-dam²**=a³** βɔ¹=tʰi³=a² lɔŋ¹=ɛ³ tɨk⁰ pʌt⁰-tɕʌk⁰-t-a¹

Nongdam**=ERG** bird=DEF=ABS stone=with kill throw-PFV-PST-3

‘Nongdam threw a stone at the bird and killed it.’ (S2.22)

(391) piʔ⁰ tʰɛ³ βe³ bat⁰ ʃiŋ² ta¹, nɔ² ti² sa¹ ni³ tʰi³ ma³ [...]

piʔ⁰**=tʰi³=ɛ³** βe³-bat⁰ ʃiŋ²-t-a¹ nɔ²-ti²-sa¹-ni³=tʰi³=ma³

3sg**=DEF=ERG** ITER-say put-PST-3 orphan-DIM-two=DEF=DAT

‘He said again, to the two orphans […]’ (20160106_01)

One possible explanation for this reversion to the common form of the ergative postposition might be that morphophonological change has taken place in combinations of demonstrative or definite determiners and the ergative postposition. Two possible paths of development are presented in Figure 17. Both scenarios start off with the full forms of the demonstrative and definite determiners: proximal /=ɹi^{3}/, medial /=ni^{3}/, distal /=ʃi^{3}/, and definite /=t^{h}i^{3}/ (see section 5.1.3.2). In the first scenario, raising takes place under influence of the high vowel /i/ of the determiner, followed by elision of this /i/. In the second, the vowel of the determiner and the ergative postposition combine into a single tone-bearing syllable, followed by monophthongisation.

a) PHASE I: vowel raising

/a^{3}/$_{[Erg]}$ → [ɛ^{3}] / ɹi^{3}$_{[Prox]}$ __
ni^{3}$_{[Med]}$ __
ʃi^{3}$_{[Dist]}$ __
t^{h}i^{3}$_{[Def]}$ __

PHASE II: elision

/i^{3} ɛ^{3}/ → /ɛ^{3}/

EXAMPLE * piʔ^{0} t^{h}i^{3} a^{3} → * piʔ^{0} t^{h}i^{3} ɛ^{3} → /piʔ^{0}=t^{h}=ɛ^{3}/
3SG DEF ERG 3SG DEF ERG 3SG=DEF=ERG

b) PHASE I: diphthongization

/Ci^{3}/$_{[Dem/Def]}$ → [Ci] / __ a^{3}$_{[Erg]}$

PHASE II : monophthongization

/ia^{3}/ → /ɛ^{3}/

EXAMPLE * piʔ^{0} t^{h}i^{3} a^{3} → * piʔ^{0} t^{h}i a^{3} → /piʔ^{0}=t^{h}=ɛ^{3}/
3SG DEF ERG 3SG DEF ERG 3SG=DEF=ERG

Figure 17 - An attempt at explaining reversion to ergative /=ɛ^{3}/.

Morphophonological change is just one possible explanation for the occurrence of /ɛ^{3}/ with personal pronouns and proper nouns when a demonstrative or definite determiner intervenes. Anecdotal evidence suggest a similar process of vowel raising might be productive in some speaker of the language, in this case following personal pronouns which end in a high vowel /i/ or the rhyme /iʔ/: 1) consultant MK uses /ɛ^{3}/ with the first person exclusive pronoun /i^{2}/ 'we', as can be seen in examples (392) and (393) and 2) consultant SN uses /ɛ^{3}/ with the third person singular pronoun, as is shown in (394) and (395). The phrases are elicited, but the speaker utters them with clear articulation and steady pace, there is no mumbling or stuttering, except in example (394), where the speaker repeats the first word after a false start.

(392) i^{2} ɛ^{3} tɨl^{2} saʔ^{0} mi^{1}.

i^{2}=ɛ^{3} tɨl^{2} saʔ^{0}-m-i^{1}

1EXCL=ERG rice eat.soft-NEG-1PL

'We do not eat rice.' (20100124-112046)

(393) i^{2} ɛ^{3} tɨl^{2} sʌt^{0} ti^{1}.

i^{2}=ɛ^{3} tɨl^{2} sʌt^{0}-t-i^{1}

1EXCL=ERG rice eat.soft[66]-PST-1PL

'We ate rice.' (20100124-112656)

(394) piʔ^{0} ɛ^{3}, piʔ^{0} ɛ^{3} tɨl^{2} saʔ^{0} a^{3}.

piʔ^{0}=ɛ^{3} **piʔ^{0}=ɛ^{3}** tɨl^{2} saʔ^{0}-a^{3}

3SG=ERG **3SG=ERG** rice eat.soft-3

'He, he eats rice.' (SDM31-2009)

(395) piʔ^{0} ɛ^{3} saʔ^{0} ta^{1} sɛ^{3}.

piʔ^{0}=ɛ^{3} saʔ^{0}-t-a^{1}=sɛ^{3}

3SG=ERG eat.soft-PST-3=COMP

'He has eaten already.' (SDM31-2009)

These are the only two personal pronouns that end in a high front vowel or have a rhyme consisting of a high front vowel plus glottal stop. Speaker MK, who uses /=ɛ^{3}/ with /i^{2}/ 'we', employs the expected form /=a^{3}/ with all other personal pronouns and, perhaps surprisingly, also with the third person singular pronoun /piʔ^{0}/. Based on the current data, we can only speculate about the cause of the observed variation. If we are indeed looking at phonological change, then there should be a phonological explanation for the difference between the two speakers who have been observed to use /=ɛ^{3}/ with pronouns: perhaps the change affects /i^{2}/ first and /piʔ^{0}/ follows later. The glottal stop coda does form a demarcation between the vowel of the pronoun and the vowel of the ergative postposition and is thus perhaps posing a hurdle for the partial assimilation process.

[66] Since the verb is finite here, we would expect the verbal stem /saʔ^{0}/ 'eat soft food' to be used. Perhaps the speaker made a mistake, because he does seem correct himself immediately after by adding /til^{2} sʌt^{0} tɕɔl^{2}/ '(we) have already eaten rice'. The perfective marker /tɕɔl^{2}/ indeed normally co-occurs with the nominal stem of the verb, here /sʌt^{0}/ 'eat soft food'.

5.1.7.1.2 Absolutive case postposition

The function of the absolutive postposition /=a^{2}/ is to mark the single argument of an intransitive clause, as illustrated by (396), to mark the patient-like argument of a transitive clause, as in (397), or to mark the theme argument of a ditransitive clause, as in (398).

(396) e^{2} tʰɔ^{3} niŋ^{2} **tʰa^{2}** βe^{3} βɛl^{2} ta^{1}.

e^{2}tʰɔ^{3} **niŋ^{2}=tʰi^{3}=a^{2}** βe^{3}-βɛl^{2}-t-a^{1}

and **3PL=DEF=ABS** ITER-return-PST-3

'And they returned again.' (20160106_05)

(397) miʔ^{0} nu^{1} **tʰa^{2}** hi^{1} ɛ^{3} kʌk^{0} ta^{1}.

miʔ^{0}-nu^{1}=tʰi^{3}=a^{2} hi^{1}=ɛ^{3} kʌk^{0}-t-a^{1}

person-F=DEF=ABS dog=ERG bite-PST-3

'A dog bit the woman.' (20100124-112656)

(398) miʔ^{0} βa^{1} sa^{1} nɛ^{3} miʔ^{0} nu^{1} sa^{1} ma^{3} nap^{0} ti^{1} **tʰa^{2}** kɔʔ^{0} ta^{1}.

miʔ^{0}-βa^{1}-sa^{1}=ni^{3}=ɛ^{3} miʔ^{0}-nu^{1}-sa^{1}=ma^{3} **nap^{0}-ti^{1}=tʰi^{3}=a^{2}** kɔʔ^{0}-t-a^{1}

person-M-DIM=MED=ERG person-F-DIM=DAT **banana-fruit=DEF=ABS** give-PST-3

'The boy gave the banana to a girl.' (20121103_04)

Like the ergative postposition (see section 5.1.7.1.1), the absolutive postposition combines with the reduced form of the demonstrative or definite determiner whenever such determiner is present. Hence we see the allomorph /=tʰ/ of the definite marker /=tʰi^{3}/~/=tʰ/ preceding the absolutive postposition /=a^{2}/ in examples (396)-(398).

Absolutive marking is differential: not all S, P, and T arguments receive an absolutive postposition. Across TB languages this is the prevalent pattern (DeLancey 2011b:11). Definiteness, though a precise definition of this concept in the context of Muklom is yet to be developed, plays an important role in differential absolutive marking in Muklom: NPs without demonstrative or definite determiners usually do not take absolutive marking, while NPs with these determiners more often do take absolutive marking. Another factor which cross-linguistically is often found to play a role in differential case marking, animacy, does not seem to affect case marking in Muklom.

When we look at differential absolutive marking, we must distinguish between verbal clauses and nominal clauses. Further, we must distinguish between arguments which are not modified by a demonstrative or definite determiner, and arguments that are. I will refer to the former as bare arguments and to the latter as non-bare arguments for the sake of this discussion. In verbal clauses, bare arguments

cannot be accompanied by an absolutive marker. A bare S argument like /piʔ^{0}/ ‘he’ in (399), a bare P argument like /i^{2}/ in (400) or /miʔ^{0}-nu^{1}/ ‘woman’ in (401), and a bare T argument like /tɨl^{2}/ ‘rice’ in (402) must all remain unmarked for case.

(399) piʔ^{0} ɟɨp^{0} a^{3}.
piʔ^{0} ɟɨp^{0}-a^{3}
3SG sleep-3
‘He sleeps.’ (20170224_01)

(400) miʔ^{0} nu^{1} ɛ^{3} i^{2} βat^{0} ta^{1}.
miʔ^{0}-nu^{1}=ɛ^{3} **i^{2}** βat^{0}-t-a^{1}
person-F=ERG **1EXCL** hit-PST-3
‘A woman hit us.’ (20151228_01)

(401) i^{2} a^{3} miʔ^{0} nu^{1} βat^{0} ti^{1}.
i^{2}=a^{3} **miʔ^{0}-nu^{1}** βat^{0}-t-a^{1}
1EXCL=ERG **person-F** hit-PST-1PL
‘We hit a woman.’ (20151228_01)

(402) tɨl^{2} βe^{3} kɔʔ^{0} p^{h}u^{3}.
tɨl^{2} βe^{3}-kɔʔ^{0}-p^{h}-u^{3}
rice ITER-give-INV-2SG
‘Give me more rice.’ (20121105_11)

While bare arguments cannot be accompanied by an absolutive marker in a verbal clause, it seems the opposite is true for nominal interrogative clauses: a questioned bare NP must be accompanied by an absolutive marker. The utterance in (403) is an example of a nominal interrogative clause with a bare noun, /miʔ^{0}/ ‘person’, which is accompanied by the absolutive postposition /=a^{2}/. Interrogative pronouns can also take absolutive marking, as is illustrated by example (404), in which the pronoun /i^{3}tʌŋ^{2}/ ‘who’ is accompanied by the absolutive marker /=a^{2}/.

(403) tɕʌm^{2} tan^{3} miʔ^{0} a^{2} nɨm^{1} hɨm^{2} na^{3}?

tɕʌm^{2}=tan^{3} **miʔ^{0}=a^{2}** nɨm^{1} hɨm^{2}=na^{3}

what=as.much.as **person=ABS** 2PL.POSS house=in

'How many people are there in your household?' (20120218_03)

(404) ba^{3} miŋ^{3} i^{3} tʌŋ^{2} a^{2}?

ba^{3}-miŋ^{3} **i^{3}tʌŋ^{2}=a^{2}**

2SG.POSS-name **who=ABS**

'What is your name?' (lit. 'Who is your name?') (S1.26)

Non-bare S, P, and T arguments, on the other hand, tend to be marked by an absolutive postposition, as illustrated by examples (396)-(398) above. Noun type is not a restricting factor here: the absolutive postposition can occur with non-bare common nouns, proper nouns, and pronouns.

Although non-bare arguments tend to take absolutive case marking, non-bare arguments without case marking are also found. For example, the S argument /βɔ^{1}/ 'chicken' of the intransitive verb /tɔŋ^{2}/ 'sit' in (405) remains unmarked, even though the noun is accompanied by the definite marker /=t^{h}i^{3}/. Similarly, the P argument of a transitive verb can remain unmarked for case when it takes the definite marker, as is exemplified by /mɨk^{0}/ 'eye' in example (406).

(405) βɔ^{1} t^{h}i^{3} tɕʌm^{2} lʌŋ^{2} na^{3} tɔŋ^{2} a^{3}?

βɔ^{1}=t^{h}i^{3} tɕʌm^{2}lʌŋ^{2}=na^{3} tɔŋ^{2}-a^{3}

chicken[67]**=DEF** what=on sit-3

'What does the chicken sit on?' (B1.147)

(406) mɨk^{0} t^{h}i^{3} kʌp^{0} ta^{1}.

mɨk^{0}=t^{h}i^{3} kʌp^{0}-t-a^{1}

eye=DEF find-PST-3[68]

'She found the eye.' (20160106_02)

We can conclude that definiteness, though a precise definition of this concept in the context of Muklom is yet to be developed, plays an important role in differential absolutive marking in Muklom: NPs without demonstrative or definite determiners usually do not take absolutive marking, while NPs with

[67] The word /βɔ^{1}/ can mean 'bird' (any type) or 'chicken' in particular, without the need to add further specification.

[68] The person indexes show allomorphy between tenses and between affirmative and negative (see section 6.1.2). The third person index exhibits the following allomorphs: /-a^{1}/~/-a^{3}/~/-ɔʔ^{0}/.

these determiners more often do take absolutive marking. As mentioned, animacy does not appear to play a role. Animate and inanimate referents both can take absolutive marking, as illustrated by example (407), with the animate referent /miʔ^{0}-nu^{1}-sa^{1}/ ‘girls’, and by example (408), with the inanimate referent /lɔŋ^{1}/ ‘stone’, both accompanied by the absolutive marker /=a^{2}/.

(407) miʔ^{0} βa^{1} sa^{1} nɛ^{3} miʔ^{0} nu^{1} sa^{1} t^{h}a^{2} βat^{0} a^{3}.

miʔ^{0}-βa^{1}-sa^{1}=ni^{3}=ɛ^{3}	**miʔ^{0}-nu^{1}-sa^{1}=t^{h}i^{3}=a^{2}**	βat^{0}-a^{3}
person-M-DIM=MED=ERG	**person-F-DIM=DEF=ABS**	hit-3

‘That boy hits the girl.’ (20121103_04)

(408) miʔ^{0} nu^{1} ɛ^{3} lɔŋ^{1} t^{h}-a^{2} βat^{0} a^{3}.

miʔ^{0}-nu^{1}=ɛ^{3}	**lɔŋ^{1}=t^{h}i^{3}=a^{2}**	βat^{0}-a^{3}
person-F=ERG	**stone=DEF=ABS**	hits-3

‘A woman hits the stone.’ (B1.88)

5.1.7.1.3 Dative case postposition

The third and last postposition that can mark core arguments is the dative marker /=ma^{3}/ ‘to’. This postposition can also mark certain oblique arguments. The dative covers a range of functions, including at least: 1) marking the R argument of ditransitive clauses, 2) marking the argument that has the semantic role of Stimulus in transitive clauses, 3) marking an adverbial phrase of time, 4) marking a resulting state in intransitive clauses, and 5) marking the Possessor in possessive nominal clauses. The first four are discussed here, a discussion of nominal clauses and possessive constructions in particular can be found in section 7.1.2.3. The postposition /=ma^{3}/ combines freely with pronouns, proper nouns, common nouns, and nominalised clauses (see section 7.2.1 on clausal nominalisation), both with bare NPs and NPs accompanied by definite or demonstrative determiners.

An example of dative /=ma^{3}/ in a ditransitive clause is provided in (409), where it is placed after the R argument /miʔ^{0}-nu^{1}-sa^{1}/ ‘a girl’. Addressees of speaking verbs in ditransitive clauses are also marked by the dative postposition. An example of this is provided in (410), where the speaker /piʔ^{0}/ is marked by the ergative postposition /=ɛ^{3}/ and the addressees /nɔ^{2}-ti^{2}-sa^{1}-ni^{3}=t^{h}i^{3}/ ‘the two orphans’ by dative /=ma^{3}/.

(409) miʔ^{0} βa^{1} sa^{1} nɛ^{3} miʔ^{0} nu^{1} sa^{1} ma^{3} nap^{0} ti^{1} t^{h}a^{2}

[miʔ^{0}-βa^{1}-sa^{1}=ni^{3}=ɛ^{3}]$_{A}$	[miʔ^{0}-nu^{1}-sa^{1}**=ma^{3}**]$_{R}$	[nap^{0}-ti^{1}=t^{h}i^{3}=a^{2}]$_{T}$
[person-M-DIM=MED=ERG]$_{A}$	[person-F-DIM**=DAT**]$_{R}$	[banana-fruit=DEF=ABS]$_{T}$

kɔʔ^{0} ta^{1}.

kɔʔ^{0}-t-a^{1}

give-PST-3

‘The boy gave the banana to a girl.’ (20121103_04)

(410) nɔ^{2} ti^{2} sa^{1} ni^{3} t^{h}i^{3} ma^{3} βe^{3} bat^{0} ʃiŋ^{2} ta^{1}.

nɔ^{2}-ti^{2}-sa^{1}-ni^{3}=t^{h}i^{3}**=ma^{3}** βe^{3}-bat^{0} ʃiŋ^{2}-t-a^{1}

orphan-DIM-two=DEF**=DAT** ITER-say put-PST-3

‘Again, he said to the two orphans: …’ (20160106_01)

The ‘R’ argument covers multiple semantic roles, not only Recipient as in (409) and (410), but also Beneficiary, Maleficiary, and Purpose. Example (411) contains an instance of a Beneficiary marked by /=ma^{3}/. An example of malefactive meaning is provided in (412), where the quoted speaker is disadvantaged by the destructive behaviour of his animals: they devoured all his medicinal plants. Finally, (413) contains an example of a dative-marked Purpose, here taking the shape of a nominalised verb.

(411) mika ma^{3} ɟuŋ^{2} βaŋ^{3} kɛl kɔʔ^{0} u^{3}.

mika**=ma^{3}** ɟuŋ^{2}=βaŋ^{3} kɛl kɔʔ^{0}-p^{h}-u^{3}

Mika**=DAT** water=from pour give-2SG

‘Pour Mika some water!’ (B1.14)

(412) aɹe ŋa^{1} ma^{3} ʃɨt^{0} βʌŋ^{3} p^{h}ʌk^{0} sʌt^{0} ɛʔ^{0} tɕʌk^{0} ta^{1}.

aɹe **ŋa^{1}=ma^{3}** ʃɨt^{0} βʌŋ^{3} p^{h}ʌk^{0}-sʌt^{0} ɛʔ^{0}-tɕʌk^{0}-t-a^{1}

EXCLAM **1SG=DAT** be.destroyed go.up eat.solid-eat.soft do-PFV-PST-3

‘Oh! They have destroyed them and have eaten them up (to my disadvantage).’ (20151208_01)

(413) ŋa^{1} u^{0}ɟɨp^{0} ma^{3} sɛ^{3} ka^{3} ʌŋ^{3}.

ŋa^{1} u^{0}-ɟɨp^{0}**=ma^{3}** sɛ^{3}-ka^{3}-ʌŋ^{3}

1SG NMLZ-sleep**=DAT** COS-go-1SG

‘I am going to sleep (now).’ (S1.66)

In transitive clauses, /=ma^{3}/ marks a range of arguments which can be subsumed under the umbrella of the semantic role Stimulus. For example, with different verbs that express desire, the object of that

desire is marked by the dative postposition, as is exemplified for the verb /nuk^{0}/ ‘like’ in (414), the verb /ɨn^{1} maʔ^{0}/~/ɨn^{1}-mʌt^{0}/ ‘love’ in (415), and the verb /ɹʌm^{2}/ ‘appreciate’ in (416). The object of fear can also be marked with the dative postposition, as is exemplified by (417). In all these examples, the entity which does the liking, loving, appreciating or fearing either receives an absolute case marker or is left unmarked for case.

(414) ŋa^{1} ɟɔŋ^{1} bal^{1} ma^{3} nuk^{0} m-ɔŋ^{1}.
ŋa^{1} ɟɔŋ^{1}bal^{1}**=ma^{3}** nuk^{0}-m-ɔŋ^{1}
1SG insect**=DAT** like-NEG-1SG
‘I don’t like insects.’ (S1.21)

(415) ɟa^{2} ɹɔ^{2} t^{h}a^{2} ɟa^{2} hʌn^{3} ma^{3} ɨn^{1} maʔ^{0} ta^{1}.
ɟa^{2}ɹɔ^{2}=t^{h}i^{3}=a^{2} ɟa^{2}hʌn^{3}**=ma^{3}** ɨn^{1} maʔ^{0}-t-a^{1}
young.man=DEF=ABS young.woman**=DAT** heart/liver perish-PST-3
‘The young man loved a young woman.’ (S2.23)

(416) miʔ^{0} βa^{1} ɹa^{2} ɟan^{2} ma^{3} ɹʌm^{2} a^{3}.
miʔ^{0}-βa^{1}=ɹi^{3}=a^{2} ɟan^{2}**=ma^{3}** ɹʌm^{2}-a^{3}
person-M=PROX=ABS dao**=DAT** appreciate-3
‘Men appreciate daos.’ (B1.69)

(417) ʃaʔ^{0} t^{h}i^{3} ma^{3} t^{h}ʌ^{0}ɟi^{2} tɕɔ^{2} ta^{1} ɹi^{3}.
ʃaʔ^{0}=t^{h}i^{3}**=ma^{3}** t^{h}ʌ^{0}ɟi^{2} tɕɔ^{2}-t-a^{1}=ɹi^{3}
tiger=DEF**=DAT** all fear-PST-3=INFER
‘They of course all feared the tiger.’ (20151208_03)

Another context in which we find the postposition /=ma^{3}/ is adverbial expressions of time, where it denotes duration. In an example that was sent to me by text message, example (418), the sender is indicated that they were going to stay for the duration of ten days.

(418) ŋa^{1} t^{h}ɔʔ^{0} sal^{2} ʌ^{0}si^{2} ma^{3} ɟu^{3} nʌŋ^{3}.
ŋa^{1}=t^{h}ɔʔ^{0} sal^{2} ʌ^{0}-si^{2}**=ma^{3}** ɟu^{3}-n-ʌŋ^{3}
1SG=also day ten**=DAT** go-FUT-1SG
‘I will also come for ten days.’ (MessagesExtracts_2016)

Finally, in intransitive clauses, /=ma^{3}/ can be used to mark the resulting state of a change that has affected the S argument of the clause. In (419), for example, the storyteller tells us that an eye was placed in a bamboo container and it turned into a human being. The resulting state, /miʔ^{0}/ 'person' is followed by the dative postposition. The consultant that helped to gloss and translate this utterance insisted that even though /hun^{2}/~hun^{3}/ is also found to function as a transitive verb meaning 'create', here the woman is not creating anything, the eye turns into a person by itself and the meaning of the verb is 'become' or 'change into'. Another example of /=ma^{3}/ with a resulting state is provided in (420).

(419) piʔ^{0} a^{3} tuŋ^{3} k^{h}a^{3} ɔ^{3} ʃiŋ^{3} ɛʔ^{0} miʔ^{0} ma^{3} hun^{2} ta^{1}.

piʔ^{0}=a^{3} tuŋ^{3} k^{h}a^{3}=ɔ^{3} ʃiŋ^{3} ɛʔ^{0} miʔ^{0}**=ma^{3}** hun^{2}-t-a^{1}

3SG=ERG cylinder cavity=at place do person=**DAT** become-PST-3

'After she placed it in a bamboo container, it turned into a human being.' (20160106_02)

(420) ɹaja ma^{3} ʌŋ^{2} na^{3} ta^{3}.

ɹaja**=ma^{3}** ʌŋ^{2}-n-a^{3}=ta^{3}

king=**DAT** COP-FUT-3=QUOT

''He will become king', they said.' (20151208_03)

5.1.7.2 Oblique arguments

Postpositions that mark oblique arguments express position, orientation, direction, and manner. The language exhibits ten such postpositions, listed in Table 44. Just like the case postpositions (see section 5.1.7.1) these are all monomorphemic; they cannot be divided into smaller meaningful parts. Two of the postpositions, /=ɔ^{3}/ and /=ɔʔ^{0}/, are alike in form and meaning, both expressing location in space or time. In conversations with consultants, no semantic distinction could be established for these two postpositions and they were considered interchangeable. Perhaps we are dealing with a weak or neutral form /=ɔ^{3}/ versus a strong or contrast-expressing form /=ɔʔ^{0}/. Such a distinction between weak non-glottalised forms and strong glottalised forms has indeed been observed in a related language variety, Hakhun (see Boro 2017:58). Alternation between a coda-less allomorph and an allomorph with a glottal stop coda has not been observed in any of the other Muklom postpositions.

postposition	English	semantic field
/=na^{3}/	‘in’	location in space or time
/=ɔ^{3}/	‘at’	
/=ɔʔ^{0}/	‘at’	
/=a^{3}/	‘at’	location in time only
/=βaŋ^{3}/	‘from’	orientation or direction
/=nʌŋ^{3}/	‘towards’	
/=ɟi^{2}/	‘after’	
/=mʌl^{2}/	‘like’	manner
/=tan^{3}/	‘as much/many as’	
/=ɛ^{3}/	‘with (instr)’	

Table 44 - Postpositions that mark oblique arguments.

An example of /=na^{3}/ ‘in’ expressing a location in space is provided in (421) and an example of the same postposition expressing location in time is given in (422).

(421) ɟa^{1} βɔk^{0} na^{3} hɔl^{3} ta^{1} ti^{3}.

ɟa^{1}-βɔk^{0}**=na^{3}** hɔl^{3}-t-a^{1}=ti^{3}

leg-belly**=in** carry-PST-3=HS

‘She carried it in the calf of her leg, so they say.’ (20151208_05)

(422) ɹʌŋ^{2} ɟa^{3} na^{3} t^{h}ʌ^{0}ɹɔl^{3} bʌl^{3} a^{3}.

ɹʌŋ^{2}-ɟa^{3}**=na^{3}** t^{h}ʌ^{0}-ɹɔl^{3} bʌl^{3}-a^{3}

sky-evening**=in** RECIP-run.parallel tap-3

‘They fall in love in the evening.’ (TY_MansDesire)

Example (423) shows /=ɔ^{3}/ expressing a location in space, and example (424) a location in time.

(423) u^{3} mɨk^{0} ʃɔ^{3} tʌ^{0}k^{h}i^{3} kɔʔ^{0} ta^{1} ti^{3}.

u^{3}-mɨk^{0}=ʃɨ^{3}**=ɔ^{3}** tʌ^{0}-k^{h}i^{3} kɔʔ^{0}-t-a^{1}=ti^{3}

3SG.POSS-eye=DIST**=at** CAUS-see give-PST-3=HS

‘He showed it to him in front of his eyes, so they say.’ (lit. ‘at his eyes’) (20151208_01)

(424) ɹʌŋ^{2} pʌl^{3} ɔ^{3} mɛŋ^{2} ɹa^{2} lʌ^{0}ɟʌk^{0} ta^{1}.

ɹʌŋ^{2}-pʌl^{3}**=ɔ^{3}** mɛŋ^{2}=ɹi^{3}=a^{2} lʌ^{0}ɟʌk^{0}-t-a^{1}

sky-night**=at** cat=PROX=ABS be.naughty-PST-3

'The cat has been naughty at night.' (B1.63)

The postposition /=ɔʔ^{0}/ similarly can express both location in space, as in (425), and location in time, as in (426).

(425) ɟu^{3} ɛʔ^{0} ba^{3}, nam p^{h}e pɨk^{0} ʃɔʔ^{0} ba^{3}, kaɹi na^{2} t^{h}ʌ^{0}laŋ^{3}ʃɨŋ^{2} ti^{1} ɹi^{3}.

ɟu^{3} ɛʔ^{0}=ba^{3} namp^{h}e pɨk^{0}=ʃɨ^{3}**=ɔʔ^{0}**=ba^{3} kaɹi=ni^{3}=a^{2} t^{h}ʌ^{0}-laŋ^{3} ʃɨŋ^{2}-t-i^{1}=ɹi^{3}

arrive do=TOP Namphai field=DIST**=at**=TOP car=MED=ABS CAUS-stand put-PST-1PL

'We arrived, at that field near Namphai, and parked the car.' (20151127_01)

(426) e^{2} t^{h}i^{3} pat^{0} ɔʔ^{0}.

e^{2}-t^{h}i^{3} pat^{0}**=ɔʔ^{0}**

NPROX-DEF era**=at**

'At that time.' (B1.96)

While the first three postpositions can express both location in space and location in space, the fourth, /=a^{3}/ 'at', only indicates location in time. This postposition is phonologically identical to the ergative allomorph /=a^{3}/ (see section 5.1.7.1.1). In example (427), /=a^{3}/ follows an expression of time /i^{3}nʌp^{0}/ of which the individual syllables mean 'this' and 'morning', but which when combined mean 'tomorrow'.

(427) i^{3} nʌp^{0} a^{3} nʌk^{0} ka^{3} p^{h}u^{3} ta^{3}.

i^{3}nʌp^{0}**=a^{3}** nʌk^{0} ka^{3}-p^{h}-u^{3}=ta^{3}

tomorrow**=at** PROH go-CIS-2SG=QUOT

''Don't come tomorrow!' she said.' (20160106_04)

Then there are three postpositions which express orientation or direction. The first indicates direction or orientation away from a source, /=βaŋ^{3}/ 'from', as illustrated in (428). This postposition can also be used to express continuation from a certain point in time, 'for, since', as is shown in (429). It sometimes combines with the postposition /=na^{3}/ 'in', as exemplified in (430) and (431), perhaps expressing the notion that the object has made a movement away from the source but has not become completely detached from it: the grass is still stuck to the ground and the money has not fallen out of the bag.

(428) e^{2} tʰɔ^{3} tɕɛŋ^{3} βa^{1} tʰɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3}a^{3} tsʌm^{1} nʌm^{3}

e^{2}tʰɔ^{3}	tɕɛŋ^{3}-βa^{1}=tʰi^{3}=ɛ^{3}	u^{3}-na^{3}**=βaŋ^{3}**	kɛl^{2}dɨŋ^{2}	ni^{3}a^{3}	tsʌm^{1}-nʌm^{3}
and	Chengwa=DEF=ERG	3SG.POSS-ear**=from**	earthworm	and	paddy-stalk

tsɔŋ^{3} a^{3} tʰa^{2} xʌm^{2} tʰɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

tsɔŋ^{3}-a^{3}=tʰi^{3}=a^{2}	xʌm^{2}=tʰi^{3}=ɔʔ^{0}	lʌt^{0}	kɔʔ^{0}-t-a^{1}
wear.in.ear-3=DEF=ABS	mat=DEF=at	pull.out	give-PST-3

'And Chengwa pulled out of his ears an earthworm and a paddy stalk that he was wearing in them and placed them on a mat.' (20160106_01.ed)

(429) βʌk^{0} ɹa^{2} ʝa^{3} pi^{2} bʌ^{0}li^{3} βaŋ^{3} sɛ^{3} ɹim^{2} i^{3}.

βʌk^{0}=ɹi^{3}=a^{2}	ʝa^{3}pi^{2}	bʌ^{0}li^{3}**=βaŋ^{3}**	sɛ^{3}-ɹim^{2}-i^{3}
pig=PROX=ABS	month	four**=from**	DUR-tame-1PL

'For four months we have been taking care of this pig.' (B1.132)

(430) e^{2} tʰɔ^{3} sɛ^{3} nam^{2} tʰa^{2} pʰuk^{0} ta^{1} sɛ^{3} haʔ^{0} βaŋ^{3} na^{3}.

e^{2}tʰɔ^{3}=sɛ^{3}	nam^{2}=tʰi^{3}=a^{2}	pʰuk^{0}-t-a^{1}=sɛ^{3}	haʔ^{0}**=βaŋ^{3}=na^{3}**
and=COMP	grass=DEF=ABS	sprout-PST-3=COMP	earth**=from=in**

'And grass had already sprouted from the earth.' (20121103_03)

(431) ba^{3} kʰak^{0} βaŋ^{3} na^{3} ŋɨn^{2} tʰʌ^{0}lʌt^{0} a^{3}.

ba^{3}-kʰak^{0}**=βaŋ^{3}=na^{3}**	ŋɨn^{2}	tʰʌ^{0}-lʌt^{0}-a^{3}
2SG.POSS-bag**=from=in**	money	INTR-stick.out-3

'Money is sticking out from your bag.' (20161223_01)

The next postposition, /=nʌŋ^{3}/ 'towards', indicates orientation or direction towards a goal, as exemplified in (432). An example of the third postposition, /=ʝi^{2}/ 'after', is provided in (433). This word is homophonous with and likely etymologically related to the body part noun /ʝi^{2}/ 'back'.

(432) sʌm^{2} nʌŋ^{3} ʌ^{0}ɹɛl^{3} tʰa^{2} tʌ^{0}pʰʌl^{3} ti^{1}.

sʌm^{2}**=nʌŋ^{3}**	ʌ^{0}-ɹɛl^{3}=tʰi^{3}=a^{2}	tʌ^{0}-pʰʌl^{3}-t-i^{1}
plains**=to**	NMLZ-few=DEF=ABS	INTR-split-PST-1PL

'Some of us split off towards the plains.' (20151208_05)

(433) e^{2} tʰɔ^{3} dʌk^{0} hʌn tɔl^{3} miʔ^{0} ɛ^{3} piʔ^{0} ɟi^{2} pʰʌn^{2} ta^{1}.

e^{2}tʰɔ^{3} dʌk^{0}-hʌn tɔl^{3} miʔ^{0}=ɛ^{3} piʔ^{0}=**ɟi^{2}** pʰʌn^{2}-t-a^{1}

and SUPER-many mass person=ERG 3SG=**after** follow-PST-3

'And so many people followed him.' (C63186t)

The last three postpositions in Table 44 express manner. The postposition /=mʌl^{2}/ is exemplified in (434), /=tan^{3}/ 'as much/many as' in (435), and /=ɛ^{3}/ 'with' in (436). The last carries an instrumental meaning, not comitative. This postposition is homophonous with the default form of the ergative marker, /=ɛ^{3}/ (5.1.7.1.1).

(434) miʔ^{0} tʰa^{2} sɨp^{0} ʌ^{0} naʔ^{0} mʌl^{2} tɨŋ^{2} ta^{1}.

miʔ^{0}=tʰi^{3}=a^{2} sɨp^{0}-ʌ^{0}-naʔ^{0}=**mʌl^{2}** ti^{3} ʌŋ^{2}-t-a^{1}

person=DEF=ABS ant-and-bee=**like** COS.COP COP[69]-PST-3

'The people became like insects.' (20151208_05)

(435) kɔnta ni^{3} tan^{3} sɛ^{3} tɕuŋ^{1} ti^{1} hɛ^{3} ɔ^{3}.

kɔnta-ni^{3}=**tan^{3}** sɛ^{3}-tɕuŋ^{1}-t-i^{1}=hɛ^{3} ɔ^{3}

hour[70]-two=**as.much.as** DUR-be.lost-PST-1PL=DUB EXCLAM

'We were lost for as long as two hours maybe.' (20151127_01)

(436) βɔ^{1} pi^{3} ɟan^{2} ɛ^{3} tuk^{0} pʌt^{0} ta^{1} ti^{3}.

βɔ^{1}-pi^{3} ɟan^{2}=**ɛ^{3}** tuk^{0} pʌt^{0}-t-a^{1}=ti^{3}

bird.type knife=**with** break throw-PST-3=HS

'She threw a knife at the bird and broke it (its leg).' (20151208_05)

Four postpositions in Table 44 have the syllable structure V(C): /=ɔ^{3}/ 'at', /=ɔʔ^{0}/ 'at', /=a^{3}/ 'at', and /=ɛ^{3}/ 'with (instr)'. When a postposition of this syllable type is preceded by a demonstrative or definite determiner, the reduced form of that determiner must be used, i.e. the allomorph without the vowel /i/ (see section 5.1.3.2). For example, the definite marker /=tʰi^{3}/ appears in reduced form /=tʰ/ in (437) because it is followed by the onset-less postposition /=ɛ^{3}/ 'with'.

[69] The copulas /ti^{3}/ 'become' and /ʌŋ^{2}/ 'be' have here merged into a single verb /tɨŋ^{2}/ 'become' (see section 6.1.1.2).

[70] Indo-Aryan loan.

(437) nam^{2} tsɔŋ^{1} t^{h}ɛ^{3} tʌŋ^{1} k^{h}ʌk^{0} ta^{1}.

nam^{2}-tsɔŋ^{1}**=t^{h}i^{3}=ɛ^{3}** tʌŋ^{1} k^{h}ʌk^{0}-t-a^{1}

grass-bundle=**DEF=with** obstruct wrap-PST-3

'They blocked it and wrapped it with the bundle of grass.' (20160106_01)

Of the ten postpositions that mark oblique arguments, six have so far been found to co-occur with so-called relational nouns which function syntactically as nouns and convey a meaning that in some languages is expressed by adpositions instead. An example of a fixed collocation of relational noun and postposition is provided in (438), where the postposition /=na^{3}/ 'in' is combined with the relational noun /k^{h}ɔ^{2}/~/k^{h}ɔ^{3}/ 'head'. Syntactically, we can say that the relational noun forms an NP with the possessive determiner /hiʔ^{0}-tʌŋ^{2}/ 'our (incl)' and the noun /hɨm^{2}/ 'house'. This NP is then modified by the postposition /=na^{3}/ 'in'.

(438) hiʔ^{0} tʌŋ^{2} hɨm^{2} k^{h}ɔ na^{3} βɔ^{1} pu^{2} a^{3}.

hiʔ^{0}-tʌŋ^{2} hɨm^{2}-**k^{h}ɔ=na^{3}** βɔ^{1} pu^{2}-a^{3}

1INCL.POSS house-**head**[71]**=in** bird fly-3

'A bird is flying above our house.' (20161223_01)

The six postpositions that have been found to combine with relational nouns are /=na^{3}/ 'in', /=ɔ^{3}/ 'at', /=ɔʔ^{0}/ 'at', /=a^{3}/ 'at', /=βaŋ^{3}/ 'from', and /=nʌŋ^{3}/ 'towards'. Some relational nouns derive from body parts, such as /k^{h}ɔ^{2}/ 'head', /ɟi^{2}/ 'back', /sam^{2}/ 'side', and /ɟa^{1}/ 'leg'. Other relational nouns do not seem to have a connection to the body, such as /tit^{0}/ 'proximity', /ɟʌm^{2}/ 'company', and /mɔŋ^{2}/ 'inside'. An overview of relational noun and postposition combinations that express position, orientation, direction, and manner is presented in Table 45. These are all the fixed collocations that are found in the current corpus of annotated texts; there may be more relational noun and postposition combinations in the language than are included here.

rel N-post	**gloss**	**English**	**semantic field**
/k^{h}ɔ=na^{3}/	head-in	'above'	location in space
/k^{h}uŋ^{3}=na^{3}/	underneath-in	'underneath'	
/ɟa^{3}-k^{h}ɔ=na^{3}/	leg-head-in	'in front of'	

[71] If a non-stopped syllable is transcribed without a superscript number, this indicates that the tone could not be determined with certainty. The element /k^{h}ɔ^{2}/~/k^{h}ɔ^{3}/ 'head' has been found to carry either tone 2 or 3, depending on the context it appears in (see 3.5). It could not be determined yet which tone the syllable /k^{h}ɔ/ carries in the collocation /k^{h}ɔ=na^{3}/.

/ɟi^{3}-k^{h}ɔ=na^{3}/	back-head-in	‘behind’	
/tit^{0}=na^{3}/	proximity-in	‘near’	
/ɟʌk^{0}tuŋ^{2}=na^{3}/	middle-in[72]	‘between’	
/mɔŋ^{2}=na^{3}/	inside-in	‘(stay) inside’	
/haŋ^{3}=na^{3}/	opposite-in	‘opposite’	
/kaŋ^{2}=na^{3}/	edge-in	‘at the edge of’	
/sam^{2}-kaŋ^{2}=na^{3}/	side-edge-in	‘at the side of’	
/ɟi^{3}=na^{3}/	back-in	‘after’	location in time
/ɟi^{3}=ɔ^{3}/	back-at	‘after’	
/ɟi^{3}=ɔʔ^{0}/	back-at	‘after’	
/ɟi^{3}=a^{3}/	back-at	‘after’	
/ɟi^{3}=βaŋ^{3}/	back-from	‘from’	
/mɔŋ^{2}=ɔ^{3}/	inside-at	‘within, during’	
/mɔŋ^{2}=ɔʔ^{0}/	inside-at	‘within, during’	
/kɔ^{2}=nʌŋ^{3}/	direction-towards	‘towards’	orientation or direction
/mɔŋ^{2}=βaŋ^{3}/	inside-from	‘from inside’	
/mɔŋ^{2}=nʌŋ^{3}/	inside-to	‘(move) inside’	
/haŋ^{3}-kɔ^{2}=na^{3}/	opposite-direction-in	‘the opposite way’	
/sam^{2}-kɔ^{2}=na^{3}/	side-direction-in	‘towards the side of’	
/ɟʌm^{2}=nʌŋ^{3}/	company-to	‘to (a person)’	
/ɟʌm^{2}=na^{3}/	company-in	‘with (comitative)’	manner
/ɟʌm^{2}=ɔʔ^{0}/	company-at	‘with (comitative)’	

Table 45 - Fixed collocations of relational nouns and postpositions.

The expressions of location in space in Table 45 all contain the postposition /=na^{3}/ ‘in’. However, collocations with /=na^{3}/ are not restricted to this semantic domain, as we also find this postposition in expressions of orientation or direction and of manner.

The element /=na^{3}/ ‘in’ semantically lies close to /=ɔ^{3}/ ‘at’, /=ɔʔ^{0}/ ‘at’, and /=a^{3}/ ‘at’. Indeed, sometimes they are interchangeable. Of /ɟi^{3}=na^{3}/, /ɟi^{3}=ɔ^{3}/, /ɟi^{3}=ɔʔ^{0}/, and /ɟi^{3}=a^{3}/ which all mean ‘after’,

[72] Perhaps the first syllable of this complex postposition, /ɟʌk^{0}/, derives from the word /ɟʌk^{0}/ ‘hand’. The etymology of the second syllable is still unclear.

the first three appear interchangeable, expressing only slightly different senses. The postposition /=a^{3}/ ‘at’, however, only occurs in time-related expressions, as indicated in Table 44.

Some of the relational nouns have been affected by tone change. For example, the lexical source of /ɟa^{3}-/ in /ɟa^{3}-k^{h}ɔ=na^{3}/ ‘in front of’ originally carries first tone: /ɟa^{1}/ ‘leg’. Similarly, the word /ɟi^{2}/ ‘back’ changed to tone 3 after combining with postpositions. The tones of the relational nouns have been determined with the help of a native speaker consultant. Where tone change has taken place in fixed collocations of relational noun and postposition, the direction of change is always towards mid level tone, i.e. tone 3, which is the same pattern as has been observed in compound words: the first component of a compound sometimes changes tone and if it does so, it always changes to tone 3 (section 3.5). It has yet to be determined why this sound changes affects some relational nouns, for example /ɟi^{2}/→/ɟi^{3}-/ ‘back’, but not others, for example /mɔŋ^{2}/ ‘inside’. Possibly, those that have undergone sound change are forms which have become bound to the modified noun. For now, all relational nouns have been glossed as unbound elements.

All the collocations in Table 45 consist of a relational noun and a postposition, or of two relational nouns and a postposition. However, it is also possible for relational nouns to appear without a postposition, at least it is in the following combination of relational nouns: /ɟa^{3}-k^{h}ɔ^{2}/ ‘before, ago’, abstracted away from the original lexical meaning ‘leg-head’. An example of this expression of time is provided in (439).

(439) ŋa^{1} a^{3} paŋ^{3} bʌ^{0}li^{3} ɟa^{3} k^{h}ɔ^{2} kaɹi ɹa^{2} ɹi^{2} tʌŋ^{1}.

ŋa^{1}=a^{3}	paŋ^{3}	bʌ^{0}li^{3}	**ɟa^{3}-k^{h}ɔ^{2}**	kaɹi=ɹi^{3}=a^{2}	ɹi^{2}-t-ʌŋ^{1}
1SG=ERG	year	four	**ago**	car=PROX=ABS	buy-PST-1SG

‘I bought this car four years ago.’ (B1.132)

5.2 The order of elements

This section discusses the order of elements in the noun complex, that is, the order of all elements that have been incorporated in this chapter. Section 5.2.1 gives an overview of the arrangement of elements, and section 5.2.2 provides supporting evidence in the form of examples in context for all proposed relative orders of elements.

5.2.1 Overview

An overview of the order of elements in the noun complex is provided in Figure 18. The head of the NP, the head noun, is placed in slot zero. Elements that are stacked one on top of the other in the same

slot do not co-occur in the corpus, hence their relative order cannot be determined. Two elements in Figure 18 occupy two slots instead of one. The first element that can occur in two different slots is the demonstrative or definite determiner, which can occur after the noun, but also before the noun (see section 5.1.3.2). The label ‘dem/def (A)’ stands for any demonstrative or definite which precedes the noun and those that follow have been labelled ‘dem/def (B)’.This of course refers to modifying determiners and not to the independent demonstrative and definite pronouns (see section 5.1.1.5), some of which are homophonous to the pre-posed modifiers but syntactically occupy the same position as the head noun. The second element that occurs in two slots is the quantifier (see section 5.1.3.4). Some quantifiers precede the noun they modify, while others follow. At least one quantifier can occur in both slots: either after or before the noun it modifies.

<table>
<tr><td>-2</td><td>-1</td><td>0</td><td>+1</td><td>+2</td><td>+3</td><td>+4</td></tr>
<tr><td>possessive</td><td rowspan="2">modifier noun</td><td rowspan="5">head noun</td><td>classifier</td><td>numeral</td><td rowspan="5">dem/def B</td><td rowspan="5">postposition</td></tr>
<tr><td>possessor noun</td><td colspan="2">quantifier B</td></tr>
<tr><td colspan="2">dem/def A</td><td colspan="2" rowspan="3">adjective</td></tr>
<tr><td colspan="2">interrogative</td></tr>
<tr><td colspan="2">quantifier A</td></tr>
</table>

Figure 18 - The order of elements in the noun complex.

5.2.2 Evidence

This section provides evidence for the order of elements presented in Figure 18, specifically for columns that are adjacent to one another. The discussion of supportive evidence follows the order of the columns, from left to right, and within columns from top to bottom. This section will only provide evidence for the relative position of elements, other details, such as their meaning and function, are discussed in section 5.1.

5.2.2.1 The position of possessive determiners

Possessive determiners (see section 5.1.3.1) precede modifier nouns, as is exemplified in (440), where possessive determiner /i^{3}-/ ‘my’ precedes the compound /jʌk^{0}-ɹaŋ^{1}/ ‘arm bone’. The fist component of the compound, /jʌk^{0}/ ‘arm’, is a modifier noun; it specifies the type of /ɹaŋ^{1}/ ‘bone’, i.e. a bone of the arm, and not of another body part.

(440) i^{3} jʌk^{0} ɹaŋ^{1}.

[i^{3}-[jʌk^{0}-[ɹaŋ^{1}]]]

[1SG.POSS-[arm-[bone]]]

‘My arm bone.’ (20151020_01)

5.2.2.2 The position of possessor nouns

The possessor noun (see section 5.1.2) precedes the modifier noun, as is illustrated by (441). In this example, a compound possessor noun, /miʔ^{0}-nu^{1}/ ‘woman’, modifies the following compound, /mɔŋ^{2}-nuk^{0}/ ‘inner desire’. The latter compound can be further broken down into a modifier noun /mɔŋ^{2}/ ‘inside’, which specifies the type of /nuk^{0}/ ‘desire’, hence we can say that the possessor noun precedes the modifier noun.

(441) miʔ^{0} nu^{1} mɔŋ^{2} nuk^{0} ɹʌm^{2} baŋ^{2} k^{h}ɔl^{2} kuk^{0}.

miʔ^{0}-nu^{1}	**mɔŋ^{2}-nuk^{0}**	ɹʌm^{2}baŋ^{2}	k^{h}ɔl^{2}	kuk^{0}
person-F	**inside-desire**	type.of.tree	bark	strip.bark

‘The inner desire of a woman comes easy like the bark of the Rambang tree.’ (20170124_01)

5.2.2.3 The position of modifier nouns

A modifier noun (see section 5.1.2) will precede the head noun, as is illustrated by example (442), in which the type of /tɕɨk^{0}/ ‘pot’ is specified by the modifier noun /tɨl^{2}/ ‘(cooked) rice’, together forming the compound /tɨl^{2}-tɕɨk^{0}/ ‘rice pot’.

(442) tɨl^{2} tɕɨk^{0} hɔp^{0} tɕʌk^{0} tʌŋ^{1}.

tɨl^{2}-tɕɨk^{0}	hɔp^{0}-tɕʌk^{0}-t-ʌŋ^{1}
rice-pot	cover-PFV-PST-1SG

‘I have covered the rice pot.’ (B1.40)

5.2.2.4 The position of demonstrative and definite determiners (A)

The following determiner forms precede the noun they modify: proximal /i^{3}-ɹi^{3}/, medial /e^{2}-ni^{3}/, distal /e^{2}-ʃɨ^{3}/, and definite /e^{2}-t^{h}i^{3}/ (see section 5.1.3.2). An example of each is provided in the clauses (443)-(446). The position of post-noun demonstratives and definite determiners is discussed in section 5.2.2.12.

(443) i³ ɹi³ paŋ³ ɔ³ ka¹ ni³.

i³-ɹi³	**paŋ³**=ɔ³	ka¹-n-i³
PROX-PROX	**year**=at	go-FUT-1PL

'We will go during this year.' (20161223_02)

(444) e² ni³ se³ ni³ ba³ nʌŋ³ βaŋ³ kʌp⁰ tu¹?

e²-ni³	**se³**=ni³	ba³=nʌŋ³=βaŋ³	kʌp⁰-t-u¹
NPROX-MED	**song**=MED	Q=to=from	find-PST-2SG

'Where did you find this song?' (B1.73)

(445) e² ʃi³ mɛŋ² ʃi³ tat⁰ sin.

e²-ʃi³	**mɛŋ²**=ʃi³	tat⁰	sin
NPROX-DIST	**cat**=DIST	try	look.at

'Have a look at that cat!' (B1.73)

(446) e² tʰi³ hi¹ tʰɛ³ ŋa¹ sɔk⁰ ta¹.

e²-tʰi³	**hi¹**=tʰi³=ɛ³	ŋa¹	sɔk⁰-t-a¹
NPROX-DEF	**dog**=DEF=ERG	1SG	bark-PST-3

'This dog barked at me.' (B1.74)

5.2.2.5 The position of interrogative determiners

The personal interrogative determiner /u³tʌŋ²/ 'who' and non-personal /ba³ɹi²/ both precede the noun they modify. In example (447), /u³tʌŋ²/ questions the following compound noun /miʔ⁰-βa¹-sa¹/ 'boy', and in example (448), /ba³ɹi²/ questions /lʌm²/ 'road'.

(447) e² ʃi³ miʔ⁰ nu¹ ɛ³ u³ tʌŋ² miʔ⁰ βa¹ sa¹ βat⁰ ta¹?

e²-ʃi³	miʔ⁰-nu¹=ɛ³	**u³tʌŋ²**	**miʔ⁰-βa¹-sa¹**	βat⁰-t-a¹
NPROX-DIST	person-F=ERG	**who**	**person-M-DIM**	hit-PST-3

'Which boy did that woman hit?' (B1.147)

(448) ba^{3} ɹi^{2} lʌm^{2} βa^{1} ʃa^{2} p^{h}ʌn^{2} u^{3}?

ba^{3}ɹi^{2} **lʌm^{2}** βa^{1}=ʃi^{3}=a^{2} p^{h}ʌn^{2}-u^{3}

which **road** CLF=DIST=ABS follow-2SG

'Which road do you follow?' (C63186t)

5.2.2.6 The position of quantifying determiners (A)

All quantifying determiners which can precede the noun can alternatively be placed after the noun. This includes /t^{h}ʌ^{0}ʝi^{2}/ 'all' and the distributive numerals, which are recognisable by the distributive prefix /t^{h}ʌ^{0}-/ they carry. An example of /t^{h}ʌ^{0}ʝi^{2}/ 'all' in pre-noun position is provided in (449), and an example of a pre-noun distributive numeral is provided in (450). Quantifiers which follow the noun they modify will be discussed in section 5.2.2.10.

(449) t^{h}aŋ^{3} a^{3} ɹɔl^{3} nal^{2} pat^{0} sɛ^{3} t^{h}u^{3} taʔ^{0} p^{h}a^{3} t^{h}ʌ^{0}ʝi^{2} haʔ^{0} sɔŋ^{3} na^{3}.

t^{h}aŋ^{3}=a^{3} ɹɔl^{3}-nal^{2} pat^{0} sɛ^{3}-t^{h}u^{3}-taʔ^{0}-p^{h}-a^{3} **t^{h}ʌ^{0}ʝi^{2}** **haʔ^{0}-sɔŋ^{3}**=na^{3}

now=at life-new era COS-arrive-PST-CIS-3 **all** **village**=in

'Now a time of new life has arrived in all villages.' (TY_MansDesire)

(450) t^{h}ʌ^{0}bʌ^{0}li^{3} nap^{0} ti^{1} saʔ^{0} ta^{1}.

t^{h}ʌ^{0}-bʌ^{0}li^{3} nap^{0}-ti^{1} saʔ^{0}-t-a^{1}

DISTR-four banana-fruit eat-PST-3

'She ate each of the four bananas.' (MessagesExtracts_2018)

Only one quantifier is circumplaced to the noun it modifies: /ba^{3}ɹi^{2} … =t^{h}ɔʔ^{0}/ 'whichever/whatever'. The first part of this quantifier is identical in form to the non-personal interrogative determiner (see the immediately preceding section 5.2.2.5) but does not change the utterance into a question. An example of the quantifying determiner /ba^{3}ɹi^{2}/ is provided in (451), where it modifies the noun /lʌm^{2}/ 'road'.

(451) ba^{3} ɹi^{2} lʌm^{2} nʌŋ^{3} t^{h}ɔʔ^{0} ka^{1} ɹɔʔ^{0} ʌŋ^{2} na^{3}.

ba^{3}ɹi^{2} lʌm^{2}=nʌŋ^{3}**=t^{h}ɔʔ^{0}** ka^{1}-ɹɔʔ^{0} ʌŋ^{2}-n-a^{3}

which road=to**=also** go-CNT AUX-FUT-3

'He will keep on going in whatever direction.' (lit. 'to whatever road') (20170124_01)

5.2.2.7 The position of head nouns

The head noun precedes classifiers, post-head quantifiers, and adjectives, if present. Example (452) illustrates that the head noun, here /βaʔ^{0}/ 'bamboo', precedes the classifier, here /liŋ^{1}/, which is used for long objects. Example (453) shows how head noun /sa^{1}/ 'child' precedes a post-head quantifier, the plural marker /=tʌŋ^{2}/. Finally, example (454), shows that the head noun, here /kʰʌt^{0}/ 'cloth', precedes the adjective, here /nup^{0}/ 'soft'.

(452) βaʔ^{0} liŋ^{1} ʌ^{0}si^{2}.

βaʔ^{0}	**liŋ^{1}**	ʌ^{0}si^{2}
bamboo	**CLF**	ten

'Ten pieces (full length) of bamboo.' (B1.127)

(453) u^{3} sa^{1} tʌŋ^{2} tʰa^{2} pan^{3} pʰɔk^{0} ɛʔ^{0}, tʌ^{0}pʰʌl^{3} tɕu^{3} βʌŋ^{1} ta^{1}.

u^{3}-**sa^{1}=tʌŋ^{2}**=tʰi^{3}=a^{2}	pan^{3}	pʰɔk^{0}	ɛʔ^{0}	tʌ^{0}-pʰʌl^{3}-tɕu^{3}-βʌŋ^{1}-t-a^{1}
3SG.POSS-**child=PL**=DEF=ABS	scatter	explode	do	INTR-distribute-away-go.up-PST-3

'Her children burst out and were scattered around.' (20160106_01)

(454) kʰʌt^{0} nup^{0} ʃɔʔ^{0}?

kʰʌt^{0}-nup^{0}=ʃi^{3}=ɔʔ^{0}

cloth-soft=DIST=in

'In that shawl?' (20160107_04)

5.2.2.8 The position of classifier determiners

Classifier determiners (see section 5.1.3.3) follow the head noun and precede the numeral, if present. An example is provided in (455), where classifier /liŋ^{1}/ precedes the numeral /=tɔm^{2}/ 'three'.

(455) ŋaʔ^{0} liŋ^{1} tɔm^{2}.

ŋaʔ^{0}	**liŋ^{1}-tɔm^{2}**
fish	**CLF-three**

'Three lengthy, complete fishes.' (B1.127)

5.2.2.9 The position of numerals

Numerals that modify a head noun (see section 5.1.5) will precede the post-noun demonstrative and definite determiners, if present. These determiners are proximal /=ɹi^{3}/~/=ɹ/, medial /=ni^{3}/~/=n/, distal /=ʃi^{3}/~/=ʃ/, and definite /=tʰi^{3}/~/=tʰ/ (5.1.3.2). An example is provided in (456) where the numeral /bʌ^{0}ŋa^{3}/ 'five' follows the compound noun /haʔ^{0}-sɔŋ^{3}/ 'village' and precedes the distal determiner /=ʃi^{3}/.

(456) haʔ^{0} sɔŋ^{3} bʌ^{0}ŋa^{3} ʃi^{3} na^{3} hɨm^{2} ʌ^{0}ʃɛ^{1} i^{3}?

haʔ^{0}-sɔŋ^{3}	**bʌ^{0}ŋa^{3}=ʃi^{3}**=na^{3}	hɨm^{2}	ʌ^{0}-ʃɛ^{1}	i^{3}
village	**five=DIST**=in	house	NMLZ-one	Q.AFF

'In those five villages there is one house?' (20161223_01)

5.2.2.10 The position of quantifying determiners (B)

The following quantifying determiners are always post-head: plural marker /=tʌŋ^{2}/, /=βɛʔ^{0}/ 'every', and /tɕɛn^{3}/ 'alone'. There are other quantifying determiners that can follow the head noun, but these can alternatively be placed before the noun: /tʰʌ^{0}ʝi^{2}/ 'all' and the distributive numerals, which are recognisable by the distributive prefix /tʰʌ^{0}-/ they carry. This group of quantifiers precedes any post-head demonstrative or definite determiner, if present. For example, in (457), the plural marker /=tʌŋ^{2}/ precedes the definite determiner /=tʰ/. Example (458) illustrates that the quantifier /tʰʌ^{0}ʝi^{2}/ 'all' precedes the demonstrative or definite marker, here the proximal marker /=ɹ/.

(457) ʌ^{0}ɹɛl^{3} miʔ^{0} tʌŋ^{2} tʰa^{2} haʔ^{0} bɨŋ^{2} tʰi^{3} nʌŋ^{3} ka^{1} ta^{1}.

ʌ^{0}-ɹɛl^{3}	miʔ^{0}**=tʌŋ^{2}=tʰi^{3}**=a^{2}	haʔ^{0}-bɨŋ^{2}=tʰi^{3}=nʌŋ^{3}	ka^{1}-t-a^{1}
NMLZ-few	person**=PL=DEF**=ABS	earth-pit=DEF=to	go-PST-3

'A few people went to the pit in the ground.' (C63186t)

(458) nʌŋ^{1} a^{3} i^{2} tʰʌ^{0}ʝi^{2} ɹa^{2} βat^{0} taʔ^{0} pʰu^{3}.

nʌŋ^{1}=a^{3}	i^{2}	**tʰʌ^{0}ʝi^{2}=ɹi^{3}**=a^{2}	βat^{0}-taʔ^{0}-pʰ-u^{3}
2SG=ERG	1EXCL	**all=PROX**=ABS	hit-PST-INV-2SG

'You (sg) have hit all of us.' (20100124-112656)

5.2.2.11 The position of attributive adjectives

Attributive adjectives precede a post-head demonstrative or definite determiner, if present. This is demonstrated by example (459), in which the adjective /-nup^{0}/ 'soft' precedes the distal marker /=ʃ/.

The same rule applies to the adjectival numerals 1-3 (see section 5.1.5), as is illustrated by example (460), where adjectival numeral /=ni^{3}/ ‘two’ is followed by definite marker /=t^{h}i^{3}/.

(459) k^{h}ʌt^{0} nup^{0} ʃɔʔ^{0}?
k^{h}ʌt^{0}-**nup^{0}=ʃi^{3}**=ɔʔ^{0}
cloth-**soft=DIST**=in
‘In that shawl?’ (20160107_04)

(460) nɔ^{2} ti^{2} sa^{1} ni^{3} t^{h}i^{3} ma^{3} βe^{3} bat^{0} ʃiŋ^{2} ta^{1}.
nɔ^{2}-ti^{2}-sa^{1}-**ni^{3}=t^{h}i^{3}**=ma^{3} βe^{3}-bat^{0} ʃiŋ^{2}-t-a^{1}
orphan-DIM-**two=DEF**=DAT ITER-say put-PST-3
‘Again, he said to the two orphans: …’ (20160106_01)

5.2.2.12 The position of demonstrative and definite determiners (B)

Post-noun demonstrative and definite determiners precede a postposition, if present. This applies both to postpositions which mark core arguments and those that mark obliques. An example of a definite marker followed by an ergative case postposition is provided in (461). This utterance is taken from a story which tells of a pregnancy in a rather uncommon location, the calf of the leg instead of the womb. An example of an oblique argument is provided in (462). Here, the definite marker /=t^{h}i^{3}/ is followed by the postposition /=nʌŋ^{3}/ ‘towards’.

(461) nɨŋ^{2} ni^{3} t^{h}ɛ^{3} ɟa^{1} βɔk^{0} ɔʔ^{0} nɔ^{2} hɔl^{3} ta^{1}.
nɨŋ^{2}-ni^{3}**=t^{h}i^{3}=ɛ^{3}** ɟa^{1}-βɔk^{0}=ɔʔ^{0} nɔ^{2} hɔl^{3}-t-a^{1}
3PL-DU**=DEF=ERG** leg-belly=at baby carry-PST-3
‘The two of them were carrying a baby in the calf of their leg.’ (20160106_01.ed)

(462) ʌ^{0}ɹɛl^{3} miʔ^{0} tʌŋ^{2} t^{h}a^{2} haʔ^{0} bɨŋ^{2} t^{h}i^{3} nʌŋ^{3} ka^{1} ta^{1}.
ʌ^{0}-ɹɛl^{3} miʔ^{0}=tʌŋ^{2}=t^{h}i^{3}=a^{2} haʔ^{0}-bɨŋ^{2}**=t^{h}i^{3}=nʌŋ^{3}** ka^{1}-t-a^{1}
NMLZ-few person=PL=DEF=ABS earth-pit**=DEF=to** go-PST-3
‘A few people went to the pit in the ground.’ (C63186t)

5.2.2.13 The position of postpositions

The rightmost element in the noun complex is the postposition. Muklom exhibits the order noun-adposition, which is cross-linguistically the common order for verb final languages, and it is the order that is reconstructed for PST (LaPolla 2017a:47). Postpositions fall outside the scope of the NP proper; they follow all other markers of the noun, such as the post-head definite and demonstrative determiners (see section 5.2.2.12).

5.3 NP conjunction

The language has two conjunctions that are exclusively used to conjoin NPs: /ni^{3}a^{3}/~/ni^{3}/ 'and' and /ʌ^{0}-/ 'and'. In addition to this, there are two conjunctions which can be used to conjoin clauses or paragraphs (see section 7.3 and section 8.2.2), but also NPs: /ti^{1}a^{3}/~/ti^{3}/ 'or' and /e^{2}t^{h}ɔ^{3}/ 'and'. NPs that are linked by /e^{2}t^{h}ɔ^{3}/ may have to be considered a case of verb ellipsis though.

The core morpheme of the first conjunction, /ni^{3}a^{3}/~/ni^{3}/ 'and', is homophonous with the number /-ni^{3}/ 'two', which is perhaps no coincidence but rather due to grammaticalization of one form into the other, where the direction 'two' > 'and' is more plausible since the numeral goes back to PTB *g-nis (Benedict 1972:94). Some other Tangsa varieties also exhibit phonological similarity between the NP conjunction and the number 'two' (S.D. Morey, p.c.). The morphological status of this conjunction is yet to be determined. If /ni^{3}a^{3}/~/ni^{3}/ is a bound morpheme, it needs to be confirmed whether it attaches to the preceding or following NP. For now, the conjunction is transcribed and glossed as if it were an unbound morpheme. In example (463), /ni^{3}a^{3}/ conjoins two common nouns, /kɛl^{2}dɨŋ^{2}/ 'worm' and /tsʌm^{1}-nʌm^{3}/ 'paddy stalk'. Example (469) illustrates the conjoining of two proper nouns, here the names of the two girls /nɛmi/ and /sɛŋ^{3}p^{h}ʌŋ^{2}/.

(463) e^{2} t^{h}ɔ^{3} tɕɛŋ^{3} βa^{1} t^{h}ɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3} a^{3} tsʌm^{1} nʌm^{3}

e^{2}t^{h}ɔ^{3}	tɕɛŋ^{3}-βa^{1}=t^{h}i^{3}=ɛ^{3}	u^{3}-na^{3}=βaŋ^{3}	kɛl^{2}dɨŋ^{2}	**ni^{3}a^{3}**	tsʌm^{1}-nʌm^{3}
and	Chengwa=DEF=ERG	3SG.POSS-ear=from	worm	**and**	paddy-stalk

tsɔŋ^{3} a^{3} t^{h}a^{2} xʌm^{2} t^{h}ɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

tsɔŋ^{3}-a^{3}=t^{h}i^{3}=a^{2}	xʌm^{2}=t^{h}i^{3}=ɔʔ^{0}	lʌt^{0}	kɔʔ^{0}-t-a^{1}
wear.in.ear-3=DEF=ABS	mat=DEF=at	pull.out	give-PST-3

'And Chengwa pulled out of his ear an earthworm and a paddy stalk, and placed them on a mat.' (20160106_01.ed)

(464) ni^{3} mi^{2} ni^{3} a^{3} sɛŋ^{3} pʰʌŋ^{2} xum^{3} na^{3} lɨŋ^{3} xiŋ^{3} a^{3}.

ni^{3}mi^{2} **ni^{3}a^{3}** sɛŋ^{3}pʰʌŋ^{2} xum^{3}=na^{3} lɨŋ^{3}-xiŋ^{3}-a^{3}

Nemi **and** Sengphang village=in around-walk-3

'Nemi and Sengphang are walking around in the village.' (B1.132)

The long and short form of this first conjunction appear to be interchangeable. That is, while there may be a certain semantic difference, the utterance will remain grammatical. Indeed, consultant NMN was heard replacing one by the other when repeating herself in example (465), produced during a metalinguistic conversation about the postpositions /=ɔʔ^{0}/ 'at, in' and /=na^{3}/ 'in'. The conjunction here conjoins two postpositional phrases.

(465) a. hɨm^{2} ɔʔ^{0} ni^{3} a^{3} hɨm^{2} na^{3}.

hɨm^{2}=ɔʔ^{0} **ni^{3}a^{3}** hɨm^{2}=na^{3}

house=at **and** house=in

''At the house' and 'in the house'.' (20161223_01)

b. hɨm^{2} ɔʔ^{0} ni^{3} hɨm^{2} na^{3}.

hɨm^{2}=ɔʔ^{0} **ni^{3}** hɨm^{2}=na^{3}

house=at **and** house=in

''At the house' and 'in the house'.' (20161223_01)

The conjunction /ni^{3}a^{3}/ 'and' is productive, i.e. it can be used with any new combination of NPs. This cannot be said of the next conjunction, /ʌ^{0}-/ 'and', as it found only in fixed, idiomatic expressions (see section 4.3.2). The conjunction does not carry tone and is homophonous with the de-adjectival nominalizer /ʌ^{0}-/. Nouns which are conjoined by /ʌ^{0}-/ have become compounds; no modifiers such as adjectives or determiners can stand between the nouns. I treat the conjunction as a prefix rather than a suffix underlyingly since this analysis fits in best with the iambic prosody of the language. Three examples of fixed expressions with /ʌ^{0}-/ are provided in (466), (467), and (468). The conjunction /ʌ^{0}-/ may have been productive at an earlier stage of the language, but currently one cannot freely conjoin nouns with this element. For example, consultants reject the construction in example (469), where the names of two girls are conjoined by /ʌ^{0}-/: they deem this utterance ungrammatical.

(466) ʃɔm^{1} ʌ^{0}βaʔ^{0}.

ʃɔm^{1}-**ʌ^{0}**-βaʔ^{0}

medicine-**and**-bamboo

'Medicine.' (20151208_01)

(467) pʰi^{1} ʌ^{0}βɔ^{1}.

pʰi^{1}-**ʌ^{0}**-βɔ^{1}

?-**and**-bird

'All types of birds.' (20151208_05)

(468) pʰʌk^{0} ʌ^{0}sʌt^{0}.

pʰʌk^{0}-**ʌ^{0}**-sʌt^{0}

food.solid-**and**-food.soft

'Food.' (20151208_05)

(469) *ni^{3} mi^{2} ʌ^{0}sɛŋ^{3} pʰʌŋ^{2} xum^{3} na^{3} lɨŋ^{3} xiŋ^{3} a^{3}.

ni^{3}mi^{2}-ʌ^{0}-sɛŋ^{3}pʰʌŋ^{2} xum^{3}=na^{3} lɨŋ^{3}-xiŋ^{3}-a^{3}

Nemi-and-Sengphang village=in around-walk-3

Intended: 'Nemi and Sengphang are walking around in the village.' (B1.132)

The meaning of expressions containing the conjunction /ʌ^{0}-/ is often different from the sum of their components. For example, (466) means 'medicine', rather than 'medicine and bamboo'. The conjunction /ni^{3}/ cannot replace /ʌ^{0}-/ in these fixed expressions without a change in meaning. Also, fossilized expressions with /ʌ^{0}-/ may contain elements whose meaning is no longer known to the speaker, as is the case in (467), where the meaning of /pʰi^{1}-/ is not known to my consultants.

At least in a subset of fixed expressions it is possible to drop the conjunction /ʌ^{0}-/, as is illustrated by (470). Possibly, this occurs only in 'X ʌ^{0}-Y' expressions which are highly frequent. The compound /pʰʌk^{0}-sʌt^{0}/ 'food' in (470) functions as noun, but in other contexts it may also function as a verb, meaning 'to eat'. The second part of this compound shows allomorphy between a 'nominal stem' /sʌt^{0}/ and a 'verbal stem' /saʔ^{0}/ (see section 6.1.1.4). The latter as illustrated by example (471). We can tell that /pʰʌk^{0}-sʌt^{0}/ in the first example, (470), is functioning as a NP, because 1) the second element, /sʌt^{0}/, is a nominal stem, which differs from the verbal stem /saʔ^{0}/, 2) the compound is modified by a possessive pronoun, /i^{3}-/ 'my'.

(470) i³ pʰʌk⁰ sʌt⁰ nʌk⁰ hɔt⁰ ka¹ ɟu².

i³-**pʰʌk⁰-sʌt⁰**	nʌk⁰	hɔt⁰	ka¹	ɟu²
1SG.POSS-**food.solid-food.soft**	PROH	steal	go	MIT

'Don't steel my food!' (B1.11)

(471) e² tʰɔ³ pɔl² tɕiŋ² bʌŋ¹ tɕiŋ² e² ʃa² ba³ pʰʌk⁰ saʔ⁰ ti¹

e²tʰɔ³	pɔl²-tɕiŋ²-bʌŋ¹-tɕiŋ²	e²-ʃĩ³=a²=ba³	**pʰʌk⁰-saʔ⁰**-t-i¹
and	tree-root-tree-root	NPROX-DIST=ABS=TOP	**eat.solid-eat.soft**-PST-1PL

ɟɔ³ i² a³.

ɟɔ³	i²=a³
MIT	1EXCL=ERG

'And we ate all kinds of tree roots.' (20151208_01)

The third conjunction, /ti¹a³/~/ti³/ 'or', contrasts two NPs. In example (472), the marker conjoins the two NPs /pʰʌ⁰lʌp⁰/ 'tea' and /kɔfi/ 'coffee'. Like the conjunction /ni³a³/ 'and', /ti¹a³/ can drop its second syllable, as is illustrated by (473).

(472) pʰʌ⁰lʌp⁰ ti¹ a³ kɔfi lɨŋ² u³?

pʰʌ⁰lʌp⁰	**ti¹a³**	kɔfi	lɨŋ²-u³
tea	**or**	coffee	drink-2SG

'Do you drink tea or coffee?' (B1.148)

(473) pʰʌ⁰lʌp⁰ ti¹ kɔfi lɨŋ² u³?

pʰʌ⁰lʌp⁰	**ti¹**	kɔfi	lɨŋ²-u³
tea	**or**	coffee	drink-2SG

'Do you drink tea or coffee?' (B1.148)

This conjunction can also have a larger scope and conjoin two clauses instead of just two NPs, as is exemplified by (474).

(474) skul nʌŋ^{3} ka^{1} tu^{1} ti^{1} ba^{3}ɟun^{1} te^{2} ɟʌm^{2} na^{3} ɟɔl^{2} tu^{1}?

skul=nʌŋ^{3}	ka^{1}-t-u^{1}	**ti^{3}**	ba^{3}-ɟun^{1}-te^{2}-ɟʌm^{2}=na^{3}	ɟɔl^{2}-t-u^{1}
school=to	go-PST-2SG	**or**	2SG.POSS-relative-company=in	run-PST-2SG

'Did you go to school or did you run off with your relatives?' (B1.149)

The above discussion relates to conjunctions of two items only. When more than two items are listed, one can do so either without using the conjunction /ni^{3}a^{3}/, as in (475), or the conjunction can be placed between two items (476). It is not possible to use /ni^{3}a^{3}/ twice in a list of three items, as in (477). This utterance is deemed ungrammatical by consultants.

(475) βʌk^{0} ŋʌm^{2} ʃiŋ^{2} ke^{2} βɔŋ^{2} kɔʔ^{0} taʔ^{0} p^{h}ʌŋ^{2}.

βʌk^{0}	ŋʌm^{2}	ʃiŋ^{2}-ke^{2}	βɔŋ^{2}	kɔʔ^{0}-taʔ^{0}-p^{h}-ʌŋ^{2}
pig	meat	bean-pea	rice.uncooked	give-PST-INV-1SG

'He gave me pork, peas, and rice.' (B1.133)

(476) βʌk^{0} ŋʌm^{2} ʃiŋ^{2} ke^{2} ni^{3} a^{3} βɔŋ^{2} kɔʔ^{0} taʔ^{0} p^{h}ʌŋ^{2}.

βʌk^{0}	ŋʌm^{2}	ʃiŋ^{2}-ke^{2}	**ni^{3}a^{3}**	βɔŋ^{2}	kɔʔ^{0}-taʔ^{0}-p^{h}-ʌŋ^{2}
pig	meat	bean-pea	**and**	rice.uncooked	give-PST-INV-1SG

'He gave me pork, peas, and rice.' (B1.133)

(477) *βʌk^{0} ŋʌm^{2} ni^{3} a^{3} ʃiŋ^{2} ke^{2} ni^{3} a^{3} βɔŋ^{2} kɔʔ^{0} taʔ^{0} p^{h}ʌŋ^{2}.

βʌk^{0}	ŋʌm^{2}	**ni^{3}a^{3}**	ʃiŋ^{2}-ke^{2}	**ni^{3}a^{3}**	βɔŋ^{2}	kɔʔ^{0}-taʔ^{0}-p^{h}-ʌŋ^{2}
pig	meat	**and**	bean-pea	**and**	rice.uncooked	give-PST-INV-1SG

Intended: 'He gave me pork, peas, and rice.' (B1.133)

Lastly, it is possible to use the conjunction /e^{2}t^{h}ɔ^{3}/ 'and' between the last two items in a list, as in (478). This conjunction is normally used to conjoin two clauses or link two paragraphs and has not been observed to be used as a conjunction between two NPs, i.e. two NPs that are not part of a list of NPs, hence we may want to analyse this as a case of verb ellipsis. According to this analysis, what precedes the conjunction /e^{2}t^{h}ɔ^{3}/ is a clause, from which the verb, /kɔʔ^{0}-taʔ^{0}-p^{h}-ʌŋ^{2}/ 'he gave me' has been left out to avoid repetition.

(478) βʌk⁰ ŋʌm² ʃiŋ² ke² e² tʰɔ³ βɔŋ² kɔʔ⁰ taʔ⁰ pʰʌŋ².

βʌk⁰	ŋʌm²	ʃiŋ²-ke²	**e²tʰɔ³**	βɔŋ²	kɔʔ⁰-taʔ⁰-pʰ-ʌŋ²
pig	meat	bean-pea	**and**	rice.uncooked	give-PST-INV-1SG

'He gave me pork, peas, and rice.' (B1.133)

The above examples do not involve overt case marking. However, conjoined NPs may be marked for case just like all non-conjoined NPs. With the conjunction /ni³/~/ni³a³/ 'and', the case marker is always placed after the right-hand NP; case is marked only once. Example (479) shows conjoined NPs with ergative marking, and example (480) with absolutive marking.

(479) u³ nu¹ ni³ βa¹ tʰɛ³, ɹʌŋ² te² tʰɛ³ ʝan² xi²

u³-nu¹	**ni³**	**βa¹=tʰi³**=ɛ³	ɹʌŋ²-te²=tʰi³=ɛ³	ʝan²-xi²
3SG.POSS-mother	**and**	**father=DEF**=ERG	sky-PERS=DEF=ERG	knife

hun kɔʔ⁰ ta¹ ti³.

hun	kɔʔ⁰-t-a¹=ti³
create	give-PST-3=HS

'Her parents, the people from the sky, made a knife and gave it to her.' (20151208_05)

(480) alu ni³ tuŋ¹ ɹa² ʌ⁰pɨŋ¹ tɕɛn³.

alu	ni³	tuŋ¹=ɹi³=a²	ʌ⁰-pɨŋ¹	tɕɛn³
potato[73]	and	taro=PROX=ABS	NMLZ-tasty	equally

'Potato and taro are equally tasty.' (S2.33)

With the conjunction /ʌ⁰-/ 'and', the same pattern is observed: case is marked only once, and the case marker follows the right-hand NP. Example (481) shows conjoined NPs with ergative marking, and (482) with absolutive marking.

(481) tɕʌm² tan³ ŋʌm² ʌ⁰ ŋaʔ⁰ tʰɛ³ ba³, ɨn² i³ ɹa²

tɕʌm²=tan²	**ŋʌm²-ʌ⁰-ŋaʔ⁰=tʰi³=ɛ³**=ba³	ɨn²	i³-ɹi³=a²
what=as.much.as	**game-and-fish=DEF=ERG**=TOP	yes	PROX-PROX=ABS

[73] Indo-Aryan loan.

ɹaja ʌŋ^{2} tɕɨŋ^{1}, ɹaja ma^{3}.

ɹaja ʌŋ^{2}-tɕɨŋ^{1} ɹaja=ma^{3}

king[74] COP-OBL king=DAT

'So many animals said, 'Yes, he must be king, become king.' (20151208_03)

(482) e^{2} t^{h}ɔ^{3} ʃɔm^{1} ʌ^{0} βaʔ^{0} t^{h}a^{2} tat^{0} kɔʔ^{0} ta^{1} ta^{3}.

e^{2}t^{h}ɔ^{3} **ʃɔm^{1}-ʌ^{0}-βaʔ^{0}=t^{h}i^{3}=a^{2}** tat^{0} kɔʔ^{0}-t-a^{1}=ta^{3}

and[75] **medicine-and-bamboo=DEF=ABS** try give-PST-3=QUOT

'And he tried to give them medicine.' (20151208_01)

In a list that contains the conjunction /e^{2}t^{h}ɔ^{3}/ 'and', however, case marking can be repeated after each NP, as is exemplified in (483), where /βɔ^{1}/ 'chicken', /βʌk^{0}/ 'pig', /kɛl^{2}/ 'goat', and /man^{2}/ 'cow' each are followed by the ergative postposition /=ɛ^{3}/. Repeated case marking again suggests that /e^{2}t^{h}ɔ^{3}/ here connects clauses from which the verb has been elided, and not NPs.

(483) βɔ^{1} ɛ^{3} p^{h}ʌk^{0} tɕʌk^{0} e^{2} t^{h}ɔ^{3} a βʌk^{0} ɛ^{3} kɛl^{2} ɹɛ^{3} e^{2} t^{h}ɔ^{3}

βɔ^{1}=ɛ^{3} p^{h}ʌk^{0}-tɕʌk^{0} e^{2}t^{h}ɔ^{3} a **βʌk^{0}=ɛ^{3}** **kɛl^{2}=ɹi^{3}=ɛ^{3}** e^{2}t^{h}ɔ^{3}

chicken=ERG eat.solid-PFV and HESIT **pig=ERG** **goat=PROX=ERG** and

man^{2} ɛ^{3} e^{2} ʃɔ^{3} p^{h}ʌk^{0} tɕʌk^{0} kɔ^{3} ɛʔ^{0} […]

man^{2}=ɛ^{3} e^{2}-ʃi^{3}=ɔ^{3} p^{h}ʌk^{0}-tɕʌk^{0} kɔ^{3}ɛʔ^{0}

cow=ERG NPROX-DIST=at eat.solid-PFV because

'Because chickens had eaten it, and pigs, the goats and cows had eaten it there…' (20151208_01)

[74] Idem.

[75] The conjunction /e^{2} t^{h}ɔ^{3}/ 'and' is here used to link this clause to the previous one.

6 The verb complex

This chapter discusses the verb plus modifiers of the verb, here referred to as the verb complex. The scope of this chapter differs in two ways from the domain of the verb phrase as defined in formal linguistic theory. The modifiers that are included are person indices, hierarchical and inverse marking, cislocative, negation, tense, aspect, and mood. On the one hand, the scope of the verb complex as discussed here is narrower than the formal verb phrase as it does not include the 'object' argument, but on the other hand, its span is wider because operators such as markers of evidentiality and illocution are included. Large-range operators like these, which have scope over the entire clause rather than the verb phrase, are incorporated in this chapter so that the discussion of tense, aspect, and mood (TAM) can be kept together in one place.

The first part of this chapter, section 6.1, introduces the different elements in the verb complex, and the second part, section 6.2, discusses the slot that each of the elements occupies within the verb complex.

6.1 Elements

The language exhibits different types of verbs, which will be discussed in section 6.1.1.1, 6.1.1.2, and 6.1.1.3. A subset of verbs shows root allomorphy. This is discussed in section 6.1.1.4, followed by a description of person indexing on the verb in section 6.1.2. The cislocative marker is described in 6.1.3, negation in 6.1.4 and 6.1.5. The largest section, 6.1.6, is dedicated to TAM markers, and the multifunctional valency-prefix in section 6.1.7 closes the list of elements. A further discussion of selected elements in the Muklom verb complex can be found in Mulder (2018a) and Mulder (2019).

6.1.1 Verb

For a stem to be considered a verb, it must be able to carry at least one verbal operator (see section 4.1.1.2). While most Muklom verbs show a full paradigm, some are more restricted. Some verb stems, for example, only occur within a certain tense, and some only with a certain person category. The primary word class of these stems is often adjective, and their use as verb is secondary (see section 4.1.1.3). These are cases of 'incomplete' zero-derivation from adjective to verb. We can thus divide the word class verbs into full-fledged verbs and defective verbs. Examples of defective verbs are provided in section 4.1.1.2, but one verb will be discussed in more detail here, the negative existential (see section 6.1.1.3).

Another dichotomy within the word class of verbs, which is also topic of discussion in this section, is that between lexical verbs and grammaticalised verbs (see Bybee 2000:806). The first, lexical or content verbs, can act as main verb in a verbal clause (see section 6.1.1.1). The second, grammaticalised verbs, may occur either in nominal clauses, or verbal clauses (see section 6.1.1.2). Grammaticalised verbs in nominal clauses serve to link two NPs, i.e. they act as copulas. Grammaticalised verbs in verbal clauses support the main verb by carrying certain verbal operators that cannot combine with a verbal operator that is already present on the main verb, i.e. they act as auxiliaries. Operators that cannot combine on the same verb, are the verb negator and the tense markers (see section 6.1.1.2).

Finally, this section discusses the phenomenon of verb stem alternation. A subset of all verbs shows allomorphy between what can be termed the verbal stem and the nominal stem (see section 6.1.1.4).

6.1.1.1 Lexical verbs

This section is intended as a summary. For further discussion of the topics brought together here under the umbrella of lexical verbs, and for examples in context, the reader is encouraged to use the cross-references. Lexical verbs are those verbs that can act as a main verb in a clause. Like verbs in general, they can take one or more verbal operators from the list of possible verbal operators, which are tense-aspect-mood markers, negation, cislocative, inverse, and person indexing. Nominal stems, which in case of stem alternation can be recognized by their form (see section 6.1.1.4), and in all cases can be recognized by the type of markers they can co-occur with, can still take certain verbal operators, hence are considered main verbs. The verbal operators that can combine with bare nominal stems, i.e. stems that are not preceded by a valency-changing prefix (see section 6.1.7), are solely the so-called non-inflecting markers among the aspect and mood markers (see section 6.1.6). None of the other markers, i.e. the inflecting TAM markers, negation, cislocative, inverse, and person indexing can combine with bare nominal stems.

Verb stems that are nominalized by the prefixation of nominalizer /u^0-/ (see section 4.2.2), however, can only take nominal operators such as determiners and postpositions, they do not take verbal operators. Verbal stems that have been nominalized by means of /u^0-/ are therefore not considered main verbs, but nouns.

6.1.1.2 Auxiliary and copula

Muklom has two grammaticalised verbs (see Bybee 2000:806) that function as auxiliary or copula.[76] The first verb is stative /ʌŋ²/ 'AUX/COP' which grammaticalised from the phonologically identical lexical verb 'be'. The second is change of state (COS) /ti³/~/tɨk⁰/ 'COS.COP' which may have grammaticalised from the lexical verb 'die', again phonologically identical. The first and most frequently used verb acts as a copula in nominal clauses and as an auxiliary in verbal clauses. Like most verb-final languages, Muklom places the auxiliary after the main verb. The second grammaticalised verb, /ti³/~/tɨk⁰/ 'COS.COP', expresses a change of state and appears to occur exclusively in nominal clauses, i.e. it functions as copula only.

In the description of the use of the copula and auxiliary /ʌŋ²/ I make a distinction between so-called basic clauses and non-basic clauses. A basic clause does not require the element /ʌŋ²/, and a non-basic clause does. This applies both to nominal clauses and verbal clauses. A basic nominal clause is a nominal clause that is affirmative and unmarked for tense. The copula /ʌŋ²/ is not required in this type of nominal clause. A non-basic nominal clause is a nominal clause that contains a verbal negator /-m/, a tense marker /-t/ for past or /-n/ for future, or both. This type of nominal clause does require a copula /ʌŋ²/, or even two copulas, when both negation and tense marking are present (see also section 7.1.2).

Similarly, the auxiliary /ʌŋ²/ is only required in non-basic verbal clauses. A verbal clause with either a verbal negator or a tense marker, but not both, is a basic clause. A non-basic verbal clause is both negated and tense-marked. The latter configuration is discussed in section 6.1.4. The distribution of the copula and auxiliary /ʌŋ²/ is summarized in Table 46. The abbreviation NOM.PRED represents the nominal predicate, the symbol Σ stands for the stem of the main verb, -COP/-AUX means that the configuration does not require a copula or auxiliary, and +COP/+AUX that it does require one.

nominal clause		**verbal clause**	
-COP	**+COP (+COP)**	**-AUX**	**+AUX**
NOM.PRED	NOM.PRED /ʌŋ²/ TENSE NOM.PRED /ʌŋ²/ NEG NOM.PRED /ʌŋ²/ NEG /ʌŋ²/ TENSE	Σ TENSE Σ NEG	Σ NEG /ʌŋ²/ TENSE

Table 46 - Distribution of the copula and auxiliary /ʌŋ²/.

The copula /ʌŋ²/ may also indicate a change of state, but only when the goal NP is marked by the dative postposition /=ma³/, as is illustrated by (484) and (485). The first example contains additionally a pre-

[76] The copula may be modified by verbal operators. That the copula can be inflected, does not disqualify its status as a copula, it merely shows that it is a verbal copula, a grammatical element which links two NPs (see for example Hengeveld and Mackenzie 2008:391-392 on verbal copulas as dummies).

verbal COS marker /sɛ^{3}-/. The second example does not have this marker, which confirms that the combination of copula and dative marker by itself already expresses a change of state.

(484) piʔ^{0} ɹa^{2} sɛ^{3} ʌŋ^{2} na^{3} ɹaja ma^{3} ta^{3}.

piʔ^{0}=ɹi^{3}=a^{2} sɛ^{3}-**ʌŋ^{2}**-n-a^{3} ɹaja**=ma^{3}**=ta^{3}

3SG=PROX=ABS COS-**COP**-FUT-3 king**=DAT**=QUOT

‘‘He will be king’, they said.’ (20151208_03)

(485) ɹaja ma^{3} ʌŋ^{2} na^{3} ta^{3}.

ɹaja**=ma^{3}** **ʌŋ^{2}**-n-a^{3}=ta^{3}

king**=DAT** **COP**-FUT-3=QUOT

‘‘He will become king’, they said.’ (20151208_03)

The second grammaticalised verb, /ti^{3}/~/tɨk^{0}/ ‘COS.COP’ always expresses a change of state, without requiring a dative postposition. It is likely that this grammatical element developed from the lexical verb /ti^{3}/~/tɨk^{0}/ ‘die’, considering their identical phonological form, including identical stem alternation, and their relatedness in meaning since the act of dying constitutes the ultimate change of state.

This grammaticalised verb only appears to occur in nominal clauses, i.e. it acts as a copula only, not as an auxiliary. In example (486), the copula /ti^{3}/ connects the experiencer /na^{3}mɛŋ^{2}/ ‘cat’ with nominal predicate /tɕʌm^{3}-lal^{3}/ ‘being hungry’. We know that the latter is a compound noun, and not a verb, because it cannot be followed by a person index directly. The second element of the compound, /lal^{1}/~/lal^{3}/ ‘be hungry/thirsty’ can function as a verb and take person indexing, as exemplified in (487), but only when standing on its own, not in combination with /tɕʌm^{3}/ ‘hunger, famine’. When part of the compound noun /tɕʌm^{3}-lal^{3}/, /lal^{3}/ stands in the nominal stem form that carries third tone.

(486) na^{1} mɛŋ^{2} tɕʌm^{3} lal^{3} ti^{3} a^{3}.

na^{1}mɛŋ^{2} tɕʌm^{3}-lal^{3} **ti^{3}**-a^{3}

cat hunger-be.hungry/thirsty **COS.COP**-3

‘The cat is getting hungry.’ (S1.26)

(487) ʌ^{0}nɛ^{2} ʌ^{0}nɛ^{2} sa^{1} lal^{1} ʌŋ^{3}.

ʌ^{0}-nɛ^{2} ʌ^{0}-nɛ^{2}-sa^{1} **lal^{1}**-ʌŋ^{3}

NMLZ-little NMLZ-little-DIM **be.hungry/thirsty**-1SG

‘I am a tiny bit hungry.’ (S1.34)

The copula /ti^{3}/ is unmarked for tense in (486), but it may combine with tense marking, and if it does so, the tense marker either directly follows the copula, as in example (488), or it follows the copula /ʌŋ^{2}/ which can be placed after the copula /ti^{3}/ to carry the tense marker, as illustrated by (489). When the verbal stem /ti^{3}/ of the copula is directly followed by the copula /ʌŋ^{2}/ in casual speech, the two often merge into a single syllable verbal form /tɨŋ^{2}/ 'become', as is the case in this example. The tone of the copula /ti^{3}/ disappears, the tone of the copula /ʌŋ^{2}/ is retained, and the front vowel /i/ and back vowel /ʌ/ merge into a mid-vowel /ɨ/. Based on current data, it cannot be established yet whether there is a semantic difference between the configuration with and the configuration without the second copula.

(488) ʃal ti^{3} ta^{1}.
ʃal **ti^{3}**-t-a^{1}
rot[77] **COS.COP**-PST-3
'It became rotten.' (B1.66)

(489) miʔ^{0} t^{h}a^{2} sɨp^{0} ʌ^{0} naʔ^{0} mʌl^{2} tɨŋ^{2} ta^{1}.
miʔ^{0}=t^{h}i^{3}=a^{2} sɨp^{0}-ʌ^{0}-naʔ^{0}=mʌl^{2} **ti^{3}** **ʌŋ^{2}**-t-a^{1}
person=DEF=ABS ant-and-bee=like **COS.COP COP**-PST-3
'The people became like insects.' (20151208_05)

In example (489), the copula /ʌŋ^{2}/ follows the verbal copula stem /ti^{3}/, but is also possible to use the nominal copula stem /tɨk^{0}/ in combination with the copula /ʌŋ^{2}/, as is exemplified by (490). It has not been possible to determine whether there is a distinction in meaning between constructions with Σ_1 /ti^{3}/ as in (489) and Σ_2 /tɨk^{0}/ as in (490).

(490) ŋa^{1} sʌt^{0} kiʔ^{0} lɨk^{0} tɨk^{0} ʌŋ^{2}nʌŋ^{3}.
ŋa^{1} sʌt^{0} kiʔ^{0} lɨk^{0} **tɨk^{0}** ʌŋ^{2}-n-ʌŋ^{3}
1SG eat.soft cold sick **COS.COP** COP-FUT-1SG
'I will get sick if I eat on an empty stomach.' (S2.25)

In negative clauses, the copula /ti^{3}/ carries the negator /-m/, as shown in example (491). Configurations in which the copula /ʌŋ^{2}/ is added to carry the negator instead have not been observed so far.

[77] This verb shows stem alternation between /ʃal^{1}/ and /ʃal^{3}/. It could not be established yet which stem is used here.

(491) ŋa^{1} ɟuŋ^{2} lal^{3} ti^{3} mɔŋ^{1}.

ŋa^{1} ɟuŋ^{2}-lal^{3}	**ti^{3}**-m-ɔŋ^{1}
1SG water-be.hungry/thirsty	**COS.COP**-NEG-1SG

'I am not thirsty.' (S1.4)

6.1.1.3 Existential

There are two existential roots, affirmative /t^{h}a^{1}/ 'there is/are' and negative /huŋ^{1}/ 'there is/are not'. It seems the first is never used as a verb, at least it has not been found to be used in this way so far. In the annotated corpus, it is always appears in nominal clauses and combines with the nominalizing prefix /ʌ^{0}-/ (see section 4.2.1), i.e. the affirmative existential seems to be always used as a noun.[78] The affirmative existential /ʌ^{0}-t^{h}a^{1}/ is exemplified in (492), a basic nominal clause which is not marked for tense.

(492) p^{h}ʌk^{0} sʌt^{0} ʌ^{0}t^{h}a^{1}.

p^{h}ʌk^{0}-sʌt^{0}	**ʌ^{0}-t^{h}a^{1}**
food.hard-food.soft	**NMLZ-EXIST**

'There is food.' (20161223_01)

A nominal clause that is unmarked for tense does not require a copula. The nominal element /ʌ^{0}-t^{h}a^{1}/, like all nouns derived by means of /ʌ^{0}-/, cannot take verbal operators such as tense marking and negation by itself, so when a nominal clause is overtly marked for tense, the copula /ʌŋ^{2}/ must be added to carry the tense marker. Example (493) shows the existential with a past tense copula, /ʌŋ^{2}-t-a^{1}/ 'they were'.

(493) ŋʌm^{2} ʌ^{0} ŋaʔ^{0} puɹa t^{h}ʌ^{0}ɟi^{2} ʌ^{0}t^{h}a^{1} ʌŋ^{2} ta^{1}.

ŋʌm^{2}-ʌ^{0}-ŋaʔ^{0}	puɹa	t^{h}ʌ^{0}ɟi^{2}	**ʌ^{0}-t^{h}a^{1}**	**ʌŋ^{2}-t-a^{1}**
game-and-fish	all[79]	all	**NMLZ-EXIST**	**COP-PST-3**

'All animals were present.' (20151208_02)

Likewise, a negative nominal clause requires a copula /ʌŋ^{2}/ to carry the negator /-m/, as is illustrated in (494). Although a negator is present on the copula, the clause as a whole is affirmative, due to the particle /=ɛ^{3}/ which reverses negation (see section 6.1.5).

[78] In Muishaung, another Tangsa variety, a cognate of Muklom /t^{h}a^{1}/ has been found to function as a verb, taking tense marking and person indexing (S.D. Morey, p.c.).
[79] Indo-Aryan loan.

(494) ʌ^{0}tʰa^{1} ʌŋ^{2} mɔʔ^{0} ɛ^{3}.

ʌ^{0}-tʰa^{1} **ʌŋ^{2}-m-ɔʔ^{0}**-ɛ^{3}

NMLZ-EXIST **COP-NEG-3**-REV.NEG

'There was.' (lit. 'There wasn't not.') (541)

The negative existential functions both as derived noun and as verb. As verb, it seems to occur exclusively with the third person index, i.e. it is a defective verb (see section 4.1.1.2). An example of the negative existential verb is provided in (495). The verb /huŋ^{1}/ is here embedded in an adverbial clause of manner.

(495) ŋɨn^{2} pe huŋ^{1} a^{3} duk^{0} kan nʌŋ^{3} ka^{1} tʌŋ^{1}.

ŋɨn^{2} pe **huŋ^{1}**-a^{3} duk^{0}kan=nʌŋ^{3} ka^{1}-t-ʌŋ^{1}

money take **NEXIST**-3 shop=to go-PST-1SG

'I went to the shop without taking money.' (B1.149)

The nominal form of the negative existential is derived by adding the nominalizing prefix /ʌ^{0}-/, which normally used to derive a noun from an adjective: /ʌ^{0}-huŋ^{1}/ 'there is/are not'. An example of a nominal clause with negative existential is provided in (496). Since the clause is not marked for tense, no copula is needed.

(496) nam^{2} tʰ-a^{2} ʌ^{0}huŋ^{1}, haʔ^{0} na^{3}.

nam^{2}=tʰi^{3}=a^{2} **ʌ^{0}-huŋ^{1}** haʔ^{0}=na^{3}

grass=DEF=ABS **NMLZ-NEXIST** earth=in

'There is no grass on the earth.' (20121103_03)

However, if the clause is overtly marked for tense, a copula must be inserted, as is exemplified in (497), where the future tense marker /-n/ is carried by the copula /ʌŋ^{2}/.

(497) e^{2} ʃɔ^{3} tɕʌm^{1} tɕɔ^{2} tsʌm^{3} naŋ^{3} t^{h}ɔʔ^{0}

e^{2}-ʃì^{3}=ɔ^{3}	tɕʌm^{1}-tɕɔ^{2}	tsʌm^{3}-naŋ^{3}=t^{h}ɔʔ^{0}
NPROX-DIST=at	worries[80]	suffering-tiredness=any

ʌ^{0}huŋ^{1} ʌŋ^{2} na^{3} sɛ^{3}.

ʌ^{0}-huŋ^{1}	**ʌŋ^{2}-n-a^{3}**=sɛ^{3}
NMLZ-NEXIST	**COP-FUT-3**=COMP

'There will be no worries or hardship there.' (20170122_02)

The nominal forms /ʌ^{0}-t^{h}a^{1}/ 'there is/are' and /ʌ^{0}-huŋ^{1}/ 'these is/are not' further appear in possessive constructions, in so-called possessive nominal clauses, which will be discussed in section 7.1.2.3.

6.1.1.4 Verb stem alternation

All verbs can be considered to have two roots, verbal root Σ_1 and 'nominal' root Σ_2. I use quotation marks around 'nominal' because its association with nominals is obvious but not exclusive. As will be discussed in this section, each root can co-occur with a subset of verbal markers and derivational morphology. In other words, the two types of roots are defined by the morphosyntactic configurations they can appear in. Before moving to the discussion of morphosyntactic configurations, I will describe the phonological patterns of verb stem alternation found in Muklom.

The vast majority of Muklom verb roots have one phonological form that does not change between different morphosyntactic configurations, but a minority do show allomorphy between the two verb roots, Σ_1 and Σ_2, or even between three verb root forms, Σ_{1a}, Σ_{1b}, and Σ_2, depending on morphosyntactic configuration. Verb root allomorphy in TB languages is commonly referred to as 'verb stem alternation' (e.g. Chhangte 1993; Jacques et al. 2012; Morey 2018; VanBik 2009). Verb stem alternation is found in various parts of the TB region and has been found to extend beyond the Kuki-Chin branch, contrary to earlier statements by VanBik (2009:16, 517).

In Muklom, each instance of verb root allomorphy involves one or more of the following changes: 1) mutation of tone, 2) mutation in vowel quality, i.e. apophony, 3) alternation between a syllable of the type CV(ʔ), and a syllable with /t/ or /k/ in coda position. In the current collected lexicon, alternation of tone as in /dʌm^{1}/~/dʌm^{3}/ 'cover a horizontal surface' is the most frequent change of all. Table 47

[80] The consultant indicated the compound /tɕʌm^{1}-tɕɔ^{2}/ 'worries' may have been borrowed from a Pangwa variety of Tangsa. They could not assign meaning to the first element, /tɕʌm^{1}/, but /tɕɔ^{2}/ was found to be identical to the word 'fear' in Muklom.

shows a selection of stem alternating verbs. This sample has been selected to reflect the diversity in alternation patterns. A full list of alternating verbs observed so far is included in Appendix A.

Σ_1		Σ_2	**English**
Σ_{1a}	Σ_{1b}		
/dʌm^1/		/dʌm^3/	‘cover a horizontal surface’
/ɹʌn^1/		/ɹʌn^3/	‘tear’
/tɨŋ^2/		/tɨŋ^3/	‘smell’
/pan^2/		/pan^3/	‘break, scatter’
/ka^1/	/ka^3/	/kat^0/	‘go’
/t^{h}u^1/		/t^{h}ɔk^0/	‘arrive’
/mɔ^2/		/mɔt^0/	‘shake’
/ɹi^2/		/ɹik^0/	‘buy’
/p^{h}ɔ^3/		/p^{h}ɔ:t^0/	‘smoke (tr)’
/tɕu^3/		/tɕuk^0/	‘request’
/ti^3/		/tɨk^0/	‘die, become’
/ɟu^3/		/ɟɔk^0/	‘move downwards’
/kɔʔ^0/		/kɔt^0/	‘give’
/maʔ^0/		/mʌt^0/	‘perish’

Table 47 - A selection of stem alternating verbs.

Four patterns stand out in verbs that show stem alternation. The first pattern relates to tone: Σ_2 always carries tone 3 or has a plosive coda, while Σ_1 may carry any tone, but cannot have a stop coda. A second pattern, which has already been mentioned, is that if allomorphy involves alternation in syllable structure, the coda of Σ_2 must be alveolar /t/ or velar /k/. So far, no instance of Σ_2 with a bilabial coda /p/ or glottal stop /ʔ/ has been observed in stem alternating verbs. With regard to the first, Muklom neatly aligns with alternating verb stems that have been reconstructed for Proto-Kuki-Chin (PKC) by VanBik (2009). Kuki-Chin is a branch of TB which exhibits prolific stem alternation. In VanBik’s collection of proto-etyma, Σ_2 forms with coda /t/ or /k/ are found, but none of the reconstructed Σ_2 forms has final /p/. However, with regard to glottal stop codas Muklom does not align with the reconstructed PKC system: glottal stop codas are frequently found in Σ_2 (see VanBik 2009:passim). The third pattern, like the second, relates to syllable structure: in verbs that show root allomorphy, Σ_1 can contain no plosive coda except /ʔ/. Reconstructed PKC forms of Σ_1 do contain the plosive codas /p/, /t/, and /k/, as illustrated by the reconstructed etyma listed in (498).

(498) *ʔip~*ʔiʔ ‘sleep’ (VanBik 2009:581)
*thut~*thuʔ ‘anoint’ (VanBik 2009:542)
*tak~*taʔ ‘weave’ (VanBik 2009:591)

The fourth pattern in Muklom stem alternation relates to vowel quality: if apophony occurs, it is always between the same pair of vowels, as the overview in Table 48 shows, between ‘exterior’ vowels located in the extremities of vowel space in Σ_1, and ‘interior’ vowels in Σ_2, i.e. central and mid vowels.

Σ_1	Σ_2
/u/	/ɔ/
/i/	/ɨ/
/a/	/ʌ/

Table 48 - Patterns of allophony.

None of these three restrictions apply to verbs that do not show stem allomorphy. Regardless of whether they function as Σ_1 or Σ_2, non-alternating verbs may carry any tone, they may have a stop coda, including /p/, and they may have as nucleus any vowel from the phoneme inventory.

Verb stem alternation is at least partially conditioned by morphosyntax, as is demonstrated in (499)-(501) for the verb /saʔ^0/~/sʌt^0/ ‘eat soft foods’, where /saʔ^0/ is Σ_1, and /sʌt^0/ is Σ_2. In verbal complexes that contain a person index, Σ_1 must be used. In example (499), which contains a first person plural index in the second clause, we therefore see the stem /saʔ^0/. A verb complex that does not contain a person index, such as the clause in (500) and (501), allow either Σ_1 or Σ_2 to be used. In example (500), Σ_1 /saʔ^0/ is used, and Σ_2 /sʌt^0/ in (501). There may also be semantic conditions that determine which stem should be used, but so far, no semantic distinction between the two configurations could be determined.

(499) ba^3 luk^0 ɔ^1 tɨl^2 sɛ^3 ɟaŋ^2 a^3, hiʔ^0 tʌŋ^2 a^3 tɨl^2 saʔ^0 ni^3.
ba^{3}luk^{0}ɔ^1 tɨl^2 sɛ^3-ɟaŋ^2-a^3 hiʔ^0-tʌŋ^2=a^3 tɨl^2 **saʔ^0**-n-i^3
when[81] rice COS-done-3 1INCL=ERG rice **eat.soft**-FUT-1PL
‘When the rice is cooked, we will eat rice.’ (20120217_03)

[81] The question word /ba^{3}luk^{0}ɔ^1/ is historically multimorphemic. The first element, /ba^3/, is comparable to the onset <wh> of English question words such as <why>, <where>, and <which>, the second element probably

(500) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} te^{2}.

ŋa^{1}=a^{3} tɨl^{2} **saʔ^{0}**-te^{2}

1SG=ERG rice **eat.soft**-PROSP

'I am about to eat rice.' (B1.21)

(501) ŋa^{1} a^{3} tɨl^{2} sʌt^{0} te^{2}.

ŋa^{1}=a^{3} tɨl^{2} **sʌt^{0}**-te^{2}

1SG=ERG rice **eat.soft**-PROSP

'I am about to eat rice.' (20100124-112046)

We can tell that the occurrence of Σ$_{2}$ /sʌt^{0}/ in a clause like (501) is not a case of assimilation to the initial /t/ of the following grammatical marker /te^{2}/, because we also find Σ$_{2}$ /sʌt^{0}/ in front of a grammatical marker with initial /k/, as in (502).

(502) ŋa^{1} a^{3} tɨl^{2} sʌt^{0} kʌm^{1}.

ŋa^{1}=a^{3} tɨl^{2} **sʌt^{0}-kʌm^{1}**

1SG=ERG rice **eat.soft-PROG**

'I am eating rice.' (20161223_02)

We refer to Σ$_{1}$ as the 'verbal stem', because it takes person indices, and to Σ$_{2}$ as the 'nominal stem', not only because in its root form it does not combine with person indices, but also because when a verb is turned into a noun by means of the prefix /u^{0}-/, Σ$_{2}$ must be used. For example, /saʔ^{0}/~/sʌt^{0}/ 'eat soft foods' → /u^{0}-sʌt^{0}/ 'eating of soft foods', /kɔʔ^{0}/~/kɔt^{0}/ 'give' → /u^{0}-kɔt^{0}/ 'giving', and /ti^{3}/~/tɨk^{0}/ 'die' → /u^{0}-tɨk^{0}/ 'dying'. The valency affecting prefix /tʌ^{0}-/~/t^{h}ʌ^{0}-/ always combines with Σ$_{2}$, the nominal stem, and the resulting sesquisyllabic verb stem does take person indices. A few examples of verb stems derived through prefixing of /tʌ^{0}-/~/t^{h}ʌ^{0}-/ are: /ɹʌn^{1}/~/ɹʌn^{3}/ 'tear' → /t^{h}ʌ^{0}-ɹʌn^{3}/ 'be torn', /maʔ^{0}/~/mʌt^{0}/ 'perish, disappear' → /t^{h}ʌ^{0}-mʌt^{0}/ 'lose (tr)', and /tal^{1}/~/tal^{3}/ 'be wise' → /tʌ^{0}-tal^{3}/ 'train, teach'.

However, the situation is less straightforward with nominaliser /ʌ^{0}-/, which derives a noun from an adjective. Depending on the word, this nominalizer may take Σ$_{1}$, or take Σ$_{2}$. For example, /tɨŋ^{2}/~/tɨŋ^{3}/ 'smell' has a related de-adjectival noun /ʌ^{0}-tɨŋ^{2}/ 'the state of being smelly', which contains the Σ$_{1}$, and /dʌm^{1}/~/dʌm^{3}/ 'cover a horizontal surface' similarly has the related form /ʌ^{0}-dʌm^{1}/ 'the state of having a horizontal service covered', containing a Σ$_{1}$. The verb /ɹʌn^{1}/~/ɹʌn^{3}/ 'tear', on the other hand, has a

derives from /luk^{0}/ 'tall, long', and the origin of final element /ɔ^{1}/ is less clear but it might derive from the postposition /ɔ^{3}/~/ɔ^{4}/ 'at, in'. It is as of yet unclear how the difference in tone should be explained.

related de-adjectival noun that is based on Σ_2, /ʌ^0-ɹʌn^3/ 'the state of being torn'. Similarly, /pan^2/~/pan^3/ 'scatter' has the related form /ʌ^0-pan^3/ 'the state of being scattered', containing the Σ_2 of the lexeme.

While most verbs that show stem alternation appear to have two root allomorphs, at least one verb has three allomorphs: /ka^1/~/ka^3/~/kat^0/ 'go'. The first two allomorphs are found with person indices, they are Σ_1 forms that are labelled Σ_{1a} and Σ_{1b} respectively. The first, Σ_{1a} /ka^1/ occurs with overt tense marking, i.e. in past and future tense, and the second, Σ_{1b} /ka^3/, occurs when no tense is marked, i.e. in present tense clauses. It could be that this is a rare type of irregular verb, but it is also possible that there are more of these, but that they have not come to light yet because in tone elicitation sessions the focus has been on the indices rather than the roots of inflected verb forms. Extremely frequent verbs like 'go' cross-linguistically are more likely to show irregularities such as allomorphy or suppletion. English <go> versus <went> illustrates the latter.

As can be deducted from Table 47, stem alternation affects both intransitive and transitive verbs. For example, /ti^3/~/tɨk^0/ 'die' and /ka^1/~/ka^3/~kat^0/ 'go' are intransitive verbs, but /kɔʔ^0/~/kɔt^0/ 'give' and /ɹʌn^1/~/ɹʌn^3/ 'tear, rip' are transitive.

When allomorphy occurs, we can often distinguish a primary form and a secondary, derived form. In this case, evidence appears to point towards Σ_2 as a derived stem and Σ_1 as a primary stem, where Σ_2 is the product of some type of nominalization process (see Chhangte 1993:85-86; VanBik 2009:517). If that is correct, then we need to explore how this nominalization process created the alternations in vowel quality, tone, and syllable structure that we currently observe in verb root allomorphy. Perhaps the largest challenge will be to explain how certain codaless Σ_1 forms and certain Σ_1 forms with glottal stop coda have acquired a coda in their Σ_2 counterpart and also how this coda can be either /t/ or /k/ while there is no phonological conditioning environment synchronically which can account for these two codas as allophones of the same phoneme. In Mizo, a language with proliferate verb stem alternation, a subset of alternating stems shows a similar correspondence (Chhangte 1993:86): some codaless Σ_1 forms have a Σ_2 counterpart with a plosive coda.

6.1.2 Person indices

Muklom has a full-fledged system for indexing the categories person and number on the verb (see Mulder 2018a, 2019). Not all TB languages spoken in Northeast India exhibit a similarly rich paradigm; the landscape of person indexing is rather diverse in this region (see Jacquesson 2001). Many TB languages lack verb agreement entirely (Jacquesson 2001:114; Burling 2003:173). For Tangsa it was earlier assumed that all its language varieties exhibited person indexing (Morey 2011a:98), but with the collection of new data it became apparent that some varieties completely lack person indexing on the verb. Morey (2015:32) briefly describes three varieties that do not show indexing in any form: Yasawa,

Pinkhu, and Champang. The absence of indexing in the latter is remarkable, because a close relative of Champang, Haqchum, does exhibit person marking. The Tangsa cluster shows a high degree of diversity in which verbal operators they employ, the position of these verbal operators relative to the verb (Morey 2019b), and, as we have seen here, even may differ with respect to an essential aspect of the verb phrase - the presence versus absence of person indexing.

Scholars disagree whether person indexing can be reconstructed for PTB. For example, LaPolla (2017a:51) states that the development of person indices from eroded personal pronouns in different TB languages seems to have been independent innovations, and according to him, attempts to reconstruct an index paradigm at the PTB level have been unsuccessful. DeLancey (2010), on the contrary, argues that a paradigm of person markers must be reconstructed for PTB, and that a lack of indexing in certain languages or subgroups (for example Boro-Garo) constitutes an innovation rather than an inherited feature. Jacquesson (2001:137-138) takes the middle ground in this discussion. From the overview of verb agreement paradigms in a sample of 22 Tangsa varieties in Morey (2019b:145) it is clear beyond any doubt that at least these varieties have cognate person indices, so whether the systems for person indexing across the Tangsa cluster derive from a PTB paradigm or represent an independent innovation, the person indices in these varieties, including Muklom, derive from a common source.

Since the paradigms for the intransitive verb and transitive verb differ in Muklom, they will be discussed separately. Section 6.1.2.1 introduces the person indices and discusses the intransitive paradigm, and section 6.1.2.2 discusses the transitive paradigm and highlights the features that are different from the intransitive paradigm.

6.1.2.1 Intransitive paradigm

This section will discuss the following topics in relation to person indices: 1) number distinctions and their distribution, 2) clusivity, 3) allomorphy. A large portion of this discussion, as will be indicated, applies to the transitive paradigm as well, but to prevent repetition, will be treated in this section only, leaving section 6.1.2.2 for the discussion of characteristics that are exclusively part of the transitive paradigm. Reciprocality is expressed by a valency-changing prefix and not by a special index and is therefore not discussed here but in section 6.1.7.2. Reflexivity is encoded by means of a periphrastic construction and is discussed in section 7.1.5.

Table 49 provides an overview of all affirmative intransitive person indices. All indices, both intransitive and transitive, always combine with the Σ_1 form of the verb stem (see section 6.1.6).

person		PRS	FUT	PST
1	SG	Σ_1-ʌŋ^3	Σ_1-n-ʌŋ^3	Σ_1-t-ʌŋ^1
	PL	Σ_1-i^3	Σ_1-n-i^3	Σ_1-t-i^1
2	SG	Σ_1-u^3	Σ_1-n-u^3	Σ_1-t-u^1
	DU	Σ_1-ʃ-ɨn^2	Σ_1-ʃ-ɨn^2-n-ɨn^3	Σ_1-ʃ-ɨn^2-t-ɨn^1
	TRI	Σ_1-tɔm^2-ɨn^2	Σ_1-tɔm^2-n-ɨn^3	Σ_1-tɔm^2-t-ɨn^1
	PL	Σ_1-ɨn^2	Σ_1-n-ɨn^3	Σ_1-t-ɨn^1
3		Σ_1-a^3	Σ_1-n-a^3	Σ_1-t-a^1

Table 49 - The intransitive verb paradigm: affirmative.

When it comes to the encoding of number, there is no difference between intransitive and transitive verbs. As can be seen in the leftmost column of Table 49, Muklom encodes the following four number values in person indices: singular, plural, dual, and trial.[82] However, number is not differentiated in all persons. Firstly, the third person index does not distinguish between any number values. For example, the third person form of the present tense paradigm is always /-a^3/, whether the single argument of the verb (S) is a single, dual, trial, or plural entity. Secondly, it seems dual and trial number are only encoded in second person verbs, never in first or third person.[83] Moreover, their marking is optional. Dual or trial forms can be replaced by regular plural forms. While some consultants expressed the opinion that dual marking is obligatory and trial marking is optional, the corpus shows that both categories are optionally marked. Perhaps the statements by these consultants do indicate that the dual is used more frequently than the trial.

The number categories singular and plural are encoded in portmanteau person indices, single morphemes which encode both number and person. The dual and trial, however, are expressed by a separate morpheme. The dual and trial verb forms are composite forms that must include a regular portmanteau plural index: they consist of a dual marker /-ʃ/ or plural marker /-tɔm^2/, followed by the second person plural index /-ɨn^2/. The trial marker /-tɔm^2/ derives from the adjectival numeral /-tɔm^2/ 'three', but the dual marker does not seem to have any connection with the numeral /ʌ^0-ni^3/ 'two'. While Morey (2019b) reports no dual marker in a sample of (Pangwa) Tangsa varieties, the Muklom dual /-ʃ/ does find potential cognates in a few other Northern Naga languages, for example dual /s/ in Phong (Dutta 2016), and beyond in other TB branches, such as the reconstructed proto-forms *-tsh for

[82] The trial is used when the addressees form a group of three. Das Gupta (1980:11) suggests that trial indexing on the verb can also be used when addressing a larger group. I have not encountered this use of the trial.
[83] Consultants confirm that the dual does not occur in first or third person verb forms. However, there is some doubt regarding the trial marker. Consultants have provided one first person verb form and one third person verb form with trial marking (B1.128, B1.134). It remains to be determined whether these verb forms are indeed used in day-to-day language.

rGyalrong, *-si for Dulang Rawang and Western Himalayan, and *-ci for Kiranti (LaPolla 2003:30) as well as Chepang (DeLancey 1981a:88).

Dual and trial number can be marked on the personal pronoun simultaneously. The trial marker on personal pronouns is identical in form to the trial marker on verbs, but the dual marker takes a different shape, /-ni^{3}/. This marker does derive from the adjectival numeral /-ni^{3}/ 'two'. The morphemes that express dual and trial meaning on personal pronouns are, based on syntactic criteria, considered and integral part of the personal pronoun and no longer adjectives (see section 5.1.1.3). An example of a dual marker on a personal pronoun and on a verb is provided in (503). The dual marker /-ʃ/ on the verb may also be left out, even when the noun is modified by the numeral 'two', as is illustrated by (504). The current corpus does not contain an example of an overt S unmarked for number in combination with a dual verb form, but we do know that dual marking may occur in the verb even if the argument NP is elided, such as in (505).

(503) nɨm^{1} ni^{3} ka^{1} ʃɨn^{2}.
nɨm-**ni^{3}** ka^{1}-**ʃ**-ɨn^{2}
2PL-**DU** go-**DU**-2PL
'You two go.' (20170224_01)

(504) nɨm^{1} ni^{3} ka^{1} ɨn^{2}.
nɨm^{1}-**ni^{3}** ka^{1}-ɨn^{2}
2PL-**DU** go-2PL
'You two go.' (20170224_01)

(505) haʔ^{0} bɨŋ^{2} k^{h}ʌt^{0} ka^{3} ʃɨn^{2} ɟu^{2} ta^{3}.
haʔ^{0}-bɨŋ^{2} k^{h}ʌt^{0} ka^{3}-**ʃ**-ɨn^{2} ɟu^{2}=ta^{3}
earth-pit dig.out go-**DU**-2PL MIT=QUOT
''You two must go dig out a pit' he said.' (20151208_05)

Similarly, trial number can be marked on both personal pronoun and verb, as shown in (506), or appear only on the pronoun, as in example (507). Trial marking can occur on the verb also when pro-drop occurs, as is illustrated by (508).

(506) nɨm^{1} tɔm^{2} ɟɨp^{0} tɔm^{2} nɨn^{3}.

nɨm^{1}-**tɔm^{2}** ɟɨp^{0}-**tɔm^{2}**-n-ɨn^{3}

2PL-**TRI** sleep-**TRI**-FUT-2PL

'You three will sleep.' (20170224_01)

(507) nɨm^{1} tɔm^{2} ba^{3} nʌŋ^{3} ka^{1} tɨn^{1}?

nɨm^{1}-**tɔm^{2}** ba^{3}-nʌŋ^{3} ka^{1}-t-ɨn^{1}

2PL-**TRI** Q-to go-PST-2PL

'Where did you three go?' (S2.28)

(508) ba^{3} nʌŋ^{3} ka^{1} tɔm^{2} tɨn^{1}?

ba^{3}-nʌŋ^{3} ka^{1}-**tɔm^{2}**-t-ɨn^{1}

Q-to go-**TRI**-PST-2PL

'Where did you three go?' (S2.28)

While dual and trial number can be marked on both personal pronouns and verbs, clusivity is encoded in the pronoun paradigm but not in the verbal paradigm. Personal pronouns (section 5.1.1.3) and possessive determiners (section 5.1.3.1) differentiate between inclusive and exclusive first person. The person indices do not encode clusivity; the first person plural index is /-i^{1}/~/-i^{3}/, regardless whether the addressee is included or excluded. A historical explanation for the lack of clusivity marking on the verb has been proposed by LaPolla (2017a:51). In his view, person indexing derives from free pronouns that became suffixed to the verb at a stage during which no clusivity distinction was encoded in the pronoun system yet. LaPolla (2005) concludes that in a sample of TB pronoun systems all inclusive forms are innovations, and that most exclusive forms are inherited. The Muklom first person plural index /-i^{1}/~/-i^{3}/ does also show slightly more resemblance to the first person exclusive pronoun, /i^{2}/ 'we', than to the inclusive form /hiʔ^{0}/ (section 5.1.1.3), perhaps reflecting a similar path of retention and innovation. However, the view that person indices are etymologically related to contemporary pronoun systems is contested. DeLancey (2010:8) argues that at least in a subset of TB languages verb agreement predates the current pronominal paradigm.

The person indices show allomorphy, and Table 49 contains most of the allomorphs. The remaining allomorphic forms occur in the negative, which is presented in Table 50. From these two tables we can conclude that index allomorphy involves changes in one or more of the following changes: 1) tone, 2) vowel quality, and 3) syllable structure. The last only occurs in one case, namely with the negative third person index /-ɔʔ^{0}/. In some language varieties related to Muklom, change in syllable structure is much more widespread than this. These varieties have a full set of so-called non-stopped indices, i.e. forms

that do not end in a plosive coda, next to a full set of indices with so-called stopped indices, i.e. forms that end in a plosive coda (see Morey 2016).

person		**NEG**
1	SG	Σ_1-m-ɔŋ^1
	PL	Σ_1-m-i^1
2	SG	Σ_1-m-u^1
	DU	Σ_1-ʃ-ɨn^2-m-ɨn^1
	TRI	Σ_1-tɔm^2-m-ɨn^2
	PL	Σ_1-m-ɨn^1
3		Σ_1-m-ɔʔ^0

Table 50 - The intransitive verb paradigm: negative present.

The double marking of the second person plural, /-ɨn^2/~/-ɨn^3/, in the negative dual is discussed in section 6.1.4. The same section also discusses negative non-present forms, which are more complex in composition because negation and tense marking cannot co-occur as modifiers of the same verb root. When a verb is negated, tense marking moves to an auxiliary. All possible allomorphs of the person indices are present in Table 49 and Table 50, the non-present forms do not include additional allomorphs.

The tone alternation patterns are rather complex, but the following generalizations can be made: present and future tense indices mainly carry tone 3, while past tense and negated indices mainly carry tone 1. However, the tone of suffixes is more successfully predicted based on the directly preceding element, rather than the tense or polarity of the whole verb complex. The morphological rules (509)-(516) below summarize the patterns of tone alternation in person indices in intransitive clauses. Superscript numbers 1, 2, and 3 represent tonemes, 'Σ' represents the verb root, 'DU' dual number 'TRI' trial number, 'CIS' cislocative, and 'PI' the person index. The abbreviation 'INV' in the last rule, (516), stands for 'inverse' and relates to transitive verbs but is included here for the sake of comprehensiveness. The discussion of the inverse can be found in section 6.1.2.2.2.

Translated into prose, the morphological rules read as follows: the dual and trial have invariable forms, /-ʃ/ and /-tɔm^2/ respectively. The second person plural indices that directly follow the dual or trial morphemes carry tone 2. All person indices that directly follow the future tense marker /-n/ carry tone 3 and those that directly follow the past tense marker /-t/ carry tone 1. Form here onwards the paradigm becomes more complex and exceptions need to be included in the rules. For example, if an index directly follows the verb root, it carries tone 3, except the second person plural, which carries tone 2. Also, if an index directly follows negative /-m/, it carries tone 1, except the third person index,

which has a glottal stop coda. Finally, if an index directly follows the inverse marker /-pʰ/ or the cislocative marker /-pʰ/, it carries tone 3, except the first person singular and second person plural indices, which carry tone 2. I at first found it hard to believe the exceptions existed, but they have been confirmed on multiple occasions by a main consultant.

(509) DU = /-ʃ/

(510) TRI = /-tɔm²/

(511) PI → PI^2 / DU _
TRI _

(512) PI → PI^3 / FUT _

(513) PI → PI^1 / PST _

(514) PI → PI^2 / Σ _ [PI =2PL]
→ PI^3 / Σ _ [PI =other value]

(515) PI → PI^0 / NEG _ [PI=3]
→ PI^1 / NEG _ [PI=other value]

(516) PI → PI^2 / INV _ [PI=1SG; 2PL]
CIS _ [PI=1SG; 2PL]
→ PI^3 / INV _ [PI=other value]
CIS _ [PI=other value]

I would like to argue that tone 1 indices and the index ending in a glottal stop coda, found after the past tense marker and negative marker respectively as described by rule (513) and (515), are reflex of an earlier series of indices with plosive coda. As has been mentioned, multiple but not all Tangsa varieties show two sets of indices: one set without a coda or with a nasal coda and one set with plosive codas (Morey 2019b:145). Having two sets of indices synchronically, one non-stopped and one stopped, is a feature that is also found in Nocte (Jacquesson 2001:126) and Jingphaw, but it appears not to occur in other TB language groups, and therefore has been proposed to be an innovation within the TB family (DeLancey 2015:130). In each Tangsa variety that exhibits this feature, it is the negative and past

paradigms that take the so-called stopped indices. On possibility is, therefore, that the tone 1 indices and the glottal stop coda index of Muklom are a reflex of an earlier set of stopped indices, as is visualized in Figure 19. The glottal stop coda on the third person index might represent a retention of an intermediate stage between development from a non-glottal plosive coda and a tone 1 creaky syllable. Across Tangsa we find that third person index is more conservative than first and second person indices. Not only Muklom, but also other varieties such as Cholim, Longri, Chamchang, Shecyü, Lochang, Lungkhi, Yongkuk and Phong (Morey 2019b:145) have no plosive coda in first and second person negative indices yet do have a coda in the third person index in the shape of either /k/ or /ʔ/. In Cholim and Phong, the third person index of the past tense also have plosive coda, while Muklom and the remainder of the above-mentioned varieties have no (recorded form with) coda.

index [oral plosive coda]	→	index [glottalization]	→	index [coda elision, plus creakiness]	
				/-ʌŋ^{1}/~/-ɔŋ^{1}/	1SG
				/-u^{1}/	2SG
				/-i^{1}/	1PL
				/-ɨn^{1}/	2PL
/-ɔk^{0}/ 3		/-ɔʔ^{0}/ 3		/-a^{1}/	3

Figure 19 - Possible path of change with corresponding contemporary indices below.

Anecdotal evidence suggests there is minor dialectal variation within Muklom in the domain of verb inflection, and one variation appears to confirm the development proposed in Figure 19: consultant TT pronounces negative third person /-m-ɔʔ^{0}/ as /-m-ɔk^{0}/ (recording 20100124-112046).[84] This might reflect a retention of an older form of this index with velar coda /k/ in a subsection of the Muklom language community, a form which is also present in at least four other Tangsa varieties, i.e. Mungre, Chamchang, Shecyü, and Lochang (Morey 2019b:145).

It is less easy to formulate possible proto-stages for current tone 3 and tone 2 index allomorphs in Muklom, because related varieties show diverse tone marking. For example, in a sample of future tense paradigms from 22 Tangsa varieties collected by Morey (2019b:145), 16 include tone marking in the transcription, and of these, 10 have tone 2 indices, 4 have tone 3 indices in the future tense, and 2 have tone 1 indices. The varieties with tone 3 future indices are: Muklom, Lungkhi, Gaqlun, and Hakhun. It

[84] Recorded in New Chingsa village by Stephen Morey. The speaker was in his forties at the time of recording. He exhibits another phonological variant in his speech: /ɨ/ is often pronounced as [u], for example, [num^{1}] for /nɨm^{1}/ 'you (pl)'.

remains to be determined what developments lead to this diversification on person indices within Tangsa. Person index forms might constitute a useful criterion for the subgrouping of Tangsa varieties.

In Muklom, not only tone but also vowel quality may differ between person index allomorphs. Vowel change is a much less widespread phenomenon than tone alternation, affecting only two forms within the negative paradigm: 1) the first person singular, affirmative /-ʌŋ^{1}/~/-ʌŋ^{2}/~/-ʌŋ^{3}/ → negative /-ɔŋ^{1}/, and 2) the third person, affirmative /-a^{1}/~/-a^{3}/ → negative /-ɔʔ^{0}/. The fact that vowel change to /ɔ/ in the index only occurs in negative verb forms, and specifically on indices that otherwise have a low vowel /a/ or low-mid unrounded back vowel /ʌ/, suggests that it reflects the retention of a property of an earlier form of the negative which has been lost in the other indices. Perhaps a proto-form of the verbal negator contained some type of lip rounding, either in the form of a rounded vowel, for example */mɔ/ or */mu/, or in the form of a consonantal element, such as */m^{w}/ or */mβ/. Or perhaps the rounding is a form of assimilation to the bilabial onset itself. The PTB reconstructed form of the negator, *ma (Benedict 1972:97), does not have a rounded vowel.

A final note on person indexing: a generic referent takes third person indexation. This is illustrated by examples (517) and (518), both taken from an elicitation session in which I asked two consultants questions about the felicity of certain constructions. In the second example, (518), the first token of third person /-a^{3}/ has a generic referent, while the second token /-a^{3}/ has a specific referent, namely the person who asked the question, me.

(517) ŋa^{1} a^{3} tɨl^{2} sʌt^{0} kʌm^{1} ta^{3} t^{h}ʌ^{0}ɹaʔ^{0} a^{3}.

ŋa^{1}=a^{3}	tɨl^{2}	sʌt^{0}-kʌm^{1}=ta^{3}	t^{h}ʌ^{0}-ɹaʔ^{0}-**a^{3}**
1SG=ERG	rice	eat-PROG=QUOT	TR-speak-**3**

'One says 'I am eating rice'.' (20161223_02)

(518) hɨm^{2} ʃɛ^{1} ɔʔ^{0} ta^{3} ʝɨn^{3} ɹaʔ^{0} a^{3} tat^{0} pɨt^{0} a^{3}.

hɨm^{2}-ʃɛ^{1}=ɔʔ^{0}=ta^{3}	ʝɨn^{3}	ɹaʔ^{0}-**a^{3}**	tat^{0}	pɨt^{0}-a^{3}
house-one=at=QUOT	ABIL	speak-**3**	try	ask-3

'She is trying to ask whether one can say 'at one house'.' (20161223_01)

6.1.2.2 Transitive paradigm

This section discusses the inflection of transitive and ditransitive verbs. As discussed in section 6.1.2.1, Tangsa varieties show a high degree of diversity within the domain of the verb. An isogloss runs through the region with indexing languages on one side and non-indexing languages on the other. This line cuts through Tangsa and interestingly enough the more complex verb paradigms, like the argument indexing

systems of Hakhun (Boro 2017) and Nocte (DeLancey 2011a; Rahman 2016), are located closer to the boundary (S.D. Morey, p.c.), beyond which there is no person indexing at all until one reaches the Kuki-Chin languages in the south (DeLancey 2015:142-144). Two complex features of person indexing on the transitive verb are hierarchical indexing and inverse marking, both of which occur in Muklom.

Hierarchical or person-based indexing is commonly found among TB languages. Some argue that it can be reconstructed as far back as at the level of PTB (see for example DeLancey 1981a; Bauman 1975), and that languages with non-hierarchical agreement, i.e. S/A agreement, must be an innovation. We find S/A systems for example in the Kuki-Chin branch. Non-hierarchical systems may also exhibit inverse marking. Within Tangsa, the Pangwa subgroup shows very little hierarchical agreement or inverse marking, but it is found more often in non-Pangwa varieties. Muklom is one of the non-Pangwa varieties that show both hierarchical indexing and inverse marking (see Mulder 2018a). Examples of related language varieties that show hierarchical indexing are Hakhun (Morey 2011b:677; Boro 2017:396-403), Jingphaw (DeLancey 2011a), and Nocte (DeLancey 2011a; Rahman 2016:70-71).

Hierarchical indexing in Muklom is discussed in section 6.1.2.2.1, and inverse marking in section 6.1.2.2.2.

6.1.2.2.1 Hierarchical indexing

Intransitive clauses involve a single argument (S), but transitive clauses involve two arguments, a patient-like argument (P) and an agent-like argument (A) that acts upon this P argument. Each argument has either a first, second, or third person referent. The former two are referred to as Speech Act Participants (SAPs), and the last is referred to as a non-Speech Act Participant (non-SAP) (compare Bauman 1975 and DeLancey 1980). In intransitive clauses, the person index encodes the S argument. In transitive clauses, the person index most often encodes the A referent, but some configurations prefer or require the P argument to be encoded instead. This type of differential person indexing is referred to as hierarchal indexing. This type of indexing is found in different languages throughout the TB area. Indeed, DeLancey (1981a:83, 1989:317, 326[85]) observes that this feature is found in multiple branches of the TB language family.

Hierarchical indexing in transitive clauses in Muklom can be described as follows (see also Mulder 2018a:143-149): indices align with the A argument of the clause, except when a third person A acts upon a first or second person P argument, in which case indices align with the 'higher ranked' P argument. This means that SAP arguments are higher in rank than non-SAP arguments and are therefore

[85] To describe the pattern observed in hierarchical verb paradigms, the author uses expressions such as 'person hierarchy' or 'agreement hierarchy' (DeLancey 1981:83-84) but he also refers to hierarchical indexing as a 'split ergativity agreement pattern' (DeLancey 1980:49, 1989:317), which is a somewhat confusing term and I doubt whether 'split ergative' is a suitable term in the context of hierarchical indexing (see also footnote 10 in DeLancey 1980:134).

more likely to trigger person indexing on the transitive verb. In other words, indexing in transitive clauses is governed by the person hierarchy in Figure 20.

SAP		**non-SAP**
1st person /	2nd person	> 3rd person

Figure 20 - A person hierarchy for Muklom person indexing.

First and second person are equal in rank: first person does not take priority over second, and neither does second person take priority over first. It is the syntactic role of each SAP that determines the alignment of the person index when SAPs act upon one another: the A argument is given priority over the P argument. Example (519) illustrates a first person acting upon a second person, 1→2. The first person A argument triggers person indexing, /-ʌŋ^{2}/. When we reverse the roles and have a second person referent acting upon a first person referent, 2→1, as in (520), the A argument is still triggering person indexing, /-u^{3}/.

(519) ŋa^{1} a^{3} nʌŋ^{1} βat^{0} taʔ^{0} p^{h}ʌŋ^{2}.
[**ŋa^{1}=a^{3}**]$_{A}$ [nʌŋ^{1}]$_{P}$ βat-taʔ^{0}-p^{h}-**ʌŋ^{2}**
[**1SG=ERG**]$_{A}$ [2SG]$_{P}$ hit-PST-INV-**1SG**[86]
'I have hit you (sg).' (B1.86)

(520) nʌŋ^{1} a^{3} ŋa^{1} βat^{0} taʔ^{0} p^{h}u^{3}.
[**nʌŋ^{1}=a^{3}**]$_{A}$ [ŋa^{1}]$_{P}$ βat^{0}-taʔ^{0}-**p^{h}-u^{3}**
[**2SG=ERG**]$_{A}$ [1SG]$_{P}$ hit-PST-**INV-2SG**
'You (sg) have hit me.' (B1.86)

When first and second person act upon one another, indexing of the P argument is not available as a second option, alignment is always with the A. Consultants deem indexing of P in the configuration 1→2, as in (521), and in the reverse configuration 2→1, as in (522), ungrammatical.

[86] When the inverse morpheme precedes the person index, all indices carry tone 3, except the first person singular index and the second person plural index, which carry tone 2, as formulated in the morphophonological rule in (516).

(521) *ŋa^{1} a^{3} nʌŋ^{1} βat^{0} taʔ^{0} p^{h}u^{3}.

*[ŋa^{1}=a^{3}]$_{A}$ [**nʌŋ^{1}**]$_{P}$ βat^{0}-taʔ^{0}-p^{h}-**u^{3}**

*[1SG=ERG]$_{A}$ [**2SG**]$_{P}$ hit -PST-INV-**2SG**

Intended: 'I have hit you.' (B1.86)

(522) *nʌŋ^{1} a^{3} ŋa^{1} βat^{0} taʔ^{0} p^{h}ʌŋ^{2}.

*[nʌŋ^{1}=a^{3}]$_{A}$ [**ŋa^{1}**]$_{P}$ βat^{0}-taʔ^{0}-p^{h}-**ʌŋ^{2}**

*[2SG=ERG]$_{A}$ [**1SG**]$_{P}$ hit-PST-INV-**1SG**

Intended: 'You have hit me.' (B1.86)

Cross-linguistically, not all hierarchical indexing systems assign the same rank to first and second person. Some hierarchical languages, like Hakhun (Boro 2017:396; DeLancey 2017:90) rank first person higher than second, and others rank second person higher than first, for example the Nakh-Dagestanian language Icari Darci (Jacques and Antonov 2014:309, based on data from Sumbatova and Mutalov 2003). Neither do systems that rely on syntactic role in SAP→SAP configurations always prioritize the A argument as Muklom does. In fact, DeLancey (2017:87) finds that Sino-Tibetan hierarchical systems most often index the P in clauses that contain two SAP arguments.

In total, seven configurations of A and P argument are possible, as is visualized in Table 51. Configurations with two SAPs, i.e. 1→2 and 2→1 which were exemplified in (519) and (520) respectively, are referred to as the 'local domain' (Jacques and Antonov 2014:302), configurations consisting of two non-SAPs, i.e. 3→3, are known as the 'non-local' domain of the transitive paradigm, and mixed configurations, i.e. 1/2→3 and 3→1/2, are called the 'mixed' domain.

A \ **P**	**1**	**2**	**3**
1	-	local	mixed
2	local	-	
3	mixed		non-local

Table 51 - The three domains of argument configurations.

While in the local domain, syntactic role determines index alignment, in the mixed domain, position on the person hierarchy regulates person indexing. The examples below illustrate hierarchical agreement in all four mixed domain configurations: 1→3 in (523), 2→3 in (524), 3→1 in (525), and 3→2 in (526). In each of the examples, indexing aligns with SAP argument, regardless of its syntactic role, hence alignment is with the A argument in the first two examples and with the P argument in the last two.

(523) ŋa^{1} a^{3} miʔ^{0} nu^{1} βat^{0} tʌŋ^{1}.

[**ŋa^{1}=a^{3}**]$_{A}$ [miʔ^{0}-nu^{1}]$_{P}$ βat^{0}-t-**ʌŋ^{1}**

[**1SG=ERG**]$_{A}$ [person-F]$_{P}$ hit-PST-**1SG**

'I have hit the woman.' (B1.85)

(524) nʌŋ^{1} a^{3} miʔ^{0} nu^{1} βat^{0} tu^{1}.

[**nʌŋ^{1}=a^{3}**]$_{A}$ [miʔ^{0}-nu^{1}]$_{P}$ βat^{0}-t-**u^{1}**

[**2SG=ERG**]$_{A}$ [person-F]$_{P}$ hit-PST-**2SG**

'You (sg) have hit the woman.' (B1.85)

(525) niŋ^{2} a^{3} ŋa^{1} βat^{0} taʔ^{0} p^{h}ʌŋ^{2}.

[niŋ^{2}=a^{3}]$_{A}$ [**ŋa^{1}**]$_{P}$ βat^{0}-taʔ^{0}-p^{h}-**ʌŋ^{2}**

[3PL=ERG]$_{A}$ [**1SG**]$_{P}$ hit-PST-INV-**1SG**

'They have hit me.' (B1.86)

(526) niŋ^{2} a^{3} nʌŋ^{1} βat^{0} taʔ^{0} p^{h}u^{3}.

[niŋ^{2}=a^{3}]$_{A}$ [**nʌŋ^{1}**]$_{P}$ βat^{0}-taʔ^{0}-p^{h}-**u^{3}**

[3PL=ERG]$_{A}$ [**2SG**]$_{P}$ hit-PST-INV-**2SG**

'They have hit you (sg).' (B1.86)

If number were encoded in third person indices, we would have been able to determine with which argument indexing aligns in the non-local domain, but since number is not encoded we have no way of knowing whether third person indices align with A or P.

Table 52 provides the complete transitive paradigm for the present tense affirmative. To allow easy comparison with the intransitive paradigm, intransitive person indices are listed in the last column.

A \ P	1SG	1PL	2SG	2PL	3	S
1SG			Σ_1-p^h-ʌŋ^2	Σ_1-p^h-ʌŋ^2	Σ_1-ʌŋ^3	Σ_1-ʌŋ^3
1PL			Σ_1-p^h-i^3	Σ_1-p^h-i^3	Σ_1-i^3	Σ_1-i^3
2SG	Σ_1-p^h-u^3	Σ_1-p^h-u^3			Σ_1-u^3	Σ_1-u^3
2PL	Σ_1-p^h-ɨn^2	Σ_1-p^h-ɨn^2			Σ_1-ɨn^2	Σ_1-ɨn^2
3	Σ_1-p^h-ʌŋ^2	Σ_1-p^h-i^3	Σ_1-p^h-u^3	Σ_1-p^h-ɨn^2	Σ_1-a^3	Σ_1-a^3
	Σ_1-p^h-a^3	Σ_1-p^h-a^3	Σ_1-p^h-a^3	Σ_1-p^h-a^3		
	Σ_1-a^3	Σ_1-a^3	Σ_1-a^3	Σ_1-a^3		

Table 52 - The present tense affirmative transitive verb paradigm, with P argument indexing shaded.

The data gathered indicate that only one alignment is possible for most configurations, but when P outranks A on the person hierarchy in the mixed domain, multiple options are available, as is shown in the last row of Table 52. Index alignment with P is restricted to exactly this area and indexing of the higher ranked first or second person P is the most frequently used option. What exactly regulates the choice between the three available options has not been determined yet, but it could be that pragmatics, verbal semantics or perhaps also syntax play a role. If we had a larger corpus of annotated narrative, we could explore whether a discourse-prominent A argument (pragmatics) or the presence of a little affected P argument (verbal semantics) is perhaps more likely to trigger indexing of the A argument. One consultant indicates that the form {Σ_1-a^3} is an acceptable verb form, but only if one adds something to 'make a complete sentence', which seems to suggest that this option is available in subordinate clauses but not in main clauses. A somewhat comparable rule has been suggested for Hakhun, namely that A indexing in this language is obligatory in non-final clauses in series of chained clauses (Boro 2017:418). To conclude, the exact conditions in Muklom that allow the speaker to overrule the person hierarchy have yet to be determined.

The ditransitive verb paradigm is identical to the transitive paradigm listed in Table 7. In ditransitive clauses, the Theme argument (T) cannot trigger index alignment but the Recipient argument (R) can. The rules of hierarchical indexing run parallel with those found in transitive clauses: in ditransitive clauses, only SAP R arguments trigger person indexing, non-SAP R arguments do not. If no SAP R argument is present, the A argument is indexed. An example of R indexing is provided in (527). The R argument, /ŋa^1/ 'I', is marked by the dative morpheme /=ma^3/ (see section 5.1.7.1 on case marking). The theme argument (T) is a non-SAP in this clause.

(527) nɨŋ^{2} a^{3} ŋa^{1} ma^{3} bɔ^{3} ti^{1} kɔʔ^{0} taʔ^{0} p^{h}ʌŋ^{2}.

[nɨŋ^{2}=a^{3}]$_{A}$ [**ŋa^{1}=ma^{3}**]$_{R}$ [bɔ^{3}-ti^{1}]$_{T}$ kɔʔ^{0}-taʔ^{0}-p^{h}-**ʌŋ^{2}**

[3PL=ERG]$_{A}$ [**1SG=DAT**]$_{R}$ [papaya-fruit]$_{T}$ give-PST-INV-**1SG**

'They gave papaya to me.' (B1.86)

6.1.2.2.2 Inverse

Inverse marking is cross-linguistically rare, but not uncommon in TB. Inverse marking in TB languages was first recognised as such, it seems, by DeLancey (1980:13-14, 1981a:85) and subsequently discussed in various other publications (e.g. Ebert 1987:477; Jacques and Antononv 2014). In Muklom, inverse configurations are marked by a the postverbal element /-p^{h}/~/-p^{h}ʌ^{0}/ (see also Mulder 2018a:149-153) which already featured in many example clauses in the previous section. In Cholim, another Tangsa variety, we find a tone-bearing postverbal particle /p^{h}a^{2}/ which appears to be a cognate of the Muklom inverse (Morey 2011a:90; Mulder 2018a:152). Other potential cognates are the inverse marker /-h/ of Phong (Dutta 2016) and Nocte (DeLancey 1981a:95;[87] Rahman 2016:73). However, some TB inverse markers are either clearly non-cognate or appear to be non-cognate, for example Karbi <nang=> (Konnerth 2014:223), Jyarong <u-> (DeLancey 1981a:86), Chepang <-taa> (DeLancey 1981a:88), Vayu <-sU> (DeLancey 1981a:95), and closer to home we find Hakhun (Tangsa) with a non-past inverse marker /r-/ and past inverse marker /t^{h}-/, both occurring in post-verbal position (Boro 2017:341-346). At least some of these must have developed separately. This section discusses the following aspects of the Muklom inverse marker /-p^{h}/~/-p^{h}ʌ^{0}/: 1) function, 2) distribution, and 3) allomorphy.

In the discussion of hierarchical indexing, it was concluded that Muklom takes first and second person references together and gives them a different status from non-SAP referents. It has long been observed that various constructions in TB languages recognize speaker and addressee as a separate category. In Muklom, SAPs not only play a role in person indexing, but also in inverse marking. The marker /-p^{h}/ signals the presence of an SAP P argument in a transitive clause, an SAP R argument in a ditransitive clause, or even an SAP possessor referent. An example of a P argument that triggers inverse marking on person index is presented in (528), and (529) shows an R argument that makes the index take an inverse marker.

[87] However, DeLancey (1981:95) suggests that Nocte /-h/ derives from a proto-inverse marker *-s.

(528) nɨŋ^{2} a^{3} i^{2} βat^{0} taʔ^{0} pʰi^{3}.

[nɨŋ^{2}=a^{3}]$_{A}$ [**i^{2}**]$_{P}$ βat^{0}-taʔ^{0}-pʰ-**i^{3}**

[3PL=ERG]$_{A}$ [**1PL**]$_{P}$ hit-PST-INV-**1PL**

'They have hit us' (B1.86)

(529) nɨŋ^{2} a^{3} ŋa^{1} ma^{3} bɔ^{3} ti^{1} kɔʔ^{0} taʔ^{0} pʰʌŋ^{2}.

[nɨŋ^{2}=a^{3}]$_{A}$ [**ŋa^{1}=ma^{3}**]$_{R}$ [bɔ^{3}-ti^{1}]$_{T}$ kɔʔ^{0}-taʔ^{0}-**pʰ**-ʌŋ^{2}

[3PL=ERG]$_{A}$ [**1SG=DAT**]$_{R}$ [papaya-fruit]$_{T}$ give-PST-**INV**-1SG

'They gave papaya to me.' (B1.86)

An SAP possessor can trigger the appearance of an inverse marker, as is illustrated by (530), which has a second person possessor referent encoded in the possessive determiner /ba^{3}-/ 'your(sg)'. However, the possessor cannot trigger indexing on the verb like the P argument did in (528) or the R argument in (529): the person index in (530) agrees with the S argument /nɨŋ^{2}/ 'money'.

(530) ba^{3} kʰak^{0} βaŋ^{3} na^{3} ŋɨn^{2} tʰʌ^{0}lʌt^{0} ka^{3} pʰa^{3}.

[**ba^{3}-**]$_{POSS}$kʰak^{0}=βaŋ^{3}=na^{3} [ŋɨn^{2}]$_{S}$ tʰʌ^{0}-lʌt^{0} ka^{3}-**pʰ**-a^{3}

[**2SG.POSS-**]$_{POSS}$bag=from=in [money]$_{S}$ INTR-pull.out go-INV-3

'Money is sticking/coming out of your bag.' (B1.133)

The function of /-pʰ/ is to mark the presence of a non-A SAP. Table 52 is repeated below as Table 53 to show the exact distribution of the inverse marker in the verb paradigm, indicated by shaded cells. In the last row we see that while the inverse marker /-pʰ/ must be present in 3→1/2 configurations that index the P argument, the inverse is 'optional' in 3→1/2 configurations that index the A argument. The forms listed are those of the affirmative present, but the distribution of the inverse is identical across tenses and polarities.

A \ non-A	1SG	1PL	2SG	2PL	3	S
1SG			Σ_1-p^h-ʌŋ^2	Σ_1-p^h-ʌŋ^2	Σ_1-ʌŋ^3	Σ_1-ʌŋ^3
1PL			Σ_1-p^h-i^3	Σ_1-p^h-i^3	Σ_1-i^3	Σ_1-i^3
2SG	Σ_1-p^h-u^3	Σ_1-p^h-u^3			Σ_1-u^3	Σ_1-u^3
2PL	Σ_1-p^h-ɨn^2	Σ_1-p^h-ɨn^2			Σ_1-ɨn^2	Σ_1-ɨn^2
3	Σ_1-p^h-ʌŋ^2	Σ_1-p^h-i^3	Σ_1-p^h-u^3	Σ_1-p^h-ɨn^2	Σ_1-a^3	Σ_1-a^3
	Σ_1-p^h-a^3	Σ_1-p^h-a^3	Σ_1-p^h-a^3	Σ_1-p^h-a^3		
	Σ_1-a^3	Σ_1-a^3	Σ_1-a^3	Σ_1-a^3		

Table 53 - The distribution of the inverse marker /-p^h/ (present tense affirmative paradigm).

From a typological perspective, inverse systems can be divided into those that are canonical, and those that are not. Canonical systems add an inverse marker to the verb every time when P outranks A on a referential hierarchy (Jacques and Antonov 2014). Non-canonical systems extend the use of the inverse beyond this domain. Muklom represents an example of a non-canonical inverse system, since the inverse not only appears in the configurations 3→1/2, which constitutes a part of the mixed domain, but also throughout the entire local domain. This means we cannot account for the distribution of the inverse marker in Muklom by evoking a person hierarchy (see Mulder 2018a:150). It is not uncommon for inverse systems to be highly uncanonical, extending the use of the inverse in different directions (Jacques and Antonov 2014).

It can be concluded that Muklom shows a separation of NP and verb marking. Case marking on NPs does not align nicely with the systems of person indexing and inverse marking on the verb. This type of non-alignment is known as associative agreement (Bickel 2000) and is the opposite of integrative agreement, the clean alignment of NP and verb marking. TB languages often show associative agreement, so Muklom fits the TB profile in this respect.

The inverse marker /-p^h/ has an allomorph /-p^{h}ʌ^0/ which must be used whenever a future tense marker /-n/ or negative /-m/ directly follows. The first allomorph constitutes a unit smaller than a syllable, i.e. an onset, and the second constitutes a minor syllable (see section 3.3.1). An example of the allomorph /-p^{h}ʌ^0/ is found in (531).

(531) p^{h}ʌn kɔʔ^0 p^{h}ʌ^{0}nɨn^3 i^3?

p^{h}ʌn kɔʔ^0-**p^{h}ʌ^0**-n-ɨn^3 i^3

tell give-**INV**-FUT-2PL Q.AFF

‘Will you tell us?’ (20100124-112656)

At least two possible scenarios can be reconstructed to account for the allomorphy in the inverse marker. First, the vowel /ʌ/ in the second allomorph could be analysed as a prothetic vowel that serves to break up the consonant cluster /pʰn/. Muklom does not allow consonant clusters in onset position (see section 3.3.1.2). According to this scenario, the allomorph /-pʰ/ constitutes the older or underlying form. Second, the allomorph /pʰʌ⁰/ could instead represent the older or underlying form. The diachronic explanation could then be that the vowel of the inverse marker /-pʰʌ⁰/ was elided or assimilated under influence of the vowel of the following person index, resulting in a reduced allomorph /-pʰ/. All person indices start with a vowel, but the future tense marker consists of a consonant, /n/.

A similar form of allomorphy is found in Hakhun, which exhibits a set of verbal operators that take the shape of a single-consonant morpheme when directly preceding a person index, but when they do not directly precede an index, an allomorph with the phonological structure Cə must be employed (Boro 2019:185).

6.1.3 Direction: cislocative

The cislocative marker /-pʰ/~/-pʰʌ⁰/ expresses movement or orientation in space towards the speaker. Cislocatives, as well as other types of directives, are commonly found across TB languages (see DeLancey 1985). I would like to suggest that in Muklom, the cislocative marker is the source from which the homophonous inverse marker (section 6.1.2.2.2), and deontic marker developed (section 6.1.6.3.2). Supporting evidence is found in 1) the fact that they occupy the same slot in the clause relative to the verb, i.e. between the verb root and the person index, 2) shared allomorphy between /-pʰ/ and /-pʰʌ⁰/, and 3) semantic proximity. It is not impossible to imagine a semantic path from cislocative to inverse marking or form cislocative to social obligation that rests on the speaker. In fact, an etymological connection between cislocative and inverse is attested in certain other TB languages, such as Karbi (Konnerth 2015) and Sizang (Kuki-Chin) (DeLancey 1981b, Konnerth 2015).

Two examples of cislocative markers are presented below. Example (532) contains the most frequently used allomorph /-pʰ/ and (533) contains the minor syllable allomorph /-pʰʌ⁰/. As with the inverse marker, the cislocative must take the shape /-pʰʌ⁰/ when directly preceding a future tense marker /-n/ or negative marker /-m/.

(532) pʰʌŋ³ tʰa² tɕɛŋ³ βa¹ ka¹ taʔ⁰ pʰa³, haʔ⁰ nʌŋ³.

pʰʌŋ³=tʰi³=a³	tɕɛŋ³-βa¹	ka¹-taʔ⁰-**pʰ**-a³	haʔ⁰=nʌŋ³
start=DEF=at	Chengwa	go-PST-**CIS**-3	earth=to

'First, Chengwa came here, to the earth.' (20160106_01)

(533) piʔ⁰ tʰu³ pʰʌ⁰mɔʔ⁰ ti³.

piʔ⁰ tʰu³-**pʰʌ⁰**-m-ɔʔ⁰=ti³

3SG arrive-**CIS**-NEG-3=HS

'She will not come (she said).' (S2.19)

6.1.4 Negation

The language exhibits at least three different negating elements, which are: 1) the postverbal negator /-m/, 2) the preverbal prohibitive marker /nʌk⁰/, and 3) the negative existential /huŋ¹/ 'there isn't, there aren't'. The verbal negator is the topic of discussion in the current section. The prohibitive is discussed under mood in section 6.1.6.3.9, and the negative existential is discussed together with its affirmative counterpart in section 6.1.1.3.

The verb is negated by the postverbal marker /-m/, as is illustrated by example (534), where it follows the verb root /sʌm¹/ 'know'.

(534) ŋa¹ sʌm¹ mɔŋ¹.

ŋa¹ sʌm¹-**m**-ɔŋ¹

1SG know-**NEG**-1SG

'I don't know.' (20161223_02)

The negator must always follow the verb in Muklom, there is no pre-verbal negator. This is a deviation from the strong tendency of ST languages to exhibit NEG-verb order. The reconstructed PTB basic negator is a pre-verbal *ma (Benedict 1972:97), but some TB subgroups have developed an exclusively post-verbal negator, a development which according to Post (2015:1-2) might be confined to certain subgroups within Northeast India. Post-verbal negators may derive from different sources. LaPolla (2017a:47), for example, describes two scenarios: in the first scenario, a post-verbal negator develops from a reinforcement of the original pre-posed negator and in the second scenario, a post-verbal negator develops from a combination of a post-posed auxiliary and negator. Post (2015:2) describes a third scenario to account for the presence of a post-verbal negator in Galo (Tani) but which may apply to other languages just as well: a post-verbal negator develops into a suffix from a negative auxiliary in an older serial verb construction. If the Muklom negator /-m/ derives from PTB *ma 'not' (Matisoff 2003:121), which seems likely, then this negator does not derive from a reinforcer but rather from the original negator, in the shape of a post-head negative auxiliary or a negator that once attached to post-head auxiliary that has become eroded. There are more Tangsa varieties that exhibit post-verbal

negation. In fact, Morey (2019b:145) finds in a sample of 22 Tangsa varieties that 17 exhibit post-verbal negation, /m-/ or /b-/, and 5 have pre-verbal negation, /mi^{2}/ /miʔ/ or /i^{3}/.

The verbal negator /-m/ always co-occurs with a person index. In fact, the negator has been reduced to less than a syllable and since the language does not allow nasals to function as nucleus (see section 3.3.1.1), it has become the onset of the syllable which contains the person index. Table 54 shows the verb paradigm for negative present tense. Indices that follow the negator directly carry tone 1, except for the third person index, which has a glottal stop coda, /-m-ɔʔ^{0}/. The tones on negative indices are not consistent across Tangsa varieties (Morey 2019b:145). Some have plosive codas, which includes the glottal stop, some have tone 3, others tone 2, and yet others, such as Rinkhu and Rera, have negative indices that carry tone 1 as in Muklom.

Although the personal pronoun paradigm makes a distinction between inclusive and inclusive first person, this distinction is not encoded in the verbal paradigm anywhere. First person does not distinguish between dual, trial and plural; the element /-m-i^{1}/ serves a general non-singular first person form in the negative paradigm of the verb. Even fewer distinctions are made for the third person; one form /-m-ɔʔ^{0}/ suffices in the negative paradigm. Second person, on the other hand, consists of four different forms: singular, dual, trial, and plural. The dual suffix /-ʃ/ stands closer to the verb root than negator /-m/. Both combine with their own person index, the first carrying tone 2, and the second carrying tone 1. The trial marker /tɔm^{2}/ also stands closer to the verb root than the negator, but this number marker does not take its own person index.

	SG	**DU**	**TRI**	**PL**
1	Σ_1-m-ɔŋ^{1}	Σ_1-m-i^{1}		
2	Σ_1-m-u^{1}	Σ_1-ʃ-ɨn^{2}-m-ɨn^{1}	Σ_1-tɔm^{2}-m-ɨn^{1}	Σ_1-m-ɨn^{1}
3	Σ_1-m-ɔʔ^{0}			

Table 54 - Negative present paradigm.

The symbol Σ represents the verb stem. The negator must combine with the verbal stem Σ_1, it does not combine with Σ_2. Example (534) above contains the verbal root of an alternating verb, /sʌm^{1}/~/sʌm^{3}/ - the first form is the verbal root. Another example is provided below in (535), this time with a verb showing stem alternation between two coda-less stems and a stem with a coda. The nominal stem is with coda, /kat^{0}/ 'go', and the verb has two verbal stems, /ka^{1}/~/ka^{3}/ 'go' (see section 6.1.1.4). When a verbal operator intervenes between the verb root and the index, the stem /ka^{1}/ is used, as is the case in (535), where the intervening operator is the negator /-m/.

(535) ŋa^{1} ka^{3} mɔŋ^{1}.

ŋa^{1} **ka^{3}-m-**ɔŋ^{1}

1SG **go-NEG-**1SG

'I'm not going.' (20170224_01)

Negation and overt tense marking cannot combine on the same verb. Therefore, the past and future negative paradigms consist of the same forms as the present, a main verb combined with the negator /-m/, but to carry the tense marker, the auxiliary /ʌŋ^{2}/ is added. The auxiliary plus postposed tense markers take a second person index. The negator thus stands closest to the main verb, and the auxiliary intervenes between the main verb and the tense marker. An example of a negative past configuration is provided in (536). The main verb /tɔŋ^{2}/ 'sit' comes first, followed by the negator /-m/ and accompanying third person index /-ɔʔ^{0}/, and the auxiliary /ʌŋ^{2}/ then carries the past tense marker /-t/ which is accompanied by another third person index, /-a^{1}/. The forms /-ɔʔ^{0}/ and /-a^{1}/ are allomorphs of the third person index. The conditioning environments of allomorphs in the person indexing paradigm are discussed in section 6.1.2.

(536) nɨŋ^{2} ni^{3} ʃi^{3} ɹum^{3} tɔŋ^{2} mɔʔ^{0} ʌŋ^{2} ta^{1} hɛ^{3} ɹi^{3}?

nɨŋ^{2}-ni^{3}=ʃi^{3} ɹum^{3}-**tɔŋ^{2}-m-ɔʔ^{0}** **ʌŋ^{2}-t-a^{1}**=hɛ^{3}=ɹi^{3}

2PL-DU=DIST together-**sit**[88]**-NEG-3** **AUX-PST-3**=DUB=INFER

'So maybe the two of them did not sleep together then?' (541)

The negative future is illustrated by example (537), where main verb /hʌn^{3}/ 'believe' is first followed by negator /-m/ and accompanying first person singular index /-ɔŋ^{1}/, and the auxiliary /ʌŋ^{2}/ then takes the future marker /-n/ and another first person singular index, /ʌŋ^{3}/. The forms /-ɔŋ^{1}/ and /-ʌŋ^{3}/ are again allomorphs of the same index.

(537) ŋa^{1} a^{3} ʝɨn^{3} hʌn^{3} mɔŋ^{1} ʌŋ^{2} nʌŋ^{3}.

ŋa^{1}=a^{3} ʝɨn^{3} **hʌn^{3}-m-ɔŋ^{1}** **ʌŋ^{2}-n-ʌŋ^{3}**

1SG=ERG ABIL **believe-NEG-1SG** **AUX-FUT-1SG**

'I will not be able to believe it.' (C63186t)

[88] The expression /ɹum^{3}-tɔŋ^{2}/~/ɹum^{3}-tɔŋ^{3}/ is a euphemism for sexual intercourse. The first element, /ɹum^{3}/ 'together', may be etymologically related to the Rera plural marker /rum^{3}/, which occurs in the personal pronoun paradigm of that Tangsa variety (Goswami 2017:32). The element /ɹum^{3}/ does not seem to occur in isolation in Muklom, hence is glossed as a bound root throughout this dissertation. The nominalised form /ʌ^{0}-ɹum^{3}/ 'together(ness)', however, does constitute a grammatical word; it can stand by itself.

While the negative present is generally expressed simply by a negated main verb, it is possible to add to this an inflected form of the auxiliary /ʌŋ²/. This appears to indicate that the described situation is a state rather than a punctual event. An example of a negated verb with present tense auxiliary is provided in (538).

(538) saʔ⁰ mɔʔ⁰ ʌŋ² a³.
saʔ⁰-m-ɔʔ⁰ **ʌŋ²-a³**
eat.soft-NEG-3 **AUX-3**
'He isn't eating.' (S2.61)

Some Tangsa varieties such as Cholim (Morey 2019b:161) appear to prohibit the combination of a negator and an overt tense marker in the same clause. In these varieties, negative clauses are left unmarked for tense. In other varieties, we do see the two elements co-occur in the same clause. Joglei, for example, exhibits double indexing and uses an auxiliary to carry the past tense marker (Morey 2019b:161), a configuration that is identical with respect to the order of elements to the negative past construction in Muklom. An example from Joglei is provided in (539). The main verb /ka¹/ 'go' is followed by the negator /m-/ and accompanying first plural index /əiʔ/, and the auxiliary /rə/ then carries the past tense marker /-t/ and a second index /-əiʔ/. Joglei does show index allomorphy in its indexing paradigm, but the negative and past tense select the same allomorph of the first plural index.

(539) ni¹ haʔ nokku² nə² **ka¹** **m-əiʔ** **rə-t-əiʔ**.
1EXCL church at **go** **NEG-1PL** **AUX-PST-1PL**
'We did not go to church.' (Morey 2019b:162)[89]

Even though Muklom allows tense and negation to co-occur, the speaker can choose to leave out the tense marker. When tense marking is absent, the clause will receive a past, present, or future tense reading depending on the larger discourse context. For example, in the retelling of a story that took place years ago, a speaker produced the tense-less clause in (540). Because the story is set in the past and past tense markers do occur throughout the discourse, the clause has a past tense meaning. It has yet to be determined whether tense-less clauses have a foregrounding function, or perhaps the opposite, that tense-marked negative clauses place an event in the foreground.

[89] Morpheme boundary indications and glosses have been adapted to fit the conventions used in this dissertation.

(540) lʌm^{2} kɔ^{2} nʌŋ^{3} sɛ^{3} t^{h}u^{3} mi^{1} hun^{3}.

lʌm^{2}-kɔ^{2}=nʌŋ^{3} sɛ^{3}-t^{h}u^{3}-**m**-i^{1} hun^{3}

road-direction=to COS[90]-arrive-**NEG**-1PL truly

'We weren't really going towards the road.' (20151127_01)

An overview of the negative past intransitive verb paradigm, here with overt tense marking, is provided in Table 55, and an overview of the negative future in Table 56. All elements follow the verb stem Σ. In most forms, the negator /-m/ is the first element after the verb stem. The forms in which this is not the case, are the dual and triple forms (see section 6.1.2), which place the dual or triple morpheme between Σ and the negator, as is also the case in the present tense paradigm (see Table 54). All forms contain two indices, except the triple forms, which already incorporated two indices in the present tense, and after addition of the auxiliary which carries the tense marking and an additional index, now contain three person indices.

	SG	**DU**	**TRI**	**PL**
1	Σ$_{1}$-m-ɔŋ^{1} ʌŋ^{2}-t-ʌŋ^{1}	Σ$_{1}$-m-i^{1} ʌŋ^{2}-t-i^{1}		
2	Σ$_{1}$-m-u^{1} ʌŋ^{2}-t-u^{1}	Σ$_{1}$-ʃ-ɨn^{2}-m-ɨn^{1} ʌŋ^{2}-ʃ-ɨn^{2}-t-ɨn^{1}	Σ$_{1}$-tɔm^{2}-m-ɨn^{1} ʌŋ^{2}-tɔm^{2}-t-ɨn^{1}	Σ$_{1}$-m-ɨn^{1} ʌŋ^{2}-t-ɨn^{1}
3	Σ$_{1}$-m-ɔʔ^{0} ʌŋ^{2}-t-a^{1}			

Table 55 - Negative past paradigm.

	SG	**DU**	**TRI**	**PL**
1	Σ$_{1}$-m-ɔŋ^{1} ʌŋ^{2}-n-ʌŋ^{3}	Σ$_{1}$-m-i^{1} ʌŋ^{2}-n-i^{3}		
2	Σ$_{1}$-m-u^{1} ʌŋ^{2}-n-u^{3}	Σ$_{1}$-ʃ-ɨn^{2}-m-ɨn^{1} ʌŋ^{2}-ʃ-ɨn^{2}-n-ɨn^{3}	Σ$_{1}$-tɔm^{2}-m-ɨn^{1} ʌŋ^{2}-tɔm^{2}-n-ɨn^{3}	Σ$_{1}$-m-ɨn^{1} ʌŋ^{2}-n-ɨn^{3}
3	Σ$_{1}$-m-ɔʔ^{0} ʌŋ^{2}-n-a^{3}			

Table 56 - Negative future paradigm.

In Table 55 and Table 56, the dual forms contain two dual markers /-ʃ/, and the trial forms contain two trial markers /-tɔm^{2}/. Speakers can change the structure of these forms. They can choose to use the most complex possible forms, which are provided in these two tables, they can choose to drop one of the two dual or trial markers, or they can drop the auxiliary but maintain the markers that follow it. An example

[90] A reviewer suggested the possibility of a habitual meaning of /sɛ^{3}/ in this clause but based on the larger discourse that this utterance is part of, we must dismiss this idea. The journey that is recounted in the text was a one-off event.

of a full form with two dual markers /-ʃ/ is found in (541), and an example of a full form with two trial markers /-tɔm²/ in (542). These examples are taken from the same elicitation recording and uttered by the same speaker.

(541) nɨm¹ ni³ ɟɨp⁰ ʃɨn² mɨn¹ ʌŋ² ʃɨn² tɨn¹.

nɨm¹-ni³ ɟɨp⁰-**ʃ**-ɨn²-m-ɨn¹ ʌŋ²-**ʃ**-ɨn²-t-ɨn¹

2PL-DU sleep-**DU**-2PL-NEG-2PL AUX-**DU**-2PL-PST-2PL

'You two did not sleep.' (20170224_01)

(542) nɨm¹ tɔm² ɟɨp⁰ tɔm² mɨn¹ ʌŋ² tɔm² tɨn¹.

nɨm¹-tɔm² ɟɨp⁰-**tɔm²**-m-ɨn¹ ʌŋ²-**tɔm²**-t-ɨn¹

2PL-TRI sleep-**TRI**-NEG-2PL AUX-**TRI**-PST-2PL

'The three of you did not sleep.' (20170224_01)

When a speaker drops a dual or trial marker, it can either be the first one, which directly follows the main verb, or the second one, which directly follows the auxiliary. An example of trial marking only on the main verb and not on the auxiliary, is provided in (543). Example (544) shows the mirror image, with a trial marker on the auxiliary, and not one the main verb.

(543) nɨm¹ tɔm² ka¹ tɔm² mɨn¹ ʌŋ² tɨn¹.

nɨm¹-tɔm² ka¹-**tɔm²**-m-ɨn¹ ʌŋ²-t-ɨn¹

2PL-TRI go-**TRI**-NEG-2PL AUX-PST-2PL

'The three of you did not go.' (20170224_01)

(544) nɨm¹ tɔm² ka¹ mɨn¹ ʌŋ² tɔm² tɨn¹.

nɨm¹-tɔm² ka¹-m-ɨn¹ ʌŋ²-**tɔm²**-t-ɨn¹

2PL-TRI go-NEG-2PL AUX-**TRI**-PST-2PL

'The three of you did not go.' (20170224_01)

Elision of the auxiliary with retention of the following markers is illustrated by example (545). When asked to repeat the utterance, the speaker added the auxiliary /ʌŋ²/ again, as shown in (546). Auxiliary elision has so far only been observed in one speaker, so it cannot be determined yet whether this is an idiosyncrasy or a more widespread phenomenon.

(545) nɨm^{1} ni^{3} ka^{1} ʃɨn^{2} mɨn^{1} ʃɨn^{2} tɨn^{1}.

nɨm^{1}-ni^{3} ka^{1}-ʃ-ɨn^{2}-m-ɨn^{1}-ʃ-ɨn^{2}-t-ɨn^{1}

2PL-DU go-DU-2PL-NEG-2PL-DU-2PL-PST-2PL

'The two of you did not go.' (20170224_01)

(546) nɨm^{1} ni^{3} ka^{1} ʃɨn^{2} mɨn^{1} ʌŋ^{2} ʃɨn^{2} tɨn^{1}.

nɨm^{1}-ni^{3} ka^{1}-ʃ-ɨn^{2}-m-ɨn^{1} **ʌŋ^{2}**-ʃ-ɨn^{2}-t-ɨn^{1}

2PL-DU go-DU-2PL-NEG-2PL **AUX**-DU-2PL-PST-2PL

'The two of you did not go.' (20170224_01)

As reported in section 6.1.2, trial verb forms can be replaced by a general second person plural verb form. Some consultants are of the opinion that dual marking, on the other hand, is compulsory. However, speakers have been observed to drop dual marking as well. This also happens in tense-marked negative clauses, which otherwise would carry one or two dual markers. For example, in the past negative clause (547), the referent of the single argument of the clause /nɨm^{1}-ni^{3}/ 'you two' is clearly two in number, as the dual marker /-ni^{3}/ 'two' on the pronoun indicates, yet no dual marker /-ʃ/ appears on the main verb or auxiliary. The same can happen in the negated future, as is illustrated by (548). Perhaps dual marking on the verb is more frequently elided when the S or A argument is overtly marked for number.

(547) nɨm^{1} ni^{3} ʝɨp^{0} mɨn^{1} ʌŋ^{2} tɨn^{1}.

nɨm^{1}-ni^{3} ʝɨp^{0}-m-ɨn^{1} ʌŋ^{2}-t-ɨn^{1}

2PL-DU sleep-NEG-2PL AUX-PST-2PL

'You two did not sleep.' (20170224_01)

(548) nɨm^{1} ni^{3} ka^{1} mɨn^{1} ʌŋ^{2} nɨn^{3}.

nɨm^{1}-ni^{3} ka^{1}-m-ɨn^{1} ʌŋ^{2}-n-ɨn^{3}

2PL-DU go-NEG-2PL AUX-FUT-2PL

'The two of you will not go.' (20170224_01)

Finally, it should be mentioned that the negator plus the third person index, /mɔʔ^{0}/, can function as a main verb in prohibitive clauses, which is discussed in section 6.1.6.3.9.

6.1.5 Negation reversal

The non-marked expression of an affirmative statement is by means of a non-negated clause. However, to emphasise an affirmative statement, speakers may use a marked construction that involves reversal of negation. Negation is reversed by the adding of a sentence-final morpheme /-ɛ³/. The few examples of this morpheme that occur in the corpus all attach the same word class, i.e. verbs, and directly follow the person index, hence it will be considered a suffix for now. This small particle did create a few misunderstandings during my fieldwork. I would sometimes not notice it being there and interpret an utterance as being a negative statement, to later discover the speaker in fact made an affirmative statement. One example of an utterance that caused such confusion is given in (549). First I interpreted the utterance to mean that something was not there, but seeing my reaction, the speaker explained to me that I had misunderstood and that what she said meant that it was available.

(549) ʌ⁰tʰa¹ ʌŋ² mɔʔ⁰ ɛ³.

ʌ⁰-tʰa¹ ʌŋ²-m-ɔʔ⁰-**ɛ³**

NMLZ-EXIST COP-NEG-3-**REV.NEG**

'It is available.' (S3.29)

Two more examples are provided below. The utterances in (550) and (551) are both taken from a narrative by an older lady about a custom that is no longer practiced. When a boy liked a girl, he would sit next to her and secretly tie a coin in the fringe of her scarf. The girl would discover the coin and if she liked him back, she would keep the coin. However, if she did not fancy the boy, she would return the coin to him.

(550) tɨn¹ maʔ⁰ mɔʔ⁰ ʌŋ² a³ ɟɔ³, βe³ tʰʌ⁰βɛl³ ɛʔ⁰ mɔʔ⁰ ɛ³.

tɨn¹ maʔ⁰-m-ɔʔ⁰ ʌŋ²-a³=ɟɔ³ βe³-tʰʌ⁰-βɛl³ ɛʔ⁰-m-ɔʔ⁰-**ɛ³**

heart/liver perish-NEG-3 AUX-3=COND ITER-CAUS-return do-NEG-3-**REV.NEG**

'If she did not love him, she would return it.' (20160107_04)

(551) tɨn¹ mʌt⁰ le¹ ʌŋ² a³ɟɔ³ lɛ³ ʃɨŋ³ ɛʔ⁰ mɔʔ⁰ ɛ³.

tɨn¹-mʌt⁰ le¹-ʌŋ²-a³=ɟɔ³=lɛ³ ʃɨŋ³ ɛʔ⁰-m-ɔʔ⁰-**ɛ³**

heart/liver-perish PRT-COP-3=COND=FOC keep do-NEG-3-**REV.NEG**

'If she loved him, she would keep it.' (20160107_04)

6.1.6 TAM

The morphemes that express tense, aspect, and mood (TAM) in Muklom can be categorised according to two parameters. The first parameter is their position relative to the verb they modify. Some TAM markers precede the verb, but the clear majority follows the verb. The markers can further be categorised based on whether they can carry a person index, the second parameter. Markers that take person indexing are referred to as 'inflecting' TAM markers, and markers that do not take person indexing are 'non-inflecting'. The markers that precede the main verb are always non-inflecting, while those that follow the verb are either inflecting or non-inflecting. There is a correlation between TAM category and inflection: tense markers are mostly inflecting, while less than half of the aspect markers are inflecting, and only one of the mood markers is inflecting.

By taking person indices, we mean that a marker can be followed by a person index, either immediately or with one of the following verbal operators intervening between the marker in question and the index: 1) a tense marker (see section 6.1.6.1), 2) negation (see section 6.1.4), 3) inverse (see section 6.1.2.2.2), 4) cislocative (see section 6.1.3), 5) or the social obligation marker (see section 6.1.6.3.2). Non-inflecting markers, for example progressive /-kʌm^{1}/ (see section 6.1.6.2.5), take neither person indexing nor can they be preceded by the five aforementioned verbal operators.

Inflecting TAM markers combine with the Σ_1 of the verb and never with the nominal stem Σ_2. In other words, they do not nominalize the verb. When verbs show stem alternation (see section 6.1.1.4), we only find Σ_1 allomorphs with inflecting TAM markers, no Σ_2 allomorphs. Non-inflecting TAM markers, however, can combine both with Σ_1 and Σ_2 of the verb. Examples of this will be provided in the relevant sections. No difference in semantics between the verbal and nominal stem in combination with these markers has been determined so far. It is not uncommon in Tibeto-Burman to see nominal elements, in this case nominal verb stems, combine with verbal elements, in this case TAM marking.

Most TAM markers constitute a full syllable, a few do not. It is assumed both types of markers derive from what were once lexical verbs, which grammaticalised into markers of tense, aspect, and mood. They could alternatively be described as auxiliary verbs with TAM senses, but since their morphosyntactic properties are somewhat different from the auxiliary /ʌŋ^{2}/, they will here be treated simply as TAM morphemes that modify the verb.

This section will discuss all tense, aspect, and mood markers observed so far, and indicate for each of them which position they take relative to the verb, and whether they are inflecting or non-inflecting.

6.1.6.1 Tense

The language has a straightforward three-way absolute tense system, consisting of past, present, and future tense, as is shown in Table 57. The past and future are overtly marked, while the present is

unmarked. The future tense is encoded by means of the suffix /-n/, and the past tense has both a short allomorph /-t/, which is the most frequent form, and a long allomorph /-taʔ^{0}/, both suffixes. The long form constitutes a full syllable (see section 3.3.1), the short form constitutes only an onset. All tense markers follow the verb root. The past and future tense markers are counted among the inflecting TAM markers; they always co-occur with an index and take the verbal stem, Σ_1.

SLOT / TENSE	**Σ_1 _ P-N**
present	Ø
past	/-t/~/-taʔ^{0}/
future	/-n/

Table 57 - Tense markers.

Although both are post-verbal, the past and future tense markers do not occupy the same slot in the verb complex: while the past tense marker precedes the inverse and cislocative, the future tense marker follows them, as will be illustrated in section 6.1.6.1.2 and 6.1.6.1.3. This may be due to their path of grammaticalization or to different time-depths of development.

6.1.6.1.1 Present

The present is characterized by the lack of an overt tense marker. An example of a verb in present tense is provided in (552). The verb ‘go’ in this example shows alternation between /ka^{1}/~/ka^{3}/, verbal stems Σ_{1a} and Σ_{1b}, and Σ_2 /kat^{0}/, the nominal stem (see section 6.1.1.4), person indices, like first person /ʌŋ^{3}/, can only combine with verbal stems, which is in this case /ka^{3}/ ‘go’.

(552) ŋa^{1} ka^{3} ʌŋ^{3}.
ŋa^{1} **ka^{3}-ʌŋ^{3}**
1SG **go-1SG**
‘I go.’ (20170224_01)

A verb unmarked for tense can, in combination with negation, also express a future tense irrealis, as illustrated by the following example. All examples from Das Gupta (1980) that are quoted in this dissertation have been converted into IPA script and provided with tone marking. In the current example, Das Gupta’s translation is maintained.

(553) ŋa¹ ka¹ mɔŋ¹ hɛ³.

ŋa¹ **ka¹-m-ɔŋ¹**=hɛ³

1SG **go-NEG-1SG**=DUB

'I may not go (uncertainty).' (Das Gupta 1980:11)

6.1.6.1.2 Past

Past tense is marked by the morpheme /-t/ or its allomorph /-taʔ⁰/. An example of the more frequent, reduced form /-t/ is provided in (554), and an example of the unreduced form /-taʔ⁰/ is provided in (555). The important difference between the two examples is that in (554), the person index immediately follows the past tense marker, while in (555), another verbal operator, here cislocative /-pʰ/, intervenes between the past tense marker and the index.

(554) ŋa¹ ka¹ tʌŋ¹.

ŋa¹ ka¹**-t**-ʌŋ¹

1SG go-**PST**-1SG

'I went.' (20170224_01)

(555) pʰʌŋ³ tʰa² tɕɛŋ³ βa¹ ka¹ taʔ⁰ pʰa³, haʔ⁰ nʌŋ³.

pʰʌŋ³=tʰi³=a³	tɕɛŋ³-βa¹	ka¹-**taʔ⁰**-pʰ-a³	haʔ⁰=nʌŋ³
start=DEF=at	Chengwa	go-**PST**-CIS-3	earth=to

'First, Chengwa came here, to the earth.' (20160106_01)

As a rule, the allomorph /-taʔ⁰/ must be used when another element intervenes between it and the person index. This morpheme is a major syllable, it is tone-bearing. Intervening elements can be the cislocative or the homophonous inverse marker /-pʰ/. Since all indices start with a vowel and both potentially intervening elements consist of a single consonant, we can formulate a phonological rule, in Figure 21, that is able to account for the distribution of the past tense allomorphs.

/-t/ → [-taʔ⁰]/ __C

Figure 21 - Allomorphy of the past tense marker.

This rule, I propose, reflects a diachronic development as well, in the reverse direction. The past tense marker /-t/ once was a full syllable, either /-taʔ⁰/ or a syllable with a different coda, which during the process of grammaticalization underwent phonological reduction and became a unit smaller than a

syllable, i.e. the onset of the following syllable, the person index. The tense marker and person index thus concatenated into a single word, a process which has been reported to have taken place in various TB languages, for example by DeLancey (2010, 2014), who refers to these multi-morphemic elements as 'agreement words'. The allomorph /-taʔ^{0}/ then represents an archaic, less eroded form of the past tense marker which has been retained in contexts where it was not immediately followed by a vowel.

The Muklom past tense marker /-t/~/-taʔ^{0}/ finds cognates in several other Tangsa varieties. In a sample of 22 varieties, Morey (2019b:145) reports that the clear majority exhibits a past tense form that contains or consists of an alveolar plosive, either voiceless /t/ as in Muklom or its voiced counterpart /d/. These past tense markers maybe derive from the PTB form *ta 'put, place' (see Benedict 1972).

6.1.6.1.3 Future

Future tense is expressed by the suffix /-n/, as is illustrated with the verb /ka^{1}/ 'go' in example (556). The future tense marker shows no allomorphy and no other verbal operator can intervene between it and the person index. The index always carries tone 3 (see section 6.1.2). Like the past tense suffix, the future tense suffix is likely to derive from a full syllable that through the process of grammaticalization and accompanying phonological erosion concatenated to the following element, which is always a person index. The past and future tense markers do not occupy the same slot in the verb complex: while the past tense marker precedes the inverse, see example (555) and section 6.1.2.2.2, and cislocative, see section 6.1.3, the future tense marker follows them, as is exemplified in (557), where inverse /-pʰʌ^{0}/ is followed by future tense /-n/.

(556) ŋa^{1} ka^{1} nʌŋ^{3}.
ŋa^{1} ka^{1}**-n-**ʌŋ^{3}
1SG go-**FUT**-1SG
'I will go.' (20170224_01)

(557) nʌŋ^{1} a^{3} ŋa^{1} ɹa^{2} βat^{0} pʰʌ^{0}nu^{3} i^{3}?
nʌŋ^{1}=a^{3} ŋa^{1}=ɹ=a^{2} βat^{0}**-pʰʌ^{0}-n-**u^{3} i^{3}
2SG=ERG 1SG=PROX=ABS hit-**INV-FUT**-2SG Q.AFF
'Are you going to hit me?' (20100124-112656)

Like any inflecting TAM marker, the future and past tense markers can only combine with verbal stems. Hence, examples (554), (555), and (556) each contain a verbal stem, in this case Σ_{1a} /ka^{1}/, of the stem alternating verb /ka^{1}/~/ka^{3}/~/kat^{0}/ 'go'.

The Muklom future tense marker /-n/ does find potential cognates in other Tangsa varieties, but perhaps not as many as with the past tense marker /-t/. Morey (2019b:145) shows that out of his sample of 22 varieties, 3 have a nasal postverbal future tense marker: /ŋ-/ in Mungre, /n-/ in Maitai, and /ma-/ in Rangsi.[91] Several varieties show a preverbal future marker /mV/ (where V can be /a/ /e/ /ə/ or /i/), which might be a cognate form as well, although it should be pointed out that Mungre exhibits both this preverbal /mV/ and a postverbal nasal prefix /ŋ-/ in future tense forms.

6.1.6.2 Aspect

Unlike the two tense markers, all aspectual markers are full syllables and bear tone. An overview of grammatical aspect markers observed so far is presented in Table 58. The position of the markers differs; while three precede the verb, change of state /sɛ^{3}-/, durative /sɛ^{3}-/, and iterative /βe^{3}-/, the remainder follows. In some aspect categories, like change of state (COS), we find a pair of markers, one of which is inflecting, and one of which is non-inflecting. Aspect markers that precede the verb never carry person indexing, and aspect markers that follow the verb either never take indexing or always take indexing, although perfective /tɕʌk^{0}/ forms an exception to this rule, as this marker occasionally appears without person index. Of the markers that follow the verb, all are placed directly after the main verb, except completive /=sɛ^{3}/ which allows other elements to intervene, such as a COS marker, person indexing, and even an inflected auxiliary. This section briefly discusses the meaning and syntactic position of each marker listed in the Table 58, supported by examples in context.

SLOT / ASPECT	_ Σ	Σ _ INDEX	Σ _	Σ (INDEX) _
change of state	/sɛ^{3}-/	/-βan^{3}/		
durative	/sɛ^{3}-/			
iterative	/βe^{3}-/			
continuative		/-βe^{3}/	/-ɹɔʔ^{0}/	
progressive		/-tɕe^{2}/	/-kʌm^{1}/	
perfective		/-tɕʌk^{0}/	/-tɕɔl^{2}/	
prospective			/-te^{2}/	
completive				/=sɛ^{3}/

Table 58 - Aspect markers.

[91] Rangsi is also known under the name Yvngban Wvng.

6.1.6.2.1 Change of state

The first two aspect markers to be discussed are the COS markers. The first marker, /sɛ^{3}-/, precedes the verb and like all preverbal TAM markers, it does not inflect. Example (558) shows a token of COS /sɛ^{3}-/, here preceding main verb /ɟaŋ^{2}/ 'become ripe, become cooked'.

(558) ba^{3} luk^{0} ɔ^{1} tɨl^{2} sɛ^{3} ɟaŋ^{2} a^{3}, hiʔ^{0} tʌŋ^{2} a^{3} tɨl^{2} saʔ^{0} ni^{3}.

ba^{3}luk^{0}ɔ^{1}	tɨl^{2}	**sɛ^{3}**-ɟaŋ^{2}-a^{3}	hiʔ^{0}-tʌŋ^{2}=a^{3}	tɨl^{2}	saʔ^{0}-n-i^{3}
when	rice	**COS**-done-3	1INCL=ERG	rice	eat.soft-FUT-1PL

'When the rice is cooked, we will eat rice.' (20120217_03)

There are two grammatical markers that show homophony with this COS marker: durative /sɛ^{3}-/ (see section 6.1.6.2.2) and completive /=sɛ^{3}/ (see section 6.1.6.2.8). The COS marker can be distinguished from the similarly preverbal durative marker /sɛ^{3}-/ not only by meaning but also by collocation: the durative must be directly preceded by an expression of time, and the COS marker does not. The COS marker can be distinguished from completive /=sɛ^{3}/ by its position relative to the verb: while COS /sɛ^{3}-/ precedes the verb, the completive follows the verb, and the auxiliary, if present. It also follows both the nominal predicate and the auxiliary in nominal clauses (see section 7.1.2). The three markers /sɛ^{3}/, especially COS and completive, may well be related and could have developed from a common source, even though they occupy different syntactic slots.

The COS marker /sɛ^{3}-/ may occur in clauses of all tenses. Example (559) shows /sɛ^{3}-/ occurring in a clause with past tense marker /-t/, and example (560) contains a future tense marker /-n/. Present tense is not overtly marked in the language. Example (561) is a present tense clause that contains a COS marker /sɛ^{3}-/. This utterance is taken from an explanatory myth that accounts for the dispersal of the different groups of people across the land.

(559) t^{h}ʌ^{0}ɟi^{2} sɛ^{3} sʌm^{1} ta^{1}.

t^{h}ʌ^{0}ɟi^{2}	**sɛ^{3}**-sʌm^{1}-t-a^{1}
all	**COS**-know-PST-3

'They had come to know everything.' (20121103_02)

(560) i^{3} nʌp^{0} i^{3} sʌn^{3} nɛʔ^{0} sɛ^{3} tʌ^{0}tɕɔŋ^{3} ni^{3}.

i^{3}-nʌp^{0}	i^{3}-sʌn^{3}-nɛʔ^{0}	**sɛ^{3}**-tʌ^{0}tɕɔŋ^{3}-n-i^{3}
tomorrow	day.after.tomorrow	**COS**-RECIP-meet-FUT-1PL

'We will get to meet soon!' (B1.71)

(561) tʰaŋ³ a³ i² ɹa² sɛ³ ɨm³ tɔŋ² i³.

tʰaŋ³=a³ i²=ɹi³=a² **sɛ³**-ɨm³ tɔŋ²-i³

now=at 1EXCL=PROX=ABS **COS**-disperse dwell-1PL

'Now, we live dispersed.' (20160106_01)

In nominal clauses, the COS marker /sɛ³-/ follows the nominal predicate but precedes the copula /ʌŋ²/, if present (see section 7.1.2 for a discussion of nominal clauses).

The second COS marker, /-βan³/, follows the verb and is an inflecting marker, as can be seen in example (562), where it is followed by the third person index /-a³/. Example (563) further illustrates that it may combine with tense marking, in this case future tense /-n/.

(562) ɛ i² nɔŋ² pe tɕu³ βan³ a³.

ɛ i²- nɔŋ² pe-tɕu³-**βan³**-a³

EXCLAM 1EXCL.POSS drum take[92]-away[93]-**COS**-3

'Hey, they take our drum away!' (20160106_05)

(563) kʌm² lʌm² βan³ ni³ piʔ⁰ ma³.

kʌm²-lʌm²-**βan³**-n-i³ piʔ⁰=ma³

trust-**COS**-FUT-1PL 3SG=DAT

'We will put our trust in him.' (20170122_03)

This aspect marker is different from the other TAM markers in the sense that it is not familiar to all speakers of Muklom. For example, one consultant who grew up in the Changlang Town area does not recognise the word at all. Some other consultants, from the Kharsang Town area, do recognise it but claim that it is not originally a Muklom word. They say the particle would have been borrowed from Chamchang or another Pangwa variety. There is indeed a cognate COS marker in all Pangwa varieties, which is highly frequent (S.D. Morey, p.c.). This marker is described for Cholim in Morey (2011b:682) and for Muishaung in Morey (2018:93). Some native speakers lament the perceived increased use of the element and talk about it in terms of language deterioration. While these expressions of concern might give off the impression that /-βan³/ is a recent loan which has spread rapidly through a subsection of the speaker population, we need to dismiss this idea. Evidence for its presence in the Muklom language has been recorded in Das Gupta (1980), published almost forty years before present. In his

[92] The verb /pe²/~/pe³/ 'take' shows stem alternation. We could not determine which form is used here.
[93] The element /-tɕu³/ 'away' is a bound morpheme, it does not seem to occur in isolation.

brief grammatical sketch of Muklom, Das Gupta provides two (near identical) clauses that contain the COS marker, reproduced in adapted form here in examples (564) and (565).

(564) i^{3} ɹa^{2} pe βan^{3} u^{3}.

i^{3}-ɹi^{3}=a^{2} pe-**βan^{3}**-u^{3}

PROX-PROX=ABS take-**COS**-2SG

'Take this one.' (Das Gupta 1980:7)

(565) i^{3} ɹi^{3} pe βan^{3} u^{3}.

i^{3}-ɹi^{3} pe-**βan^{3}**-u^{3}

PROX-PROX take-**COS**-2SG

'Take this one.' (Das Gupta 1980:7)

In our corpus, the marker shows up most frequently in storytelling, like example (562), and modern songs, like example (563). If it is a loan, the meaning of the marker may have shifted as it was borrowed into Muklom, or semantic bleaching may have taken place at another stage, because its current use is not limited to typical change of state situations. The term /kʌm^{2}-lʌm^{2}/ 'trust' in example (563) expresses a state, but in examples (562), (564), and (565), /-βan^{3}/ combines with a verb that expresses an action rather than a state, /pe/ 'take'.

6.1.6.2.2 Durative aspect

As a durative marker, /sɛ^{3}-/ indicates that an event lasts a certain amount of time. Durative /sɛ^{3}-/ follows an expression of time and precedes the verb. It may occur with or without overt tense marking, as is illustrated by the present tense clause in (566), and the past tense clause in (567). These utterances occurred in natural conversation; they were not elicited. An example of durative aspect with an overt subject, /i^{2}/ 'we (incl)', this time elicited, is provided in (568).

(566) sal^{2} tʌŋ^{2} sɛ^{3} ka^{3} u^{3}.

sal^{2}=tʌŋ^{2} **sɛ^{3}**-ka^{3}-u^{3}

day=whole **DUR**-write-2SG

'You are writing the entire day.' (B1.71)

(567) sal^{2} tʌŋ^{2} sɛ^{3} ka^{3} tu^{3}.

sal^{2}=tʌŋ^{2} **sɛ^{3}**-ka^{3}-t-u^{3}

day=whole **DUR**-write-PST-2SG

'You have been writing the entire day.' (B1.71)

(568) i^{2} a^{3} ʝa^{3} pi^{2} bʌ^{0}li^{3} βaŋ^{3} sɛ^{3} ɹim^{2} i^{3} βʌk^{0} ɹa^{2}.

i^{2}=a^{3} ʝa^{3}-pi^{2} bʌ^{0}li^{3}=βaŋ^{3} **sɛ^{3}**-ɹim^{2}-i^{3} βʌk^{0}=ɹi^{3}=a^{2}

1EXCL=ERG month four=from **DUR**-raise-1PL pig=PROX=ABS

'We have been raising it for four months, this pig.' (B1.132)

The durative aspect marker is homophonous with two other grammatical markers, COS /sɛ^{3}-/ and completive /=sɛ^{3}/, but can be distinguished from them by meaning, collocation, and position relative to the verb (see section 6.1.6.2.1).

6.1.6.2.3 Iterative

The iterative aspect marker /βe^{3}-/ 'again, back' precedes the verb it modifies and expresses a single repetition of an action, as exemplified by (569). Example (570) is a negative clause containing with an iterative marker, and (571), finally, illustrates the use of an iterative marker with an overt subject, here /nɨŋ^{2}/ 'they'.

(569) βe^{3} xiŋ^{3} ti^{1} ʝɔ^{3}.

βe^{3}-xiŋ^{3}-t-i^{1}=ʝɔ^{3}

ITER-walk-PST-1PL=MIT

'We walked again.' (20151127_01)

(570) βe^{3} βʌŋ^{1} mɔʔ^{0}.

βe^{3}-βʌŋ^{1}-m-ɔʔ^{0}

ITER-go.up-NEG-3

'They did not go again.' (542)

(571) e^{2} t^{h}ɔ^{3} nɨŋ^{2} t^{h}a^{2} βe^{3} βɛl^{2} ta^{1}.

e^{2}t^{h}ɔ^{3} nɨŋ^{2}=t^{h}i^{3}=a^{2} **βe^{3}**-βɛl^{2}-t-a^{1}

and 3PL=DEF=ABS **ITER**-return-PST-3

'And they came back again.' (20160106_05)

The form /βe^{3}-/ not only expresses repeated action but has two additional functions. These two functions associate with syntactic slots that are different from the iterative. Firstly, /βe^{3}/ can take the position of a main verb that I translate into English as 'do yet'. This use is restricted to prohibitive clauses (discussed in section 6.1.6.3.9). Secondly, the form /-βe^{3}/ functions as a continuous aspect marker, which follows the verb it modifies (see section 6.1.6.2.4). The semantic distance between the continuative marker and 'do X yet' is very small. The continuative and iterative lie a bit further apart, but it is easy to imagine that all meanings may have developed from a common source. The paths of grammaticalization leading to this endpoint where we have three related words with closely related meanings, yet which fill three different syntactic slots, has not been determined so far.

6.1.6.2.4 Continuative

The continuative markers are similar to the progressive markers in that they express an ongoing action or event, but different in the sense that they focus on the ending of it. That is, they stress that the action or event has not ended yet; it is still ongoing. The first marker is /-βe^{3}/, which I have translated as 'still' in affirmative clauses, such as example (572), and 'yet' in negative clauses, such as example (573). The utterance in (572) is taken from a story about a man who had to pay a fine to his father in law. When the father in law came to collect the fine, the man told him he did not have the full amount to pay him yet; he was still going around trying to borrow money from different people.

(572) ŋɨn^{2} nʌm^{3} ka^{1} βe^{3} p^{h}ʌŋ^{2} ɔ^{2} ta^{3}.

ŋɨŋ^{2} nʌm^{3} ka^{1}-**βe^{3}**-p^{h}-ʌŋ^{2} ɔ^{2}=ta^{3}

money borrow go-**CNT**-INV-1SG EXCLAM=QUOT

''Oh, I am still going around to borrow money for you', he said.' (20151208_05)

(573) kʌp^{0} sʌm^{1} βe^{3} mɔŋ^{1}.

kʌp^{0} sʌm^{1}-**βe^{3}**-m-ɔŋ^{1}

succeed understand-**CNT**-NEG-1SG

'I do not understand it yet.' (S2.43)

The continuative /-βe^{3}/ combines with Σ_1 of the verb, as is exemplified in (572), which contains the verbal stem /ka^{1}/ of the verb /ka^{1}/~/kʌt^{0}/ 'go', and in (573), which contains the verbal stem /sʌm^{1}/ of the alternating verb /sʌm^{1}/~/sʌm^{3}/ 'know, understand'. The other verbal stems that occur in these examples, /nʌm^{3}/ 'borrow' in (572) and /kʌp^{0}/ 'succeed' in (573), are not distinguishable in form from their nominal counterparts, they do not show verb stem alternation.

As with any of the inflecting TAM markers, verbal operators may intervene between the marker in question and the person index. For example, in (572), the inverse marker /-pʰ/ stands between continuative marker /-βe³/ and the first person index /-ʌŋ²/, and in (573), the negator /-m/ stands between /-βe³/ and first person index /-ɔŋ¹/. It is, however, possible to have no intervening operators, as is illustrated by the imperative clause in (574). Again, /-βe³/ is modifying a verb that shows verb alternation, so the Σ_1 allomorph /saʔ⁰/ of the verb /saʔ⁰/~/sʌt⁰/ 'eat soft foods'.

(574) tɨl² βaŋ³ saʔ⁰ βe³ u³.
tɨl²=βaŋ³ saʔ⁰-**βe³**-u³
rice=from eat.soft-**CNT**-2SG
'Continue to eat (your) rice!' (S2.48)

The second continuative marker is the non-inflecting /-ɹɔʔ⁰/. In example (223) it co-occurs with a verbal stem of the verb /ka¹/~/ka³/~/kat⁰/ 'go'.[94] At this time there is no data to confirm whether this marker can combine with the nominal verb stem; all tokens of /-ɹɔʔ⁰/ in the current corpus combine with verbal stems.

(575) e² tʰɔ³ ba³ nɨŋ² ni³ tʰɛ³ ba³ pʌl³ tʌŋ² sal² tʌŋ² ba³ kʰɨt⁰ ka ɹɔʔ⁰
e²tʰɔ³=ba³ nɨŋ²-ni³=tʰi³=ɛ³=ba³ pʌl³=tʌŋ² sal²=tʌŋ²=ba³ kʰɨt⁰ ka-**ɹɔʔ⁰**
and=TOP 3PL-DU=DEF=ERG=TOP night=whole day=whole=TOP dig go-**CNT**

kʰɨt⁰ ka ɹɔʔ⁰.
kʰɨt⁰ ka-**ɹɔʔ⁰**
dig go-**CNT**
'And then the two of them kept on going and digging, all night and all day.' (20151208_05)

6.1.6.2.5 Progressive

The language possesses two progressive aspect markers. The first, /-tɕe²/, combines with the verbal stem of the verb and takes person indexing. This marker is perhaps cognate with the post-verbal future markers /ʃ-/ in Muishaung, /tɕ-/ in Lungkhi, and /c-/ in Yongkuk (Morey 2019b:145), which are all inflecting as well. The inflecting progressive marker of Muklom is illustrated with the verb /saʔ⁰/~/sʌt⁰/ 'eat soft foods' in example (576). The progressive /-tɕe²/ is placed after the verbal stem of the verb, /saʔ⁰/.

[94] In this example, the tone on the verbal stem /ka¹/~/ka³/ is left unmarked, as we have not been able to confirm which allomorph, Σ_{1a} or Σ_{1b}, is used in front of /-ɹɔʔ⁰/.

(576) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} tɕe^{2} ʌŋ^{3}.

ŋa^{1}=a^{3} tɨl^{2} saʔ^{0}-**tɕe^{2}**-ʌŋ^{3}

1SG=ERG rice eat.soft-**PROG**-1SG

'I am eating rice.' (20100124-112046)

The second progressive marker is /-kʌm^{1}/, which does not take person indexing. This marker combines with the nominal stem of the verb, for example /sʌt^{0}/ in (577). At this time there is no data to confirm whether this marker can combine with the verbal stem; all tokens of /-kʌm^{1}/ in the current corpus combine either with Σ_2 allomorph /sʌt^{0}/ 'eat soft foods' or with a verb that does not show stem alternation.

(577) ŋa^{1} a^{3} tɨl^{2} sʌt^{0} kʌm^{1}.

ŋa^{1}=a^{3} tɨl^{2} sʌt^{0}-**kʌm^{1}**

1SG=ERG rice eat.soft-**PROG**

'I am eating rice.' (20161223_02)

Both clauses have a present tense reading. With an inflecting marker like /-tɕe^{2}/, the lack of an overt tense marker indicates present tense, but with a non-inflecting aspect marker like /-kʌm^{1}/, which never combines with overt tense marking, the reading depends on the context. For example, 0(577) has a present tense reading, but (578) illustrates that /-kʌm^{1}/ can be used in a non-present setting as well, in this case the event is marked as taking place in the past by means of the tense marker /-t/ in the main clause.

(578) u^{3} sa^{1} ŋa^{3}tʌŋ^{2} a^{2} sin^{3} kʌm^{1} ɔʔ^{0} ʝe^{3} su^{2} haʔ^{0} βaŋ^{3}

u^{3}-sa^{1}ŋa^{3}=tʌŋ^{2}=a^{2} sin^{3}-**kʌm^{1}**=ɔʔ^{0} ʝe^{3}su^{2} haʔ^{0}=βaŋ^{3}

3SG.POSS-disciple[95]=PL=ABS look.at-**PROG**=at Jesus earth=from

[95] Likely derives from Pali <saṅgha> '(monastic) community', perhaps borrowed into Muklom via Burmese, Shan, or Jinghpaw.

ɹʌŋ^{2} nʌŋ^{3} pʰun^{2} ɟʌm^{2} ɔʔ^{0} tʌ^{0}tun^{3} tɕi^{3} βʌŋ^{1} **t**-a^{1}.

ɹʌŋ^{2}=nʌŋ^{3} pʰun^{2}-ɟʌm^{2}=ɔʔ^{0} tʌ^{0}-tun^{3}-tɕi^{3}-βʌŋ^{1}-**t**-a^{1}

sky=to cloud-company=at INTR-lift.up-away-go.up-**PST**-3

'While his disciples were looking at him, Jesus was lifted from earth into the sky with a cloud.' (C63186t)

6.1.6.2.6 Perfective

The language exhibits two perfective morphemes, one inflecting, and the other non-inflecting. The first, inflecting marker is /-tɕʌk^{0}/. The lexical source of this grammatical marker has not been determined yet. In example (579), the person index /-a^{3}/ immediately follows the perfective marker, but the perfective may also combine with past tense, as in (580), or future tense, as in (581).

(579) kʌ^{0}lɔ^{2} lɔ^{2} tʰun^{3} **tɕʌk^{0}** a^{3}.

kʌ^{0}-lɔ^{2}-lɔ^{2} tʰun^{3}-**tɕʌk^{0}**-a^{3}

PREF-fast-fast finish-**PFV**-3

'She finishes very fast.' (B1.58)

(580) nap^{0} kʰi^{2} bʌŋ^{1} tʰa^{2} duk^{0} tɕʌk^{0} ta^{1}.

nap^{0}-kʰi^{2}-bʌŋ^{1}=tʰi^{3}=a^{2} duk^{0}-**tɕʌk^{0}**-t-a^{1}

wild.banana-tree=DEF=ABS cut-**PFV**-PST-3

'He cut down the wild banana trees.' (20160106_02)

(581) nʌŋ^{1} a^{3} tɕelap^{0} ʃi^{3} tʌ^{0}kʰam^{2} tɕʌk^{0} nu^{3} bɔ^{3}?

nʌŋ^{1}=a^{3} tɕelap^{0}=ʃi^{3} tʌ^{0}-kʰam^{2}-**tɕʌk^{0}**-n-u^{3}=bɔ^{3}

2SG=ERG paper[96]=DIST CAUS-hot-**PFV**-FUT-2SG=Q.PLR

'Will you burn that piece of paper?' (B1.15)

Sometimes, the verb complex in which the perfective is embedded remains uninflected. No semantic difference between inflected and non-inflected /-tɕʌk^{0}/ has been detected yet. An example of /-tɕʌk^{0}/ without any person index or tense marking is provided in (582). The clause is translated as past tense since inflected verbs in the text it was taken from, were marked as past tense.

[96] Indo-Aryan loan.

(582) ŋɨn^{2} tʰa^{2} tʰɔʔ^{0} kaɹi ʃɔ^{3} ʃiŋ tɕʌk^{0}.

nɨŋ^{2}=tʰi^{3}=a^{2}=tʰɔʔ^{0} kaɹi=ʃi^{3}=ɔ^{3} ʃiŋ-**tɕʌk^{0}**

money=DEF=ABS=also car=DIST=at place[97]-**PFV**

'We had also left the money in the car.' (20151127_01)

The second, exclusively non-inflecting perfective marker is /-tɕɔl^{2}/. The lexical source of this grammatical marker might be /tɕɔl^{2}/ 'be easy'. It can combine either with the nominal or the verbal stem of the verb, as becomes clear when /-tɕɔl^{2}/ combines with a verb that exhibits stem alternation, for example the verb /saʔ^{0}/~/sʌt^{0}/ 'eat soft foods' in (583) and (584). The first example contains the Σ_2 allomorph /sʌt^{0}/, and the second contains the Σ_1 allomorph /saʔ^{0}/. Markers like these, which can attach to both verb stems but not to other word categories, will be treated as suffixes and not enclitics throughout this dissertation.

(583) nʌŋ^{1} a^{3} tɨl^{2} sʌt^{0} tɕɔl^{2}.

nʌŋ^{1}=a^{3} tɨl^{2} **sʌt^{0}**-tɕɔl^{2}

2SG=ERG rice **eat.soft**-PFV

'You have eaten rice.' (20100124-112656)

(584) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} tɕɔl^{2} sɛ^{3}.

ŋa^{1}=a^{3} tɨl^{2} **saʔ^{0}**-tɕɔl^{2}=sɛ^{3}

1SG=ERG rice **eat.soft**-PFV=COMP

'I have eaten rice already.' (20100124-112046)

The perfective marker /-tɕɔl^{2}/ is not restricted to verbs relating to consumption of food, like /saʔ^{0}/~/sʌt^{0}/ 'eat soft foods', as is illustrated by example (585), in which /-tɕɔl^{2}/ combines with the verb /tʰɔk^{0}/ 'arrive'.

(585) ɔ^{2} i^{3} nʌŋ^{3} tʰɔk^{0} tɕɔl^{2} bɔ^{3} laŋ^{2}.

ɔ^{2} i^{3}-nʌŋ^{3} tʰɔk^{0}-**tɕɔl^{2}**=bɔ^{3}=laŋ^{2}

EXCLAM PROX-to arrive-**PFV**=indeed[98]=ASS

'Oh, we have arrived here already.' (20151127_01)

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[97] This verb shows stem alternation between /ʃiŋ^{2}/ and /ʃiŋ^{3}/, Σ_1 and Σ_2 respectively. It could not be confirmed which of the two was used in this context.

[98] The element /=bɔ^{3}/ 'indeed' in affirmative clauses may occupy different slots in the clause and there is still some uncertainty as to what its function is, but it seems to be an epistemic or evidential marker of some sort.

6.1.6.2.7 Prospective

The grammatical category prospective is an amalgamation of ingressive aspect and posterior tense; it denotes that an action is about to take place or will take place subsequently. I place the discussion of the prospective under aspect because it not only differs from the tense markers in section 6.1.6.1 in that it intertwines with aspect, but also because the past tense morpheme /-t/ and future tense /-n/ are instances of absolute tense, whereas the prospective involves relative tense.

The prospective marker, /-te^{2}/, is non-inflecting and can combine with either Σ_1 or Σ_2 of the verb, as becomes apparent when it combines with a verb that exhibits stem alternation, for example /saʔ^{0}/~/sʌt^{0}/ 'eat soft foods'. In (586), the prospective combines with the Σ_2 allomorph of this verb, while in (587), we find the Σ_1 allomorph.

(586) ŋa^{1} a^{3} tɨl^{2} sʌt$^{\mathbf{0}}$ te^{2}.

ŋa^{1}=a^{3} tɨl^{2} **sʌt$^{\mathbf{0}}$**-te^{2}

1SG=ERG rice **eat.soft**-PROSP

'I am about to eat rice.' (20100124-112046)

(587) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} te^{2}.

ŋa^{1}=a^{3} tɨl^{2} **saʔ$^{\mathbf{0}}$**-te^{2}

1SG=ERG rice **eat.soft**-PROSP

'I am about to eat rice.' (B1.21)

Prospective /-te^{2}/ may be etymologically connected with a homophonous nominalizer /-te^{2}/ 'PERS' which expresses notions such as 'actor', 'owner', and 'person belonging to a place or group' (see section 4.2.3), which appears to be etymologically related to the word /te^{2}/ 'grandfather'. There are other nominalizers that grammaticalised from kinship terms in Muklom: /βa^{1}/ 'father', /nu^{1}/ 'mother/, and /sa^{1}/ 'child' (see section 4.2.3). Grammaticalization of the word 'grandfather' is also found in the Tangsa variety Muishaung (Morey 2019a:48), where it functions as an agent nominalizer. The words for 'father', 'mother', and 'child' are very widespread nominalizers in the TB area but 'grandfather' is not.

6.1.6.2.8 Completive

The last aspect marker to be discussed is the completive /=sɛ^{3}/, which stands after the main verb, as exemplified by (588), in which the completive morpheme follows the inflected verb /saʔ^{0}-t-ʌŋ^{1}/ 'I ate'. The completive marker is not restricted to past tense clauses; it can also be used in a future tense clause, illustrated in (589), or a present tense or imperative clause, as in (590).

(588) ŋa^{1} a^{3} saʔ^{0} tʌŋ^{1} sɛ^{3}.

ŋa^{1}=a^{3} saʔ^{0}-t-ʌŋ^{1}=**sɛ^{3}**

1SG=ERG eat.soft-PST-1SG=**COMP**

'I have eaten rice already.' (SDM31-2009)

(589) haʔ^{0} sɔŋ^{3} ka^{1} ni^{3} sɛ^{3} ta^{3}.

haʔ^{0}-sɔŋ^{3} ka^{1}-n-i^{3}=**sɛ^{3}**=ta^{3}

society run-FUT-1PL=**COMP**=QUOT

''Let's run a society already' they said.' (20151208_04)

(590) nʌk^{0} ŋɨt^{0} u^{3} sɛ^{3}.

nʌk^{0} ŋɨt^{0}-u^{3}=**sɛ^{3}**

PROH laugh-2SG=**COMP**

'Stop laughing already!' (B1.10)

The verb that completive /=sɛ^{3}/ is an operator of need not necessarily be inflected. Example (591) illustrates that the completive morpheme can follow a non-inflected verb plus perfective marker, /saʔ^{0}-tɕɔl^{2}/ 'have eaten'.

(591) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} tɕɔl^{2} sɛ^{3}.

ŋa^{1}=a^{3} tɨl^{2} saʔ^{0}-tɕɔl^{2}=**sɛ^{3}**

1SG=ERG rice eat.soft-PFV=**COMP**

'I have eaten rice already.' (20100124-112046)

The completive marker can either precede or follow the auxiliary, if present. Example (592) contains a token of /=sɛ^{3}/ standing after both main verb /hʌn^{1}/ 'be many' and auxiliary /ʌŋ^{2}-t-a^{1}/ 'they were'. In example (593), /=sɛ^{3}/ stands after the inflected main verb /nʌn^{3}-m-ɔʔ^{0}/ 'he does not doubt' but before the auxiliary /ʌŋ^{2}-t-a^{1}/ 'he was'.

(592) hi^{1} t^{h}a^{2} hʌn^{1} tɕu^{3} βan^{3} ʌŋ^{2} ta^{1} sɛ^{3}.

hi^{1}=t^{h}i^{3}=a^{2} hʌn^{1}-tɕu^{3}-βan^{3} ʌŋ^{2}-t-a^{1}=**sɛ^{3}**

dog=DEF=ABS be.many-away-COS AUX-PST-3=**COMP**

'The dogs had increased in number.' (20121103_03)

(593) tʰɔmas a³ βe³ nʌn³ mɔʔ⁰ sɛ³ ʌŋ² ta¹.

tʰɔmas=a³ βe³-nʌn³-m-ɔʔ⁰**=sɛ³** ʌŋ²-t-a¹

Thomas=ERG ITER-doubt-NEG-3**=COMP** AUX-PST-3

'Thomas did not doubt him anymore.' (C63186t)

The completive marker /sɛ³/ is relatively flexible in its placement. First, it can follow a verb with person index, as in (588), and a verb without person index, as in (591). Second, it can occur before or after the an auxiliary, as illustrated above in (592) and (593) respectively. Third, it can follow not only verbs, but also the nominalised form of the negative existential /ʌ⁰-huŋ¹/ 'there is/are not', as is illustrated below in (594) or nominalised adjectives such as /ʌ⁰-tɕʌŋ³/ 'enough' in (595). Completive /sɛ³/is an enclitic: it can follow more than one word category but cannot occur in isolation.

(594) miʔ⁰ tɔŋ³ tɕɨŋ¹ tʰa²ʌ⁰huŋ¹ sɛ³.

miʔ⁰ tɔŋ³-tɕɨŋ¹=tʰi³=a² **ʌ⁰-huŋ¹=sɛ³**

person sit-place=DEF=ABS **NMLZ-NEXIST=COMP**

'There is no place for people to sit anymore.' (20160108_07)

(595) ʌ⁰tɕʌŋ³ sɛ³.

ʌ⁰-tɕʌŋ³=sɛ³

NMLZ-enough=COMP

'It is enough.' (20121105_11)

6.1.6.3 Mood

The definitions of tense, aspect, and mood show varying degrees of complexity. While tense can be defined in a simple, straightforward manner, and all forms of aspect fall under the umbrella of a one-sentence definition, though arguably semantically opaquer than the definition of tense, mood is not as easily captured in a one-sentence description that covers all. Firstly, the term mood covers a wide semantic range, causing definitions of mood to be are either negative or disjunctive. For example, Hengeveld (2004:1190) describes mood as something that is not tense, aspect or negation, i.e. a negative definition. Second, there is disagreement among scholars about the scope of mood, for example whether evidentiality subsumed under the M of TAM (see for example Rooryck 2001; Hengeveld 2004) or considered a separate category, the E in TAME (see for example Willett 1988; Aikhenvald 2004). The approach adopted in this chapter is the first: the category mood is taken to encompass a wide variety of modality markers, including evidentiality, and also speech act types or illocutions.

In this section, the following mood categories will be discussed: facultative modality (section 6.1.6.3.1), deontic modality (section 6.1.6.3.2), epistemic modality (sections 6.1.6.3.3 and 6.1.6.3.4), evidential modality (sections 6.1.6.3.5, 6.1.6.3.6, and 6.1.6.3.7), and illocution (sections 6.1.6.3.8, 6.1.6.3.9, 6.1.6.3.10, and 6.1.6.3.11). Most of these are encoded by markers that follow the verb, but the facultative markers and the prohibitive marker precede the verb. One marker is inflecting, deontic /pʰ-/, and the rest are non-inflecting. One mood category, the imperative, is not marked with a special morpheme, but instead takes the regular second person indices or leaves the verb stem uninflected.

MOOD \ SLOT		_ Σ	Σ _ INDEX	Σ _	Σ (INDEX) _
	facultative	/ɟin³/ /mɛ³/			
	deontic	/ɟin³/	/-pʰ/	/-tɕɨŋ¹/	
epistemic	dubitative				/=hɛ³/
	assumptive				/=laŋ²/
evidential	quotative				/=ta³/
	hearsay				/=ti³/
	inferential				/=ɹi³/
illocution	imperative	Ø			
	prohibitive	/nʌk⁰/			
	adhortative				/=tɛ³/
	mitigative				/ɟu²/

Table 59 - Markers of modality and illocution.

6.1.6.3.1 Facultative modality

There are two markers that express facultative modality, and both precede the verb they modify. The first, /ɟɨn³/ 'can, be possible', expresses both extrinsic facultative modality, i.e. the conditions that create the ability or possibility lie outside of the participant that engages in the event, as is illustrated by (596) and (597), an intrinsic innate facultative modality, i.e. the conditions that create the ability or possibility lie within the participant and are innate, as is exemplified by (598). Additionally, the morpheme /ɟɨn³/ may express that the participant has permission to engage in the event. Following Hengeveld (2004:1193-1194) and Hengeveld and Mackenzie (2008:176, 213), the grammatical encoding of obligation and permission to engage in an event are both treated as deontic modality here. The deontic sense of /ɟɨn³/ is discussed in section 6.1.6.3.2.

(596) ŋa^{1} a^{3} ɟɨn^{3} hʌn^{3} mɔŋ^{1} ʌŋ^{2} nʌŋ^{3}.

ŋa^{1}=a^{3} **ɟɨn^{3}** hʌn^{3}-m-ɔŋ^{1} ʌŋ^{2}-n-ʌŋ^{3}

1SG=ERG **ABIL** believe-NEG-1SG AUX-FUT-1SG

'I will not be able to believe it.' (C63186t)

(597) ɟɨn^{3} ʌŋ^{2} a^{3} t^{h}a^{2} tʌ^{0}t^{h}ɨn^{3} a^{3}.

ɟɨn^{3} ʌŋ^{2}-a^{3}=t^{h}i^{3}=a^{2} tʌ^{0}-t^{h}ɨn^{3}-a^{3}

PSSB COP-3=DEF=ABS PREF[99]-think-3

'He thinks it is possible.' (B1.141)

(598) ɟɨn^{3} k^{h}i^{3} mɔŋ^{1}.

ɟɨn^{3} k^{h}i^{3}-m-ɔŋ^{1}

ABIL see-NEG-1SG

'I cannot see (because I am blind).' (B1.71)

The second marker, /mɛ^{3}/ 'can, know how', expresses an acquired ability of a person, i.e. intrinsic non-innate facultative modality. That /ɟɨn^{3}/ expresses innate ability and /mɛ^{3}/ acquired ability is evident from the examples (598) and (599) which both contain the verb /k^{h}i^{3}/ 'see', but with different markers of facultative modality. Seeing is considered an innate capacity; one does not learn to see. Hence, when we talk about the lack of that capacity, we must use the word /ɟɨn^{3}/ as in (598). Consultants consider the term /mɛ^{3}/ semantically infelicitous in this context, as is illustrated by (600). The skill of preparing tea, on the other hand, is an acquired ability. Therefore, the word /mɛ^{3}/ must be used in (599).

(599) p^{h}ʌ^{0}lʌp^{0} mɛ^{3} lɨm^{3} mɔŋ^{3}.

p^{h}ʌ^{0}lʌp^{0} **mɛ^{3}** lɨm^{3}-m-ɔŋ^{1}

tea **ABIL** prepare-NEG-1SG

'I do not know how to make tea.' (B1.71)

[99] This is an instance of the valency-changing prefix /tʌ^{0}-/~/t^{h}ʌ^{0}-/. Because the root /t^{h}ɨn^{3}/ is not found in isolation in the current corpus, it cannot be determined yet in what way the prefix changes valency with this root. Also, it may be the case that this verb and others only occur with the valency-changing prefix.

(600) *mɛ³ kʰɨ³ mɔŋ¹.

***mɛ³** kʰɨ³-m-ɔŋ¹

ABIL see-NEG-1SG

Intended: ‘I cannot see (i.e. I am blind).’ (B1.71)

Both facultative modality markers can additionally function as main verbs, as is illustrated by examples (601) and (602). We know they are main verbs, because: 1) they take person indices and tense marking, and 2) they are the only verb in the clause - no other verbs which they potentially could be modifying are present in the clause.

(601) βa¹ ʃɛ¹ ŋa¹ ɟɨn³ ʌŋ³ ta³.

βa¹-ʃɛ¹ ŋa¹ **ɟɨn³**-ʌŋ³=ta³

person-one 1SG **be.able**-1SG=QUOT

‘One said, ‘I can’.’ (20151208_04)

(602) mɛ³ na³.

mɛ³-n-a³

be.able-FUT-3

‘She will be able to.’ (CTT.lexicon)

6.1.6.3.2 Deontic modality

The language possesses at least three markers that express the notion that a participant is under the obligation or has permission to engage in an event, i.e. deontic modality (see Hengeveld 2004:1193-1194). The first, /ɟɨn³/ ‘be allowed to’, expresses permission to engage in an event, as is exemplified by (603) and (604). This same form also expresses extrinsic facultative modality (see section 6.1.6.3.1). These two senses have in common that they both express conditions that allow the event to take place which lie outside of the participant that engages in the event. With facultative modality, the favourable conditions lie in the circumstances to the event, and with deontic modality, the favourable condition, permission, is provided by a third party.

(603) nʌŋ^{1} a^{3} ŋaʔ^{0} bɨŋ^{2} βaŋ^{3} ɟɨn^{3} lɔt^{0} εʔ^{0} u^{3}.

nʌŋ^{1}=a^{3} ŋaʔ^{0}-bɨŋ^{2}=βaŋ^{3} **ɟɨn^{3}** lɔt^{0} εʔ^{0}-u^{3}

2SG=ERG fish-pit=from **PERMIS** grab do-2SG

'You are allowed to take fish from the pond.' (lit. 'You are allowed to grab from the fish pond.') (B1.162)

(604) nʌŋ^{1} a^{3} k^{h}ʌm^{2} ɟɨn^{3} lɨŋ^{2} mu^{1}.

nʌŋ^{1}=a^{3} k^{h}ʌm^{2} **ɟɨn^{3}** lɨŋ^{2}-m-u^{1}

2SG=ERG alcohol **PERMIS** drink-NEG-1SG

'You are not allowed to drink alcohol.' (B1.162)

The second deontic marker, /-p^{h}/, can be used to express a sense of social obligation or expectation for the participant to engage in the event. It is counted among the inflecting TAM markers and seems to occur solely with first person indices. This marker is homophonous with the inverse (see section 6.1.2.2.2) and cislocative (see section 6.1.3), and all three functions share the same slot in the verb complex. It has not been determined yet whether the three derive from a common source. There are only a few examples of this marker in the corpus. One of these, which I heard being uttered regularly while staying at the house of my main host family, is provided in (605). The example was uttered by a girl who was leaving the house to go to school in the morning. As she rode her bike towards the gate, she called out to her grandmother who was somewhere in the house, not visible to her, informing her that she was leaving. The social obligation lies in that she is expected to arrive at school on time. Another example of deontic /-p^{h}/ is found in (606), which contains the allomorph /-p^{h}ʌ^{0}/ that occurs whenever the future tense marker /-n/ follows, just as is the case with the inverse and cislocative. The example was uttered by one of my hosts when I was about to wash the dishes after a shared meal. She protested and tried to make clear that I, being a guest, should not be doing any chores. Cleaning up after the meal is considered the duty of the host. Both utterances appear to involve consideration of the addressee, which is perhaps the intermediary sense through which an inverse marker, which signals the presence of an SAP non-agent argument, could have developed into a marker of obligation, first obligation towards the addressee, and then extending toward a more general social obligation.

(605) ŋa^{1} ka^{1} p^{h}ʌŋ^{2}.

ŋa^{1} ka^{1}-**p^{h}**-ʌŋ^{2}

1SG go-**OBL**-1SG

'I must go!' (S3.38)

(606) ŋa^{1} a^{3} tɛɔ^{3} p^{h}ʌ^{0}nʌŋ^{2}.

ŋa^{1}=a^{3} tɛɔ^{3}-**p^{h}ʌ^{0}**-n-ʌŋ^{3}

1SG=ERG wash.dishes-**OBL**-FUT-1SG

'I must go wash the dishes!' (S1.78)

In his short description of Muklom, Das Gupta (1980) includes two examples of /-p^{h}/ expressing deontic meaning, which are reproduced with new glosses[100] in (607) and (608). Das Gupta also contains two clauses with /-p^{h}/ which are different from other tokens in that they do not appear to express deontic meaning, nor cislocative or inverse. Unfortunately, they were presented with limited contextualizing information. The clauses are listed below in (609) and (610), maintaining the original translation. The first could potentially be deontic if the speaker intended to express that they were supposed to shoot the ball due to a rule of the game, or because they are expected to do so for some other reason. However, the second example is harder to link to deontic meaning, since listening to a song on the radio is much less likely to be an obligatory action. Perhaps these two instances of /-p^{h}/ express that the actor is doing something for their own benefit. It is not unimaginable that such a first person beneficiary sense, 'for myself', developed from the inverse function of /-p^{h}/, or even the cislocative function. The translation that Das Gupta provides along with the two clauses may alternatively suggest an inchoative or prospective meaning. Based on current data, it cannot be determined yet whether /-p^{h}/ has, or had, indeed the additional senses that I suggested here.

(607) ŋa^{1} a^{3} bʌŋ^{1} ɹi^{3} duk^{0} p^{h}ʌŋ^{2}.

ŋa^{1}=a^{3} bʌŋ^{1}=ɹi^{3} duk^{0}-**p^{h}**-ʌŋ^{2}

1SG=ERG tree=PROX cut-**OBL**-1SG

'I must cut this tree.' (Das Gupta 1980:11)

(608) i^{2} a^{3} bʌŋ^{1} ɹi^{3} duk^{0} p^{h}i^{3}.

i^{2}=a^{3} bʌŋ^{1}=ɹi^{3} duk^{0}-**p^{h}**-i^{3}

1EXCL=ERG tree=PROX cut-**OBL**-1PL

'We (excl) must cut this tree.' (Das Gupta 1980:12)

[100] The transcription and translation have also been adapted.

(609) ŋa^{1} a^{3} bɔl^{3} hap^{0} p^{h}ʌŋ^{2}.

ŋa^{1}=a^{3} bɔl^{3} hap^{0}**-p^{h}-**ʌŋ^{2}

1SG=ERG ball shoot-**?**-1SG

'I shall play the ball just now.' (Das Gupta 1980:10)

(610) ŋa^{1} a^{3} ɹadiɔ se^{3} tat^{0} p^{h}ʌŋ^{2}.

ŋa^{1}=a^{3} ɹadiɔ-se^{3} tat^{0}**-p^{h}-**ʌŋ^{2}

1SG=ERG radio-song listen-**?**-1SG

'I am just going to listen to radio.' (Das Gupta 1980:10)

The third deontic marker is /-tɕɨŋ^{1}/ 'must'. Unlike /-p^{h}/, this marker is non-inflecting. Its meaning is also slightly different. The type of obligation that is expressed by /-tɕɨŋ^{1}/ does not derive from social expectations, but rather an obligation that arises from particular circumstances. An example is provided in (611). A man is giving two orphans instructions that will prevent them from losing their lives in an upcoming disaster. Deontic /-tɕɨŋ^{1}/ can occur with all (implied) agents: first person, as exemplified in (612), second person, as already shown by (611), and third person, in (613). In example (612), the speaker is about to tell a story and is asking the interlocutor from which point he should start the story. Example (613) is taken from a narrative in which the tiger is nominated to become the king of all creatures.

(611) βɔ^{1} xɨt^{0} ʌŋ^{2} a^{3} ʝɔ^{3}, t^{h}al^{2} nʌŋ^{3} kat^{0} tɕɨŋ^{1} ta^{3}.

βɔ^{1}-xɨt^{0} ʌŋ^{2}-a^{3}=ʝɔ^{3} t^{h}al^{2}=nʌŋ^{3} kat^{0}**-tɕɨŋ^{1}**=ta^{3}

type.of.bird COP-3=COND surface=to go-**OBL**=QUOT

''When the Qhit bird is there, you must come to the surface' he said.' (20160106_01)

(612) ʝi^{2} βaŋ^{3} ʃa^{2} bat^{0} tɕɨŋ^{1} i^{3}, t^{h}aŋ^{3} a^{3}?

ʝi^{2}=βaŋ^{3}=ʃi^{3}=a^{2} bat^{0}**-tɕɨŋ^{1}** i^{3} t^{h}aŋ^{3}=a^{3}

after=from=DIST=ABS say-**OBL** Q.AFF now=at

'Do I now have to say what comes after?' (20151208_02)

(613) i³ ɹa² ɹaja ʌŋ² tɕɨŋ¹.

i³-ɹi³=a² ɹaja ʌŋ²-**tɕɨŋ¹**

PROX-PROX=ABS king[101] COP-**OBL**

'This one must be king.' (20151208_03)

6.1.6.3.3 Dubitative epistemic modality

Doubt about a proposition can be expressed by means of the dubitative epistemic morpheme /=hɛ³/, which follows the verb and person index, as illustrated by example (614). This utterance is taken from a storytelling session in which a woman recounts the story of how she and her husband once got lost in the jungle. The dubitative indicates that the speaker is not fully sure how long they had been rambling through the jungle already.

(614) kɔnta ni³ tan³ sɛ³ tɕuŋ¹ ti¹ hɛ³ ɔ³.

kɔnta-ni³=tan³ sɛ³-tɕuŋ¹-t-i¹=**hɛ³** ɔ³

hour[102]-two=as.much.as DUR-be.lost-PST-1PL=**DUB** EXCLAM

'We were maybe lost for two hours already.' (20151127_01)

If the auxiliary /ʌŋ²/ is present in the clause, dubitative /=hɛ³/ will be placed after it, as shown in example (615). This utterance is taken from a storytelling session in which an older woman tells the mythical story of two orphan siblings and the granddaughter of the older woman asks her questions about the story. The older woman had just said that a bird instructed the orphans to sleep together, as they were the only two survivors of a disaster and the land needed to be repopulated. The granddaughter then asks, in (615), whether they had not been sleeping together already before the bird instructed them so. The dubitative and inferential markers indicate that the granddaughter already infers they maybe did not sleep together before. Otherwise, why would the bird still need tell them to do so?

(615) nɨŋ² ni³ ʃi³ ɹum³ tɔŋ² mɔʔ⁰ ʌŋ² ta¹ hɛ³ ɹi³?

nɨŋ²-ni³=ʃi³ ɹum³-tɔŋ²-m-ɔʔ⁰ ʌŋ²-t-a¹=**hɛ³**=ɹi³

2PL-DU=DIST together-sit[103]-NEG-3 AUX-PST-3=**DUB**=INFER

'So maybe they did not sleep together?' (541)

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[101] Indo-Aryan loan.
[102] Indo-Aryan loan.
[103] See footnote 88.

In the corpus, this marker occurs in verbal clauses after verbs that carry person indexing, and in nominal clauses after the nominal predicates. The dubitative marker /=hɛ^{3}/ is an enclitic: it can stand after different word categories but cannot occur in isolation. It has not been determined yet whether the marker can occur after uninflected verbs in verbal clauses as well.

By using /=hɛ^{3}/, the speaker indicates that they doubt their own knowledge. This knowledge can derive from different sources. The speaker doubts the accuracy of their own recalling of an event, i.e. first-hand information, as in (614). Or the speaker may doubt the reliability of reported information or their interpretation of it, i.e. second-hand information, as in (615).

6.1.6.3.4 Assumptive epistemic modality

The speaker may indicate that a proposition is a matter of course by adding the morpheme /=laŋ^{2}/. One consultant indicates that this epistemic marker is more widely used in the Kharsang Town area than in the Changlang Town area. The marker may combine with an inflected verb, with a non-inflected verb, or following a nominal predicate in a nominal clause (see also section 7.1.2). Example (616), shows the marker in combination with a verb that carries negation and a third person index. In example (617), the marker co-occurs with a non-inflecting TAM morpheme, /-tɕɔl^{2}/. Another particle, /=bɔ^{3}/ 'indeed' stands in between this morpheme and the assumptive marker. There is still some uncertainty as to what the function of this /=bɔ^{3}/ is, but it appears to be an epistemic or evidential marker of some sort. This utterance is taken from the story about the couple that got lost in the jungle. At this moment in the narrative they realize they have arrived at a familiar place.

(616) ɹaʔ^{0} mɔʔ^{0} laŋ^{2}.
ɹaʔ^{0}-m-ɔʔ^{0}**=laŋ^{2}**
speak-NEG-3=**ASS**
'Of course, it does not speak.' (S2.19)

(617) ɔ i^{3} nʌŋ^{3} tʰɔk^{0} tɕɔl^{2} bɔ^{3} laŋ^{2}.

ɔ	i^{3}-nʌŋ^{3}	tʰɔk^{0}-tɕɔl^{2}=bɔ^{3}**=laŋ^{2}**
EXCLAM	PROX-to	arrive-PFV=indeed=**ASS**

'Oh, of course we have arrived here already.' (20151127_01)

When an auxiliary or copula is present in the clause, /=laŋ^{2}/ will be placed after it, as illustrated by example (618), which contains two copulas, the change of state copula /ti^{3}/~/tɨk^{0}/ and the stative copula /ʌŋ^{2}/.

(618) i^{2} ni^{3} lɛ^{3} tɕuŋ^{1} tɨk^{0} bɔ^{3} ʌŋ^{2} i^{3} laŋ^{2}.

i^{2}-ni^{3}=lɛ^{3} tɕuŋ^{1} tɨk^{0}=bɔ^{3} ʌŋ^{2}-i^{3}**=laŋ^{2}**

1EXCL-DU=FOC wandering COS.COP=indeed COP-1PL**=ASS**

'We must indeed be lost.' (20151127_01)

6.1.6.3.5 Quotative evidential modality

The language has two reportative markers, a quotative and a hearsay marker. The quotative marker /=ta^{3}/ marks direct quotation, i.e. quotes in which the pronouns and person indices do not reorient. The marker /=ta^{3}/ is always placed directly after the quoted utterance, as illustrated by (619).

(619) βɔ^{1} xɨt^{0} ʌŋ^{2} a^{3} ɟɔ^{3} t^{h}al^{2} nʌŋ^{3} kat^{0} tɕɨŋ^{1} ta^{3}.

βɔ^{1}-xɨt^{0} ʌŋ^{2}-a^{3}=ɟɔ^{3} t^{h}al^{2}=nʌŋ^{3} kat^{0}-tɕɨŋ^{1}**=ta^{3}**

type.of.bird COP-3=COND front.yard=to go-OBL**=QUOT**

''When the Qhit bird is there, you must go outside' he said.' (20160106_01)

The quotative marker /=ta^{3}/ is a clitic and not a verb and differs from verbs for speaking such as /bat^{0}/ 'say' and /ɹaʔ^{0}/ 'speak' in that it cannot carry person indices, negation or other verbal markers. Direct quotation will be discussed in more detail in section 7.1.4.

6.1.6.3.6 Hearsay evidential modality

The second reportative marker, /=ti^{3}/, indicates that the speaker has obtained the information from another person, who may be the original source, but the original speech is not as important to flag, or that they may have heard it from yet another person. The hearsay morpheme occurs frequently in narratives, for example oral histories that have been passed on from generation to generation. The utterance in (620) is taken from such a story.

(620) miʔ^{0} ɟʌm^{2} ɔʔ^{0} hi^{1} t^{h}a^{2} kɔʔ^{0} ta^{1} ti^{3}.

miʔ^{0}-ɟʌm^{2}=ɔʔ^{0} hi^{1}=t^{h}i^{3}=a^{2} kɔʔ^{0}-t-a^{1}**=ti^{3}**

person-company=at dog=DEF=ABS give-PST-3**=HS**

'He (a god) gave the dog to the humans, they say.' (20121103_03)

6.1.6.3.7 Inferential evidential modality

The marker /=ɹi^{3}/ indicates that the speaker is basing a statement on inference, either through the observation of the result of an event or through hearsay report. An example of inference from hearsay is provided in (621), taken from a narrative about a time far in the past during which not only humans,

but also animals and supposedly everything else except water and stone were able to speak and they all shared the same language.

(621) bʌŋ^{1} ʃa^{2} t^{h}ɔʔ^{0} βan^{2} ʌŋ^{2} ta^{1} ti^{3} ɹi^{3}.

bʌŋ^{1}=ʃi^{3}=a^{2}=t^{h}ɔʔ^{0} βan^{2} ʌŋ^{2}-t-a^{1}=ti^{3}**=ɹi^{3}**

tree=DIST=ABS=also speak AUX-PST-3=HS**=INFER**

'The trees also spoke.' (20160108_07)

In example (622), a speaker notices an object lying on the floor where it should not be and infers that it may have fallen down.

(622) u^{0}xʌt^{0} ʌŋ^{2} ta^{1} hɛ^{3} ɹi^{3}.

u^{0}-xʌt^{0} ʌŋ^{2}-t-a^{1}=hɛ^{3}**=ɹi^{3}**

NMLZ-fall COP-PST-3=DUB**=INFER**

'Maybe it has fallen.' (S1.62)

Sometimes it may be difficult to distinguish between inference based on observation of a resultative state and inference based on hearsay, as is exemplified by (623). This example is taken from a story that explains how human beings obtained fire. The story tells us that the tiger had fire, and that humankind through cunning obtained fire from the tiger, but it does not tell us how the tiger obtained the fire in the first place. When the narrator utters example (623), he is inferring that the tiger must have gotten the fire from somewhere else before the start of the story.

(623) ʃaʔ^{0} t^{h}ɛ^{3} ba^{3} βʌl^{1} t^{h}a^{2} kʌp^{0} ta^{1} ɹi^{3}.

ʃaʔ^{0}=t^{h}i^{3}=ɛ^{3}=ba^{3} βʌl^{1}=t^{h}i^{3}=a^{2} kʌp^{0}-t-a^{1}**=ɹi^{3}**

tiger=DEF=ERG=TOP fire=DEF=ABS obtain-PST-3**=INFER**

'The tiger must have obtained the fire.' (20151208_03)

6.1.6.3.8 Imperative and hortative illocution

Imperative and hortative forms of the verb do not differ from declarative forms. Also, imperative, hortative and declarative speech acts all do not require an illocution marker. Person indices of the imperatives are identical to second person present tense declarative verb forms and hortatives are identical first person plural present tense declarative verb form (see section 6.1.2). Like inflected declarative forms, the imperative and hortative take the verbal stem Σ_1, as is illustrated with the verb /βʌŋ^{1}/~/βʌŋ^{3}/ 'go up' in imperative clause (624) and hortative clause (625).

(624) i^{2} hɨm^{2} ʃɔʔ^{0} sin βʌŋ^{1} u^{3}.

i^{2} hɨm^{2}=ʃi^{3}=ɔʔ^{0} sin **βʌŋ^{1}-u^{3}**

1EXCL.POSS house=DIST=at look.at **go.up-2SG**

'Go have a look in our house!' (20161223_01)

(625) i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} ɟu^{3} i^{3} ta^{3}.

i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} **ɟu^{3}**-i^{3}=ta^{3}

PROX-PROX direction=to **go.down-1PL**=QUOT

''Let us go down this way' he said.' (20151127_01)

An overview of forms is provided in Table 60. Similar to prohibitives (see section 6.1.6.3.9), imperative utterances can only be directed at addressees.

	1PL	**2SG**	**2DU**	**2TRI**	**2PL**
HORT	Σ$_{1}$-i^{3}				
IMP		Σ$_{1}$-u^{3}	Σ$_{1}$-ʃ-ɨn^{2}	Σ$_{1}$-tɔm^{2}-ɨn^{2}	Σ$_{1}$-ɨn^{2}

Table 60 - Imperative and hortative forms of the verb.

The inverse marker /-p^{h}/ can occur in imperative speech acts, as illustrated by example (626), and so can the homophonous cislocative marker, as is shown by example (627).

(626) tɨl^{2} βe^{3} kɔʔ^{0} p^{h}u^{3}.

tɨl^{2} βe^{3}-kɔʔ^{0}**-p^{h}**-u^{3}

rice ITER-give-**INV**-2SG

'Give me more rice!' (20121105_11)

(627) βʌl^{1} kaŋ^{2} na^{3} tɔŋ ka^{1} p^{h}u^{3}.

βʌl^{1}-kaŋ^{2}=na^{3} tɔŋ ka^{1}**-p^{h}**-u^{3}

fire-edge=in sit go-**CIS**-2SG

'Come sit next to the fire!' (S1.77)

The imperative can be softened by means of the clause-final mitigative particle /ɟu^{2}/ (see section 6.1.6.3.11).

6.1.6.3.9 Prohibitive illocution

Negative commands are marked by a preverbal morpheme /nʌk⁰/, which finds cognates in various Tangsa varieties and beyond. Morey (2019b:170) lists ten contemporary Tangsa varieties that exhibit cognate prohibitive markers, all of which are preverbal: /nak/, /naʔ/, or /noʔ/. The language varieties Hakhun and Phong, which are considered Tangsa or Nocte depending on where the speakers live, also exhibit a cognate preverbal prohibitive: /nɤʔ/ in Hakhun (see Boro 2017:493), and /nak/ in Phong (see Dutta 2016). Nocte (Rahman, 2016:84) similarly uses preverbal /nak/. This marker probably has developed from another source than the reconstructed PTB prohibitive marker *ta, which also preceded the verb (see Benedict 1972:97), thus differentiating these Northern-Naga languages from the Boro-Garo languages, which do exhibit reflexes of PTB *ta.

In prohibitive clauses in Muklom, the speaker can chose whether they include a person index, making the command sound more polite, as in (628), or omit the index, resulting in a more direct command, as in (629). Optional indexing of prohibitive forms has also been reported for a related language variety, Hakhun, in Boro (2017:494). The prohibitive can also be softened by means of the mitigative particle /ɟu²/ (see section 1.1.6.3.11).

(628) nʌk⁰ ɹɔ² ɹak⁰ ɨn².
nʌk⁰ ɹɔ²ɹak⁰-**ɨn²**
PROH play-**2PL**
'Don't play!' (S1.53)

(629) nʌk⁰ ɹɔ² ɹak⁰.
nʌk⁰ ɹɔ²ɹak⁰
PROH play
'Don't play!' (S1.53)

The person indices of the prohibitive paradigm, when present, are identical to the declarative and imperative (see Table 60) second person forms. Table 61 gives an overview of attested prohibitive forms. The use of the prohibitive marker is restricted to commands aimed at an addressee, it is not used with first or third persons. The trial form, indicated with an asterisk, is not found in the current corpus.

	SG	**DU**	**TRI**	**PL**
polite	nʌk⁰ Σ_1-u³	nʌk⁰ Σ_1-ʃ-ɨn²	*nʌk⁰ Σ_1-tɔm²-ɨn²	nʌk⁰ Σ_1-ɨn²
direct	nʌk⁰ Σ_1			

Table 61 - Prohibitive forms of the verb.

As indicated in Table 61, the prohibitive combines with Σ_1, and it does so regardless of the presence or absence of a person index. For example, in (630) we observe the form /ka^3/, of the two Σ_1 allomorphs of the verb /ka^1/~/ka^3/~/kat^0/ 'go' and in (631) the Σ_1 allomorph /saʔ^0/ of the verb /saʔ^0/~/sʌt^0/ 'eat soft foods'. The verbs in these two clauses both carry a second person index /-u^3/. But also, the prohibitive clause in (632), which lacks a person index, contains a Σ_1 allomorph, in this case of the verb /tɕu^3/~/tɕuk^0/ 'request, beg'.

(630) nʌk^0 ka^3 u^3.
nʌk^0 ka^3-u^3
PROH go-2SG
'Don't go!' (20151020_01)

(631) nʌk^0 saʔ^0 u^3.
nʌk^0 saʔ^0-u^3
PROH eat.soft-2SG
'Don't eat!' (20151020_01)

(632) nʌk^0 tɕu^3.
nʌk^0 tɕu^3
PROH beg
'Don't beg!' (B1.71)

The prohibitive morpheme has not been observed to combine with TAM markers, but the inverse marker /-p^h/ can co-occur with the prohibitive marker /nʌk^0/, as is illustrated by (633), and so can the homophonous cislocative marker /p^h-/, as is shown in example (634).

(633) nʌk^0 tɕɔ^2 p^{h}u^3.
nʌk^0 tɕɔ^2-**p^h**-u^3
PROH fear-**INV**-2SG
'Don't be afraid of me!' (S1.54)

(634) i³ nʌp⁰ a³ nʌk⁰ ka³ pʰu³ ta³.

i³-nʌp⁰=a³ **nʌk⁰** ka³-**pʰ**-u³=ta³

tomorrow=at **PROH** go-**CIS**-2SG=QUOT

‘‘Don’t come tomorrow!’ she said.’ (20160106_04)

A remarkable feature of prohibitive illocutions is that they allow the continuative aspect marker /-βe³/ (see section 6.1.6.2.4) to be used as a verb, which I gloss as ‘do yet’. This verb occurs exclusively in prohibitive clauses. We can tell that /βe³/ is functioning as a main verb in this configuration, because 1) it can take person indexing, 2) it can be modified by a prohibitive marker. Two examples of /βe³/ ‘do yet’ in prohibitive clauses are provided in (635) and (636). In the first, the speaker is an interviewer who tries to tell the interviewee not to start talking yet. He uses the respectful addressing phrase /i³-pʰɔ¹/ ‘my older brother’ and places a person index, /-u³/, after the verb, thus creating a politer command. The short command in example (636) is a versatile expression that is commonly used to stop people from initiating a certain action. Indexation is omitted, resulting in a more forceful command.

(635) ɟɔ³ i³ pʰɔ¹ nʌk⁰ βe³ u³.

ɟɔ³ i³-pʰɔ¹ **nʌk⁰** **βe³**-u³

MIT 1SG.POSS-older.brother **PROH** **do.yet**-2SG

‘My brother, please, not yet!’ (20160106_04)

(636) nʌk⁰ βe³.

nʌk⁰ **βe³**

PROH **do.yet**

‘Not yet!’ (20100124-095559)

Another feature that stands out is that prohibitive illocutions allow the negator plus third person index /-m-ɔʔ⁰/ (section 6.1.4) to be used as a main verb, which I translate as ‘say no, contradict’. This verb occurs exclusively in prohibitive clauses. We can tell that /mɔʔ⁰/ is functioning as a main verb in this configuration, because 1) it can take person indexing, 2) it can be modified by a prohibitive marker. An example of /mɔʔ⁰/ ‘say no’ in a prohibitive clause is provided in (637). This example was uttered by a sister who was scolding her younger brother for contradicting her.

(637) nʌk^{0} mɔʔ^{0} u^{3}!

nʌk^{0} **mɔʔ^{0}**-u^{3}

PROH **say.nay**-2SG

‘Stop saying ‘no’!’ (S3.12)

6.1.6.3.10 Adhortative illocution

An adhortative speech act encourages an addressee to realise the proposition. Muklom uses the postverbal morpheme /-tɛ^{3}/ to signal adhortative illocution. The morpheme combines with second person forms of the verb, it cannot be used with first or third persons. An example with a singular addressee is provided in (638), two addressees in (639), and a group of addressees in (640). The current annotated corpus does not contain an example of a hortative marker with a trial verb form.

(638) tɔŋ^{2} u^{3} tɛ^{3}.

tɔŋ^{2}-u^{3}-**tɛ^{3}**

sit-2SG-**HORT**

‘Do sit down!’ (20121103_04_SM_T)

(639) e^{2} t^{h}i^{3} pɨt^{0} ʃɨn^{2} p^{h}ɨn^{2} tɛ^{3}.

e^{2}-t^{h}i^{3} pɨt^{0}-ʃ-ɨn^{2}-p^{h}-ɨn^{2}-**tɛ^{3}**

NPROX-DEF ask-DU-2PL-INV-2PL-**HORT**

‘You two, do go ahead and ask us this.’ (541)

(640) tɔŋ^{2} ɨn^{2} tɛ^{3}.

tɔŋ^{2}-ɨn^{2}-**tɛ^{3}**

sit-2PL-**HORT**

‘Do sit down!’ (S1.56)

6.1.6.3.11 Mitigative illocution

The mitigative morpheme /ʝu^{2}/ can be used to make a command sound more polite, such as the imperative in (641) and the probative in (642), but can also be used with statements, as in (643). It has not been observed to occur with adhortatives. The latter example is taken from a story in which a woman gets pregnant but carries her offspring in a rather unusual part of the body, namely in the calf of her leg. Perhaps the mitigative is used here to politely draw the listener’s attention to an event that is crucial in the continuation of the plot of a story.

(641) ɹʌŋ^{2} sɔŋ^{2} ti^{3} nu^{3} ɟɔ^{3}, ŋa^{1} ma^{3} bat^{0} ɛʔ^{0} pʰu^{3} ɟu^{2}.

ɹʌŋ^{2}-sɔŋ^{2}	ti^{3}-n-u^{3}=ɟɔ^{3}	ŋa^{1}=ma^{3}	bat^{0}	ɛʔ^{0}-pʰ-u^{3}	**ɟu^{2}**
sky-cold	COS.COP-FUT-2SG=COND	1SG=DAT	tell	do-INV-2SG	**MIT**

'If you get cold, please tell me.' (S1.70)

(642) i^{3} pʰʌk^{0} sʌt^{0} nʌk^{0} huʔ^{0} ka ɟu^{2}.

i^{3}-pʰʌk^{0}-sʌt^{0}	nʌk^{0}	huʔ^{0}	ka	**ɟu^{2}**
1SG.POSS-food.hard-food.soft	PROH	steal	go	**MIT**

'Please don't steal my food.' (B1.11)

(643) u^{3} sa^{1} hɔl^{3} ta^{1} ɟu^{2}.

u^{3}-sa^{1}	hɔl^{3}-t-a^{1}	**ɟu^{2}**
3SG.POSS-child	carry-PST-3	**MIT**

'She was pregnant, you see.' (20160106_01.ed)

6.1.7 Valency-affecting prefix

Muklom exhibits a valency-affecting prefix /tʌ^{0}-/~/tʰʌ^{0}-/. The allomorph /tʌ^{0}-/ is used when the verb root starts with a voiceless consonant, and its aspirated counterpart /tʰʌ^{0}-/ when the onset of the verb root is a voiced consonant (see section 3.4.2.1). This prefix always combines with Σ_2, the 'nominal' stem, (see section 6.1.1.4), as becomes evident from its co-occurrence with stem-alternating verbs: the valency-affecting prefix must combine with the Σ_2 allomorph of an alternating verb. For example, /mɔ^{2}/~/mɔt^{0}/ 'shake (intr)' → /tʰʌ^{0}-mɔt^{0}/ 'shake (caus)', /ɹʌn^{1}/~/ɹʌn^{3}/ 'tear, rip' → /tʰʌ^{0}-ɹʌn^{3}/ 'be torn', and /xɔŋ^{1}/~/xɔŋ^{3}/ 'come up' → /tʌ^{0}-xɔŋ^{3}/ 'bring up'. This could suggest that, originally, the prefix functioned as a nominaliser. Synchronically, however, verbs that carry a valency-changing prefix can potentially take all verbal markers, both inflecting and non-inflecting (see section 6.1.6).

The prefix can either increase the valency of a verb, acting as a causative, or decrease the valency, acting as a reciprocal or detransitivizing marker. While Muklom uses a single prefix to express these three notions, which are semantically diverse, but all relate to valency, two other Tangsa varieties have been reported to use two or three different prefixes to cover a similar range of functions. Cholim has two markers: a causative prefix /tă-/, and a so-called middle prefix /ră-/, which makes verbs reciprocal or reflexive (Morey 2011b:679). The second Tangsa variety, Muishaung, exhibits three valency changing prefixes: causative /tə-/, reciprocal /rə-/, and reflexive /kə-/ (Morey, 2018:93). The causative markers of these varieties appear to be cognates of the general valency-changing prefix /tʌ^{0}-/~/tʰʌ^{0}-/ in Muklom.

The Muklom valency-changing prefix /tʌ⁰-/ possibly derives from the PTB causative prefix /*s-/. This is not unlikely, since multiple reconstructed PTB lexemes with a *s in onset position have a /t/-reflex in Muklom. A few examples are *siy > /ti³/~/tɨk/ 'die', *sak > /tʌk⁰/ 'breath', and *m-sin > /tɨn¹/ 'liver' (Benedict 1972:207). Similarly, Morey (2011b:685) suggests that the causative prefix /tă-/ of Cholim may be cognate with the Proto-Sino-Tibetan (PST) causative prefix /*s-/. Another potential cognate is the deverbal nominaliser tə- of Mongsen (Ao), a prefix which is no longer productive in the language (see Coupe 2008:248, 256). Many TB languages preserve some evidence of the PTB causative, but productive causatives in in current use tend to be innovative, derived from a serial verb meaning 'send', 'do', 'give' or 'make' (LaPolla 2003:33). If /tʌ⁰-/ indeed derives from *s-, then the Tangsa varieties might be one of the few TB languages to still have a productive reflex of the old PTB causative.

6.1.7.1 Causative

Many TB languages exhibit reflexes of the PTB causative *s-, but many have also developed a causative marker by serializing a verb, which has grammaticalised into a post-verbal causative marker (see LaPolla 2017a:52). The causative in Muklom, however, is of a different nature: its lexical source is no longer recognizable as would often be the case with a serialized verb, and instead of a post-verbal unbound marker, the language has a prefixed causative marker.

The causative use of the prefix /tʌ⁰-/~/tʰʌ⁰-/ is illustrated by examples (644) and (645) with the verb root /laŋ³/ 'stand'. In (644), the form /laŋ³/ is an intransitive verb 'stand', and the addition of the valency-affecting prefix /tʰʌ⁰-/ in (645) creates a causative verb /tʰʌ⁰-laŋ³/ 'make something stand', which in this context together with the following verb /ʃiŋ²/ 'put' gives the meaning 'park'.

(644) u³ pʰʌk ʌ⁰ na³ jʌp⁰ jʌp⁰ sɛ³ bʌn³ laŋ³ a³ ta³.

u³-pʰʌk⁰-ʌ⁰-na³	jʌp⁰	jʌp⁰=sɛ³	bʌn³	**laŋ³**-a³=ta³
3SG.POSS-ears	flap	flap=COMP	wait	**stand**-3=QUOT

'Already flapping her ears, she waits and stands.' (20160106_04)

(645) kaɹi na² tʰʌ⁰laŋ³ ʃiŋ² ti¹ ɹi³.

kaɹi=ni³=a²	**tʰʌ⁰-laŋ³**	ʃiŋ²-t-i¹=ɹi³
car=MED=ABS	**CAUS-stand**	put-PST-1PL=INFER

'We parked the car.' (20151127_01)

The prefix may not only derive causatives from stative verbs, as in (645), but also from dynamic verbs. For example, the dynamic verb /tʰut⁰/ ‘dig’ receives a causative meaning after adding the valency-affecting prefix: /tʌ⁰-tʰut⁰/ ‘make someone dig’.

6.1.7.2 Reciprocal

The transitive, non-reciprocal verb /βat⁰/ ‘hit’ in (646) takes one argument marked for absolutive case, and one marked for ergative case. In this clause, emphasis is put on the patient by employing the order PA(V) instead of the default order AP(V) (see also section 7.1.1).

(646) hi¹ tʰa² piʔ⁰ a³ βat⁰ ta¹.

[hi¹=tʰi³=a²]P [piʔ⁰=a³]A **βat⁰**-t-a¹

[dog=DEF=ABS]P [3SG=ERG]A **hit**-PST-3

‘He hit the dog.’ (20100124-112656)

The reciprocal use of the valency-affecting prefix is illustrated by examples (647) and (305). In (647), the same verb root /βat⁰/ ‘hit’ appears in a complement clause to the main verb /nuk⁰/ ‘like’, but this time it receives the prefix /tʰʌ⁰-/, which gives the verb a reciprocal meaning ‘to hit one another’. The agents of reciprocal action may be marked for absolutive case, as is illustrated by (305). It does not seem possible to use an ergative marker in reciprocal constructions.

(647) tʰʌ⁰βat⁰ ma³ nuk⁰ u³ i³?

tʰʌ⁰-βat=ma³ nuk⁰-u³ i³

RECIP-hit=DAT like-2SG Q.AFF

‘Do you want to fight?’ (lit. ‘hit one another’) (B1.41)

(648) βʌl¹ ɹa², ʝuŋ² ɹa², niŋ² ni³ ʃa² tʌ⁰kʰʌt⁰ ta¹.

[βʌl¹=ɹi³**=a²**]A [ʝuŋ²=ɹi³**=a²**]A [niŋ²-ni³=ʃi³**=a²**]A tʌ⁰-kʰʌt⁰-t-a¹

[fire=PROX**=ABS**]A [water=PROX**=ABS**]A [3PL-DU=DIST**=ABS**]A RECIP-be.angry[104]-PST-3

‘Fire, water, the two of them fought one another.’ (20151208_04)

A few other examples of verbs with a reciprocal prefix are /nuk⁰/ ‘like’ → /tʰʌ⁰-nuk⁰/ ‘like one another’, /nʌn³/ ‘mistrust’ → / /tʰʌ⁰-nʌn³/ ‘mistrust one another’, /lʌp⁰/ ‘mate’ → /tʰʌ⁰-lʌp⁰/ ‘mate with one

[104] The root /kʰʌt⁰/ without prefix means ‘to be angry’, but in combination with the valency-changing prefix, the verb appears to denote not merely the state of being angry but rather the act of fighting.

another', /mɔl^{3}/ 'fight' → /tʰʌ^{0}-mɔl^{3}/ 'fight with one another', /dʌn^{3}/ 'separate' → /tʰʌ^{0}-dʌn^{3}/ 'separate form one another', /laʔ^{0}/ 'have sexual intercourse', /tʰʌ^{0}-laʔ^{0}/ 'have sexual intercourse with one another', and /bat^{0}/ 'tell' → /tʰʌ^{0}-bat^{0}/ 'tell to one another'.

6.1.7.3 Detransitivizer

Instead of indicating an increase in the number of arguments that a verb takes, the prefix /tʌ^{0}-/~/tʰʌ^{0}-/ may also indicate the opposite, a reduction in the number of arguments, specifically the transition from transitive to intransitive verb. The resulting intransitive clause either has no overtly expressed agent or experiencer, or, if the agent or experiences is overtly expressed, it has been stripped from its ergative marking and received dative case marking instead.

The process of detransitivization by prefix is illustrated by examples (649), (650), and (431). The resulting configuration, in this case, is one without an agent. The verb root /lʌt^{0}/ without a prefix, as in (649), means 'to pull out something'. Because of pro-drop, the agent argument is not overtly expressed, but the first person singular agent is still encoded by the person index /-ʌŋ^{1}/. If the agent is overtly expressed, like the person name /tɕɛŋ^{3}-βa^{1}/ 'Chengwa' in (650), it must receive ergative case marking. When the verb /lʌt^{0}/ is detransitivized by means of the prefix /tʰʌ^{0}-/, as in (431), the theme has become the single argument of the clause, and the meaning of the verb becomes 'to stick out'.

(649) ŋaʔ^{0} liŋ^{1} ni^{3} i^{3} kʰak^{0} βaŋ^{3} lʌt^{0} kɔʔ^{0} tʌŋ^{1}.

ŋaʔ^{0} liŋ^{1}-ni^{3}	i^{3}-kʰak^{0}=βaŋ^{3}	**lʌt^{0}**	kɔʔ^{0}-t-ʌŋ^{1}
fish CLF-two	1SG.POSS-bag=from	**pull.out**	give-PST-1SG

'I pulled two fishes out of my bag and gave them.' (B1.133)

(650) e^{2} tʰɔ^{3} tɕɛŋ^{3} βa^{1} tʰɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3}a^{3} tsʌm^{1} nʌm^{3}

e^{2}tʰɔ^{3}	tɕɛŋ^{3}-βa^{1}=tʰi^{3}**=ɛ^{3}**	u^{3}-na^{3}=βaŋ^{3}	kɛl^{2}dɨŋ^{2}	ni^{3}a^{3}	tsʌm^{1}-nʌm^{3}
and	Chengwa=DEF**=ERG**	3SG.POSS-ear=from	earthworm	and	paddy-stalk

tsɔŋ^{3} a^{3} tʰa^{2} xʌm^{2} tʰɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

tsɔŋ^{3}-a^{3}=tʰi^{3}=a^{2}	xʌm^{2}=tʰi^{3}=ɔʔ^{0}	**lʌt^{0}**	kɔʔ^{0}-t-a^{1}
wear.in.ear-3=DEF=ABS	mat=DEF=at	**pull.out**	give-PST-1SG

'And Chengwa pulled out from his ear the earthworm and the paddy stalk that he was wearing in it and put them on the mat.' (20160106_01.ed)

(651) ba^{3} k^{h}ak^{0} βaŋ^{3} na^{3} ŋɨn^{2} t^{h}ʌ^{0}lʌt^{0} a^{3}.

ba^{3}-k^{h}ak^{0}=βaŋ^{3}=na^{3} ŋɨn^{2} **t^{h}ʌ^{0}-lʌt^{0}**-a^{3}

2SG.POSS-bag=from=in money **INTR-stick.out**-3

'Money is sticking out from your bag.' (20161223_01)

One reason for detransitivizing a verb may be that there is no agent involved in the event at all, as is the case in example (431), where the money is coming out of the bag perhaps by the movement of the bag, or because it has not been closed properly or has holes in it, but not because a person or animal is actively trying to pull the money out.

A second reason to detransitivize a verb may be to emphasize the role of the theme and to downplay the role of another semantic role that would otherwise be encoded as an argument with ergative case marking. The downplayed argument will be marked with dative case. An example of this type of change in configuration is illustrated by (652) and (653). The verb /k^{h}i^{3}/ 'see' always takes a theme argument with it, unless this theme argument is elided when it can be inferred from the context, or when the speaker wants to refer to the ability of a person to see with their eyes in general. In example (652), we see the verb /k^{h}i^{3}/ taking two arguments. The first is the experiencer argument /sa^{1}/ 'child', marked by the ergative postposition /=ɛ^{3}/. The second is the theme argument /miʔ^{0}-nu^{1}-sa^{1}/ 'girl', which is marked as absolutive by the following /=a^{2}/. Example (653) illustrates the detransitivized version of the same verb. The theme, /piʔ^{0}/ 'he', receives no case marking in this utterance, and the experiencer, /dʌk^{0}-hʌn^{1} miʔ^{0}/ 'many people' is demoted from ergative to dative case /=ma^{3}/.

(652) e^{2} ʃi^{3} sa^{1} t^{h}ɛ^{3} miʔ^{0} nu^{1} sa^{1} t^{h}a^{2} k^{h}i^{3} ta^{1}.

e^{2}-ʃi^{3} sa^{1}=t^{h}i^{3}=ɛ^{3} miʔ^{0}-nu^{1}-sa^{1}=t^{h}i^{3}=a^{2} **k^{h}i^{3}**-t-a^{1}

NPROX-DIST child=DEF=ERG person-F-DIM=DEF=ABS **see**-PST-3

'That child saw the girl.' (20121104_07)

(653) ɟe^{3} su^{2} u^{0}tɨk^{0} ɟi^{2} u^{0}ʃat^{0} ɛʔ^{0} piʔ^{0} dʌk^{0} hʌn^{1} miʔ^{0} ma^{3}

ɟe^{3}su^{2} u^{0}-tɨk^{0} ɟi^{2} u^{0}-ʃat^{0} ɛʔ^{0} piʔ^{0} dʌk^{0}-hʌn^{1} miʔ^{0}**=ma**

Jesus NMLZ-die after NMLZ-wake.up do 3SG SUPER-many person**=DAT**

tʌ^{0}k^{h}i^{3} ta^{1}.

tʌ^{0}-k^{h}i^{3}-t-a^{1}

INTR-see-PST-3

'After Jesus died and rose, he was seen by many people.' (C63186t)

After detransitivation of the verb /kʰi³/ ‘see’, the experiencer can alternatively be left out, as is illustrated by (654). The experiencer is in this case a generic one. This example has been taken from a conversation about a cow that had become so emaciated due to illness that her bones were showing through the skin.

(654) u³ ɹaŋ¹ tʌ⁰kʰi³ a³.

u³-ɹaŋ¹	**tʌ⁰-kʰi³**-a³
3SG.POSS-bone	**INTR-see**-3

‘Her bones are showing.’ (S2.52)

One more example of the detransitivizing prefix is found in the verb pair /ɟɔʔ⁰/ ‘collect, gather’ → /tʰʌ⁰-ɟɔʔ⁰/ ‘come together, gather’.

Since one prefix is used to express three notions, it does happen that the causative, reciprocal, or intransitive forms of the same verb are identical in form. For example, the form /tʌ⁰-kʰi³/ which is derived from the verb root /kʰi³/ ‘see’, can have either have a intransitive meaning ‘be(come) visible’, as illustrated by (653) and (654), or have a causative meaning ‘show something’, as in (655).

(655) ɟe³ su² a³ ɹʌŋ² ʈin¹ mʌt⁰ tʌ⁰kʰi³ ma³ ka¹ taʔ⁰ pʰa³.

ɟe³su²=a³	ɹʌŋ²	ʈin¹-mʌt⁰	**tʌ⁰-kʰi³**=ma³	ka¹-taʔ⁰-pʰ-a³
Jesus=ERG	God	heart/liver-perish	**CAUS-see**=DAT	go-PST-CIS-3

‘Jesus came here to show God’s love.’ (C63186t)

6.2 The order of elements

This section discusses the order of elements in the verb complex. That is, the order of all elements that have been incorporated in the current chapter. Section 6.2.1 provides an overview of arrangement of elements, and section 6.2.2 provides supporting evidence in the form of examples in context for all proposed relative orders of elements.

6.2.1 Overview

The order of elements in the verbal complex is visualised in Figure 22. This is the order that is observed in clauses with one verb, without any auxiliary. Approximately a third of the markers precedes the verb root, and the remaining two third follow the verb root. For markers that occupy different columns in Figure 22, there is evidence in the corpus for their relative order. This can either be in the form of clauses that contain both markers, for example past tense and inverse, or in the form of clauses that

contain a third marker in combination with one of the markers under investigation. The future and past tense do not co-occur in the same clause, but we can establish their order based on their position relative to the inverse marker. Clauses that contain a past tense marker and inverse show that the past tense precedes the inverse, whereas clauses that contain a future tense marker and inverse show that the future tense follows the inverse. When markers that occupy the same column in Figure 22, for example the inverse and the cislocative, no relative order could be determined because the two do not co-occur in the current corpus, neither could their relative order be determined with the help of a third element.

<table>
<tr><th>-2</th><th>-1</th><th>0</th><th>+1</th><th>+2</th><th>+3</th><th colspan="2">+4</th><th>+5</th><th>+6</th><th>+7</th><th>+8</th><th>+9</th><th>+10</th></tr>
<tr><td>change of state
/sɛ³-/</td><td rowspan="4">valency
/tʌ⁰-/</td><td rowspan="10">Σ</td><td>change of state
/-βan³/</td><td rowspan="2">past
/-t/</td><td>inverse
/-pʰ/</td><td rowspan="4">negation
/-m/</td><td rowspan="4">future
/-n/</td><td rowspan="7">pers.
index</td><td colspan="4">reverse negative
/-ɛ³/</td></tr>
<tr><td>iterative
/βe³-/</td><td>continuative
/-βe³/</td><td>cislocative
/-pʰ/</td><td colspan="2">dubitative[105]
/=hɛ³/</td><td rowspan="7">quotative
/=ta³/</td><td rowspan="7">hearsay
/=ti³/</td><td rowspan="7">inferential
/=ɹi³/</td></tr>
<tr><td>prohibitive
/nʌk⁰/</td><td>perfective
/-tɕʌk⁰/</td><td colspan="2">adhortative
/-tɛ³/</td></tr>
<tr><td>ability
/ʝɨn³/</td><td colspan="3">progressive
/-tɕe²/</td><td colspan="2">assumptive
/=laŋ²/</td></tr>
<tr><td colspan="2">ability
/mɛ³/</td><td colspan="4">social obligation
/-pʰ/</td><td>completive
/=sɛ³/</td><td>mitigative
/ʝu²/</td></tr>
<tr><td colspan="2">permission
/ʝɨn³/</td><td colspan="5">continuative
/-ɹɔʔ⁰/</td></tr>
<tr><td colspan="2" rowspan="5">durative
/sɛ³-/</td><td colspan="5">perfective
/-tɕɔl²/</td></tr>
<tr><td colspan="5">obligation
/-tɕɨŋ¹/</td></tr>
<tr><td colspan="6">prospective
/-te²/</td></tr>
<tr><td colspan="7">progressive
/-kʌm¹/</td></tr>
</table>

Figure 22 - The order of elements in the verb complex.

[105] The order of the first three elements in this column with respect to some of the markers on the left cannot be confirmed based on current corpus: 1) dubitative /=hɛ³/ in relation to continuative /-ɹɔʔ⁰/, perfective /-tɕɔl²/, obligation /-tɕɨŋ¹/, prospective /-te²/ and progressive /-kʌm¹/, 2) adhortative /-tɛ³/ in relation to the same five elements, and 3) assumptive /=laŋ²/ in relation to the same five elements minus perfective /-tɕɔl²/, which has been shown to precede the assumptive.

When an auxiliary, a form of /ʌŋ²/, is introduced to support the main verb, the order of some of the elements in the verb complex shifts and this cannot be conveniently displayed in one figure. The order of elements in clauses with auxiliaries will therefore be discussed in the sections dedicated to those elements. To illustrate the reconfiguration of elements in clauses with an auxiliary, one example will be discussed here: the past tense marker and negation.

In clauses with a single verb and no auxiliary, the past tense marker occupies a slot closer to the verb root than negation. Even though the two never occur in the same single-verb clause without an auxiliary, we know this is their relative order, because the past tense morpheme /-t/~/-taʔ⁰/ precedes the inverse marker /-pʰ/~/-pʰʌ⁰/ and the negator /-m/ follows the inverse marker. An example of a clause with past tense marker /-taʔ⁰/ and inverse /-pʰ/ is provided in (656), and an example of inverse /-pʰʌ⁰/ with negator /-m/ is provided in (657).

(656) pʰʌŋ³ tʰa² tɕɛŋ³ βa¹ ka¹ taʔ⁰ pʰa³, haʔ⁰ nʌŋ³.

pʰʌŋ²=tʰi³=a³ tɕɛŋ³-βa¹ ka¹-**taʔ⁰-pʰ**-a³ haʔ⁰=nʌŋ³

start=DEF=at Chengwa go-**PST-CIS**-3 earth=to

'First, Chengwa came here, to the earth.' (20160106_01)

(657) ɟuk⁰ ni³ tʰa² kɔʔ⁰ pʰʌ⁰mɔŋ¹.

ɟuk⁰-ni³=tʰi³=a² kɔʔ⁰-**pʰʌ⁰-m**-ɔŋ¹

time-two=DEF=ABS give-**INV-NEG**-1SG

'I am not giving it to you a second time.' (20151208_01)

However, if a clause is marked for both past tense and negation, which can only happen in a clause that contains an auxiliary (see section 6.1.4), the negator is carried by the main verb, and the tense marker is carried by the following auxiliary, resulting in the reverse order, with negation preceding past tense. This configuration is illustrated by example (658), in which main verb /tɔŋ²/ 'sit' carries the negator /-m/, and the auxiliary /ʌŋ²/ the past tense marker /-t/.

(658) nɨŋ² ni³ ʃi³ ɹum³ tɔŋ² mɔʔ⁰ ʌŋ² ta¹ hɛ³ ɹi³?

nɨŋ²-ni³=ʃi³ ɹum³-**tɔŋ²-m-ɔʔ⁰** **ʌŋ²-t-a¹**=hɛ³=ɹi³

2PL-DU=DIST together-**sit**[106]**-NEG-3** **AUX-PST-3**=DUB=INFER

'So maybe the two of them did not sleep together then?' (541)

[106] The expression /ɹum³-tɔŋ²/~/ɹum³-tɔŋ³/ is a euphemism for sexual intercourse.

6.2.2 Evidence

This section provides evidence for the order of elements presented in Figure 22, specifically for columns that are adjacent to one another. The discussion of supportive evidence follows the order of the columns, from left to right, and within columns from top to bottom. Some elements are homophonous but have distinct functions. This section will only provide evidence for the relative position of elements, other details, such as their meaning and function, have been discussed in section 6.1.

6.2.2.1 The position of change of state /sɛ^{3}-/

Example (659) shows that the COS marker /sɛ^{3}-/ (see section 6.1.6.2.1) precedes the valency changing prefix /tʌ^{0}-/~/tʰʌ^{0}-/ (see section 6.1.7). Unlike the homophonous completive marker /=sɛ^{3}/, which follows the verb, this COS marker precedes the verb.

(659) i^{3} nʌp^{0} i^{3} sʌn^{3} nɛʔ^{0} sɛ^{3} tʌ^{0}tɕɔŋ^{3} ni^{3}.

i^{3}-nʌp^{0} i^{3}-sʌn^{2}-nɛʔ^{0} **sɛ^{3}-tʌ^{0}**-tɕɔŋ^{3}-n-i^{3}

tomorrow day.after.tomorrow **COS-RECIP**-meet-FUT-1PL

'We will get to meet soon!' (B1.71)

6.2.2.2 The position of iterative /βe^{3}-/

The iterative marker /βe^{3}-/ (see section 6.1.6.2.3) precedes the valency prefix /tʌ^{0}-/~/tʰʌ^{0}-/, as is illustrated by example (660), in which these markers precede the verb root /βɛl^{3}/ 'return'.

(660) tɨn^{1} maʔ^{0} mɔʔ^{0} ʌŋ^{2} a^{3} ɟɔ^{3}, βe^{3} tʰʌ^{0}βɛl^{3} ɛʔ^{0} mɔʔ^{0} ɛ^{3}.

tɨn^{1} maʔ^{0}-m-ɔʔ^{0} ʌŋ^{2}-a^{3}=ɟɔ^{3} **βe^{3}-tʰʌ^{0}**-βɛl^{3} ɛʔ^{0}-m-ɔʔ^{0}-ɛ^{3}

heart/liver perish-NEG-3 AUX-3=COND **ITER-CAUS**-return do-NEG-3-REV.NEG

'If she did not love him, she would return it.' (20160107_04)

6.2.2.3 The position of prohibitive /nʌk^{0}/

The prohibitive morpheme /nʌk^{0}/ (see section 6.1.6.3.9) precedes the valency-changing prefix /tʌ^{0}-/~/tʰʌ^{0}-/, as is illustrated by (661).

(661) nʌk⁰ tʌ⁰tɨp⁰.

nʌk⁰ **tʌ⁰**-tɨp⁰

PROH **RECIP**-hit

'Do not hit one another!' (S1.55)

6.2.2.4 The position of facultative /ɟɨn³/

The facultative marker /ɟɨn³/ 'can' expresses extrinsic or innate ability (section 6.1.6.3.1) and precedes the valency-changing prefix /tʌ⁰-/~/tʰʌ⁰-/, as is illustrated with the verb /tʌ⁰-saŋ³/ 'clean' in (662).

(662) ɟɨn³ tʌ⁰saŋ³ mɔŋ¹.

ɟɨn³ **tʌ⁰**-saŋ³-m-ɔŋ¹

ABIL **CAUS**-clean-NEG-1SG

'I am not able to clean it.' (B1.71)

6.2.2.5 The position of facultative /mɛ³/

The second facultative marker, /mɛ³/ 'can, know how to' (see section 6.1.6.3.1), expresses acquired ability and precedes the verb root, as is exemplified in (663). Evidence for the position of this facultative marker relative to the valency changing prefix is not present the current corpus, the two have not been found to co-occur.

(663) mɛ³ lɨm³ mɔŋ¹.

mɛ³ **lɨm³**-m-ɔŋ¹

ABIL **cook**-NEG-1SG

'I do not know how to prepare it (tea).' (B1.71)

6.2.2.6 The position of deontic /ɟɨn³/

The form /ɟɨn³/ also functions as a deontic marker meaning 'be allowed to', i.e. having permission to engage in an action (see section 6.1.6.3.2). The permissive deontic precedes the verb stem, as is illustrated in (664). Evidence for the position of the durative marker relative to the valency changing prefix is not present the current corpus, the two do not co-occur.

(664) nʌŋ^{1} a^{3} kʰʌm^{2} ɟɨn^{3} lɨŋ^{2} mu^{1}.

nʌŋ^{1}=a^{3} kʰʌm^{2} **ɟɨn^{3}** **lɨŋ^{2}**-m-u^{1}

2SG=ERG alcohol **PERMIS** **drink**-NEG-2SG

'You are not allowed to drink alcohol.' (B1.162)

6.2.2.7 The position of durative /sɛ^{3}-/

The durative marker /sɛ^{3}-/ (see section 6.1.6.2.2) precedes the verb root, as is illustrated by (665), in which /sɛ^{3}-/ precedes the verb /ka^{3}/ 'write'. Evidence for the position of the durative marker relative to the valency changing prefix is not present the current corpus, the two have not been found to co-occur. Unlike the homophonous completive marker /=sɛ^{3}/, which follows the verb, this durative marker precedes the verb.

(665) sal^{2} tʌŋ^{2} sɛ^{3} ka^{3} tu^{1}.

sal^{2}=tʌŋ^{2} **sɛ^{3}-ka^{3}**-t-u^{1}

day=whole **DUR-write**-PST-2SG

'You have been writing the entire day.' (B1.71)

6.2.2.8 The position of valency-changing prefix /tʌ^{0}-/~/tʰʌ^{0}-/

The valency-changing marker, which has two allomorphs, /tʌ^{0}-/ and /tʰʌ^{0}-/ (see section 6.1.7), is prefixed to the verb root, for example to /laŋ^{3}/ 'stand' in (666).

(666) kaɹi na^{2} tʰʌ^{0}laŋ^{3} ʃɨŋ^{2} ti^{1} ɹi^{3}.

kaɹi=ni^{3}=a^{2} **tʰʌ^{0}-laŋ^{3}** ʃɨŋ^{2}-t-i^{1}=ɹi^{3}

car=MED=ABS **CAUS-stand** put-PST-1PL=INFER

'We parked the car.' (20151127_01)

6.2.2.9 The position of Σ

Based on the current corpus, it has been determined that the following elements occupy the slot directly following the verb stem: change of state marker /-βan^{3}/, as shown in example (667), continuative aspect marker /-βe^{3}/ as in (668), perfective /-tɕʌk^{0}/ as in (669), progressive /-tɕe^{2}/ as in (670), social obligation marker /-pʰ/ as in (686), continuative aspect marker /-ɹɔʔ^{0}/ as in (672), perfective marker /-tɕɔl^{2}/ as in

(673), general obligation marker /-tɕɨŋ^{1}/ as in (674), prospective marker /-te^{2}/ as in (675), and finally, progressive /-kʌm^{1}/, exemplified in (676).

(667) piʔ^{0} ma^{3} t^{h}aŋ^{3} a^{3} hun^{3} kʌm^{2} βan^{3} i^{3}.

piʔ^{0}=ma^{3} t^{h}aŋ^{3}=a^{3} hun^{3} **kʌm^{2}-βan^{3}**-i^{3}

3SG=DAT now=at truly **trust-COS**-PL

'We will now truly trust him.' (20170122_01)

(668) ŋɨn^{2} nʌm^{3} ka^{1} βe^{3} p^{h}ʌŋ^{2} ɔ^{2} ta^{3}.

ŋɨn^{2} nʌm^{3} **ka^{1}-βɛ^{3}**-p^{h}-ʌŋ^{2} ɔ^{2}=ta^{3}

money borrow **go-CNT**-INV-1SG EXCLAM=QUOT

''Oh, I am still going around to borrow money for you', he said.' (20151208_05)

(669) nap^{0} k^{h}i^{2} bʌŋ^{1} t^{h}a^{2} duk^{0} tɕʌk^{0} ta^{1}.

nap^{0}-k^{h}i^{2}-bʌŋ^{1}=t^{h}i^{3}=a^{2} **duk^{0}-tɕʌk^{0}**-t-a^{1}

wild.banana-tree=DEF=ABS **cut-PFV**-PST-3

'He cut down the wild banana trees.' (20160106_02)

(670) ŋa^{1} a^{3} tɨl^{2} saʔ^{0} tɕe^{2} ʌŋ^{3}.

ŋa^{1}=a^{3} tɨl^{2} **saʔ^{0}-tɕe^{2}**-ʌŋ^{3}

1SG=ERG rice **eat.soft-PROG**-1SG

'I am eating rice.' (20100124-112046)

(671) ŋa^{1} a^{3} tɕɔ^{3} p^{h}ʌ^{0}nʌŋ^{2}.

ŋa^{1}=a^{3} **tɕɔ^{3}-p^{h}ʌ^{0}**-n-ʌŋ^{3}

1SG=ERG **wash.dishes-OBL**-FUT-1SG

'I must go wash the dishes!' (S1.78)

(672) e^{2} t^{h}ɔ^{3} ba^{3} niŋ^{2} ni^{3} t^{h}ɛ^{3} ba^{3} pʌl^{3} tʌŋ^{2} sal^{2} tʌŋ^{2} ba^{3} k^{h}ɨt^{0} ka ɹɔʔ^{0}

e^{2}t^{h}ɔ^{3}=ba^{3} niŋ^{2}-ni=t^{h}i^{3}=ɛ^{3}=ba^{3} pʌl^{3}=tʌŋ^{2} sal^{2}=tʌŋ^{2}=ba^{3} k^{h}ɨt^{0} **ka-ɹɔʔ^{0}**

and=TOP 3PL-DU=DEF=ERG=TOP night=whole day=whole=TOP dig **go-CNT**

kʰɨt⁰ ka ɹɔʔ⁰ .

kʰɨt⁰ **ka-ɹɔʔ⁰**

dig **go-CNT**

‘And then the two of them kept on going and digging, all night and all day.’ (20151208_05)

(673) ŋa¹ a³ tɨl² saʔ⁰ tɕɔl² sɛ³.

ŋa¹=a³ tɨl² **saʔ⁰-tɕɔl²**=sɛ³

1SG=ERG rice **eat.soft-PFV**=COMP

‘I have eaten rice already.’ (20100124-112046)

(674) ʝi² βaŋ³ ʃa² bat⁰ tɕɨŋ¹ i³, tʰaŋ³ a³?

ʝi²=βaŋ³=ʃi³=a² **bat⁰-tɕɨŋ¹** i³ tʰaŋ³=a³

after=from=DIST=ABS **say-OBL** Q.AFF now=at

‘Do I now have to say what comes after?’ (20151208_02)

(675) ŋa¹ a³ tɨl² sʌt⁰ te².

ŋa¹=a³ tɨl² **sʌt⁰-te²**

1SG=ERG rice **eat.soft-PROSP**

‘I am about to eat rice.’ (20100124-112046)

(676) ŋa¹ a³ tɨl² sʌt⁰ kʌm¹.

ŋa¹=a³ tɨl² **sʌt⁰-kʌm¹**

1SG=ERG rice **eat.soft-PROG**

‘I am eating rice.’ (20161223_02)

6.2.2.10 The position of change of state /-βan³/

The change of state marker /βan³/ directly precedes the past tense marker /-t/~/-taʔ⁰/, as is illustrated by (677). Unlike its preverbal counterpart /sɛ³-/, /-βan³/ follows the verb stem (see section 6.1.6.2.1).

(677) e² ʃi³ βaŋ³ sʌm tɕu³ βan³ ta¹.

e²-ʃi³=βaŋ³ sʌm-tɕu³-**βan³-t**-a¹

NPROX-DIST=from know-away-**COS-PST**-3

‘From then on they came to know it (the use of medicine).’ (20151208_01)

6.2.2.11 The position of continuative /-βe^{3}/

The continuative marker /-βe^{3}/ (see section 6.1.6.2.4) directly precedes the past tense marker /-t/~/-taʔ^{0}/, as is shown in (678). Unlike the homophonous iterative /βe^{3}-/, which precedes the verb stem, the continuative is a postverbal marker.

(678) i^{3} nu^{1} βa^{1} ɟʌm^{2} na^{3} hun^{3} ʌŋ^{2} βe^{3} tʌŋ^{1}.

i^{3}-nu^{1}-βa^{1}-ɟʌm^{2}=na^{3}	hun^{3}	ʌŋ^{2}-**βe^{3}-t**-ʌŋ^{1}
1SG.POSS-mother-father-company=in	really	COP-**CNT-PST**-1SG

'I was still staying with my parents.' (542)

6.2.2.12 The position of perfective /-tɕʌk^{0}/

The perfective marker /-tɕʌk^{0}/ (see section 6.1.6.2.6) likewise directly precedes the past tense marker /-t/~/-taʔ^{0}/, as is illustrated by example (679).

(679) nap^{0} k^{h}i^{2} bʌŋ^{1} t^{h}a^{2} duk^{0} tɕʌk^{0} ta^{1}.

nap^{0}-k^{h}i^{2}-bʌŋ^{1}=t^{h}i^{3}=a^{2}	duk^{0}-**tɕʌk^{0}-t**-a^{1}
wild.banana-tree=DEF=ABS	cut-**PFV-PST**-1SG

'He cut down the wild banana trees.' (20160106_02)

6.2.2.13 The position of progressive /-tɕe^{2}/

The progressive marker /-tɕe^{2}/ (see section 6.1.6.2.5) is postverbal and precedes the future marker /-n/, as illustrated by (680), and negative /-m/, as illustrated by (681). In the current corpus, the progressive marker /-tɕe^{2}/ has not been found to co-occur with the past tense, inverse, or cislocative, which all three precede the future and negative. The position of progressive /-tɕe^{2}/ relative to these three markers can therefore not be determined yet.

(680) hiʔ^{0} tʌŋ^{2} ma^{3} kuʔ^{0} ʌ^{0} mɔl^{2} tʌŋ^{2} nɔʔ^{0} bat^{0} tʌ^{0}p^{h}ʌn^{3} tɕe^{2} ni^{3}.

hiʔ^{0}-tʌŋ^{2}=ma^{3}	kuʔ^{0}-ʌ^{0}-mɔl^{2}=tʌŋ^{2}=ni^{3}=ɔʔ^{0}	bat^{0}	tʌ^{0}-p^{h}ʌn^{3}-**tɕe^{2}-n**-i^{3}
1INCL-PL=DAT	festival-and-Mol=whole=MED=at	say	RECIP-tell-**PROG-FUT**-1PL

'We will tell one another stories during the Mol festival.' (20151208_01)

(681) ɟɨn^{3} tʌ^{0}pʰʌn^{3} tɕe^{2} mi^{1}.

ɟɨn^{3} tʌ^{0}-pʰʌn^{3}-**tɕe^{2}-m**-i^{1}

ABIL RECIP-tell-**PROG-NEG**-1PL

'We can no longer tell one another stories (because we have forgotten them).' (20151208_01)

6.2.2.14 The position of deontic /-pʰ/

The deontic marker /-pʰ/ (see section 6.1.6.3.2), is homophonous with the inverse and cislocative markers and likely etymologically related to them. This marker precedes future tense marker /-n/, as is illustrated by (682). Only a few tokens of this marker appear in the current corpus of annotated texts, and none of them have not been found to co-occur with the inverse, cislocative, or negation, so it cannot be determined yet 1) whether these can combine with deontic /-pʰ/, and 2), if they can, what their relative order would be.

(682) ŋa^{1} a^{3} tɕɔ^{3} pʰʌ^{0}nʌŋ^{2}.

ŋa^{1}=a^{3} tɕɔ^{3}-**pʰʌ^{0}-n**-ʌŋ^{3}

1SG=ERG wash.dishes-**OBL-FUT**-1SG

'I must go wash the dishes!' (S1.78)

6.2.2.15 The position of continuative /-ɹɔʔ^{0}/

Unlike the other continuative marker, /-βe^{3}/, the morpheme /-ɹɔʔ^{0}/ cannot combine with person indices (see section 6.1.6.2.4). We know that /-ɹɔʔ^{0}/ may co-occur with the completive marker /=sɛ^{3}/, and when it does, the continuative will precede the completive, as is exemplified in (683).

(683) ʃɨŋ ɹɔʔ^{0} sɛ^{3} ba^{3} hi^{1} tʰa^{2} hʌn^{1} tɕu^{3} βan^{3} ʌŋ^{2} ta^{1}.

ʃɨŋ-**ɹɔʔ^{0}=sɛ^{3}**=ba^{3} hi^{1}=tʰi^{3}=a^{2} hʌn^{1}-tɕu^{3}-βan^{3} ʌŋ^{2}-t-a^{1}

keep-**CNT=COMP**=TOP dog=DEF=ABS be.many-away-COS AUX-PST-3

'Because he had continued to keep them, the dogs were becoming many in number.'

(20121103_03)

6.2.2.16 The position of perfective /-tɕɔl^{2}/

Unlike perfective marker /-tɕʌk^{0}/, the morpheme /-tɕɔl^{2}/ cannot co-occur with person indices (see section 6.1.6.2.6). We know that perfective /-tɕɔl^{2}/ may co-occur with the completive marker /=sɛ^{3}/, and

when it does, the perfective will precede the completive, as is illustrated by (684). Similarly, it may combine with assumptive marker /=laŋ²/, and then also precedes, as is exemplified by (685).

(684) ŋa¹ a³ tɨl² saʔ⁰ tɕɔl² sɛ³.

ŋa¹=a³ tɨl² saʔ⁰-**tɕɔl²=sɛ³**

1SG=ERG rice eat.soft-**PFV=COMP**

'I have eaten rice already.' (20100124-112046)

(685) ɔ² i³ nʌŋ³ tʰɔk⁰ tɕɔl² bɔ³ laŋ².

ɔ² i¹=nʌŋ³ tʰɔk⁰-**tɕɔl²**=bɔ³=**laŋ²**

EXCLAM PROX=to arrive-**PFV**=indeed=**ASS**

'Oh, we must have reached here.' (20151127_01)

6.2.2.17 The position of deontic /-tɕɨŋ¹/

The obligation marker /-tɕɨŋ¹/ 'must' cannot co-occur with person indices (see section 6.1.6.3.2). We know that deontic /-tɕɨŋ¹/ can occur with completive /=sɛ³/, as illustrated by (686), and /-tɕɨŋ¹/ precedes the completive.

(686) ɹaja ʌŋ² tɕɨŋ¹ sɛ³.

ɹaja ʌŋ²-**tɕɨŋ¹=sɛ³**

king[107] COP-**OBL=COMP**

'He must be king.' (20151208_03)

6.2.2.18 The position of prospective /-te²/

The prospective marker /-te²/ cannot co-occur with person indices (see section 6.1.6.2.7). The current corpus shows that the prospective may co-occur with mitigative /ɟu²/, and the prospective precedes the mitigative, as shown by example (687).

[107] Indo-Aryan loan.

(687) ŋa^{1} tʰɔʔ^{0} ɟʌk^{0} sɔm^{3} kat^{0} te^{2} ɟu^{2}.

ŋa^{1}=tʰɔʔ^{0} ɟʌk^{0}-sɔm^{3} kat^{0}-**te^{2}** **ɟu^{2}**

1SG=also hand-uphold go-**PROSP** **MIT**

'I am also about to go work, okay?' (544)

6.2.2.19 The position of progressive /-kʌm^{1}/

Unlike the other progressive marker, /-tɕe^{2}/, the morpheme /-kʌm^{1}/ does not co-occur with person indices (see section 6.1.6.2.5). We know that /-kʌm^{1}/ may co-occur with the quotative marker /=ta^{3}/, and that when it does, the progressive will precede the quotative, as is shown in (688).

(688) ŋa^{1} a^{3} tɨl^{2} sʌt^{0} kʌm^{1} ta^{3} tʰʌ^{0}ɹaʔ^{0} a^{3}.

ŋa^{1}=a^{3} tɨl^{2} sʌt^{0}-**kʌm^{1}=ta^{3}** tʰʌ^{0}-ɹaʔ^{0}-a^{3}

1SG=ERG rice eat.soft-**PROG=QUOT** CAUS-speak-3

''I am eating rice' one says.' (20161223_02)

6.2.2.20 The position of past tense /-t/~/-taʔ^{0}/

The past tense marker (see section 6.1.6.1.2) follows the verb stem and precedes the inverse /-pʰ/~/-pʰʌ^{0}/, as is shown in (689), where past tense /-taʔ^{0}/ precedes the inverse /-pʰ/. The future, on the other hand, follows the inverse (see section 6.2.2.24).

(689) tɕʌm^{2} ma^{3} hʌl^{1} taʔ^{0} pʰu^{3}?

tɕʌm^{2}=ma^{3} hʌl^{1}-**taʔ^{0}-pʰ**-u^{3}

what=DAT call-**PST-INV**-2SG

'Why did you call me?' (B1.84)

The past tense marker also precedes the cislocative marker, which is homophonous with the inverse, as is illustrated by (690), in which past tense morpheme /-taʔ^{0}/ precedes cislocative /-pʰ/.

(690) pʰʌŋ^{3} tʰa^{3} tɕɛŋ^{3} βa^{1} ka^{1} taʔ^{0} pʰa^{3}, haʔ^{0} nʌŋ^{3}.

pʰʌŋ^{3}=tʰi^{3}=a^{3} tɕɛŋ^{3}-βa^{1} ka^{1}-**taʔ^{0}-pʰ**-a^{3} haʔ^{0}=nʌŋ^{3}

start=DEF=at Chengwa go-**PST-CIS**-3 earth=to

'First, Chengwa came here, to the earth.' (20160106_01)

6.2.2.21 The position of inverse /-pʰ/~/-pʰʌ⁰/

The inverse marker /-pʰ/~/-pʰʌ⁰/ (see section 6.1.2.2.2) precedes the future tense marker /-n/ as is illustrated by example (691). The inverse also precedes the negative /-m/, as is shown in (692).

(691) nʌŋ¹ a³ ŋa¹ ɹa² βat⁰ pʰʌ⁰nu³ i³?

nʌŋ¹=a³	ŋa¹=ɹi³=a²	βat⁰-**pʰʌ⁰-n**-u³	i³
2SG=ERG	1SG=PROX=ABS	hit-**INV-FUT**-2SG	Q.AFF

'Are you going to hit me?' (20100124-112656)

(692) ʝɨn³ kɔʔ⁰ pʰʌ⁰mɔŋ¹ ʌŋ² tʌŋ¹.

ʝɨn³	kɔʔ⁰-**pʰʌ⁰-m**-ɔŋ¹	ʌŋ²-t-ʌŋ¹
ABIL	give-**INV-NEG**-1SG	AUX-PST-1SG

'I was not able to give it to you.' (S2.42)

6.2.2.22 The position of cislocative /-pʰ/~/-pʰʌ⁰/

The cislocative marker /-pʰ/~/-pʰʌ⁰/ is homophonous with the inverse marker and etymologically related to it (see section 6.1.2.2.2). The cislocative precedes future tense marker /-n/, as is illustrated by (693). The cislocative also precedes the negator /-m/, as is shown in example (694).

(693) i³ nʌp⁰ su³ nu¹ mi² tʰu³ pʰʌ⁰na³.

i³-nʌp⁰	su³-nu¹-mi²	tʰu³-**pʰʌ⁰-n**-a³
tomorrow	Sunumi	arrive-**CIS-FUT**-3

'Sunumi will arrive (here) tomorrow.' (B1.10)

(694) piʔ⁰ tʰu³ pʰʌ⁰mɔʔ⁰ ti³.

piʔ⁰	tʰu³-**pʰʌ⁰-m**-ɔʔ⁰=ti³
3SG	arrive-**CIS-NEG**-3=HS

'She will not come (she said).' (S2.19)

6.2.2.23 The position of negative /-m/

The negator /-m/ (see section 6.1.4) precedes the person index, as shown in example (695), where /-m/ precedes the first person singular index /-ɔŋ^{1}/, which is an allomorph of the form /-ʌŋ^{3}/ in (696) above (see section 6.1.2 for the discussion of allomorphy in person indices).

(695) ŋa^{1} ka^{1} mɔŋ^{1}.

ŋa^{1} ka^{1}**-m-ɔŋ^{1}**

1SG go-**NEG-1SG**

'I'm not going.' (20170224_01)

6.2.2.24 The position of future /-n/

The future tense marker /-n/ (see section 6.1.6.1.3) precedes the person index, as is illustrated by example (696), in which /-n/ attaches to first person singular index /-ʌŋ^{3}/.

(696) ŋa^{1} ka^{1} nʌŋ^{3}.

ŋa^{1} ka^{1}**-n-ʌŋ^{3}**

1SG go-**FUT-1SG**

'I will go.' (20170224_01)

6.2.2.25 The position of person indices

The person indices are postverbal and occupy the slot directly preceding the following operators: the suffix /-ɛ^{3}/ which reverses negation, as in (697), dubitative /=hɛ^{3}/, exemplified in (435), adhortative /-tɛ^{3}/, exemplified in (699), assumptive /=laŋ^{2}/, exemplified in (700), and completive /=sɛ^{3}/, as in (701).

(697) tin^{1} mʌt^{0} le^{1} ʌŋ^{2} a^{3} ɟɔ^{3} lɛ^{3} ʃiŋ^{3} ɛʔ^{0} mɔʔ^{0} ɛ^{3}.

tin^{1}-mʌt^{0}	le^{1}-ʌŋ^{2}-a^{3}=ɟɔ^{3}=lɛ^{3}	ʃiŋ^{3}	ɛʔ^{0}-m-**ɔʔ^{0}-ɛ^{3}**
heart/liver-perish	PRT-COP-3=COND=FOC	keep	do-NEG-**3-REV.NEG**

'If she loved him, she would keep it.' (20160107_04)

(698) kɔnta ni^{3} tan^{3} sɛ^{3} tɕuŋ^{1} ti^{1} hɛ^{3} ɔ^{3}.

kɔnta-ni^{3}=tan^{3} sɛ^{3}-tɕuŋ^{1}-t-**i^{1}=hɛ^{3}** ɔ^{3}

hour[108]-two=as.much.as DUR-be.lost-PST-**1PL=DUB** EXCLAM

'We were lost for as long as two hours maybe.' (20151127_01)

(699) i^{3} te^{2} ɔ^{2} xuŋ βʌŋ^{1} p^{h}u^{3} tɛ^{3}.

i^{3}-te^{2} ɔ^{2} xuŋ βʌŋ^{1}-p^{h}-**u^{3}-tɛ^{3}**

1SG.POSS-grandfather EXCLAM climb go.up-CIS-**2SG-HORT**

'Grandfather, do come up.' (541)

(700) kaɹi t^{h}a^{2} t^{h}ɔʔ^{0} e^{2} ʃi^{3} na^{3} ʃiŋ tɕʌk^{0} ti^{1} laŋ^{2}.

kaɹi=t^{h}i^{3}=a^{2}=t^{h}ɔʔ^{0} e^{2}-ʃi^{3}=na^{3} ʃiŋ-tɕʌk^{0}-t-**i^{1}=laŋ^{2}**

car[109]=DEF=ABS=also NPROX-DIST=in put-PFV-PST-**1PL=ASS**

'We must have parked the car there also.' (20151127_01)

(701) ŋa^{1} a^{3} saʔ^{0} tʌŋ^{1} sɛ^{3}.

ŋa^{1}=a^{3} saʔ^{0}-t-**ʌŋ^{1}=sɛ^{3}**

1SG=ERG eat.soft-PST-**1SG=COMP**

'I have eaten rice already.' (SDM31-2009)

6.2.2.26 The position of reverse negative /-ɛ^{3}/

All tokens of the reverse negative marker /-ɛ^{3}/ (see section 6.1.5) that occur in the current annotated corpus directly follow the person index and constitute the last element of the clause they occur in. It remains to be determined whether any of the other post-verbal operators can follow the reverse negative.

6.2.2.27 The position of dubitative /=hɛ^{3}/

The dubitative marker /=hɛ^{3}/ (see section 6.1.6.3.3) has been found to precede the quotative marker /=ta^{3}/, as exemplified in (702). It will always follow the person index of the verb, if present.

[108] Indo-Aryan loan.
[109] Idem.

(702) ɟat⁰ ɹi¹ tʰa² i³ ɹi³ kɔ² na³ ʌŋ² na³ hɛ³ ta³.

ɟat⁰-ɹi¹=tʰi³=a² i³-ɹi³ kɔ²=na³ ʌŋ²-n-a³**=hɛ³=ta³**

jungle-boundary=DEF=ABS PROX-PROX direction=in COP-FUT-3**=DUB=QUOT**

‘‘The jungle boundary is maybe this way’ he said.’ (20151127_01)

6.2.2.28 The position of adhortative /-tɛ³/

The adhortative marker /-tɛ³/ (see section 6.1.6.3.10) precedes quotative /=ta³/, as example (703) illustrates.

(703) ɟuŋ² te² ka³ u³ tɛ³ ta³.

ɟuŋ² te² ka³-u³**-tɛ³=ta³**

water fetch go-2SG-**HORT=QUOT**

‘‘Do go fetch water’ he said.’ (20151208_05)

6.2.2.29 The position of assumptive /=laŋ²/

Based on the current corpus, it can be determined that the assumptive marker /=laŋ²/ (see section 6.1.6.3.4) precedes quotative marker /=ta³/. An example of this combination is provided in (704).

(704) xɨm³ ɟɔŋ² bɔ³ laŋ² ta³.

xɨm³-ɟɔŋ²=bɔ³**=laŋ²=ta³**

Khimyong=indeed**=ASS=QUOT**

‘‘This should indeed be Khimyong’ he said.’ (20151127_01)

6.2.2.30 The position of completive /=sɛ³/

The completive marker /=sɛ³/ (see section 6.1.6.2.8) precedes adhortative /ɟu²/, as is exemplified in (705). Unlike the homophonous COS marker and durative marker /sɛ³-/, which precede the verb, the completive follows the verb.

(705) xʌŋ^{1} u^{3} sɛ^{3} ɟu^{2}.

xʌŋ^{1}-u^{3}**=sɛ^{3}** **ɟu^{2}**

go.up-2SG**=COMP** **MIT**

‘Off you go already!’ (S2.29)

6.2.2.31 The position of mitigative /ɟu^{2}/

The mitigative marker /ɟu^{2}/ (see section 6.1.6.3.11) precedes quotative /=ta^{3}/, as is shown in example (706).

(706) i^{3} su^{1} ni^{3} ɔ^{2} nɨm^{1} ni^{3} a^{3} haʔ^{0} bɨŋ^{2} k^{h}ɨt^{0}

i^{3}-su^{1}-ni^{3}	ɔ^{2}	nɨm^{1}-ni^{3}=a^{3}	haʔ^{0}-bɨŋ^{2}	k^{h}ɨt^{0}
1SG.POSS-grandchild-two	EXCLAM	2PL-DU=ERG	earth-pit	dig.out

ka^{3} ʃɨn^{2} ɟu^{2} ta^{3} ti^{3} bat^{0} ta^{1}.

ka^{3}-ʃ-ɨn^{2} **ɟu^{2}=ta^{3}**=ti^{3} bat^{0}-t-a^{1}

go-DU-2PL **MIT=QUOT**=HS say-PST-3

‘‘My two grandchildren, you two must dig a pit’ he said, so they say.’ (20151208_05)

6.2.2.32 The position of quotative /=ta^{3}/

The quotative marker /=ta^{3}/ (see section 6.1.6.3.5) may co-occur with the hearsay marker /=ti^{3}/, which it precedes, as is exemplified in (707).

(707) i^{3} su^{1} ni^{3} ɔ^{2} nɨm^{1} ni^{3} a^{3} haʔ^{0} bɨŋ^{2} k^{h}ɨt^{0}

i^{3}-su^{1}-ni^{3}	ɔ^{2}	nɨm^{1}-ni^{3}=a^{3}	haʔ^{0}-bɨŋ^{2}	k^{h}ɨt^{0}
1SG.POSS-grandchild-two	EXCLAM	2PL-DU=ERG	earth-pit	dig.out

ka^{3} ʃɨn^{2} ɟu^{2} ta^{3} ti^{3} bat^{0} ta^{1}.

ka^{3}-ʃ-ɨn^{2} ɟu^{2}**=ta^{3}=ti^{3}** bat^{0}-t-a^{1}

go-DU-2PL MIT**=QUOT=HS** say-PST-3

‘‘My two grandchildren, you two must dig a pit’ he said, they say.’ (20151208_05)

6.2.2.33 The position of hearsay /=ti^{3}/

The hearsay marker /=ti^{3}/ (see section 6.1.6.3.6) precedes the inferential marker /=ɹi^{3}/, as is illustrated by example (708).

(708) e^{2} tʰa^{2} βɔ^{1} tʰɔʔ^{0} i^{3} ɹa^{2} u^{3} kʰɔ^{2} tʰɔ^{3} dʌŋ^{3} ta^{1} ti^{3} ɹi^{3}.

e^{2}tʰa^{2}	βɔ^{1}=tʰɔʔ^{0}	i^{3}-ɹ=a^{2}	u^{3}-kʰɔ^{2}=tʰi^{3}=ɔ^{3}	dʌŋ^{3}-t-a^{1}**=ti^{3}=ɹi^{3}**
but	bird=also	PROX-PROX=ABS	3SG.POSS-head=DEF=at	perch-PST-3**=HS=INFER**

'But the bird, it perched on his head.' (20160108_07)

Also, if an auxiliary is present in the clause, the morpheme /=ti^{3}/ is placed after it, as is exemplified by (709). The hearsay marker here follows the auxiliary /ʌŋ^{2}-t-a^{1}/ 'they were'.

(709) bʌŋ^{1} ʃa^{2} tʰɔʔ^{0} βan^{2} ʌŋ^{2} ta^{1} ti^{3} ɹi^{3}.

bʌŋ^{1}=ʃi^{3}=a^{2}=tʰɔʔ^{0}	βan^{2}	**ʌŋ^{2}-t-a^{1}=ti^{3}**=ɹi^{3}
tree=DIST=ABS=also	speak	**AUX-PST-3=HS**=INFER

'The trees also spoke.' (20160108_07)

6.2.2.34 The position of inferential /=ɹi^{3}/

The inferential marker /=ɹi^{3}/ (see section 6.1.6.3.7) is usually not followed by any of the elements discussed in this chapter, as it occupies the last slot, as in (708). In clauses which contain auxiliaries or copulas, the inferential morpheme also mostly seems to follow these. However, sometimes it is placed in front of the auxiliary or copula instead. An example of a post-posed /=ɹi^{3}/ is provided in (710), with the auxiliary /ʌŋ^{2}/, and an example of a pre-posed /=ɹi^{3}/ is provided in (711), where /=ɹi^{3}/ is placed between the adjective /ka^{3}/ 'open' and the change of state copula /ti^{3}/ and the stative copula /ʌŋ^{2}/.

(710) ɹʌŋ^{2} tʰɛ^{3} kɔʔ^{0} mɔʔ^{0} sɛ^{3} ʌŋ^{2} ta^{1} ɹi^{3}.

ɹʌŋ^{2}=tʰi^{3}=ɛ^{3}	kɔʔ^{0}-m-ɔʔ^{0}=sɛ^{3}	ʌŋ^{2}-t-a^{1}**=ɹi^{3}**
god=DEF=ERG	give-NEG-3=COMP	AUX-PST-3**=INFER**

'The god didn't give it anymore.' (20151208_03)

(711) e^{2} t^{h}ɔ^{3} tsʌm^{1} t^{h}a^{2} nuŋ^{2} ka^{3} ɹi^{3} ti^{3} ʌŋ^{2} ta^{1}.

e^{2}t^{h}ɔ^{3}	tsʌm^{1}=t^{h}i^{3}=a^{2}	nuŋ^{2}	ka^{3}**=ɹi^{3}**	ti^{3}	ʌŋ^{2}-t-a^{1}
and	paddy=DEF=ABS	mouth	be.open=**INFER**	COS.COP	COP-PST-3

'And the paddy, it's mouth was open.' (20121103_03)

7 Notes on clause structure

This chapter discusses a selection of topics within the domain of clause structure, starting with simplex clauses, i.e. non-embedded clauses, in section 7.1, followed by complex clauses, clauses that involve clausal embedding, in section 7.2. Finally, a few examples of clause coordination are presented in section 7.3.

7.1 Simplex clauses

This section discusses simplex clauses, i.e. non-embedded clauses. First, basic word order is described in section 7.1.1. Different types of nominal clauses are discussed in section 7.1.2, not to be confused with nominalised clauses. The remaining sections are dedicated to a small selection of constructions: interrogative clauses in section 7.1.3, direct quotation in 7.1.4, reflexive constructions in 7.1.5, predicates with two verbs in section 7.1.6, and finally light verb constructions in section 7.1.7.

7.1.1 Basic word order and right-dislocation

As in most TB languages, the verb occurs most frequently after all core and oblique constituents in texts, i.e. the default position of the verb is clause-final. Of the core arguments, the agent-like argument tends to precede the patient-like argument, but constituents can be moved around. In other words, the basic word order in Muklom is APV, which in typological work is often referred to as an 'SOV language', an abbreviation which is perhaps more suitable for languages where 'subject' and 'object' are relevant syntactic categories than for languages where they are not. Constituent order tendencies are of course not the only cue hearers have for interpreting the role of constituents. Other cues include context knowledge, for example knowledge about preceding discourse, about the discourse setting or may involve world knowledge in general. Case markers and other postpositions that are attached to the right of NPs constitute another cue. An example of a clause with one core argument, S, is presented in (712), and an example of a clause with two core arguments, A and P, and default order is presented in (713). The default order of arguments in a clause with three core arguments is agent-recipient-theme, as is exemplified in (714).

(712) mɛŋ^{2} ɟɨp^{0} tɕɨŋ^{1} k^{h}uŋ^{3} na^{3} ɟɨp^{0} a^{3}.

[mɛŋ^{2}]$_{S}$ ɟɨp^{0}-tɕɨŋ^{1}-k^{h}uŋ^{3}=na^{3} [ɟɨp^{0}-a^{3}]$_{V}$

[cat]$_{S}$ sleep-place-under=in [sleep-3]$_{V}$

'The cat sleeps under the bed.' (20161223_01)

(713) ʃaʔ^{0} ɛ^{3} tɕɔk^{0} kʌk^{0} ta^{1}.

[ʃaʔ^{0}=ɛ^{3}]$_{A}$ [tɕɔk^{0}]$_{P}$ [kʌk^{0}-t-a^{1}]$_{V}$

[tiger=ERG]$_{A}$ [deer]$_{P}$ [bite-PST-3]$_{V}$

'The tiger bit the deer.' (SDM31-2009)

(714) miʔ^{0} βa^{1} sa^{1} nɛ^{3} miʔ^{0} nu^{1} sa^{1} ma^{3} nap^{0} ti^{1} t^{h}a^{2} kɔʔ^{0} ta^{1}.

[miʔ^{0}-βa^{1}-sa^{1}=ni^{3}=ɛ^{3}]$_{A}$ [miʔ^{0}-nu^{1}-sa^{1}=ma^{3}]$_{R}$ [nap^{0}-ti^{1}=t^{h}i^{3}=a^{2}]$_{T}$ [kɔʔ^{0}-t-a^{1}]$_{V}$

[person-M-DIM=MED=ERG]$_{A}$ [person-F-DIM=DAT]$_{R}$ [banana-fruit=DEF=ABS]$_{T}$ [give-PST-3]$_{V}$

'The boy gave the banana to a girl.' (20121103_04)

An example of a transitive clause in which the constituents do not follow the default order but the reverse, P-A, is presented in (715). Definiteness, though a precise definition of this concept in the context of Muklom is yet to be developed, is a factor that could play a role in constituent order: perhaps an argument that carries the anaphoric or definite determiner /-t^{h}i^{3}/, like /miʔ^{0}-nu^{1}=t^{h}i^{3}=a^{2}/ 'the woman' in (715), more easily precedes an argument that lacks a definite or demonstrative determiner, like /hi^{1}=ɛ^{3}/ 'a dog' in (715), than the other way around. Since transitive clauses with overt A and P arguments are rare in non-elicited speech, as is illustrated by the three texts in Appendix C which combined contain only six tokens of this type, all six with the order A-P, a much larger corpus of annotated texts is needed to be able to confirm or reject this idea. An example of a ditransitive clause with a non-default order, A-T-R, is provided in (716). Again, the presence or lack of definite and demonstrative determiners might have affected the configuration: the first two arguments carry a definite marker /=t^{h}i^{3}/ while the last does not.

(715) miʔ^{0} nu^{1} t^{h}a^{2} hi^{1} ɛ^{3} kʌk^{0} ta^{1}.

[miʔ^{0}-nu^{1}=t^{h}i^{3}=a^{2}]$_{P}$ [hi^{1}=ɛ^{3}]$_{A}$ [kʌk^{0}-t-a^{1}]$_{V}$

[person-F=DEF=ABS]$_{P}$ [dog=ERG]$_{A}$ [bite-PST-3]$_{V}$

'A dog bit the woman.' (20100124-112656)

(716) miʔ^{0} βa^{1} sa^{1} tʌŋ^{2} t^{h}ɛ^{3} nap^{0} ti^{1} t^{h}a^{2} ŋa^{1} ma^{3} kɔʔ^{0} ta^{1}.

[miʔ^{0}-βa^{1}-sa^{1}=tʌŋ^{2}=t^{h}i^{3}=ɛ^{3}]$_{A}$ [nap^{0}-ti^{1}=t^{h}i^{3}=a^{2}]$_{T}$ [ŋa^{1}=ma^{3}]$_{R}$ [kɔʔ^{0}-t-a^{1}]$_{V}$

[person-M-DIM=PL=DEF=ERG]$_{A}$ [banana-fruit=DEF=ABS]$_{T}$[1SG=DAT]$_{R}$ [give-PST-3]$_{V}$

'The boys gave the banana to me.' (B1.74)

Constituents usually precede the verb, but it is possible to dislocate either a core constituent or an oblique constituent and place it after the verb. The slot to the right of the verb is a focus position and right-dislocated constituents are often but not always marked by a definite or demonstrative clitic (see section 5.1.3.2) and by the focus clitic /=lɛ^{3}/ (see section 8.3.2), as is exemplified by (717). This utterance is taken from a story about the mythical time of destruction and creation. The narrator disapproves of the behaviour of the characters in the story. An example of a right-dislocated constituent without a determiner clitic or focus particle is provided in (718), which is an expression that can be used to indicate that someone is stingy. In examples (717) and (718), the dislocated constituent occurs once. However, it is also possible to repeat a constituent that occurs in pre-verbal position in the post-verbal focus slot, as is done with /ʃɔl^{2}/ 'wolf' in example (719). This utterance is taken from a portion of traditional narrative which explains how the dog became a companion of humans. At first, he tried to join the wolves, but he failed and found a place with the humans instead.

(717) ʌ^{0}ɟaʔ^{0} ʌŋ^{2} ta^{1} ɹʌŋ^{2} t^{h}ɨp^{0} miʔ^{0} t^{h}i^{3} lɛ^{3}.

ʌ^{0}-ɟaʔ^{0} [ʌŋ^{2}-t-a^{1}]$_{V}$ **[ɹʌŋ^{2}-t^{h}ɨp^{0}-miʔ^{0}=t^{h}i^{3}=lɛ^{3}]$_{rDis}$**

NMLZ-abnormal [COP-PST-3]$_{V}$ **[sky-annihilation-person=DEF=FOC]$_{rDis}$**

'They were abnormal, the people of the time of destruction.' (20121103_03)

(718) k^{h}ʌt^{0} lɔ^{1} lɔ^{1} ʃɛ^{1} t^{h}ɔʔ^{0} kɔʔ^{0} mɔʔ^{0} piʔ^{0} ɟun^{1} te^{2} ma^{3}.

k^{h}ʌt^{0} lɔ^{1}-lɔ^{1}-ʃɛ^{1}=t^{h}ɔʔ^{0} [kɔʔ^{0}-m-ɔʔ^{0}]$_{V}$ **[piʔ^{0} ɟun^{1}te^{2}=ma^{3}]$_{rDis}$**

cloth CLF-REDUP-one=also [give-NEG-3]$_{V}$ **[3SG.POSS relative=DAT]$_{rDis}$**

'He does not even give one piece of cloth to his relatives.' (B1.134)

(719) ʃɔl^{2} ɟʌm^{2} ɔʔ^{0} tat^{0} ɹup^{0} kɔ^{3} lɛ^{3}, ʃɔl^{2} t^{h}i^{3} lɛ^{2}.

ʃɔl^{2}-ɟʌm^{2}=ɔʔ^{0} tat^{0} [ɹup^{0}]$_{V}$=kɔ^{3}lɛ^{3} **[ʃɔl^{2}=t^{h}i^{3}=lɛ^{3}]$_{rDis}$**

wolf-company=at try [unite]$_{V}$=because **[wolf=DEF=FOC]$_{rDis}$**

'Since he tried to team up with the wolf, the wolf.' (20151208_04)

It is also possible to right-dislocate a nominalized clause, as is exemplified by (720). We can tell that the clause /ba^{3}-miŋ^{3} pɨt^{0}-p^{h}-ʌŋ^{2}/ 'I ask you for your name' has been nominalized because it is followed

by two NP markers: a demonstrative determiner, distal marker /=ʃi³/, and the dative case marker, /=ma³/ (see also section 7.2.2).

(720) ʝa³ ʃiʔ⁰ nʌk⁰ kʌp⁰ u³ ʝu² ba³ mɨŋ³ pɨt⁰ pʰʌŋ² ʃi³ ma³.

ʝa³ʃiʔ⁰	[nʌk⁰-kʌp⁰-u³]$_{V}$	ʝu²	**[ba³-mɨŋ³**	**pɨt⁰-pʰ-ʌŋ²=ʃi³=ma³]**$_{rDis}$
bad	[PROH-receive-2SG]$_{V}$	MIT	**[2SG.POSS-name**	**ask-INV-1SG=DIST=DAT]**$_{rDis}$

'Please don't take offense at the fact that I ask you for your name.' (B1.104)

Right-dislocated constituents may carry case markers, as the presence of the dative case marker in examples (718) and (720) demonstrates, so it can be concluded that the postverbal focal slot is not extra-clausal.

7.1.2 Nominal clauses

Verbal clauses are those clauses which contain a verbal predicate. Nominal clauses, on the other hand, are clauses that have a nominal predicate. They do not contain a lexical verb (see section 6.1.1.1) but may contain one or more grammaticalised verbs, i.e. copulas. Present tense, affirmative nominal clauses do not require the presence of a copula, as is illustrated by example (721), where /mukᵒlɔm²/ is the nominal predicate. Negative, past tense, or future tense nominal clauses do require a copula. An example is provided in (491)(722), where /ʝuŋ²-lal³/ 'thirst' functions as nominal predicate and the change of state copula /ti³/ carries the negator /-m/.

(721) nɨŋ² ɹa² muk⁰ lɔm².

nɨŋ²=ɹi³=a²	muk⁰lɔm²
3PL=PROX=ABS	Muklom

'They are Muklom.' (MessagesExtracts_2017)

(722) ŋa¹ ʝuŋ² lal³ ti³ mɔŋ¹.

ŋa¹ ʝuŋ²-lal³	**ti³**=m=ɔŋ¹
1SG water-hunger/thirst	**COS.COP**=NEG=1SG

'I am not thirsty.' (S1.4)

The use of copulas is further discussed and exemplified in section 6.1.1.2 and section 6.1.1.3 (see also Mulder 2019). Four types of nominal clauses will be discussed below: equational clauses in section

7.1.2.1, location clauses in section 7.1.2.2, possessive constructions in section 7.1.2.3, and comparative constructions in section 7.1.2.4.

7.1.2.1 Equational clauses

An example of an equational clause is found above in (721). Another example is presented below, in (723). In equational clauses, the first component tends to be modified by a definite or demonstrative determiner, like the proximal determiner /=ɹi^{3}/ in (721) and the medial determiner /=ni^{3}/ in (723).

(723) mi^{3} ka^{3} na^{2} nɛdɛɹlɛnd te^{2} nu^{1} bɔ^{3}.
mi^{3}ka^{3}=ni^{3}=a^{2} nɛdɛɹlɛnd-te^{2}-nu^{1}=bɔ^{3}
Mika=MED=ABS the.Netherlands-PERS-F=indeed
'Mika is indeed Dutch.' (B1.58)

Furthermore, absolutive marking tends to appear on the first component of an equational clause. Indeed, for some clauses, consultants have indicated that absolutive marking is compulsory. For example, consultants find clause (724) ungrammatical and indicate that 'something is missing'. An absolutive marker on the cat is the missing element, as is demonstrated by example (725), which only differs from the former by the presence of an absolutive marker /=a^{2}/ and is considered grammatical.

(724) *e^{2} ʃi^{3} mɛŋ^{2} ʃi^{3} ʌ^{0}puŋ^{2}.
e^{2}-ʃi^{3} mɛŋ^{2}=ʃi^{3}**=Ø** ʌ^{0}-puŋ^{2}
NPROX-DIST cat=DIST**=Ø** NMLZ-white
Intended: 'That cat is white.' (B1.73)

(725) e^{2} ʃi^{3} mɛŋ^{2} ʃa^{2} ʌ^{0}puŋ^{2}.
e^{2}-ʃi^{3} mɛŋ^{2}=ʃi^{3}**=a^{2}** ʌ^{0}-puŋ^{2}
NPROX-DIST cat=DIST**=ABS** NMLZ-white
'That cat is white.' (B1.73)

The position of the nominalised adjective in equational clauses differs from the nominalised adjective that functions as a modifier noun (see section 5.1.2). The following two examples serve to illustrate that difference. Example (726) contains a noun that is modified by a de-adjectival modifier noun, a construction which encodes restrictive modification. The modifier noun /ʌ^{0}-k^{h}i^{2}/ 'grey' precedes the

noun it modifies, /man^{2}/ ‘cow’. In example (727), on the contrary, the de-adjectival nominal predicate /ʌ^{0}-puŋ^{2}/ ‘white’ follows the noun /man^{2}/.

(726) ʌ^{0}kʰi^{2} man^{2}.

ʌ^{0}-kʰi^{2}	man^{2}
NMLZ-grey	cow

‘The grey cow.’ (20151020_01)

(727) e^{2} ni^{3} man^{2} na^{2} ʌ^{0}puŋ^{2}.

e^{2}-ni^{3}	man^{2}=ni^{3}=a^{2}	**ʌ^{0}-puŋ^{2}**
NPROX-MED	cow=MED=ABS	**NMLZ-white**

‘That cow is white.’ (B1.12)

7.1.2.2 Location clauses

Nominal clauses that express location follow the same rules or tendencies with respect to copulas as other nominal clauses (see section 7.1.2 above). Specialised locational copulas, observed among some TB languages (see for example Bradley 2017:17-18), have not been observed for Muklom. An example of a locational clause without a copula is provided in (728). The clause in (729) is an example of a locational clause with copula, here carrying the future tense marker /-n/.

(728) tɕʌm^{2} tan^{3} miʔ^{0} a^{2} nɨm^{1} hɨm^{2} na^{3}?

tɕʌm^{2}-tan^{3}	miʔ^{0}=a^{2}	nɨm^{1}	hɨm^{2}=na^{3}
what-as.many.as	person=ABS	2PL.POSS	house=in

‘How many people are there at your house?’ (20120218_03)

(729) ʝat^{0} ɹi^{1} tʰa^{2} i^{3} ɹi^{3} kɔ^{2} na^{3} ʌŋ^{2} na^{3} hɛ^{3} ta^{3}.

ʝat^{0}-ɹi^{1}=tʰi^{3}=a^{2}	i^{3}-ɹi^{3}	kɔ^{2}=na^{3}	**ʌŋ^{2}-n-a^{3}**=hɛ^{3}=ta^{3}.
jungle-line=DEF=ABS	PROX=PROX	direction=in	**COP-FUT-3**=DUB=QUOT

‘‘The edge of the jungle will maybe be in this direction.’’ (20151127_01.ed)

7.1.2.3 Possessive constructions

Possession can not only be expressed by possessive pronouns, but also by means of a possessive existential clause. The Possessor carries a dative case marker in this possessive construction. Cross-

linguistically it is not uncommon for the existential marker to be used in possessive constructions (see Schachter and Shopen 2007:56). In Muklom, affirmative possessive clauses contain the existential /tʰa¹/ ‘there is/are’ and clauses which express negative possession can be formed with the negative existential /huŋ¹/ ‘there is/are not’ (see section 6.1.1.3). An example of an affirmative possessive clause is provided in (730), where the Possessor /hiʔ⁰-tʌŋ²/ ‘we (incl)’ is followed by dative /=ma³/, and an example of a negative possessive clause is provided in (731), where /ɹʌŋ²-sɔŋ²/ is the Possessor. The latter example is a saying which means one should not be afraid of the cold, as it has no teeth and therefore cannot bite you.

(730) hiʔ⁰ tʌŋ² ma³ mɛŋ² ʌ⁰ʃɛ¹ ʌ⁰tʰa¹.
hiʔ⁰-tʌŋ²=ma³ mɛŋ² ʌ⁰-ʃɛ¹ ʌ⁰-tʰa¹
1PL.IN=DAT cat NMLZ-one NMLZ-EXIST
‘We have one cat.’ (B1.21)

(731) ɹʌŋ² sɔŋ² ma³ u³ pa³ ʌ⁰huŋ¹.
ɹʌŋ²-sɔŋ²=ma³ u³-pa³ ʌ⁰-huŋ¹
sky-cold=DAT 3SG.POSS-tooth NMLZ-NEXIST
‘The cold does not have teeth.’ (S2.20)

Possessive existential clauses are nominal clauses: the existential elements function as nominal predicates, as we can tell from the presence of the de-adjectival nominalizer /ʌ⁰-/ in the above two examples. The types of possession that are expressed by this construction may be both alienable an unalienable. The clause in (730) constitutes an example of alienable possession, and the clause in (731) of unalienable possession.

7.1.2.4 Comparative constructions

There are different constructions which can express comparison between referents. This section discusses three constructions that are used in Muklom to express inequality. The first construction takes the shape of a nominal clause, consisting of a comparee NP, a standard NP, and a de-adjectival nominal predicate that encodes the so-called parameter, the property in terms of which two NPs are compared (see Dixon 2008:788; Treis 2018:ii). The second and third constructions constitute NP units, not full clauses, but they are included in this section to keep the discussion of comparative constructions together in one place.

The first construction contains the comparative marker /=naŋ^{3}ɛ^{3}/. The (lexical) source from which this comparative marker evolved is not yet clear, but the fact that the comparative marker consists of two syllables, suggests that historically it consisted of two morphemes, since Muklom morphemes tend to be monosyllabic (see section 3.3.2). Perhaps the two morphemes were a relational noun plus the instrumental postposition /=ɛ^{3}/. Two examples of the comparative construction with /=naŋ^{3}ɛ^{3}/ are presented in (732) and (733). The standard NP, here /i^{3}-ɹi^{3}/ 'this' and /bɔ^{3}-ti^{1}=ɹi^{3}/ 'this papaya', must be marked with absolutive case, as is the general rule for the first component of nominal clauses. The comparee NP, here /e^{2}-ʃi^{3}/ 'that' and /aiskɹim/ 'ice cream', must not be marked for case. Muklom exhibits the same order of elements in comparative constructions as has been reconstructed in PST: standard-(comparative marker)-adjective (see LaPolla 2017a:47). In Muklom, the slot of the adjective is occupied by a nominalized adjective, like /ʌ^{0}-jɔŋ^{2}/ 'a big one' and /ʌ^{0}-xʌl^{2}/ 'a good one' in examples (732) and (733).

(732) i^{3} ɹa^{2} e^{2} ʃi^{3} naŋ^{3} ɛ^{3} ʌ^{0}jɔŋ^{2}.

i^{3}-ɹi^{3}=a^{2}	e^{2}-ʃi^{3}=**naŋ^{3}ɛ^{3}**	ʌ^{0}-jɔŋ^{2}
PROX-PROX=ABS	NPROX-DIST=**COMPAR**	NMLZ-big

'This one is bigger than that one.' (B1.62)

(733) bɔ^{3} ti^{1} ɹa^{2} aiskɹim naŋ^{3} ɛ^{3} ʌ^{0}xʌl^{2}.

bɔ^{3}-ti^{1}=ɹi^{3}=a^{2}	aiskɹim=**naŋ^{3}ɛ^{3}**	ʌ^{0}-xʌl^{2}
papaya-fruit=PROX=ABS	ice.cream=**COMPAR**	NMLZ-good

'This papaya is better than ice cream.' (B1.36)

It is possible to leave the standard of the comparison unmentioned, as is done in example (734). The hearer must then infer from the context what the standard is.

(734) u^{0}ʃa^{3} naŋ^{3} ɛ^{3} ʌ^{0}-hʌn^{1}.

u^{0}-ʃa^{3}=**naŋ^{3}ɛ^{3}**	ʌ^{0}-hʌn^{1}
NMLZ-hundred=**COMPAR**	NMLZ-many

'They number over a hundred.' (20151020_01)

When the comparative clitic /=naŋ^{3}ɛ^{3}/ is used in combination with a standard that means 'all', a superlative meaning is conveyed. Specifying the standard as 'all' to create a superlative is a strategy which is cross-linguistically quite common (see Dixon 2008:807). An example of this combination is provided in (735). There is a difference in tone and vowel between /=naŋ^{3}ɛ^{3}/ and /=nʌŋ^{1}ɛ^{3}/ as it appears

in the first line of this example. The consultant I worked with on tone determination in the lexicon insisted there is a difference in the shape of the comparative clitic when it follows /pʰe³/ ‘outside’. If this is indeed a correct judgement, it suggests that /pʰe³-nʌŋ¹ɛ³/ constitutes a compound which has been affected by vowel reduction and tone change.

(735) i³ ɹi³ hi¹ ɹa² tʰʌ⁰ʝi² pʰe³ nʌŋ¹ ɛ³ ʌ⁰ʝɔŋ².

i³-ɹi³	hi¹=ɹi³=a²	**tʰʌ⁰ʝi² pʰe³=naŋ¹ɛ³**	ʌ⁰-ʝɔŋ²
PROX-PROX	dog=PROX=ABS	**all outside=COMPAR**	NMLZ-big

‘This dog is the biggest (of all).’ (S2.34)

The second type of comparative construction involves the use of a locational postposition, /=βaŋ³/ ‘from’, as exemplified in (736). This construction is comparable to locational comparatives (see Stassen 2013).

(736) i³ ɹi³ ni³ βaŋ³ ʌ⁰ʝɔŋ².

i³-ɹi³-ni³=**βaŋ³**	ʌ⁰-ʝɔŋ²
PROX-PROX-two=**from**	NMLZ-big

‘The bigger of the two.’ (S2.34)

The third type of comparative construction lacks a comparative particle or comparative locational postposition and is exemplified in (737).

(737) i³ɹi³ ni³ ɹi³ ʌ⁰ʝɔŋ².

i³-ɹi³-ni³=ɹi³	ʌ⁰-ʝɔŋ²
PROX-PROX-two	NMLZ-big

‘The bigger of the two.’ (S2.34)

7.1.3 Interrogative clauses

This section discusses interrogative markers that can have scope over an entire clause. Question words such as /u³tʌŋ²/ ‘who’ or /tɕʌm²-tan³/ ‘how much/many’, which have a smaller scope, are discussed in section 5.1.1.8. Muklom exhibits the following three polar question particles or clitics: /i³/ ‘Q.AFF’ which marks a leading question to which an affirmative answer is expected, /=bɔ³/ ‘Q.PLR’ which marks a neutral closed question, where the speaker is not making predictions about the answer, and /=bɛ³/ ‘Q.PLR’ which appears to mark leading questions to which the speaker expects a negative answer

but somewhat confusingly also occurs in a fixed greeting to which the answer is expected to be affirmative. All three interrogative markers occur in sentence-final position, which is the general tendency among verb-final languages. However, they may alternatively be used in statements, in which case they may also appear in non-final position.

An example of the first interrogative marker, /i³/, is provided in (738). This short utterance has been taken from a story about a massive flood that forced the people to take refuge on a mountain. The mountain consisted of two parts, a lower and a higher peak. At this point of the story, the narrator had described the shape of the mountain and the interviewer responded with the question in (738), probably to show he understood what the narrator said. The narrator continues his story without directly answering the question interviewer, which illustrates another aspect of this marker, namely that it may also be used to mark rhetorical questions, where the speaker is not necessarily expecting an answer.

(738) ʌ⁰nɨm³ i³?

ʌ⁰-nɨm³ **i³**

NMLZ-low **Q.AFF**

'It is low, right?' (20160108_07)

The interrogative marker /i³/ has been glossed as an unbound morpheme, because it may also occur in isolation, namely as backchannel, as in (204) (see also section 4.4).

(739) i³.

i³

Q.AFF

'Is that so?' (541)

Furthermore, the marker /i³/ may be used in statements. It then seems to serve to keep the hearer involved or check whether they are following what the speaker is saying. In example (740), /i³/ occurs at the end of a sub-ordinate clause inside a larger statement.

(740) i³ ɹi³ kɔ² nʌŋ³ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ ʌŋ² i³ tʰɔ³,

i³-ɹi³ kɔ²=nʌŋ³ ka¹-ɹɔʔ⁰ ka¹-ɹɔʔ⁰ ka¹-ɹɔʔ⁰ ka¹-ɹɔʔ⁰ ʌŋ²-i³=tʰi³=ɔ³

PROX-PROX direction=to go-CNT go-CNT go-CNT go-CNT AUX-1PL=DEF=at

dʌk⁰ lɔːt⁰ nʌŋ³ sɛ³ ka¹ i³ tʰɔ³ i², lʌm² kʰuŋ³ sa¹ man³ sa¹

dʌk⁰-lɔːt⁰=nʌŋ³=sɛ³	ka¹-i³=tʰi³=ɔ³	**i²**	lʌm²	kʰuŋ³-sa¹-man³-sa¹
SUPER-far=to=already	go-1PL=DEF=at	**Q.AFF**	road	path-DIM-small-DIM

ʌŋ² mɔʔ⁰ ɛ³ laŋ².

ʌŋ²-m-ɔʔ⁰-ɛ³=laŋ²

COP-NEG-3-REV.NEG=indeed

'When we continued to go and go this way, when we went so far, there was a very small path.' (20151127_01.ed)

Consultants found it difficult to identify the tone on this first interrogative marker, hesitating between tone 2 and 3. In example (740), the question particle was transcribed as carrying tone 2.

The second interrogative marker is the clitic /=bɔ³/. This marker has not been observed to occur in isolation. An example of /=bɔ³/ in a polar question is provided in (741). Like /i³/, the marker /=bɔ³/ also may occur in statements. It then appears to express some type of epistemic modality, possibly a higher degree of certainty. An example of /=bɔ³/ in a statement is provided in (742). The fact that /=bɔ³/ and the morpheme /=laŋ³/ 'indeed' may co-occur within the same statement, as illustrated by (743), supports the interpretation of /=bɔ³/ as a marker of certainty.

(741) ba³ pʌk⁰ lʌk⁰ xɔŋ¹ a³ bɔ³?

ba³-pʌk⁰lʌk⁰	xɔŋ¹-a³**=bɔ³**
2SG.POSS-boredom	come.out-3**=Q.PLR**

'Do you feel bored?' (S2.34)

(742) i² ni³ lɛ³ tɕuŋ¹ tɨk⁰ bɔ³ ʌŋ² ti¹ ta³.

i²-ni³=lɛ³	tɕuŋ¹	tɨk⁰**=bɔ³**	ʌŋ²-t-i¹=ta³
1EXCL-DU=FOC	lost	COS.COP**=indeed**	COP-PST-1PL=QUOT

''We two indeed got lost', we said.' (20151127_01.ed)

(743) ŋa¹ lɛ³ tɕɔ³ sɛ³ bɔ³ xɔŋ³ βʌŋ¹ a³ laŋ².

ŋa¹=lɛ³	tɕɔ³=sɛ³**=bɔ³**	xɔŋ³-βʌŋ¹-a³**=laŋ²**
1SG=FOC	fear=COMP**=indeed**	come.out-go.up-3**=indeed**

'I started to be afraid.' (20151127_01.ed)

The third interrogative marker, /=bɛ^{3}/, most often appears to mark leading questions to which a negative answer is expected. an example is provided in (744). However, when appearing in conjunction with the word /ʌ^{0}-xʌl^{2}/ ‘good’ in greetings (see also section 8.6), the opposite, namely an affirmative answer is expected. An example of such a greeting is provided in (745). In greetings, /=bɛ^{3}/ is placed immediately after the nominalized adjective. This means that it may not always occur sentence-finally, as illustrated by (746).

(744) nʌŋ^{1} ʌ^{0}lɔ^{1} tɔŋ te^{2} bɛ^{3}?

nʌŋ^{1} ʌ^{0}-lɔ^{1} tɔŋ-te^{2}=**bɛ^{3}**

2SG NMLZ-long stay-PROSP=**Q.NEG**

‘You won’t be staying long, right?’ (S1.28)

(745) ʌ^{0}xʌl^{2} bɛ^{3}?

ʌ^{0}-xʌl^{2}=**bɛ^{3}**

NMLZ-good=**Q.AFF**

‘Are you okay?’ (S1.5)

(746) ʌ^{0}xʌl^{2} bɛ^{3} tɔŋ^{2} u^{3}?

ʌ^{0}-xʌl^{2}=**bɛ^{3}** tɔŋ^{2}-u^{3}

NMLZ-good=**Q.AFF** stay-2SG

‘How are you?’ (Lit. ‘Are you staying okay?’) (MessagesExtracts)

Like the other two interrogative markers, the clitic /=bɛ^{3}/ may also be used in statements. An example is provided in (747). This utterance is a reaction to a question that was asked by an interviewer: was there or was there not a revival in ’99? There are only a few examples of /=bɛ^{3}/ used in statements in the annotated corpus. This element also appear to express some type of epistemic modality, perhaps a lesser degree of certainty. More data is needed to determine whether this is the case or not. For now, I have glossed the element as ‘maybe’. The clitic /=bɛ^{3}/ can co-occur with the dubitative marker /=hɛ^{3}/ in statements, as is illustrated by (748).

(747) ʌ^{0}huŋ^{1} bɛ^{3}.

ʌ^{0}-huŋ^{1}=**bɛ^{3}**

NMLZ-NEXIST=**maybe**

‘There maybe wasn’t (a revival).’ (542)

(748) ɹɔk^{0} bʌ^{0}ŋa^{3} bɛ^{3} hɛ^{3}.

ɹɔk^{0}-bʌ^{0}ŋa^{3}**=bɛ^{3}=hɛ^{3}**

multiple.of.ten-five**=maybe=DUB**

'Fifty, maybe?' (S2.61)

7.1.4 Direct quotation

An utterance can be marked as direct quotation by attaching the sentence-final clitic /=ta^{3}/ to it (see also section 6.1.6.3.5). The marker /=ta^{3}/ does not invoke authority of the person who made the original statement but does give authority to the information that the speaker wants to bring across to the hearer. By using the quotative, the speaker creates the suggestion that they are literally quoting what others have said, which of course need not always be the case. The quotative is a useful tool especially in narratives for this reason, but it also helps the listeners move through the story by indicating what is quoted material. An instance of direct quotation can be found in the second utterance in example (749). This examples derives from a traditional narrative about a woman from the sky whose relatives were fish. As can been seen from the example, pronominal forms and person indices do not reorient, /i^{3}-/ '1SG.POSS' and /-ɔŋ^{1}/ '1SG' are first person forms, not third person.

(749) ɹɛʔ^{0} piʔ^{0} t^{h}ɛ^{3} ba^{3} ja^{3} ʃiʔ^{0} kʌp^{0} ta^{1} ti^{3}.

ɹɛʔ^{0} piʔ^{0}=t^{h}i^{3}=ɛ^{3}=ba^{3} ja^{3}ʃiʔ^{0} kʌp^{0}-t-a^{1}=ti^{3}

then 3SG=DEF=ERG=TOP bad receive-PST-3=HS

'Then she took it badly.'

i^{3} nu^{1} βa^{1} ŋʌm^{2} p^{h}ʌk^{0} mɔŋ^{1} ta^{3}.

i^{3}-nu^{1}-βa^{1} ŋʌm^{2} p^{h}ʌk^{0}-m-ɔŋ^{1}**=ta^{3}**

1SG.POSS-mother-father meat eat-NEG-1SG**=QUOT**

''I do not eat the meat of my parents' she said.' (20160106_04.ed)

The speaker is often not overtly mentioned with direct quotation, as in the second utterance in example (749) above. the identity of the speaker who is quoted, here the woman from the sky, can be inferred by the hearer from the context, including from the directly preceding clause where the woman from the sky is referred to by the personal pronoun /piʔ^{0}/ 'she/he'. However, it is possible to mention the speaker alongside a direct quotation. An example of this is provided in (750), where the quoted speaker is referred to as /u^{3}-hɨm^{2}-te^{2}-βa^{1}/ 'her husband'. Mentioning the speaker does not affect pronouns and person indices, they still do not reorient, but it does change the clause type from simplex to complex.

The NP referring to the speaker is marked with ergative case, indicating that the NP is functioning as the agent-like argument of a transitive clause and that the direct quotation, /i³-ɹi³ tɨl²=ɹi³ mɛ³ saʔ⁰-u³ ʝu²/ ‘you can eat this rice’, is functioning as a complement.

(750) ɹɛʔ⁰ e² tʰɔ³ u³ hɨm² te² βa¹ tʰɛ³ i³ ɹi³ tɨl² ɹi³

ɹɛʔ⁰ e²-tʰi³=ɔ³ u³-hɨm²-te²-βa¹=tʰi³=ɛ³ i³-ɹi³ tɨl²=ɹi³

then NPROX-DEF=at 3SG.POSS.DIST-house-PERS-M=DEF=ERG PROX-PROX rice=PROX

mɛ³ saʔ⁰ u³ ʝu² ta³.

mɛ³ saʔ⁰-u³ ʝu²**=ta³**

ABIL eat.soft-2SG MIT**=QUOT**

‘Then her husband said, ‘This rice you can eat.’’ (20160106_04.ed)

It is possible for a speaker to quote what they have said themselves at some point in the past. An example of self-quotation is provided in (751).

(751) ŋa¹ ŋa¹ u⁰xʌp⁰ ʌŋ² nʌŋ³ sɛ³ ʝu² ta³.

ŋa¹ ŋa¹ u⁰-xʌp⁰ ʌŋ²-n-ʌŋ³=sɛ³ ʝu²**=ta³**

1SG 1SG NMLZ-cry COP-FUT-1SG=COMP MIT**=QUOT**

‘‘I will cry…’’

bat⁰ mɔŋ¹ ɛ³ laŋ², ba³ te² ma³ lɛ³.

bat⁰-m-ɔŋ¹-ɛ³=laŋ² ba³-te²=ma³=lɛ³

say-NEG-1SG-REV.NEG=indeed 2SG.POSS-grandfather=DAT=FOC

‘...I said, to your grandfather.’ (20151127_01.ed)

7.1.5 Reflexive constructions

Reflexive action is expressed by a construction that consists of a noun /ni¹ja³/ ‘self’ and a modifying possessive determiner, as exemplified by (752) and (753). This type of reflexive construction is quite common cross-linguistically (see Schachter and Shopen 2007:27). Many TB languages of Northeast India exhibit reflexive or middle marking on the verb, but Muklom does not. In example (752), the agent-like argument is a first person thus we have a first person possessive determiner /i³-/ ‘my’ and in example (753), there is a second person agent-like argument thus we have a second person possessive

determiner /ba³-/ ‘your (sg)’. The agent-like argument takes ergative marking and the reflexive noun may take absolutive marking: reflexive clauses follow the clause-marking pattern of transitive clauses.

(752) ŋa¹ a³ i³ ni¹ ʝa³ ɹa² kʰi³ ʌŋ³.

ŋa¹=a³	**i³-ni¹ʝa³**=ɹi³=a²	kʰi³-ʌŋ³
1SG=ERG	**1SG.POSS-self**=PROX=ABS	see-1SG

‘I see myself.’ (B1.162)

(753) nʌŋ¹ a³ ba³ ni¹ ʝa³ ni³ xɔl¹ u³.

nʌŋ¹=a³	**ba³-ni¹ʝa³**=ni³	xɔl¹-u³
2SG=ERG	**2SG.POSS-self**=MED	wash-2SG

‘You wash yourself.’ (B1.162)

The element /ni¹ʝa³/ ‘self’ is an Indo-Aryan loan, probably either directly or indirectly from Assamese /niza/ ‘own, self’ which also forms a building block in the reflexive construction of this language. One consultant indicated that she knew this to be a loan from another language but could not identify the donor language. This may suggest that the lexeme has been borrowed into or between multiple languages in the region. The consultant presented the construction as in (754) as a native alternative. Instead of a reflexive noun, this construction has a regular personal pronoun, here the first person singular pronoun /ŋa¹/.

(754) ŋa¹ a³ ŋa¹ tʰa² kʰi³ ʌŋ³.

ŋa¹=a³	ŋa¹=tʰi³=a²	kʰi³-ʌŋ³
1SG=ERG	1SG=DEF=ABS	see-1SG

‘I see myself.’ (CTT.lexicon)

7.1.6 Compositional predicate constructions

The term compositional predicate construction is used here to denote simplex clauses that contain two lexical verbs, V_1 and V_2, of which only V_2 can be inflected. In some grammatical descriptions, similar constructions are labelled serial verb constructions (SVCs). Single eventhood is the main cross-linguistic criterion used to determine whether a multi-verb construction qualifies as an SVC, but grammatical properties of SVCs may differ between languages (see Bisang 2009). Since it cannot be confirmed yet whether speakers view the compositional predicates as single events or not, I will for now refrain from using the term SVC in the context of Muklom.

In resultative compositional predicate constructions, V_1 expresses the result of the action that is encoded in V_2, as in examples (755) and (756). This order effect-action is the reverse of what Aikhenvald (2006:19) observes for resultative SVCs: action-effect. Perhaps the order of the verbs in Muklom represents a cross-linguistic rarity. The first example, (755), describes an event in which a man attacked a woman with some kind of knife, /duk^0/ 'cut' in V_2 position, resulting in the death of the woman, /tɨk^0/ 'die' in V_1 position. As example (738) illustrates, the arguments of V_1 and V_2 in a resultative compositional predicate construction are different and the verbs may differ in valency: V_1 /tɨk^0/ 'die' is an intransitive verb and the (afterthought) S argument is the woman, while V_2 /duk^0/ 'cut' is a transitive verb and the A argument is the husband. Another example of a resultative compositional predicate construction is provided in (756), where the event of scattering, V_1, is the consequence of the action of hitting, V_2.

(755) e^2 t^{h}ɔ^3 u^3 hɨm^2 te^2 βa^1 t^{h}ɛ^3 tɨk^0 duk^0 tɕʌk^0 ta^1 ti^3,

e^{2}t^{h}ɔ^3 u^3-hɨm^2-te^2-βa^1=t^{h}i^3=ɛ^3 **tɨk^0** **duk^0**-tɕʌk^0-t-a^1=ti^3

and 3SG.POSS-house-PERS-M=DEF=ERG **die** **cut**-PFV-PST-3=HS

ɹʌŋ^2 te^2 nu^1 t^{h}i^3 lɛ^2.

ɹʌŋ^2-te^2-nu^1=t^{h}i^3=lɛ^2

sky-PERS-F=DEF=FOC

'And her husband killed her, the woman from the sky.' (20151208_05)

(756) u^3 tʌŋ^2 ɛ^3 pan βat^0 tɕʌk^0 ta^1?

u^{3}tʌŋ^2=ɛ^3 **pan** **βat^0**-tɕʌk^0-t-a^1

who=ERG **scatter**[110]**hit**-PFV-PST-3

'Who broke it into pieces?' (B1.66)

When the verbs differ in degree of concreteness, the verb that encodes a more concrete action will be placed in the V_1 slot and the verb that encodes a more abstract action will be placed in the V_2 slot, as is illustrated by (757). The general action of giving water is performed specifically by pouring it into a cup or glass. This order aligns with the order of verbs in so-called asymmetrical SVCs, SVCs which have a select class of verbs that may occur in V_2 position, like motion or transaction verbs such as 'go' and 'give', but are less restricted in the selection of the verb in V_1 position (see Aikhenvald 2006:21-22).

[110] The verb /pan^2/~/pan^3/ 'scatter' shows stem alternation. It has not been determined which tone the stem takes when occurring as the first verb in a compositional predicate construction.

(757) mika ma^{3} ɟuŋ^{2} βaŋ^{3} kɛl kɔʔ^{0} u^{3}.

mika=ma^{3} ɟuŋ^{2}=βaŋ^{3} **kɛl** **kɔʔ^{0}**-u^{3}

Mika=DAT water=from **pour**[111] **give**[112]-2SG

'Pour Mika some water!' (B1.14)

Compositional predicate constructions are also used to describe the action of moving to a place to perform another action. As with the action-result combinations, the order in which the verbs occur is reverse-chronological: motion verbs always take the V_2 position in compositional predicate construction and the action that is consecutively performed takes the V_1 position. This is exemplified by examples (758) and (759). The addressee of the utterance in (758) was a cat who was begging for food during mealtime and was told to go away and catch a mouse instead to satisfy his hunger. These two examples, along with example (757) above, also illustrate that compositional predicate constructions may also occur in imperative clauses.

(758) ɟuʔ^{0} pɔ^{2} lɔ^{1} ka^{3} u^{3}.

ɟuʔ^{0}pɔ^{2} **lɔ^{1}** **ka^{3}**-u^{3}

mouse **grab** **go**-2SG

'Go grab a mouse!' (S1.52)

(759) βʌl^{1} kaŋ^{2} na^{3} tɔŋ ka^{3} p^{h}u^{3}.

βʌl^{1}-kaŋ^{2}=na^{3} **tɔŋ** **ka^{3}**-p^{h}-u^{3}

fire-edge=in **sit**[113] **go**[114]-CIS-2SG

'Come sit next to the fire!' (S1.77)

While similar with respect to reverse-chronological order, move-action combinations differ from action-result combinations with regard to syntactic structure: the syntactic head with action-result combinations is V_2, and we can tell because the action verbs /duk^{0}/ 'cut' and /βat^{0}/ 'hit' in position V_2

[111] The verb /kɛl^{2}/~/kɛl3/ 'pour' shows stem alternation. It has not been determined which tone the stem takes when occurring as the first verb in a compositional predicate construction.

[112] A reviewer draws a connection between the verb /kɔʔ^{0}/ 'give' and benefactive meaning. Though compositional predicate constructions are known to be fertile grounds for grammaticalisation, the verb has not grammaticalised here (yet): the command includes the action of giving. The addressee is instructed to pour water (into a cup) and hand it to Mika.

[113] The verb /tɔŋ^{2}/~/tɔŋ^{3}/ 'sit' shows stem alternation. It has not been determined which tone the stem takes when occurring as the first verb in a compositional predicate construction.

[114] The basic movement verbs are throughout this dissertation glossed with 'go'. This choice is explained in the section on glosses in the methodology chapter, section 2.2.4.2.

determine the valency of the clauses in (755) and (756), while the syntactic head with move-action combinations is V_1, as is illustrated by example (758), where /lɔ^1/ ‘grab’ determines the valency of the clause.

If a verb that stands in V_2 position shows verb stem alternation, usually the verbal stem (Σ_1) is used, which is what is expected, considering the fact that normally only verbal stems can carry person indices. I have to say ‘usually’ and ‘normally’ because one counterexample occurs in the corpus. This example of an inflected nominal stem in V_2 position is provided in (760): /tɨk^0-ta^1/ ‘died’. The normal, Σ_1 form would be /ti^3-ta^1/ ‘died’. It is unclear why /ti^3/~/tɨk^0/ behaves in this manner in compositional predicate constructions.

(760) e^2 tʰɔ^3 ba^3 miʔ^0 βa^1 tʰɛ^3 ba^3 sʌm^2 mɔʔ^0 na u^3 sa^1

e^{2}tʰɔ^2=ba^3	miʔ^0-βa^1=tʰi^3=ɛ^3=ba^3	sʌm^2-m-ɔʔ^0	na	u^3-sa^1
and=TOP	person-M=DEF=ERG=TOP	know-NEG-3	EXCLAM	3SG.POSS-child

mɨk^0 tʌŋ^2 tʰa^2 lɛ^3 pʰʌk^0 sʌt^0 tɨk^0 ta^1 ʃi^3.

mɨk^0=tʌŋ^2=tʰi^3=a^2=lɛ^3	pʰʌk^0-sʌt^0	**tɨk^0-t-a^1**=ʃi^3
eye=PL=DEF=ABS=FOC	eat.solid-eat.soft	**die-PST-3**=DIST

‘And the man did not know that she had killed their child to eat its eyes.’ (20151208_05)

Verbs in V_1 position show both verbal (Σ_1) and nominal stem forms (Σ_2). For example, the verb /lɔ^1/~/lɔːt^0/ ‘grab’ takes Σ_1 in (758) but the verb /ti^3/~/tɨk^0/ ‘die’ takes Σ_1 in (755) and so does the compound verb /pʰʌk^0-saʔ^0/~/pʰʌk^0-sʌt^0/ in example (760). It remains to be determined what the deciding factor is in the choice of stem form in V_1 position.

7.1.7 Light verb constructions

The term light verb construction is here used to denote a construction which consists of two main parts: 1) a nominalised verb, an action noun, and 2) a grammaticalised verb or so-called light verb. The first component, the action noun, is derived from a verb by means of the nominalising prefix /u^0-/ (see section 4.2.2). Two morphemes have been observed to occur as the second component of the construction, the light verb: /ʌŋ^2/ and /ɛʔ^0/. An example with /ʌŋ^2/ is presented in (761) and an example with /ɛʔ^0/ in (762). The degree of control the participant has in the event, i.e. volition, appears to be a factor in the selection of the light verb: /ʌŋ^2/ is associated with less control and /ɛʔ^0/ with more control.

(761) hi^{1} tʰa^{2} u^{0}ɟɨp^{0} ʌŋ^{2} tɕe^{2} a^{3}.

hi^{1}=tʰi^{3}=a^{2} u^{0}-ɟɨp^{0} **ʌŋ^{2}**-tɕe^{2}-a^{3}

dog=DEF=ABS NMLZ-sleep **LV**-PROG-3

'The dog is sleeping.' (20121104_06)

(762) u^{0}tʰuːk^{0} ɛʔ^{0} tɕʌk^{0} u^{3}.

u^{0}-tʰuːk^{0} **ɛʔ^{0}**-tɕʌk^{0}-u^{3}

NMLZ-spit.out **LV**-PFV-2SG

'Spit it out!' (20151020_01)

The first, /ʌŋ^{2}/, alternatively functions as copula or as auxiliary (see section 6.1.1.2). The second, /ɛʔ^{0}/, alternatively functions to mark nominalised adverbial or cosubordinate clauses (see section 7.2.1.2) but also still functions as a lexical verb. The latter is exemplified by (763).

(763) miʔ^{0} nu^{1} ʃɛ^{3} tɕʌm^{2} lʌŋ^{2} ɛʔ^{0} ta^{1}?

miʔ^{0}-nu^{1}=ʃɨ^{3}=ɛ^{3} tɕʌm^{2}lʌŋ^{2} **ɛʔ^{0}**-t-a^{1}

person-F=DIST=ERG what **do**-PST-3

'What did that woman do?' (20160107_04.ed)

7.2 Complex clauses

This section discusses different types of clauses which are embedded in a matrix clause, distinguishing between nominalised subordinate and cosubordinate clauses (section 7.2.1) and non-nominalised subordinate clauses (sections 7.2.2 and 7.2.3). Not all types of dependent clauses require a subordinating conjunction. If a subordinating conjunction is needed, it will appear in clause-final position, which is what we would expect from a verb-final language.

7.2.1 Clausal nominalisation

This section discusses clausal nominalisation, which often but not always entails embedding a clauses in a matrix clause in which it functions as an NP. TB languages are known to make extensive use of clausal nominalisation (see Genetti 2011; DeLancey 2011c). In Muklom, clauses are nominalised without using a nominaliser. This is not particularly surprising: not all TB languages have a clausal nominaliser (see Post 2011:4). A clause can be recognised as nominalised when it (potentially) takes NP markers such as definite or demonstrative determiners and postpositions, including case makers.

Subordinate nominalised clauses typically precede the matrix verb and cosubordinate nominalised clauses precede the independent clause they are semantically linked to. Four types of nominalised clauses will be discussed: complement clauses in section 7.2.1.1, cosubordinate clauses in section 7.2.1.2, concessive clauses in section 7.2.1.3 and finally relative clauses in section 7.2.1.4.

7.2.1.1 Complement clauses

In Muklom, clauses may function as arguments of the predicate, i.e. complement clauses (see Noonan 2007). Complement clauses can take NP markers such as the definite determiner /=tʰi³/~/=tʰ/ and the absolutive case clitic /=a²/. Complement clauses do not require a complementiser. This section will discuss patient-like complements and dative-marked complements. An example of a patient-like complement carrying definite and absolutive markers is provided in (764). Despite the fact that complement clauses are nominalised, their verbs maintain their inflection, like the copula /ʌŋ²/ maintains its person index /-a³/ in example (764).

(764) ɟɨn³ ʌŋ² a³ tʰa² tʌ⁰tʰɨn³ a³.

ɟɨn³ ʌŋ²-a³**=tʰi³=a²** tʌ⁰-tʰɨn³-a³

PSSB COP-3**=DEF=ABS** PREF[115]-think-3

'He thinks it is possible.' (B1.141)

There are different strategies for encoding reported speech. One can use the hearsay marker /=ti³/ (see section 6.1.6.3.6), mark text as a direct quotation by means of the quotative marker /=ta³/, or place reported speech in a complement clause of a verb that denotes the action of speaking. An example of the latter is provided in (765). The complement clause consists of the entire utterance minus the verb /bat⁰-a³/. Again, the complement clause is accompanied by a definite and absolutive marker and the complement-internal verb, here the verb compound /tʰʌ⁰-dʌn³-tɕu³-βʌŋ¹-t-a¹/ 'became separated from one another', maintains its tense marker and person index.

(765) ŋʌm² ʌ⁰ ŋaʔ⁰ tʰa² e² ʃɨ³ βaŋ³

ŋʌm²-ʌ⁰-ŋaʔ⁰=tʰi³=a² e²-ʃɨ³=βaŋ³

game-and-fish=DEF=ABS NPROX-DIST=from

[115] This is an instance of the valency-changing prefix /tʌ⁰-/~/tʰʌ⁰-/. Because the root /tʰɨn³/ is not found in isolation in the current corpus, it cannot be determined yet in what way the prefix changes valency with this root.

tʰʌ⁰dʌn³ tɕu³ βʌŋ¹ ta¹ sɛ³ tʰa² bat⁰ a³.

tʰʌ⁰-dʌn³-tɕu³-βʌŋ¹-t-a¹=sɛ³**=tʰi³=a²** bat⁰-a³

RECP-separate-away-go.up-PST-3=COMP**=DEF=ABS** say-3

'They say that from that moment the animals became separated from one another.'

(20151208_04)

Not all complement clauses carry a determiner or case marker. An example of a complement clause without NP markers is provided in (766). The lack of inflection on the verb /kat⁰/ 'go' in the complement clause has nothing to do with the fact that it is embedded in a matrix clause: the obligation marker /tɕɨŋ¹/ is a non-inflecting TAM marker (see section 6.1.6.3.2), so even when this clause is used as an independent clause, it would not have an inflected verb.

(766) ŋa¹ a³ tat⁰ bat⁰ ʌŋ³ e² ʃi³ nʌŋ³ kat⁰ tɕɨŋ¹.

ŋa¹=a³ tat⁰ bat⁰-ʌŋ³ **e²-ʃi³=nʌŋ³** **kat⁰-tɕɨŋ¹**

1SG=ERG try say-1SG **NPROX-DIST=to** **go-OBL**

'I am trying to say we need to go over there.' (B1.12)

Dative-marked clauses express semantic roles such as Purpose and Stimulus (see also section 5.1.7.1.3). They differ from complement clauses that are (potentially) marked with absolutive case, i.e. patient-like arguments, in that the complement-internal verbs never carry inflection. An example of a Purpose complement clause is provided in (767). This example is taken from a narrative from oral history in which a man wants to take revenge on the women of a village by dropping a heavy tree on them. The verb in the embedded clause, /tʌ⁰-sɨp⁰/ 'eliminate', does not carry a third person index or any other type of inflection.

(767) miʔ⁰ nu¹ tʌŋ² tʌ⁰sɨp⁰ tʰi³ ma³ bʌŋ¹ ku² ʌ⁰ʃɛ¹ duːk⁰ ka¹ ta¹.

miʔ⁰-nu¹=tʌŋ² **tʌ⁰-sɨp⁰=tʰi³=ma³** bʌŋ¹-ku² ʌ⁰-ʃɛ¹ duːk⁰ ka¹-t-a¹

person-F=PL **CAUS-be.eliminated=DEF=DAT** tree-AUG NMLZ-one cut go-PST-3

'He went to cut a big tree to eliminate the women.' (20160106_02)

An example of a Stimulus complement clause is provided in (768). The embedded clause which expresses the object of desire precedes the matrix verb, the verb of desire /ta³/ 'want', but follows the agent-like argument of the matrix clause, /ŋa¹/ 'I'.

(768) ŋa^{1} pʰʌ^{0}lʌp^{0} lɨŋ^{3} ma^{3} ta^{3} ʌŋ^{3}.

ŋa^{1} **pʰʌ^{0}lʌp^{0}** **lɨŋ^{3}=ma^{3}** ta^{3}-ʌŋ^{3}

1SG **tea** **drink=DAT** want-1SG

'I want to drink tea.' (B1.128)

Light verb constructions (see section 7.1.7) may also be embedded as a dative complement, as is exemplified by (769) and (770). Again, the verb inside the complement clause, here the light verb /ɛʔ^{0}/ 'do', does not take inflection.

(769) tɨl^{2} sɔŋ^{1} ʌŋ^{3} u^{0}sʌt^{0} ɛʔ^{0} ma^{3}.

tɨl^{2} sɔŋ^{1}-ʌŋ^{3} **u^{3}-sʌt^{0}** **ɛʔ^{0}=ma^{3}**

rice boil-1SG **NMLZ-eat** **do=DAT**

'I boil rice to eat.' (S1.55)

(770) u^{0}xɔt^{0} ɛʔ^{0} ma^{3} ʃɨŋ^{2}-u^{3}.

u^{0}-xɔt^{0} **ɛʔ^{0}=ma^{3}** ʃɨŋ^{2}-u^{3}

NMLZ-wash **do=DAT** keep-2SG

'Put it (there) to be washed!' (S1.63)

7.2.1.2 Clausal cosubordination

Clausal cosubordination is a form of clause linkage which must be distinguished from clausal coordination and clausal subordination (see Van Valin 1984). Cosubordinate clauses cannot occur on their own, yet they are not a constituent of another clause. In other words, with regard to dependency they align with subordinate clauses but with regard to embedding they align with coordinate clauses. In Muklom, cosubordinate clauses are nominalised non-finite clauses and are characterised by the presence of a clause-final light verb /ɛʔ^{0}/ 'do'. The verb /ɛʔ^{0}/ as used in this type of clause is sometimes referred to as converb in the literature (see Coupe 2017:216). None of the verbs inside Muklom cosubordinate clauses may inflect, neither lexical verbs nor the light verb that marks the end of the cosubordinate clause. An example of a cosubordinate clause, in bold, is provided in (771).

(771) ɹu^{1} tʰa^{2} tɕɔn^{3} duːk^{0} ɛʔ^{0}, e^{2} tʰɔʔ^{0} tɨl^{2} tʰa^{2} pʌk^{0} kɔʔ^{0} ta^{1}.

ɹu^{1}=tʰɨ^{3}=a^{2} **tɕɔn^{3}** **duːk^{0}** **ɛʔ^{0}** e^{2}-tʰi^{3}=ɔʔ^{0} tɨl^{2}=tʰi^{3}=a^{2} pʌk^{0} kɔʔ^{0}-t-a^{1}

rope=DEF=ABS **pluck** **cut** **do** NPROX-DEF=at rice=DEF=ABS hang.up give-PST-3

'He cut a rope and plucked it open and with that he hung up a bag of rice for her.' (20160106_04.ed)

Muklom cosubordination with the light verb /ɛʔ^{0}/ is a clause chaining mechanism that can be used to link both sequential and simultaneous events. An example of a sequential relationship between a cosubordinate and a following independent clause can be found in (771): the cutting and plucking actions in the cosubordinate clause chronologically precede the action of hanging up the bag in the following independent clause. In (772), however, the action described in the second cosubordinate clause and the action in the following independent clause are carried out simultaneously: the carrying of the dao happens at the same time as the action of going to the fields.

(772) ɟan^{2} hi^{2} bʌt^{0} ɛʔ^{0} ni^{3} a^{3} ɟan^{2} tɔŋ hɔl^{3} ɛʔ^{0} pɨk^{0} βɔt^{0} ka^{1} ta^{1}.

ɟan^{2}-hi^{2} **bʌt^{0}** **ɛʔ^{0}** ni^{3}a^{3} **ɟan^{2}tɔŋ** **hɔl^{3}** **ɛʔ^{0}** pɨk^{0} βɔt^{0} ka^{1}-t-a^{1}

knife-sheath **hang** **do** and **dao** **carry** **do** field weed go-PST-3

'Wearing a sheath and carrying a knife, he went to weed the field.' (20160106_05)

We can tell that cosubordinate clauses are nominalised based on at least the following two cues: 1) cosubordinate clauses are compatible with the conjunct /ni^{3}/~/ni^{3}a^{3}/ 'and', as illustrated by (772) above, and this conjunct is exclusively used with NPs (see section 5.3), and 2) cosubordinate clauses can take NP markers such as definite and demonstrative determiners and postpositions. The latter is illustrated by example (773), in which the nominalised cosubordinate clause carries a definite marker, /=tʰi^{3}/, and a postposition, /=ɔʔ^{0}/ 'at'.

(773) βʌŋ^{1} pʰu^{3} lɛ^{2} ta^{1} tat^{0} hʌl^{1} kɔ^{3} ɛʔ^{0} tʰɔʔ^{0},

βʌŋ^{1}-pʰ-u^{3}=lɛ^{2}=ta^{3} **tat^{0}** **hʌl^{1}** **kɔ^{3}** **ɛʔ^{0}=tʰɨ^{3}=ɔʔ^{0}**

go.up-CIS-2SG=FOC=QUOT **try** **call** **would** **do=DEF=at**

piʔ^{0} tʰa^{2} βʌŋ^{1} mɔʔ^{0} hun^{3} ʌŋ^{2} ta^{1}.

piʔ^{0}=tʰi^{3}=a^{2} βʌŋ^{1}-m-ɔʔ^{0} hun^{3} ʌŋ^{2}-t-a^{1}

3SG=DEF=ABS go.up-NEG-3 truly AUX-PST-3

'When he called 'Come here!', she did not come.' (20160106_04.ed)

A minority of Muklom verbs shows verb stem alternation (see section 6.1.1.4). In clauses ending in a cosubordinating light verb /ɛʔ⁰/, preceding verbs can either take the verbal root, Σ_1, or the 'nominal' root, Σ_2. In the current corpus of annotated texts, stem-alternating verbs occur in this type of dependent clause 25 times. Of these 25, 20 take the shape of Σ_1 and 5 take the shape of Σ_2. It is not yet clear from these occurrences what causes the differentiation. More data is needed to determine whether variation between Σ_1 and Σ_2 in this context is rule-bound or free.

Finally, it should be noted that nominalised cosubordinate clauses can be used to link clauses together through the mechanism of tail-head linking. This topic is discussed in section 8.2.1.

7.2.1.3 Concessive clauses

The subordinator /ɔ³tʰɔʔ⁰/ embeds concessive clauses into a matrix clause. This subordinator stands on the right-hand border of the clause and appears to derive from the postposition /=ɔ³/ 'at' plus the element /=tʰɔʔ⁰/ 'also'. It is common for TB languages to have subordinators which consist of concatenated grammatical morphemes (Coupe 2017:214). If /=ɔ³/ is indeed a postposition, and NP marker, this entails that the preceding clause has been nominalised. Although the path of grammaticalization of the concessive subordinator is not fully certain, I will for now subsume concessive clauses under the header of nominalised clauses. An example of a concessive clause is provided in (774). The example illustrates that this type of dependent clause may contain an inflected verb, here the auxiliary /ʌŋ²-t-ʌŋ¹/ 'I was'. It further illustrates that the verbs in the dependent and matrix clause may carry different tense markers, here past and present respectively.

(774) kʌp⁰ mɔŋ¹ laŋ² ʌŋ² tʌŋ¹ ɔ³ tʰɔʔ⁰ u⁰kat⁰ ʌŋ² nʌŋ³.

kʌp⁰-m-ɔŋ¹	laŋ²	ʌŋ²-t-ʌŋ¹=**ɔ³tʰɔʔ⁰**	u⁰-kat⁰	ʌŋ²-n-ʌŋ³
obtain-NEG-1SG	indeed	AUX-PST-1SG=**even.though**	NMLZ-go	be-FUT-1SG

'Even though I did not obtain it (a permit), I will go.' ' (B1.151)

The concessive subordinator may also follow a non-inflecting TAM marker, like /kɔ³/ 'would' in example (775). The lack of inflection is not related to the process of subordination: also when the first clause would function as an independent clause, the compound verb /ɹʌŋ²-tse³/ 'rain' would not be accompanied by a third person index. The main clause in this example consists of a light verb construction (see section 7.1.7).

(775) ɹʌŋ^{2} tse^{3} kɔ^{3} ɔ^{3} t^{h}ɔʔ^{0} piʔ^{0} u^{0}t^{h}ɔk^{0} ʌŋ^{2} taʔ^{0} p^{h}a^{3}.

ɹʌŋ^{2}-tse^{3} kɔ^{3}=**ɔ^{3}t^{h}ɔʔ^{0}** piʔ^{0} u^{0}-t^{h}ɔk^{0} ʌŋ^{2}-taʔ^{0}-p^{h}-a^{3}

sky-shower would=**even.though** 3SG NMLZ-come LV-PST-CIS-3

'He came even though it would rain.' (B1.151)

In the above examples, the source of impediment is explicitly stated: the prediction of rain and the fact that something was not obtained. This source can also be left out. It must then be replaced by /e^{2}t^{h}a^{2}/ 'but', resulting in the concessive expression /e^{2}t^{h}a^{2}=ɔ^{3}t^{h}ɔʔ^{0}/ 'nevertheless', as exemplified by (776). Sometimes, the first vowel of the expression is dropped, as exemplified by (777). This example starts with an undefined concession which then defined by a concessive clause that follows the main clause.

(776) e^{2} t^{h}a^{2} ɔ^{3} t^{h}ɔʔ^{0} u^{0}kat^{0} ʌŋ^{2} nʌŋ^{3}.

e^{2}t^{h}a^{2}=ɔ^{3}t^{h}ɔʔ^{0} u^{0}-kat^{0} ʌŋ^{2}-n-ʌŋ^{3}

but=even.though NMLZ-go be-FUT-1SG

'Nevertheless, I will go.' (B1.151)

(777) t^{h}a^{2} ɔ^{3} t^{h}ɔʔ^{0} ɹi^{3} kʌm^{2} hun^{3} xʌŋ^{1} mɔʔ^{0} ɛ^{3},

t^{h}a^{2}=ɔ^{3}t^{h}ɔʔ^{0} ɹi^{3}kʌm^{2} hun^{3} xʌŋ^{1}-m-ɔʔ^{0}-ɛ^{3}

but=even.though a.long.time truly go.up-NEG-3-REV.NEG

ʃɔt^{0} kat^{0} ʌŋ^{2} kɔ^{3} ɔ^{3} t^{h}ɔʔ^{0}.

ʃɔt^{0}kat^{0} ʌŋ^{2}=kɔ^{3}=ɔ^{3}t^{h}ɔʔ^{0}

shortcut COP=would=even.though

'Nevertheless, even though there would be a shortcut, it took them a long time to go.' (20151127_01.ed)

The concessive expression /e^{2}t^{h}a^{2}=ɔ^{3}t^{h}ɔʔ^{0}/~/t^{h}a^{2}=ɔ^{3}t^{h}ɔʔ^{0}/ 'nevertheless' may stand in sentence-initial position, as in examples (776) and (777) above, or in sentence-final position, as in examples (778) and (779) below.

(778) ŋa^{1} u^{0}kat^{0} ʌŋ^{2} nʌŋ^{3} e^{2} t^{h}a^{2} ɔ^{3} t^{h}ɔʔ0.

ŋa^{1} u^{0}-kat^{0} ʌŋ^{2}-n-ʌŋ^{3} **e^{2}t^{h}a^{2}=ɔ^{3}t^{h}ɔʔ^{0}**

1SG NMLZ-go LV-FUT-1SG **but=even.though**

'I will go nevertheless.' (B1.151)

(779) ŋa^{1} u^{0}kat^{0} ʌŋ^{2} nʌŋ^{3} e^{2} tʰa^{2} ɔ^{3} tʰɔʔ^{0}.

ŋa^{1} u^{0}-kat^{0} ʌŋ^{2}-n-ʌŋ^{3} **tʰa^{2}=ɔ^{3}tʰɔʔ^{0}**

1SG NMLZ-go LV-FUT-1SG **but=even.though**

'I will go nevertheless.' (B1.151)

7.2.1.4 Relative clauses

In Muklom, relative clause formation involves nominalisation, a phenomenon which is cross-linguistically common (see Nikolaeva 2006:502) and has been reported to occur in numerous TB languages, e.g. in Rawang, which exhibits both non-nominalised and nominalised relative clauses (see LaPolla 2008). This section will discuss the following topics in relation to relative clauses: argument sharing, presence of noun phrase markers on relative clauses, location of the head, gapping in the relative clause, relative pronouns, and (lack of) tense coordination. The current discussion is preliminary in nature: the annotated corpus contains only eight examples of relative clauses and while five derive from natural speech narratives, three derive from a translated spoken text.[116] The translated spoken text is an informative religious text based on a script in another language, likely English. Examples from translated text, recognisable by the label (C63186t), should be treated with caution as there might be interference from the structure of the source language on the syntactic structure of the target language text. I found, for example, that AVP structures were unusually frequent in the translated text while the non-marked order in Muklom is APV (see section 7.1.1).

Languages differ with respect to flexibility in arguments sharing between matrix and relative clauses. Muklom appears be located on the flexible side of the spectrum: S, A, P and dative-marked constituents, i.e. all core arguments, can be relativised and the role of the shared argument may differ between the matrix and relative clause. The list in (780) shows which configurations occur in the current annotated corpus and in which examples of this section they can be found (the matrix clause function of the shared argument is placed on the left, and the relative clause function of the shared argument is placed on the right). In this section, some examples are repeated; only their first occurrence is listed here.

[116] In the field, I conducted one elicitation session which was aimed at eliciting relative clauses but it failed at that because the English prompts lead to answers which did show embedding, but instead of nominalised embedded verb clauses, the utterances exhibited embedding of NPs with derived nouns inside NPs.

(780)	shared argument	example
	[P-A]	(783)
	[P-P]	(782); (785)
	[S-S]	(781)
	[A-A]	(786)
	[Dat-A]	(789)
	[Dat-S]	(789)

In Muklom, relative clauses are nominalised clause that require no nominaliser, as is the case with other clausal nominalisation processes, but the nominalised status of relative clauses can be inferred from the potential occurrence of nominal markers on the right edge of the relative clauses: definite or demonstrative determiners and case markers. In the current annotated corpus, relative clauses take either a definite determiner/=tʰi³/, as in example (781), a demonstrative determiner, like distal /-ʃì³/ in example (782), or are not marked by a definite or demonstrative determiner. The two relative clauses in the annotated corpus that do not carry a definite or demonstrative determiner, examples (783) and (784), are also the only two relative clauses that contain a relative pronoun. To determine whether a correlation exists between these two factors more data is needed. Also, these two examples do not have a shared argument in the matrix clause that carries a definite or demonstrative determiner. However, from other tokens we can tell that relative clauses may be marked with a definite clitic even when the antecedent in the matrix clause does not carry any definite or demonstrative clitic. In (785), for example, the modified conjoined NPs /kɛl²dɨŋ² ni³a³ tsʌm¹-nʌm³/ 'an earthworm and paddy stalk' does not carry a definite or demonstrative determiner, while the postnominal relative clause does carry the definite determiner /=tʰi³/. This example has been taken from a mythological story in which a man from the sky, Chengwa, turns an earthworm and a paddy stalk into food for two orphans.

(781) paŋ¹ na³ ɟɨp⁰ a³ tʰa², miʔ⁰ βa¹ ʃa² paŋ¹ na³

paŋ¹=na³	ɟɨp⁰-a³=tʰi³=a²	[miʔ⁰-βa¹=ʃì³=a²	[paŋ²=na³
dormitory=in	sleep-3=DEF=ABS	[person-M=DIST=ABS	[dormitory=in

ɟɨp⁰ a³ tʰa² i³ mʌl² lɛʔ⁰ miʔ⁰ nu¹ tʌŋ² paŋ¹ nʌŋ³ ɟaŋ² tɔŋ³

ɟɨp⁰-a³**=tʰi³**=a²]$_{RelC}$]$_{S}$	i³-mʌl²=lɛʔ⁰	miʔ⁰-nu¹=tʌŋ²	paŋ¹=nʌŋ³	ɟaŋ²	tɔŋ²
sleep-3=**DEF**=ABS] $_{RelC}$]$_{S}$	PROX-like=FOC	person-F=PL	dormitory=to	pass.time	sit

kat⁰ βɨn³ ɛ³ tɨn¹ maʔ⁰ a³ ɟɔ³ tʰa² u⁰ɹɛl³ ɔʔ⁰ dɔŋ³

kat⁰	βɨn³-ɛ³	tɨn¹	maʔ⁰-a³	ɟɔ³=tʰi³=a²	u⁰-ɹɛl³=ɔʔ⁰	dɔŋ³
go	happen.to	heart	perish-3	COND=DEF=ABS	NMLZ-be.near=at	likewise

tʰɔk⁰ bɨk⁰ kɔʔ⁰ ta¹ ɹi³.

tʰɔk⁰ bɨk⁰	kɔʔ⁰-t-a¹=ɹi³	
arrive tie	give-PST-3=INFER	

‘The ones sleeping in a dormitory, the men sleeping in a dormitory, would come to the women’s dormitory to hang out and if a man happened to fall in love, he would sit like that nearby and tie it (a coin, in her shawl).’ (20160107_04)

(782) tʌ⁰tal³ ɨn² tʰʌ⁰ɟi² ʃi³ ŋa¹ a³ nɨm¹ ma³ bat⁰ pʰʌŋ² ʃi³.

tʌ⁰-tal³-ɨn²	[tʰʌ⁰ɟi²=ʃi³	[ŋa¹=a³	nɨm¹=ma³	bat⁰-pʰ-ʌŋ²=**ʃi³**]RelC]P
CAUS-learn-2PL	[all=DIST	[1SG=ERG	2PL=DAT	say-INV-1SG=**DIST**]RelC]P

‘Teach (them) everything I tell you.’ (C63186t)

(783) piʔ⁰ ti³ ta¹ ŋaɹɛ tun tɕi³ βan³ ma³

piʔ⁰	ti³-t-a¹	[ŋaɹɛ]P	tun-tɕi³-βan³=ma³
3SG	die-PST-3	[sin[117]]P	pick.up-away-COS=DAT

ba³ ɹɛ³ ɹʌŋ² ʃi³ βaŋ³ dʌn³ taʔ⁰ pʰi³.

[ba³ɹɛ³	ɹʌŋ²=ʃi³=βaŋ³	dʌn³-taʔ⁰-pʰ-i³]RelC
[which.ERG	God=DIST=from	seperate-PST-INV-1PL]RelC

‘He died to take away the sin that separated us from God.’ (C63186t)

(784) piʔ⁰ a³ tʌ⁰tʰun³ ta¹ tɕʌm² ɟʌk⁰ sɔm³ ma³ ka¹ ta¹ tʰa².

piʔ⁰=a³	tʌ⁰-tʰun³-t-a¹	[[tɕʌm²	ɟʌk⁰-sɔm³]=ma³	ka¹-t-a¹=tʰi³=a²]RelC
3SG=ERG	TR-finish-PST-3	[[what	hand-work]=DAT	go-PST-3=DEF=ABS]RelC

‘He finished the work he came to do.’ (C63186t)

[117] Consultants identified this word as a loan from another ‘tribal’ language but were not able to pinpoint the exact source.

(785) e^{2} tʰɔ^{3} tɕɛŋ^{3} βa^{1} tʰɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3}a^{3} tsʌm^{1} nʌm^{3}

e^{2}tʰɔ^{3}	tɕɛŋ^{3}-βa^{1}=tʰi^{3}=ɛ^{3}	u^{3}-na^{3}=βaŋ^{3}	[**kɛl^{2}dɨŋ^{2}**	**ni^{3}a^{3}**	**tsʌm^{1}-nʌm^{3}**
and	Chengwa=DEF=ERG	3SG.POSS-ear=from	[**earthwormand**	**paddy-stalk**	

tsɔŋ^{3} a^{3} tʰa^{2} xʌm^{2} tʰɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

[tsɔŋ^{3}-a^{3}**=tʰi^{3}**=a^{2}]$_{RelC}$]$_{P}$	xʌm^{2}=tʰi^{3}=ɔʔ^{0}	lʌt^{0}	kɔʔ^{0}-t-a^{1}
[wear.in.ear-3**=DEF**=ABS]$_{RelC}$]$_{P}$	mat=DEF=at	pull.out	give-PST-3

‘And Chengwa pulled out from his ear an earthworm and a paddy stalk that he was wearing in it and put them on the mat.’ (20160106_01.ed)

The second category of nominal markers found at the right edge of relative clauses are the absolutive case marker /=a^{2}/ and ergative case marker /=ɛ^{3}/~/=a^{3}/ (see section 5.1.7.1). The case marker on externally headed relative clauses corresponds with the role of the shared argument in the relative clause. An example of a relative clause with ergative marking is provided in (786). The shared argument functions is an A argument both in the relative and matrix clause: the woman finds an eye and the woman places it in a bamboo container. In example (787), however, the shared argument functions as an A argument in the relative clause, expressed by the ergative pronoun /ba^{3}ɹɛ^{3}/ ‘which’, but functions as an (unmarked) P argument in the matrix clause. Since absolutive marking is differential, relative clauses in which the shared argument functions as S or P may carry an absolutive marker or remain unmarked. An example of a relative clause unmarked for case is provided in (788), where the shared argument functions as a P in the relative and matrix clause. An example of a relative clause that does carry absolutive marking can be found in (789). In this example, the shared argument is a wife who turned into an elephant. The relative clause contains multiple verbs and they differ in valency: the shared argument functions in the relative clause both as an A argument of the verb /ɟʌp^{0}/ ‘flap, wave’ and as an S argument of the verbs /bʌn^{3}/ ‘wait’ and /laŋ^{3}/ ‘stand’. The case marker aligns with the valency of the verbs nearest to the right edge of the relative clause: absolutive for S and not ergative for A.

(786) i^{3} ɹɛʔ^{0} ɟuŋ^{2} pʰaŋ^{2} βaŋ^{3} mɨk^{0} kʌp^{0} a^{3} tʰɛ^{3}, piʔ^{0} a^{3} tuŋ^{2} kʰa^{3} ɔʔ^{0}

i^{3}ɹɛʔ^{0}	[[ɟuŋ^{2}-pʰaŋ^{2}=βaŋ^{3}	mɨk^{0}	kʌp^{0}-a^{3}=tʰi^{3}**=ɛ^{3}**]$_{RelC}$	piʔ^{0}=a^{3}]$_{A}$	tuŋ^{2}-kʰa^{3}=ɔʔ^{0}
then	[[water-sand=from	eye	find-3=DEF**=ERG**]$_{RelC}$	3SG=ERG]$_{A}$	cylinder-hollow=at

ʃiŋ ɛʔ⁰ miʔ⁰ ma³ hun¹ ta¹.

ʃiŋ ɛʔ⁰ miʔ⁰=ma³ hun¹-t-a¹

keep do person=DAT change.into-PST-3

‘Then, she, who found an eye at the riverbank, put it in a bamboo container and it became a person.’ (20160106_02)

(787) piʔ⁰ ti³ ta¹ ŋaɹɛ tun tɕi³ βan³ ma³

piʔ⁰ ti³-t-a¹ [ŋaɹɛ]P tun-tɕi³-βan³=ma³

3SG die-PST-3 [sin[118]]P pick.up-away-COS=DAT

ba³ ɹɛ³ ɹʌŋ² ʃi³ βaŋ³ dʌn³ taʔ⁰ pʰɨ³.

[**ba³.ɹɛ³** ɹʌŋ²=ʃi³=βaŋ³ dʌn³-taʔ⁰-pʰ-i³]RelC

[**which.ERG** God=DIST=from seperate-PST-INV-1PL]RelC

‘He died to take away the sin that separated us from God.’ (C63186t)

(788) tʌ⁰tal³ ɨn² tʰʌ⁰ʝi² ʃi³ ŋa¹ a³ nɨm¹ ma³ bat⁰ pʰʌŋ² ʃi³.

tʌ⁰-tal³-ɨn² [tʰʌ⁰ʝi²=ʃi³ [ŋa¹=a³ nɨm¹=ma³ bat⁰-pʰ-ʌŋ²=ʃi³]RelC]P

CAUS-learn-2PL [all=DIST [1SG=ERG 2PL=DAT say-INV-1SG=DIST]RelC]P

‘Teach (them) everything I tell you.’ (C63186t)

(789) u³ pʰʌk⁰ ʌ⁰na³ ʝʌp⁰ ʝʌp⁰ sɛ³ bʌn³ laŋ³ a³ tʰa² ti³,

[[u³-pʰʌk⁰ ʌ⁰-na³ ʝʌp⁰ ʝʌp⁰-sɛ³ bʌn³ laŋ³-a³=tʰi³=**a²**=ti³]RelC

[[3SG.POSS.DIST-ear and-ear wave wave-COMP wait stand-3=DEF=**ABS**=HS]RelC

u³ hɨm² te² nu¹ tʰi³ ma³ bat⁰ ta¹ nʌŋ¹ tʰa² i³ ɹa²

u³-hɨm²-te²-nu¹=tʰi³=ma³]Dat bat⁰-t-a¹ nʌŋ¹=tʰi³=a² i³-ɹi³=a²

3SG.POSS.DIST-house-PERS-F=DEF=DAT]Dat say-PST=3 2SG=DEF=ABS PROX=PROX=ABS

[118] Consultants identified this word as a loan from another ‘tribal’ language but were not able to pinpoint the exact source.

sɛ^{3} tʌ^{0}hun^{3} tu^{1} i^{2} ta^{3}.

sɛ^{3}-tʌ^{0}-hun^{3}-t-u^{1} i^{2}=ta^{3}

COS-INTR-create-PST-2SG Q.AFF=QUOT

'He said to his wife, who was standing and already flapping her ears: 'Did you turn into this?'' (20160106_04.ed)

Six out of eight of the relative clauses found in the annotated corpus are externally headed, like the above four examples (786)-(789). Muklom allows both postnominal and prenominal relative clauses. The same has been reported for nominalised relative clauses in Rawang, a TB language of Northern Myanmar (see LaPolla 2008:804). The postnominal order deviates from the relative-head order reconstructed for PST by LaPolla (2017a:51) but not from the general cross-linguistic tendency towards head-relative order, even among verb-final languages (see Dryer 1991:455; Nikolaeva 2006:503). In the above four examples, (787) and (788) contain a postnominal relative clause, while (786) and (789) contain a prenominal relative clause. Most of the relative clauses stand adjacent to the NP they modify, but in example (787), the modified noun /ŋaɹɛ/ 'sin' is separated from the relative clause by an intervening multi-verb construction and case marker. The wo remaining relative clauses found in the annotated corpus are internally headed, example (790), or headless, example (791).

(790) piʔ^{0} a^{3} tʌ^{0}t^{h}un^{3} ta^{1} tɕʌm^{2} ɟʌk^{0} sɔm^{3} ma^{3} ka^{1} ta^{1} t^{h}a^{2}.

piʔ^{0}=a^{3} tʌ^{0}-t^{h}un^{3}-t-a^{1} [[tɕʌm^{2} ɟʌk^{0}-sɔm^{3}]=ma^{3} ka^{1}-t-a^{1}=t^{h}i^{3}=a^{2}]$_{RelC}$

3SG=ERG TR-finish-PST-3 [[what hand-work]=DAT go-PST-3=DEF=ABS]$_{RelC}$

'He finished the work he came to do.' (C63186t)

(791) ɟa^{3} k^{h}ɔ^{2} xɔŋ^{1} ta^{1} t^{h}a^{2} bʌŋ^{1} k^{h}ɔ^{2} na^{3} βi^{2} βʌl^{1} ʌŋ^{2} ta^{1}.

[ɟa^{3}k^{h}ɔ^{2} xɔŋ^{1}-t-a^{1}=t^{h}i^{3}=a^{2}]$_{RelC}$ bʌŋ^{1}-k^{h}ɔ^{2}=na^{3} βi^{2} βʌl^{1} ʌŋ^{2}-t-a^{1}

[first come.out-PST-3=DEF=ABS]$_{RelC}$ tree-head=in monkey fire COP-PST-3

'The one which was produced first, was the fire of the monkey in the tree.' (20151208_04)

Five of the six the externally headed relative clauses in the sample show gapping of the shared argument. Each of the syntactic roles S, A, P in the relative clause may be gapped. An example of a gapped S, indicated by <____$_{S}$> can be found in (792). An example of a gapped A argument, indicated by <____$_{A}$> can be found in (793). An example of a gapped P argument can be found in (794). Relative clauses can become very short when the shared argument is gapped and no other core or oblique constituents are present. An example of a relative clause without overt core or oblique arguments can be found in (795).

(792) paŋ^{1} na^{3} ɟɨp^{0} a^{3} t^{h}a^{2}, miʔ^{0} βa^{1} ʃa^{2} paŋ^{1} na^{3}

paŋ^{1}=na^{3} ɟɨp^{0}-a^{3}=t^{h}i^{3}=a^{2} [miʔ^{0}-βa^{1}=ʃi^{3}=a^{2} [____s paŋ^{2}=na^{3}

dormitory=in sleep-3=DEF=ABS [person-M=DIST=ABS [____s dormitory=in

ɟɨp^{0} a^{3} t^{h}a^{2} i^{3} mʌl^{2} lɛʔ^{0} miʔ^{0} nu^{1} tʌŋ^{2} paŋ^{1} nʌŋ^{3} ɟaŋ^{2} tɔŋ^{3}

ɟɨp^{0}-a^{3}=t^{h}i^{3}=a^{2}]$_{RelC}$] i^{3}-mʌl^{2}=lɛʔ^{0} miʔ^{0}-nu^{1}=tʌŋ^{2} paŋ^{1}=nʌŋ^{3} ɟaŋ^{2} tɔŋ^{2}

sleep-3DEF=ABS]$_{RelC}$] PROX-like=FOC person-F=PL dormitory=to pass.time sit

kat^{0} βɨn^{3} ɛ^{3} tɨn^{1} maʔ^{0} a^{3} ɟɔ^{3} t^{h}a^{2} u^{0}ɹɛl^{3} ɔʔ^{0} dɔŋ^{3}

kat^{0} βɨn^{3}-ɛ^{3} tɨn^{1} maʔ^{0}-a^{3} ɟɔ^{3}=t^{h}i^{3}=a^{2} u^{0}-ɹɛl^{3}=ɔʔ^{0} dɔŋ^{3}

go happen.to heart perish-3 COND=DEF=ABS NMLZ-be.near=at likewise

t^{h}ɔk^{0} bɨk^{0} kɔʔ^{0} ta^{1} ɹi^{3}.

t^{h}ɔk^{0} bɨk^{0} kɔʔ^{0}-t-a^{1}=ɹi^{3}

arrive tie give-PST-3=INFER

'The ones sleeping in a dormitory, the men sleeping in a dormitory, would come to the women's dormitory to hang out and if a man happened to fall in love, he would sit like that nearby and tie it (a coin, in her shawl).' (20160107_04)

(793) i^{3} ɹɛʔ^{0} ɟuŋ^{2} p^{h}aŋ^{2} βaŋ^{3} mɨk^{0} kʌp^{0} a^{3} t^{h}ɛ^{3}, piʔ^{0} a^{3} tuŋ^{2} k^{h}a^{3} ɔʔ^{0}

i^{3}ɹɛʔ^{0} [[____$_{A}$ ɟuŋ^{2}-p^{h}aŋ^{2}=βaŋ^{3} mɨk^{0}$_{P}$ kʌp^{0}-a^{3}=t^{h}i^{3}=ɛ^{3}]$_{RelC}$ piʔ^{0}=a^{3}]

then [[____$_{A}$ water-bank=from eye$_{P}$ find-3=DEF=ERG]$_{RelC}$ 3SG=ERG]

ʃiŋ ɛʔ^{0} miʔ^{0} ma^{3} hun^{1} ta^{1}.

tuŋ^{2}-k^{h}a^{3}=ɔʔ^{0} ʃiŋ ɛʔ^{0} miʔ^{0}=ma^{3} hun^{1}-t-a^{1}

cylinder-hollow=at keep do person=DAT change.into-PST-3

'Then, she, who found an eye at the riverbank, put it in a bamboo container and it became a person.' (20160106_02)

(794) tʌ^{0}tal^{3} ɨn^{2} t^{h}ʌ^{0}ɟi^{2} ʃi^{3} ŋa^{1} a^{3} nɨm^{1} ma^{3} bat^{0} p^{h}ʌŋ^{2} ʃi^{3}.

tʌ^{0}-tal^{3}-ɨn^{2} [t^{h}ʌ^{0}ɟi^{2}=ʃi^{3} [ŋa^{1}=a^{3}$_{A}$ ____$_{P}$ nɨm^{1}=ma^{3} bat^{0}-p^{h}-ʌŋ^{2}=ʃi^{3}]$_{RelC}$]

CAUS-learn-2PL [all=DIST [1SG=ERG$_{A}$ ____$_{P}$ 2PL=DAT say-INV-1SG=DIST]$_{RelC}$]

'Teach (them) everything I tell you.' (C63186t)

(795) e^{2} tʰɔ^{3} tɕɛŋ^{3} βa^{1} tʰɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3}a^{3} tsʌm^{1} nʌm^{3}

e^{2}tʰɔ^{3}	tɕɛŋ^{3}-βa^{1}=tʰi^{3}=ɛ^{3}	u^{3}-na^{3}=βaŋ^{3}	[kɛl^{2}dɨŋ^{2}	ni^{3}a^{3}	tsʌm^{1}-nʌm^{3}
and	Chengwa=DEF=ERG	3SG.POSS-ear=from	[earthworm	and	paddy-stalk

tsɔŋ^{3} a^{3} tʰa^{2} xʌm^{2} tʰɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

[____$_{A}$ ____$_{P}$ (____$_{Obl}$) tsɔŋ^{3}-a^{3}=tʰi^{3}=a^{2}]$_{RelC}$]	xʌm^{2}=tʰi^{3}=ɔʔ^{0}	lʌt^{0}	kɔʔ^{0}-t-a^{1}
[____$_{A}$ ____$_{P}$ (____$_{Obl}$) wear.in.ear-3=DEF=ABS]$_{RelC}$]	mat=DEF=at	pull.out	give-PST-3

‘And Chengwa pulled out from his ear an earthworm and a paddy stalk that he was wearing in it and put them on the mat.’ (20160106_01.ed)

At the level of PST, no nominalisers or relativisers of the relative clause have been reconstructed, though many languages have developed one of these strategies as an innovation (see LaPolla 2017a:47). As already mentioned above, there are two examples relative pronouns in relative clauses in the current annotated corpus: /ba^{3}ɹɛ^{3}/ ‘which’ and /tɕʌm^{2}/ ‘what’, both formally identical to interrogative pronouns, a formal overlap which is cross-linguistically frequent. The examples are repeated below in (796) and (797). Both examples are taken from a translated text and for this reason they must be treated with caution: the syntactic structure of the source language might have affected the relativisation structure in the target language. More data, ideally from natural speech, is required to determine whether relative pronouns indeed have a place in the native inventory of syntactic structures.

(796) piʔ^{0} ti^{3} ta^{1} ŋaɹɛ tun tɕi^{3} βan^{3} ma^{3}

piʔ^{0}	ti^{3}-t-a^{1}	[ŋaɹɛ]$_{P}$	tun-tɕi^{3}-βan^{3}=ma^{3}
3SG	die-PST-3	[sin[119]]$_{P}$	pick.up-away-COS=DAT

ba^{3} ɹɛ^{3} ɹʌŋ^{2} ʃɨ^{3} βaŋ^{3} dʌn^{3} taʔ^{0} pʰi^{3}.

[**ba^{3}ɹɛ^{3}**	ɹʌŋ^{2}=ʃɨ^{3}=βaŋ^{3}	dʌn^{3}-taʔ^{0}-pʰ-i^{3}]$_{RelC}$
[**which.ERG**	God=DIST=from	seperate-PST-INV-1PL]$_{RelC}$

‘He died to take away the sin that separated us from God.’ (C63186t)

[119] Consultants identified this word as a loan from another ‘tribal’ language but were not able to pinpoint the exact source.

(797) piʔ^{0} a^{3} tʌ^{0}tʰun^{3} ta^{1} tɕʌm^{2} ɟʌk^{0} sɔm^{3} ma^{3} ka^{1} ta^{1} tʰa^{2}.

piʔ^{0}=a^{3} tʌ^{0}-tʰun^{3}-t-a^{1} [[**tɕʌm^{2}** ɟʌk^{0}-sɔm^{3}]=ma^{3} ka^{1}-t-a^{1}=tʰi^{3}=a^{2}]$_{RelC}$

3SG=ERG TR-finish-PST-3 [[**what** hand-work]=DAT go-PST-3=DEF=ABS]$_{RelC}$

'He finished the work he came to do.' (C63186t)

The last topic which will be mentioned here in relation to relative clauses is the lack of tense coordination. Examples (798) and (799) illustrate that verb in the relative clause does not need to align its tense marking to the verb in the main clause: the past tense marker /-t/ of the verb in the matrix clause is not copied onto the verb in the relative clause.

(798) e^{2} tʰɔ^{3} tɕɛŋ^{3} βa^{1} tʰɛ^{3} u^{3} na^{3} βaŋ^{3} kɛl^{2} dɨŋ^{2} ni^{3}a^{3} tsʌm^{1} nʌm^{3}

e^{2}tʰɔ^{3} [tɕɛŋ^{3}-βa^{1}=tʰi^{3}=ɛ^{3}]$_{A}$ u^{3}-na^{3}=βaŋ^{3} [kɛl^{2}dɨŋ^{2} ni^{3}a^{3} tsʌm^{1}-nʌm^{3}

and [Chengwa=DEF=ERG]$_{A}$ 3SG.POSS-ear=from [earthworm and paddy-stalk

tsɔŋ^{3} a^{3} tʰa^{2} xʌm^{2} tʰɔʔ^{0} lʌt^{0} kɔʔ^{0} ta^{1}.

[tsɔŋ^{3}-a^{3}=tʰi^{3}=a^{2}]$_{RelC}$]$_{P}$ xʌm^{2}=tʰi^{3}=ɔʔ^{0} lʌt^{0} kɔʔ^{0}-**t**-a^{1}

[wear.in.ear-3=DEF=ABS]$_{RelC}$]$_{P}$ mat=DEF=at pull.out give-**PST**-3

'And Chengwa pulled out from his ear an earthworm and a paddy stalk that he was wearing in it and put them on the mat.' (20160106_01.ed)

(799) paŋ^{1} na^{3} ɟɨp^{0} a^{3} tʰa^{2}, miʔ^{0} βa^{1} ʃa^{2} paŋ^{1} na^{3}

paŋ^{1}=na^{3} ɟɨp^{0}-a^{3}=tʰi^{3}=a^{2} [miʔ^{0}-βa^{1}=ʃi^{3}=a^{2} [paŋ^{2}=na^{3}

dormitory=in sleep-3=DEF=ABS [person-M=DIST=ABS [dormitory=in

ɟɨp^{0} a^{3} tʰa^{2} i^{3} mʌl^{2} lɛʔ^{0} miʔ^{0} nu^{1} tʌŋ^{2} paŋ^{1} nʌŋ^{3} ɟaŋ^{2} tɔŋ^{3}

ɟɨp^{0}-a^{3}=tʰi^{3}=a^{2}]$_{RelC}$]$_{S}$ i^{3}-mʌl^{2}=lɛʔ^{0} miʔ^{0}-nu^{1}=tʌŋ^{2} paŋ^{1}=nʌŋ^{3} ɟaŋ^{2} tɔŋ^{2}

sleep-3DEF=ABS] $_{RelC}$]$_{S}$ PROX-like=FOC person-F=PL dormitory=to pass.time sit

kat^{0} βɨn^{3} ɛ^{3} tɨn^{1} maʔ^{0} a^{3} ɟɔ^{3} tʰa^{2} u^{0}ɹɛl^{3} ɔʔ^{0} dɔŋ^{3}

kat^{0} βɨn^{3}-ɛ^{3} tɨn^{1} maʔ^{0}-a^{3} ɟɔ^{3}=tʰi^{3}=a^{2} u^{0}-ɹɛl^{3}=ɔʔ^{0} dɔŋ^{3}

go happen.to heart perish-3 COND=DEF=ABS NMLZ-be.near=at likewise

tʰɔk⁰ bɨk⁰ kɔʔ⁰ ta¹ ɹi³.

tʰɔk⁰ bɨk⁰ kɔʔ⁰-**t**-a¹=ɹi³

arrive tie give-**PST**-3=INFER

‘The ones sleeping in a dormitory, the men sleeping in a dormitory, would come to the women’s dormitory to hang out and if a man happened to fall in love, he would sit like that nearby and tie it (a coin, in her shawl).’ (20160107_04)

7.2.2 Reason clauses

Dependent reason clauses are formed by adding the clause-final subordinator /=kɔ³ɛʔ⁰/ ‘because’. In all tokens observed so far, the verb in the subordinate clause does not take person indices. None of the dependent clauses are followed by NP markers like definite and demonstrative determiners or case markers, so in the current corpus there is no evidence that indicates they are nominalised. Examples of reason clauses are presented in (800) and (801). Frequent collocation of the subordinator /=kɔ³ɛʔ⁰/ ‘because’ are the topic marker /=ba³/, as in (800), and the focus marker /=lɛ³/.

(800) tɛʌm³ lal³ xɔŋ kɔ³ ɛʔ⁰ ba³ kʰuk⁰ a³.

tɛʌm³-lal³ xɔŋ**=kɔ³ɛʔ⁰**=ba³ kʰuk⁰-a³

hunger-be.hungry come.out=**because**=TOP howl-3

‘He (the pig) howls because he is hungry.’ (S2.8)

(801) e² tʰɔ³ βʌl¹ nʌŋ³ haŋ³ kɔ³ ɛʔ⁰ pan³ pʰɔk⁰.

e²tʰɔ³ βʌl¹=nʌŋ³ haŋ³**=kɔ³ɛʔ⁰** pan³ pʰɔk⁰

and fire=to dry=**because** scatter explode

‘Because she dried it next to the fire, it exploded.’ (20160106_01.ed)

7.2.3 Conditional clauses

Conditional clause are marked by a clause-final marker /=ɟɔ³/. This conditional marker is homophonous with the mitigative marker /=jɔ³/ (see section 6.1.6.3.11). An example of a conditional clause which describes an event which may or may not happen is provided in (802). This example is taken from a story about people travelling through the jungle. They are leaving cutting marks on the trees so they will know whether they are going around in circles or not. If they move around in a circle, they will see the marks again, but if they go straight, they will not encounter the marked trees again. So, it is not sure yet whether the event described in the conditional clause will take place.

(802) i³ ɹɛʔ⁰ nik⁰ a³ i³ ɹi³ nʌŋ³ βe³ tʰu³ i³ ɟɔ³, ɟan² duːk⁰ mal¹ ʃa²

i³-ɹɛʔ⁰ nik⁰=a³ i³-ɹi³=nʌŋ³ βe³-tʰu³-i³**=ɟɔ³** ɟan² duːk⁰ mal¹=ʃi³=a²

PROX-then later=at PROX-PROX=to ITER-arrive-1PL**=COND** knife cut mark=DIST=ABS

kʌp⁰ kʰi³ ɔ³ tʰa², ɔ³ i³ nʌŋ³ tʰɔk⁰ tɕɔl² bɔ³ laŋ².

kʌp⁰ kʰi³=ɔ³=tʰi³=a² ɔ³ i³-nʌŋ³ tʰɔk⁰-tɕɔl²=bɔ³=laŋ²

succeed see=at=DEF=ABS EXCLAM PROX=to arrive-PFV=indeed=indeed

‘‘And then, later, if we arrive here again, when we see this cutting mark, we will be like ‘Oh, we must have reached here already.’’’ (20151127_01.ed)

An example of a conditional clause that describes an event that is bound to happen is provided in (803). The speaker knows that the bird will come at some point, the only question is when.

(803) βɔ¹ ʃup⁰ tɕʌl² βʌŋ¹ a³ ɟɔ³, nʌŋ¹ haʔ⁰ bɨŋ² nʌŋ³ βʌŋ tɕɨŋ¹.

βɔ¹-ʃup⁰tɕʌl² βʌŋ¹-a³**=ɟɔ³** nʌŋ¹ haʔ⁰-bɨŋ²=nʌŋ³ βʌŋ-tɕɨŋ¹

bird-type.of.bird go.up-3**=COND** 2SG earth-pit=to go.up-OBL

‘When the bird comes, you must go inside the pit in the ground.’ (20160106_01.ed)

It appears conditional clauses are not marked for tense, at least, none of the conditional clauses that appear in the current annotated corpus are. When the matrix clause contains a tense marker, this tense marker is not copied onto the verb in the conditional clause. An example is provided in (804), where the matrix clause contains a past tense verb, /xʌl²-t-a¹/ ‘healed’ and the conditional clause contains a verb unmarked for tense, /pʰʌk⁰-a³/ ‘they eat’.

(804) e² ʃa² pʰʌk⁰ a³ ɟɔ³, puk⁰ ʌ⁰βɔk⁰ tʌk⁰ ʃa² xʌl² ta¹.

e²-ʃi³=a² pʰʌk⁰-a³**=ɟɔ³** puk⁰-ʌ⁰-βɔk⁰-tʌk⁰=ʃi³=a² xʌl²-t-a¹

NPROX-DIST=ABS eat.hard-3**=COND** stomach-and-belly-pain=DIST=ABS be.good-PST-3

‘When they ate that, the stomach ache would heal.’ (20151208_01)

7.3 Clausal coordination

The contrastive coordinating conjunct /ti³/~/ti³a³/ ‘or’ not only links NPs (see section 5.3), but also clauses. Examples of /ti³/ connecting two verbal clauses are provided in (78) and in (806). In example

(806), the second clause consists of a single verb. In (807), /ti^{3}/ connects two short relative clauses, i.e. nominal clauses.

(805) skul nʌŋ^{3} ka^{1} tu^{1} ti^{3} ba^{3} ɟun^{1} te^{2} ɟʌm^{2} na^{3} ɟɔl^{2} tu^{1}?

skul=nʌŋ^{3} ka^{1}-t-u^{1} **ti^{3}** ba^{3}-ɟun^{1}-te^{2}-ɟʌm^{2}=na^{3} ɟɔl^{2}-t-u^{1}

school=to go-PST-2SG **or** 2SG.POSS-relative-PERS-company=in run-PST-2SG

'Did you go to school or did you run off with your relatives?' (B1.149)

(806) i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} tat^{0} xʌŋ xʌŋ ti^{3} ʌŋ^{2} mɔʔ^{0}?

i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} tat^{0} xʌŋ xʌŋ **ti^{3}** ʌŋ^{2}-m-ɔʔ^{0}

PROX-PROX direction=to try go.up REDUP **or** be-NEG-3

'Let's try to go up this way, or not?' (20151127_01)

(807) ʌ^{0}ɟɔŋ^{2} ti^{3} ʌ^{0}miŋ^{1} kɛtɛl pe^{2}tu^{1}?

ʌ^{0}-ɟɔŋ^{2} **ti^{3}** ʌ^{0}-miŋ^{1} kɛtɛl pe^{2}-t-u^{1}

NMLZ-big **or** NMLZ-small kettle take-PST-2SG

'Did you take the big or the small kettle?' (lit. 'the kettle which is big, or which is small') (B1.149)

8 Notes on discourse

8.1 Introduction

This chapter discusses tail-head linking and paragraph linking in section 8.2, information structure in section 8.3, sentence-final ‘attitude’ particles in section 8.4, fillers in section 8.5, and conventions for greetings and leave-taking in section 8.6.

8.2 Stringing portions of text together

This section discusses two strategies that speakers use to string together larger portions of text: tail-head linking in section 8.2.1 and the use of /e^{2}t^{h}ɔ^{3}/ ‘and’ as a paragraph conjunction in section 8.2.2.

8.2.1 Tail-head linking

Paragraphs can be linked together by repeating the verb from the preceding paragraph inside a cosubordinate clause ending in the light verb /ɛʔ^{0}/ ‘do’ in the next paragraph. Cosubordinate clauses ending in /ɛʔ^{0}/ are discussed in the chapter on clauses (see section 7.2.1.2). The grammatical markers that accompany the verb stem in the first paragraph, such as TMA markers and person indices, are not repeated when the verb stem appears with /ɛʔ^{0}/ ‘do’ in the second paragraph. Tail-head linking agrees in this with the general structure of cosubordinate clauses ending in the light verb /ɛʔ^{0}/: verbs in the cosubordinate clause do not carry person indices, nor can they carry most TMA markers. The valency-changing prefix /tʌ^{0}-/~/t^{h}ʌ^{0}-/, however, constitutes an integral part of the verb stem, so if the verb in the ‘tail’-clause carries this prefix, it will do so again in the ‘head’-clause, as is illustrated by the verb /t^{h}ʌ^{0}-laŋ^{3}/ ‘to place’ in example (808) below.

Example (808) shows two instances of tail-head linking by means of the construction with a repeated verb stem followed by the element /ɛʔ^{0}/ ‘do’: first with the verb /ɟu^{3}/~/ɟɔk^{0}/ ‘go down’, and second with the verb /ʃiŋ^{2}/~/ʃiŋ^{3}/ ‘place’. For both verbs, we see that the past tense marker and person index, /-t-i^{1}/ ‘PST-1PL’, is present in the tail but dropped when these verbs are repeated in the head. In this example, when the verb ‘go down’ is repeated, it takes the verbal root /ɟu^{3}/, but when the verb ‘to place’ is repeated, it takes the nominal root /ʃiŋ^{3}/ according to consultant CTT.

(808) mɛɔ^{2} βaŋ^{3} ɟu^{3} ti^{1} ˩ɹi^{3} i^{3}, ba^{3} te^{2}, i^{2} ni^{3} lɛ^{3}.

mɛɔ^{2}=βaŋ^{3} **ɟu^{3}-t-i^{1}**=˩ɹi^{3} i^{3} ba^{3}-te^{2} i^{2}-ni^{3}=lɛ^{3}

Miao=from **go.down-PST-1PL**=INF Q.AFF 2SG.POSS-grandfather 1EXCL-DU=FOC

'We came from Miao, your grandfather, the two of us.'

ɟu^{3} ɛʔ^{0} ba^{3} nʌm^{1} p^{h}e^{2} pɨk^{0} ʃɔʔ^{0} ba^{3} ka^{3} ˩ɹi^{3}

ɟu^{3} **ɛʔ^{0}**=ba^{3} nʌm^{1}p^{h}e^{2} pɨk^{0}=ʃi^{3}=ɔʔ^{0}=ba^{3} ka^{3}˩ɹi^{3}

go.down **do**=TOP Namphai field=DIST-at=TOP car

t^{h}ʌ^{0}laŋ^{3} ʃɪŋ^{2} ti^{1} ˩ɹi^{3}.

t^{h}ʌ^{0}-laŋ^{3} **ʃɪŋ^{2}-t-i^{1}**=˩ɹi^{3}

CAUS-stand **place-PST-1EXCL**=INFER

'We came down to the Namphai field and we parked the car.'

t^{h}ʌ^{0}laŋ^{3} ʃɪŋ^{3} ɛʔ^{0} ba^{3} mɔ^{3}bɛl^{3} t^{h}a^{2} t^{h}ɔʔ^{0} ka^{3} ˩ɹi^{3} na^{3}.

t^{h}ʌ^{0}-laŋ^{3} **ʃɪŋ^{3}** **ɛʔ^{0}**=ba^{3} mɔ^{3}bɛl^{3}=t^{h}i^{3}=a^{2}=t^{h}ɔʔ^{0} ka^{3}˩ɹi^{3}=na^{3}

CAUS-stand **place** **do**=TOP mobile=DEF=ABS=also car=in

'We parked the car and the phone was also in the car.' (20151127_01.ed)

8.2.2 Linking paragraphs

Paragraphs can be linked together by means of /e^{2}t^{h}ɔ^{3}/ 'and' or /i^{3}˩ɛʔ^{0}/~/˩ɛʔ^{0}/ 'then'. The former can alternatively act as an NP conjunction or clause conjunction (see section 5.3). The linking elements occur paragraph-initially. An example of the first is provided in (809) and an example of the second in (810).

(809) xʌŋ^{1} ɛʔ^{0} ka^{1} ˩ɹi^{2} t^{h}a^{2} sɛ^{3} hɔl^{3} ɟɔk^{0}.

xʌŋ^{1} ɛʔ^{0} ka^{1}˩ɹi^{2}=t^{h}i^{3}=a^{2} sɛ^{3}-hɔl^{3} ɟɔk^{0}

go.up do car=DEF=ABS COS-bring go.down

'They went and brought the car.'

e^{2} t^{h}ɔ^{3} sɛ^{3} hɨm^{2} nʌŋ^{3} sɛ^{3} t^{h}u^{3} taʔ^{0} p^{h}i^{3} ɟɔ^{2}.

e^{2}t^{h}ɔ^{3}=sɛ^{3} hɨm^{2}=nʌŋ^{3} sɛ^{3}-t^{h}u^{3}-taʔ^{0}-p^{h}-i^{3} ɟɔ^{2}

and=already house=to COS-arrive-PST-CIS-1PL MIT

'And then we arrived home.' (20151127_01.ed)

(810) tɨl^{2} t^{h}a^{2} tɨŋ^{2} ɛʔ^{0} pi^{2} ma^{3} tʌ^{0}hun^{3} ta^{1}.

tɨl^{2}=t^{h}i^{3}=a^{2} tɨŋ^{2} ɛʔ^{0} pi^{2}=ma^{3} tʌ^{0}-hun^{3}-t-a^{1}

rice=DEF=ABS smell do yeast=DAT INTR-create-PST-3

'When the rice was smelling, it became yeast.'

i^{3} ɹɛʔ^{0} piʔ^{0} a^{3} e^{2} t^{h}a^{2} t^{h}ak^{0} kʌk^{0} a^{3} t^{h}ɔ^{3} k^{h}ʌm^{2} ma^{3} tʌ^{0}hun^{3}

i^{3}ɹɛʔ^{0} piʔ^{0}=a^{3} e^{2}-t^{h}i^{3}=a^{2} t^{h}ak^{0} kʌk^{0}-a^{3}=t^{h}i^{3}=ɔ^{3} k^{h}ʌm^{2}=ma^{3} tʌ^{0}-hun^{3}

then 3SG=ERG NPROX-DEF=ABS try bite-3=DEF=at rice.beer=DAT INTR-create

ti^{3} ta^{1}, ɹu^{1} tuŋ^{3} kaŋ^{2} ɔʔ^{0}.

ti^{3}-t-a^{1} ɹu^{1} tuŋ^{3}kaŋ^{2}=ɔʔ^{0}

COS.COP-PST-3 rope because=at

'Then, when she tried to bite it, it had turned into rice beer, because of the rope.' (20160106_04.ed)

Both linking elements can be expanded by adding the element /=ba^{3}/, resulting in the expressions /e^{2}t^{h}ɔ^{3}=ba^{3}/ 'and' as in (811), and /ɹɛʔ^{0}=ba^{3}/ 'then' as in (812). The clitic /=ba^{3}/ is a topic marker (see section 8.3.1) and when this marker attaches to a linking element, it appears to mark the idea that the information in the preceding paragraph is now considered shared knowledge of the speaker and hearer and that the continuation of the story will build on that background.

(811) ʃi^{3} na^{3} dʌk^{0} lɔ:t^{0} na^{3} sɛ^{3} ka^{1} ɹi^{2} t^{h}a^{2} e^{2} t^{h}ɔ^{3} i^{2} ni^{3} t^{h}a^{2}

ʃi^{3}=na^{3} dʌk^{0}-lɔ:t^{0}=na^{3}=sɛ^{3} ka^{1}ɹi^{2}=t^{h}i^{3}=a^{2} e^{2}t^{h}ɔ^{3} i^{2}-ni^{3}=t^{h}i^{3}=a^{2}

DIST=in SUPER-far=in=already car=DEF=ABS and 1EXCL-DU=DEF=ABS

nʌm^{1} p^{h}e^{2} ɹi^{3} na^{3} t^{h}u^{3} ti^{1}, xɨm^{3} ɟɔŋ^{2} nʌm^{1} p^{h}e^{2} ɹɔ^{3}.

nʌm^{1}p^{h}e^{2}=ɹi^{3}=na^{3} t^{h}u^{3}-t-i^{1} xɨm^{3}-ɟɔŋ^{2} nʌm^{1}p^{h}e^{2}=ɹi^{3}=ɔ^{3}

Namphai=PROX=in arrive-PST-1PL Khimyong Namphai=PROX=at

''The car is over there, far away, and we arrived here at Khimyong Namphai.''

e^{2} tʰɔ^{3} ba^{3} tɕa^{3} mun^{1} βa^{1} ni^{3} a^{3} ba^{3} te^{2} ɹa^{2} kɔ^{3} lɛ^{3} xʌŋ^{1} ɛʔ^{0}

e^{2}tʰɔ^{3}=ba^{3} tɕa^{3}mun^{1} βa^{1} ni^{3}a^{3} ba^{3}-te^{2}=ɹi^{3}=a^{2}=kɔ^{3}=lɛ^{3} xʌŋ^{1} ɛʔ^{0}

and=TOP Chamun father and 2SG.POSS-grandfather=PROX=ABS=PRT=FOC go.up do

ka^{1} ɹi^{2} tʰa^{2} sɛ^{3} kɔ^{3} te^{2} hɔl^{3} xʌŋ^{1} ta^{1}.

ka^{1}ɹi^{2}=tʰi^{3}=a^{2}=sɛ^{3}=kɔ^{3} te^{2} hɔl^{3} xʌŋ^{1}-t-a^{1}

car=DEF=ABS=already=PRT take bring go.up-PST-3

'The father of Chamun and your grandfather went to bring the car.' (20151127_01.ed)

(812) ʌ^{0}lɔ^{1} hʌl^{2} nʌŋ^{3} sɛ^{3} tʰɔk^{0} ka^{1} ti^{1} sɛ^{3} ʝu^{2}.

ʌ^{0}-lɔ^{1}=hʌl^{2}=nʌŋ^{3}=sɛ^{3} tʰɔk^{0} ka^{1}-t-i^{1}=sɛ^{3} ʝu^{2}

NMLZ-far=very=to=already arrive go-PST-1PL=COMP MIT

'We went and reached far away.'

i^{3} ɹɛʔ^{0} ba^{3} ɛ tɕʌm^{2} ʌŋ^{2} a^{3} sɛ^{3}.

i^{3}ɹɛʔ^{0}=ba^{3} ɛ tɕʌm^{2} ʌŋ^{2}-a^{3}=sɛ^{3}

then=TOP EXCLAM what COP-3=COMP

'Then, (we said) 'oh, let it be.'' (20151127_01.ed)

The linking elements /e^{2}tʰɔ^{3}/ 'and' and /i^{3}ɹɛʔ^{0}/~/ɹɛʔ^{0}/ 'then' may also be followed by the enclitic /=laŋ^{2}/ 'certainly, indeed', either a single token or reduplicated. Like /=ba^{3}/, this element can follow an NP, clause, or the above mentioned linking elements. Its function falls under the scope of epistemic modality (see section 6.1.6.3.4).

8.3 Information structure

This section discusses the topic marker /=ba^{3}/ and focus marker /=lɛ^{3}/. Topic is defined here as an entity or information which the speaker assumes to be previously known to the hearer. Often, topic is defined in a narrower sense, including only entities, which are typically encoded as NPs (see for example Andrews 2007:149), but we find that the topic clitic in Muklom not only marks entities or NPs, but also blocks of information encoded in units larger than an NP. In other words, the clitic /=ba^{3}/ marks information that is expected. Focus is defined here as the information that is presented by the speaker as new or contrastive (see Andrews 2007:150).

8.3.1 Topic marker /=ba^{3}/

The element /=ba^{3}/ marks information which is assumed to be known by the hearer, i.e. topics, some of which contrastive. Morphologically, the topic marker /=ba^{3}/ is an enclitic: it can follow different syntactic units and cannot occur in isolation. The marker can be placed after NPs, including pronouns and proper nouns, after a (nominalised) clause, or, as mentioned in the preceding section, after the linking elements /e^{2}tʰɔ^{3}/ 'and' or /i^{3}ɹɛʔ^{0}/~/ɹɛʔ^{0}/ 'then' (see section 8.2.2). When it follows an NP, the marker indicates that the preceding entity is assumed to be identifiable to the hearer from the preceding discourse. When we look at co-occurrence of the topic marker with definite or demonstrative determiners in the current annotated corpus, the following pattern arises: all common nouns that are marked as a topic by /=ba^{3}/ also carry a definite or demonstrative determiner, pronouns with /=ba^{3}/ sometimes carry a definite or demonstrative determiner and sometimes do not, and subordinate nominalised clauses likewise sometimes do and sometimes do not, but none of the cosubordinate clauses in the corpus ending in the light verb /ɛʔ^{0}/ 'do' (see section 7.2.1.2) carry a definite or demonstrative determiner. When the topic clitic follows a clause or linking element, it marks that the preceding information is considered shared knowledge by the speaker and that the story will build further on the background that has been sketched by the speaker.

Examples of entities, i.e. NPs, marked as topical by /=ba^{3}/ are provided below: the common noun /ʃaʔ^{0}/ 'tiger' in (813), the personal pronoun /piʔ^{0}/ 'she' in (814), and the first name /mika/ in (815). Example (816) contains a topic marker on a clause nominalised by means of the definite marker /=tʰi^{3}/~/=tʰ/ and 0(817) contains a topic marker on a non-nominalized clause. For examples of the topic marker on a linking element, see examples (811) and (812) in the preceding section.

In the discourse preceding example (813), it is said that all species of animals had gathered and that the tiger announced he would produce fire from his teeth. According to the Muklom oral history, humans obtained fire from two animal species, once from the monkey and once from the tiger. The important point here is that the tiger has been mentioned in the immediately preceding discourse and is thus an active topic, which can be marked by /=ba^{3}/ as it is here.

(813) ʃaʔ^{0} tʰɛ^{3} ba^{3} βʌl^{1} tʰa^{2} kʌp^{0} ta^{1} ɹi^{3}.

ʃaʔ^{0}=tʰi^{3}=ɛ^{3}**=ba^{3}** βʌl^{1}=tʰi^{3}=a^{2} kʌp^{0}-t-a^{1}=ɹi^{3}

tiger=DEF=ERG**=TOP** fire=DEF=ABS obtain-PST-3=INF

'The tiger had obtained fire.' (20151208_03)

In the discourse preceding the topic-marked /piʔ^{0} tʰɛ^{3}/ 'she' in example (814), the topic switches back and forth between the husband and the wife that are the main characters in a story about the origin of

rice beer. The wife is an unusual human in that she has fish relatives. She therefore requests her husband to refrain from bringing certain types of fish into the house for consumption, but he forgets or ignores her request and brings them to their house. The topic switches as follows: the first utterance speaks about the wife, /miʔ^{0}-nu^{1}=ʃɨ^{3}/ ‘that woman’, the implied agent of the verb /hɔl^{3}-tɕʌk^{0}-t-a^{1}/ ‘he brought’ is the husband, and the topic-switch back to the wife is then marked by /=ba^{3}/ on /piʔ^{0}=tʰɨ^{3}=ɛ^{3}/ ‘she’.

(814) YK: miʔ^{0} nu^{1} ʃɨ^{3} ma^{3} ŋaʔ^{0} kuŋ^{1} ni^{3} ŋaʔ^{0} luk^{0} ʃa^{2}

miʔ^{0}-nu^{1}=ʃɨ^{3}=ma^{3} ŋaʔ^{0}-kuŋ^{1} ni^{3} ŋaʔ^{0}-luk^{0}=ʃɨ^{3}=a^{2}

person-F=DIST=DAT catfish and fish-frog=DIST=ABS

u^{3} nu^{1} ni^{3} βa^{1} ʌŋ^{2} ta^{1}.

u^{3}-nu^{1} ni^{3} βa^{1} ʌŋ^{2}-t-a^{1}.

3SG.POSS.DIST-mother and father COP-PST3

YK: ‘The catfish and frog fish were the parents of this woman.’

MKK: ɟɔ^{3}.

ɟɔ^{3}

okay

MKK: ‘Okay.’

YK: e^{2} tʰa^{2} hɔl^{3} tɕʌk^{0} ta^{1}.

e^{2}tʰa^{2} hɔl^{3}-tɕʌk^{0}-t-a^{1}

but bring-PFV-PST-3

YK: ‘But he brought them.’

ɹɛʔ^{0} piʔ^{0} tʰɛ^{3} ba^{3} ja^{3} ʃiʔ^{0} kʌp^{0} ta^{1} ti^{3}.

ɹɛʔ^{0} piʔ^{0}=tʰɨ^{3}=ɛ^{3}**=ba^{3}** ja^{3}ʃiʔ^{0} kʌp^{0}-t-a^{1}=ti^{3}

then 3SG=DEF=ERG**=TOP** bad receive-PST-3=HS

‘Then she took it badly.’ (20160106_04.ed)

Example (815) derives from a conversation in which people were compared to one another with respect to height.

(815) mika ɹa^{2} ba^{3} ʌ^{0}luːk^{0} hʌl^{2}.

mika=ɹi^{3}=a^{2}**=ba^{3}** ʌ^{0}-luːk^{0}=hʌl^{2}.

Mika=PROX=ABS**=TOP** NMLZ-tall=very

‘Mika is very tall.’ (B1.35)

The two utterances in example (816) are part of a story that tells how a couple, Mr and Ms Changmi, got lost in the jungle and found their way back home. The couple has just parked the car by the side of the road and decides to explore their plot of land and find out where their plot stops and the jungle starts. In the beginning of the second utterance, /=ba^{3}/ marks the event of going, here expressed by the nominalized clause /ka^{1}-t-i^{1}=t^{h}i^{3}=a^{2}/. The topic ‘going’ is active in the mind of the hearer: it features in the preceding utterance as the adhortative verb /ka^{3}-i^{1}/ ‘let’s go’.

(816) e^{2} nɔʔ^{0} ka^{3} i^{3} tsɔm^{3} βe^{3} ʝat^{0} ɹi^{1} t^{h}i^{3} tat^{0} sin^{3} tɕʌk^{0} ka^{3} i^{3} ta^{3}.

e^{2}-ni^{3}=ɔʔ^{0} ka^{3}-i^{3} tsɔm^{3}βe^{3} ʝat^{0}-ɹi^{1}=t^{h}i^{3} tat^{0} sin^{3}-tɕʌk^{0}ka^{3}-i^{3}=ta^{3}

NPROX-MED=at go-1PL a.short.while jungle-line=DEF try see-PFV go-1PL=QUOT

‘‘Let’s go there for a while and try to see where the jungle starts (and our field ends),’

he said.’

ka^{1} ti^{1} t^{h}a^{2} ba^{3}, t^{h}ɛʔ^{0} ka^{1} t^{h}ɛʔ^{0} ka^{1} t^{h}ɛʔ^{0} ka^{1}.

ka^{1}-t-i^{1}=t^{h}i^{3}=a^{2}**=ba^{3}** t^{h}ɛʔ^{0}-ka^{1} t^{h}ɛʔ^{0}-ka^{1} t^{h}ɛʔ^{0}-ka^{1}

go-PST-1PL=DEF=ABS**=TOP** CNT-go CNT-go CNT-go

‘We went and went and went and went.’ (20151127_01.ed)

Example (817) is taken from the same story. The entire second clause of this example is marked as topical by /=ba^{3}/. One may expect that the concept that God will show the lost couple the way out of the jungle is something that has been mentioned in the preceding discourse, but in fact it has not. What is mentioned, is that the couple prayed, as can be seen in the first utterance in this example. It appears as if the speaker assumes that the hearer infers what is obvious to the speaker, namely that the prayer consisted of a plea to God to show the way out of the jungle.

(817) ɛ^{3} ke^{2} tɕu^{2} tɕu^{2} ke^{2} tɕu^{2}.

ɛ^{3} ke^{2}tɕu^{2} tɕu^{2} ke^{2}tɕu^{2}

EXCLAM prayer pray prayer

‘‘Oh! Let’s pray, pray.’’

ʃɛ^{3} ke^{3} βa^{1} tɕʌm^{2} tʌ^{0}k^{h}i^{3} kɔʔ^{0} p^{h}i^{3} tɔl^{2} ʌ^{0}lʌm^{2} t^{h}i^{3} ta^{3} ba^{3}.

ʃɛ^{3}ke^{3}-βa^{1} tɕʌm^{2} tʌ^{0}-k^{h}i^{3} kɔʔ^{0}-p^{h}-i^{3} tɔl^{2} ʌ^{0}-lʌm^{2}=t^{h}i^{3}=ta^{3}**=ba^{3}**

God-M what CAUS-see give-INV-1PL road and-road=DEF=QUOT**=TOP**

‘‘God will show us the way.’’ (20151127_01.ed)

The examples provided so far all contain a single topic marker. However, clauses may contain more than one token of /=ba^{3}/. The last utterance in (818), for example, contains three topic markers, one after the sentence-initial linking element and two after an NP. The topic marker on /e^{2}t^{h}ɔ^{3}/ ‘and’ indicates that the preceding discourse is now considered shared knowledge by the speaker and that they will build the story on top of this foundation. The topic marker on /nɨŋ^{2}-ni^{3}=t^{h}i^{3}=ɛ^{3}/ ‘the two of them’ shows that the hearer is assumed to be able to locate the referent of this expression in the preceding discourse. An overt expression of the referent is found in the first utterance: /i^{3}-su^{1}-ni^{3}/ ‘my two grandchildren’. Though /pʌl^{3}=tʌŋ^{2} sal^{2}=tʌŋ^{2}/ ‘day and night’ is not mentioned in the preceding discourse, it is marked by /=ba^{3}/. Perhaps the speakers assumes that the hearer is familiar with this detail of the story already.

(818) i^{3} su^{1} ni^{3} ɟɔ^{3}, nɨm^{1} ni^{3} a^{3} haʔ^{0} bɨŋ^{2} k^{h}ɨt^{0}

i^{3}-su^{1}-ni^{3} ɟɔ^{3} nɨm^{1}-ni^{3}=a^{3} haʔ^{0}-bɨŋ^{2} k^{h}ɨt^{0}

1SG.POSS-grandchild-two MIT 2PL-DU=ERG earth-pit dig.out

ka^{3} ʃɨn^{2} ɟu^{3} ta^{3} ti^{3} bat^{0} ta^{1}.

ka^{3}-ʃ-ɨn^{2}=ɟu^{3}=ta^{3}=ti^{3} bat^{0}-t-a^{1}

go-DU-2PL=MIT=QUOT=HS say-PST-3

‘‘My two grandchildren, go dig out a pit in the earth’ he said.’

ɟan^{2} tɔŋ sa^{1} t^{h}a^{2} ʌ^{0}ʃɛ^{1} kɔʔ^{0} ʃɨŋ.

ɟan^{2}tɔŋ-sa^{1}=t^{h}i^{3}=a^{2} ʌ^{0}-ʃɛ^{1} kɔʔ^{0} ʃɨŋ

dao-small=DEF=ABS NMLZ-one give put

‘He gave one small dao.’

haʔ^{0} bɨŋ^{2} k^{h}ɨt^{0} ka^{3} ʃɨn^{2} ɟu^{3} ta^{3}.

haʔ^{0}-bɨŋ^{2} k^{h}ɨt^{0} ka^{3}-ʃ-ɨn^{2}=ɟu^{3}=ta^{3}

earth-pit dig.out go-DU-2PL=MIT=QUOT

‘‘Go dig out a pit in the earth.’’

e^{2} tʰɔ^{3} ba^{3} niŋ^{2} ni^{3} tʰɛ^{3} ba^{3} pʌl^{3} tʌŋ^{2} sal^{2} tʌŋ^{2} ba^{3} kʰɨt^{0} ka ɹɔʔ^{0}

e^{2}tʰɔ^{3}=**ba^{3}**	niŋ^{2}-ni^{3}=tʰi^{3}=ɛ^{3}**=ba^{3}**	pʌl^{3}=tʌŋ^{2}	sal^{2}=tʌŋ^{2}**=ba^{3}**	kʰɨt^{0}	ka-ɹɔʔ^{0}
and**=TOP**	3PL-DU=DEF=ERG**=TOP**	night=whole	day=whole**=TOP**	dig.out	go-CNT

kʰɨt^{0} ka ɹɔʔ^{0}.

kʰɨt^{0}	ka-ɹɔʔ^{0}
dig	go-CNT

‘And then the two of them kept on going and digging, all night and all day.’ (20151208_05)

Hakhun Tangsa, a closely related language variety, exhibits a discourse particle /bə/~/beʔ^{0}/ which is likely to be a cognate to the Muklom topic clitic /=ba^{3}/. Boro (2017:66) refers to the Hakhun particle as a ‘definite particle’ and his annotated examples show that it can be placed after NPs, including pronouns, proper nouns and nominalized clauses, but also can be placed after verbs (see for example Boro 2017:19).

8.3.2 Focus marker /=lɛ^{3}/

The focus clitic /=lɛ^{3}/ marks new or contrastive information. It can attach to different units: to NPs, including pronouns and proper nouns, to clauses, and even to conjunctions. Example (819) shows a focus marker with a common noun and example (820) shows the marker with a personal pronoun, In example (821), the focus marker has scope over the whole preceding clause. Finally, example (822) illustrates how the focus marker can combine with a linking element like /e^{2}tʰɔ^{3}/ ‘and’.

Example (819) is a passage from the story about Mr and Ms Changmi and how they got lost in the jungle. It is the NP /ba^{3}-te^{2}=ɹi^{3}/ ‘your grandfather over here’ that is marked by the focus marker /=lɛ^{3}/. The marker is expressing contrastive focus here. In the first utterance, a shared activity is mentioned: praying together. In what follows, however, we see that Mr and Ms Changmi are not united in their actions. While the grandfather falls asleep, the grandmother, who is also the narrator of this story, is bright awake and shaking due to anxiety. The focus marker on /ba^{3}-te^{2}=ɹi^{3}/ serves to highlight the contrast between the grandfather and the narrator in this passage.

(819) ke^{2} tɕu^{2} ɹɔʔ^{0} tat^{0} βe^{3} tɕu^{2} i^{3} ta^{3} sɛ^{3}.

ke^{2}tɕu^{2}-ɹɔʔ^{0}	tat^{0}	βe^{3}-tɕu^{2}-i^{3}=ta^{3}=sɛ^{3}
prayer-CNT	try	ITER-pray-1PL=QUOT=COMP

‘‘We have to continue to pray,’ we said.’

ba^{3} te^{2} ɹi^{3} lɛ^{3} naŋ^{3} ti^{3} ɛʔ^{0} le^{1} tʌ^{0}paŋ^{1}

ba^{3}-te^{2}=ɹi^{3}**=lɛ^{3}** naŋ^{3} ti^{3} ɛʔ^{0} le^{1}-tʌ^{0}-paŋ^{1}

2SG.POSS-grandfather=PROX**=FOC** be.tired COS.COP do and-CAUS-be.horizontal

ɟɨp^{0} ta^{1} sɛ^{3}.

ɟɨp^{0}-t-a^{1}=sɛ^{3}

sleep-PST-3=COMP

'Your grandfather over here became tired and lay down to sleep.'

ŋa^{1} ɹi^{3} tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} ti^{3} ʌŋ^{3} ta^{3}.

ŋa^{1}=ɹi^{3} tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2} ti^{3}-ʌŋ^{3}=ta^{3}

1SG=PROX what-like COS-COP COS.COP-1SG=QUOT

'I said, 'What is happening to me?''

i^{3} ɟʌk^{0} ɟa^{1} t^{h}a^{2} mɔ^{3} βʌŋ^{1} ta^{1}, u^{0}tɕɔ^{3} βaŋ^{3} t^{h}ɛ^{3}.

i^{3}-ɟʌk^{0}-ɟa^{1}=t^{h}i^{3}=a^{2} mɔ^{3}-βʌŋ^{1}-t-a^{1} u^{0}-tɕɔ^{3}=βaŋ^{3}=t^{h}i^{3}=ɛ^{3}

1SG.POSS-arm-leg=DEF=ABS move-go.up-PST-3 NMLZ-fear=from=DEF=with

'My limbs were shaking from fear.' (20151127_01.ed)

When the Changmi couple finally stumble upon a village, the village people are surprised to see the two roaming around in the dark and ask them from where they came. The passage in example (820) shows this question and the reaction of the couple. The response of the grandfather differs greatly from the response of the grandmother. While the grandfather pretends they are just out for a stroll, the grandmother and narrator of the story directly admits they are lost. The focus marker /=lɛ^{3}/ on /i^{2}-ni^{3}/ in the last utterance in this example appears to highlight the contrast between the two responses.

(820) nɨm^{1} ni^{3} ba^{3} ɹi^{2} kɔ^{2} βaŋ^{3} ɹɨn^{2} xiŋ^{3} tɕe^{2} ʃɨn^{2} ta^{3}.

nɨm^{1}-ni^{3} ba^{3}ɹi^{2} kɔ^{2}=βaŋ^{3} ɹɨn^{2} xiŋ^{3}-tɕe^{2}-ʃ-ɨn^{2}=ta^{3}

2PL-DU which direction=from PRT walk-PROG-DU-2PL=QUOT

''You two, from where have you been walking?' they said.'

ba^{3} te^{2} ɹɛ^{3} bat^{0} mɔʔ^{0} ɛ^{3} laŋ^{2}, ɛ^{3} i^{3} ɹɔʔ^{0}

ba^{3}-te^{2}=ɹi^{3}=ɛ^{3} bat^{0}-m-ɔʔ^{0}-ɛ^{3}=laŋ^{2} ɛ^{3} i^{3}-ɹi^{3}=ɔʔ^{0}

2SG.POSS-grandfather=PROX=ERG say-NEG-3-REV.NEG=indeed EXCLAM PROX-PROX-at

xiŋ^{3} i^{3} ɹɔʔ^{0} tɨm^{2} xiŋ^{3} i^{3} ta^{3}.

xiŋ^{3} i^{3}-ɹi^{3}=ɔʔ^{0} tɨm^{2}-xiŋ^{3}-i^{3}=ta^{3}

walk PROX-PROX=at around-walk-1PL=QUOT

'Your grandfather said, 'Oh! We are just walking around.''

ŋa^{1} ba^{3} le^{1} bat^{0} mɔŋ^{1} ɛ^{3} laŋ^{2}, nɔk^{0} ɔi^{2}, i^{2} ni^{3} lɛ^{3} tɕuŋ^{1}

ŋa^{1}=ba^{3} le^{1}-bat^{0}-m-ɔŋ^{1}-ɛ^{3}=laŋ^{2} nɔk^{0}=ɔi^{2} i^{2}-ni^{3}**=lɛ^{3}** tɕuŋ^{1}

1SG=TOP and-say-NEG-1SG-REV.NEG=indeed friend=VOC 1EXCL-DU**=FOC** lost

tɨk^{0} kɔ^{3} ʌŋ^{2} i^{3} ta^{3}.

tɨk^{0}=kɔ^{3} ʌŋ^{2}-i^{3}=ta^{3}

COS.COP=would COP-1PL=QUOT

'And I said, 'oh friend, we two got lost.'' (20151127_01.ed)

In example (821), the focus marker signals a shift in the direction of thinking. The Changmi couple have no idea where they are and they enter a village which they do not yet recognise. They have made it out of the jungle. They then hear people calling out to one another. Now that the issue of being stuck in the jungle is solved, a new question arises: are we amongst our own or are we amongst strangers?

(821) nʌk^{0} ɔ^{2} ba^{3} ɹi^{2} nɔk^{0} haʔ^{0} ɹaʔ^{0} ʌŋ^{2} na^{3} lɛ^{3}?

nʌk^{0} ɔ^{2} ba^{3}ɹi^{2}nɔk^{0} haʔ^{0} ɹaʔ^{0} ʌŋ^{2}-n-a^{3}**=lɛ^{3}**

PROH EXCLAM which land speech COP-FUT-3**=FOC**

''Wait a second, which tribe's language will it be (that they speak)?'' (20151127_01.ed)

The last example is taken from a different narrative from Muklom oral history. In this story there are two suns in the sky and they cause temperatures to rise and the crops and weeds dry out. In example (822), the narrator gives the listener surprising information: though weeds are a nuisance, when the land dried up and the weeds disappeared, the people somehow missed having them and requested from God that he would provide them with new weeds to keep the people busy with work in the field.

(822) e^{2} t^{h}ɔ^{3} lɛ^{3} t^{h}iŋ^{2} t^{h}a^{2} βɛ^{3} tɕu^{3} ti^{3}.

e^{2}t^{h}ɔ^{3}**=lɛ^{3}** t^{h}iŋ^{2}=t^{h}i^{3}=a^{2} βɛ^{3}-tɕu^{3}=ti^{3}

and**=FOC** weed=DEF=ABS ITER-request=HS

'They requested weeds again.' (20121103_03)

8.4 Sentence-final ‘attitude’ particles

Matisoff (1991:495) states that languages of East and southeast Asia typically have a rather large set of sentence-final particles that encode emotional attitudes of the speaker. These would to some extend fulfil the same function as intonation in non-tonal languages. I have observed the following four sentence-final ‘attitude’ particles in Muklom: /=a^{3}/, /=ɔ^{2}/, /ʝɔ^{3}/, and /ʝu^{2}/. The first, the mitigative enclitic /=a^{3}/, can be added to a direct question in order to make it sound less intrusive, as is exemplified by (823) and (824).

(823) tɕʌm^{2} lʌŋ^{2} ɹi^{2} tu^{1} a^{3}?
tɕʌm^{2}lʌŋ^{2} ɹi^{2}-t-u^{3}**=a^{3}**
what buy-PST-2SG**=MIT**
‘What did you buy?’ (B1.128)

(824) tɕʌm^{2} ma^{3} kʌ^{0}ɹɛl^{2} u^{3} a^{3}?
tɕʌm^{2}=ma^{3} kʌ^{0}ɹɛl^{2}-u^{3}**=a^{3}**
what=DAT loiter-2SG**=MIT**
‘Why are you loitering?’ (S3.22)

The second particle, /ɔ^{2}/, can be attached to a statement or question and appears to encode emotional involvement of the speaker with what is being said: expressing appreciation, disapproval, surprise, distress, or stressing the sincerity of a wish or seriousness of a statement. This particle resembles an exclamation as it is often pronounced with a stretched, rising-falling intonation. An example of /ɔ^{2}/ marking surprise is provided in (825), an utterance taken from the story about the Changmi couple and how they got lost in the jungle. When the couple merged from the jungle, the villagers were surprised and asked one another what had happened. An example of /ɔ^{2}/ marking appreciation is presented in (826). For lack of a better label, the element is glossed as an exclamation here.

(825) tɕʌm^{2} tɕʌm^{2} ʌŋ^{2} ta^{1} ɔ^{2} ta^{3} ɹɛʔ^{0}.
tɕʌm^{2} tɕʌm^{2} ʌŋ^{2}-t-a^{1} **ɔ^{2}**=ta^{3} ɹɛʔ^{0}
what what COP-PST-3 **EXCLAM**=QUOT then
‘‘Oh dear, what happened?’ they said.’ (20151127_01.ed)

(826) pɨŋ^{1} ta^{1} ɔ^{2}!

pɨŋ^{1}-t-a^{1} **ɔ^{2}**

be.tasty-PST-3 **EXCLAM**

‘It was so tasty !’ (CTT.lexicon)

The third particle, /jɔ^{3}/, is used to mitigate adhortative clauses. It may also be used as a backchannel, either as a single token or reduplicated, indicating agreement or encouragement. An example of an adhortative clause with mitigative /jɔ^{3}/ is provided in (827). An example of /jɔ^{3}/ as a backchannel is can be found in (828).

(827) tɨl^{2} saʔ^{0} i^{3} ɟɔ^{3}!

tɨl^{2} saʔ^{0}-i^{3} **ɟɔ^{3}**

rice eat.soft-1PL **MIT**

‘Let’s eat rice!’ (20100124-112656)

(828) YK: miʔ^{0} nu^{1} ʃì^{3} ma^{3} ŋaʔ^{0} kuŋ^{1} ni^{3} ŋaʔ^{0} luk^{0} ʃa^{2}

miʔ^{0}-nu^{1}=ʃì^{3}=ma^{3} ŋaʔ^{0}-kuŋ^{1} ni^{3} ŋaʔ^{0}-luk^{0}=ʃì^{3}=a^{2}

person-F=DIST=DAT catfish and fish-frog=DIST=ABS

u^{3} nu^{1} ni^{3} βa^{1} ʌŋ^{2} ta^{1}.

u^{3}-nu^{1} ni^{3} βa^{1} ʌŋ^{2}-t-a^{1}.

3SG.POSS.DIST-mother and father COP-PST3

YK : ‘The catfish and frog fish were the parents of this woman.’

MKK: ɟɔ^{3}.

ɟɔ^{3}

okay

MKK: ‘Okay.’

YK: e^{2} t^{h}a^{2} hɔl^{3} tɛʌk^{0} ta^{1}.

e^{2}t^{h}a^{2} hɔl^{3}-tɛʌk^{0}-t-a^{1}

but bring-PFV-PST-3

YK: ‘But he brought them.’ (20160106_04.ed)

Finally, commands and statements can be mitigated by adding the sentence-final element /ɟu^{2}/. For a discussion of /ɟu^{2}/ and examples in context see section 6.1.6.3.11.

8.5 Fillers

The dubitative marker /=hɛ^{3}/ (see section 6.1.6.3.3) can alternatively be used as a filler. When used as a filler, it may be accompanied by the dative marker /=ma^{3}/, the affirmative element /=bɔ^{3}/ 'indeed', the syllable /ɟʌt^{0}/, or a combination of these. The origin and meaning of the syllable /ɟʌt^{0}/ could not be confirmed with consultants but this element possibly is an Indo-Aryan loan, deriving from Assamese /zat/ 'type' (compare Karbi <ɟát> 'type, thing' in Konnerth 2014:575). An example of a filler with /=hɛ^{3}/ is provided in (829).

(829) e^{2} tʰɔ^{3} ba^{3} hɛ^{3} ma^{3} ɟʌt^{0} bɔ^{3} ɹʌŋ^{2} te^{2} nu^{1} tʰa^{2} ba^{3} [...]

e^{2}tʰɔ^{3}=ba^{3}=**hɛ^{3}=ma^{3}** **ɟʌt^{0}=bɔ^{3}** ɹʌŋ^{2}-te^{2}-nu^{1} tʰa^{2} ba^{3}

and=TOP=**maybe=DAT** **thing(?)=indeed** sky-PERS-F=tʰi^{3}=a^{2}=TOP

'And then, erm, the woman from the sky [...]' (20151208_05)

In contrast to nearby Rangpang varieties of Tangsa, Muklom does not have a filler with a rhotic like /kəɹə/ or /pəɹə/ (see Goswami 2017).

8.6 Greeting and leave-taking

It is common in languages throughout Southeast Asia to greet one another by using the formulas 'Have you eaten yet?' or 'Where are you going?' (Matisoff 1991:485). Muklom is no exception to this tendency and has standardized greetings inquiring about food and destinations. However, asking about someone's wellbeing or that of their relatives, or wishing someone a good night, or other part of the day, is common practice in greeting as well. The standard greeting which refers to food is given in (830).

(830) tɨl^{2} saʔ^{0} tu^{1} sɛ^{3} i^{3}?

tɨl^{2} saʔ^{0}-t-u^{1}=sɛ^{3} i^{3}

rice eat.soft-PST-2SG=COMP Q.AFF

'Have you eaten already?' (S1.22)

The expression /tɨl^{2} saʔ^{0}/, literally ‘eat rice’, in greetings as well as in other contexts refers to eating in general, not specifically rice, though rice is the staple food of the Muklom people, so chances are that the addressee‘s last meal consisted of rice. This collocation of verb and object, ‘eat’ and ‘rice’, to denote eating in general is common in Southeast Asia (Matisoff 1991:485).

If the answer to the last question is affirmative, then one may inquire after the food that was prepared with the rice, such as fried vegetables, meat, or eggs, with the question in (831). The dish that accompanies rice is called /pʌ^{0}ɹu^{1}/. Example (831) does not contain the question marker /=i^{3}/ like the previous greeting. In fact, adding /=i^{3}/ would result in an ungrammatical utterance, because the question marker /=i^{3}/ does not combine with question words such as /tɕʌm^{2}lʌŋ^{2}/ ‘what’, /ba^{3}-nʌŋ^{3}/ ‘to where’ and /ba^{3}-na^{3}/ ‘where’.

(831) tɕʌm^{2} lʌŋ^{2} pʌ^{0}ɹu^{1} saʔ^{0} tu^{1}?

tɕʌm^{2}lʌŋ^{2} pʌ^{0}ɹu^{1} saʔ^{0}-t-u^{1}

what dish eat.soft-PST-2SG

‘Which dish did you eat (with your rice)?

To my hostess, it was important that I mention in my reply to the greeting in (831) the meat that she had served me and her family and not to suffice by mentioning the vegetables, since meat is considered the best part of the meal and a sign of hospitality when served to guests.

An often-heard greeting when travelling on the road is the inquiry after your destination or, if you are greeted on your way to home, after your place of departure. The first type of greeting commonly takes the shape of the question in (832) and this phrase is often shortened as in (833), contracting the postposition and copula into a single syllable. Sometimes, the copula /ʌŋ^{2}/ is replaced by /ka^{1}/ ‘go’, as exemplified by (834).

(832) ba^{3} nʌŋ^{3} ʌŋ^{2} u^{3}?

ba^{3}-nʌŋ^{3} ʌŋ^{2}-u^{3}

what-to COP-2SG

‘Where are you going?’ Lit. ‘To where are you?’ (S2.20)

(833) ba^{3} **nʌŋ^{2}** u^{3}?

ba^{3}-**nʌŋ^{3}** **ʌŋ^{2}**-u^{3}

what-**to** **COP**-2SG

‘Where are you going?’ (S2.20)

(834) ba^{3} nʌŋ^{3} ka^{1} u^{3}?

ba^{3}-nʌŋ^{3} **ka^{1}**-u^{3}

what-to **go**-2SG

'Where are you going?' (S2.20)

Upon seeing someone returning, one can utter the greeting in (835), which can again be contracted, as shown in example (836).

(835) ba^{3} na^{3} ʌŋ^{2} tu^{1}?

ba^{3}-na^{3} ʌŋ^{2}-t-u^{1}

what-in COP-PST-2SG

'Where have you been? (S1.31a)

(836) ba^{3} **nʌŋ^{2}** tu^{1}?

ba^{3}**-na^{3}** **ʌŋ^{2}**-t-u^{1}

what**-in** **COP**-PST-2SG

'Where have you been? (S1.31a)

As said, it is also common practice to ask about someone's wellbeing or that of their relatives. Example (745) represents the most often heard greeting of this type. The presence of the pronoun /nʌŋ^{1}/ is optional. An alternative way of asking about the addressee's wellbeing is presented in (746) and an inquiry after the wellbeing of a relative is exemplified by (839).

(837) (nʌŋ^{1}) ʌ^{0}xʌl^{2} bɛ^{3}?

(nʌŋ^{1}) ʌ^{0}-xʌl^{2}=bɛ^{3}

(2SG) NMLZ-good=Q.AFF

'Are you okay?' (S1.5)

(838) ʌ^{0}xʌl^{2} bɛ^{3} tɔŋ^{2} u^{3}?

ʌ^{0}-xʌl^{2}=bɛ^{3} tɔŋ^{2}-u^{3}

NMLZ-good=Q.AFF stay-2SG

'How are you?' (Lit. 'Are you staying okay?') (MessagesExtracts)

(839) ba^{3} na^{1} ʌ^{0}xʌl^{2} bɛ^{3}?

ba^{3}-na^{1} ʌ^{0}-xʌl^{2}=bɛ^{3}

2SG.POSS-sister NMLZ-good=Q.AFF

'Is your sister okay?' (B1.26)

Finally, one can also ask what people are doing as a means of greeting, as in (840). The directness of this question can be mitigated by adding the politeness marker /=a^{3}/ (see section 8.4), resulting in the phrase presented in (841).

(840) tɕʌm^{2} lʌŋ^{2} ɛʔ^{0} u^{3}?

tɕʌm^{2}lʌŋ^{2} ɛʔ^{0}-u^{3}

what do-2SG

'What are you doing?' (B1.14)

(841) tɕʌm^{2} lʌŋ^{2} ɛʔ^{0} u^{3} a^{3}?

tɕʌm^{2}lʌŋ^{2} ɛʔ^{0}-u^{3}**=a^{3}**

what do-2SG**=MIT**

'What are you doing?' (B1.128)

The process of leaving and announcing that one is leaving may involve prolific use of the mitigative particles /ɟɔ^{3}/ and /ɟu^{2}/ (see section 8.4), especially between good friends and relatives. To indicate that one wishes to end a conversation or round off a visit one can use the formula in (842). The meaning of the elements of this formula in isolation could not be determined yet.

(842) ɟɔ^{1} t^{h}a^{2} ɔ^{3} lɛ^{3}.

ɟɔ^{1}-t^{h}a^{2}-ɔ^{3}-lɛ^{3}

'Okay, then.' (CTT.lexicon)

Upon departing, it is common to say to those who stay behind 'stay here, okay', as illustrated by example (843).

(843) bʌn^{3} tɔŋ^{2} u^{3} ɟɔ^{3}!

bʌn^{3} tɔŋ^{2}-u^{3} ɟɔ^{3}

wait sit-2SG MIT

‘Goodbye!’ (Lit. ‘You wait and stay here!’) (B1.35)

Appendix A: List of verb stem alternations

The phenomenon of verb root allomorphy, in Tibeto-Burman literature commonly referred to as 'verb stem alternation', has been discussed in section 6.1.1.4. The following table provides an overview of all verb stem alternations observed so far. Σ_1 can take person indices and Σ_2 can take the de-verbal nominaliser /u^0-/. Because Σ_1 takes person marking, it can also be referred to as the verbal stem and Σ_2 can be referred to as the nominal stem. However, the situation is less straightforward with de-adjectival nominaliser /ʌ^0-/: depending on the word, it attaches to Σ_1 or to Σ_2. For each adjective that is known to take this nominaliser, it is indicated in the table which stem it takes.

Σ_1	**Σ_2**	**GLOSS**
TONE 2	CODA /K/	
/pu^2/	/puk^0/	'fly'
/ɹi^2/	/ɹik^0/	'buy'
TONE 3	CODA /K/	
/tɕu^3/	/tɕuk^0/	'request'
TONE 3	CODA /K/ + V CHANGE	
/ɟu^3/	/ɟɔk^0/	'move downwards'
/ti^3/	/tɨk^0/	'die'; 'become'
/t^{h}u^3/	/t^{h}ɔk^0/	'arrive'
TONE 1	CODA /T/	
/lɔ^1/	/lɔ:t^0/	'grab'
/lɔ^1/~lɔ^2/ (first takes /ʌ^0-/)	/lɔt^0/	'be far'
/ka^1/~/ka^3/	/kat^0/	'go'
/t^{h}u^1/	/t^{h}ut^0/	'grind, crush'
TONE 2	CODA /T/	
/lɔ^1/~lɔ^2/	/lɔt^0/	'be far'
/mɔ^2/	/mɔt^0/	'shake (trans)'
TONE 3	CODA /T/	
/ka^1/~/ka^3/	/kat^0/	'go'
/p^{h}ɔ^3/	/p^{h}ɔ:t^0/	'smoke (trans)'
CODA /ʔ/	CODA /T/	

/kɔʔ⁰/	/kɔt⁰/	‘give’
/suʔ⁰/	/sut⁰/	‘stir, shove inside, stab’
/tsɔʔ⁰/	/tsɔt⁰/	‘have sexual intercourse’
CODA /ʔ/	CODA /T/ + V CHANGE	
/huʔ⁰/ (takes /ʌ⁰-/)	/hɔt⁰/	‘steal’
/maʔ⁰/	/mʌt⁰/	‘perish’
/puʔ⁰/	/pɔt⁰/	‘carry on the back’
/saʔ⁰/	/sʌt⁰/	‘eat soft foods’
/ʃiʔ⁰/	/ʃɨt⁰/	‘be destroyed’
TONE 1	TONE 3	
/bi¹/	/bi³/	‘search’
/βʌŋ¹/	/βʌŋ³/	‘move upwards/inside’
/dʌm¹/ (takes /ʌ⁰-/)	/dʌm³/	‘cover a horizontal surface’
/ɟʌl¹/	/ɟʌl³/	‘peel off’
/ɟum¹/	/ɟum³/	‘sweep’
/lal¹/	/lal³/	‘hunger, thirst’
/lim¹/ (takes /ʌ⁰-/)	/lim³/	‘overflow’
/mʌn¹/	/mʌn³/	‘be infected’
/pʰɨn¹/	/pʰɨn³/	‘sew’
/ɹʌn¹/	/ɹʌn³/ (takes /ʌ⁰-/)	‘be torn’
/sʌm¹/ (takes /ʌ⁰-/)	/sʌm³/	‘understand’
/sʌŋ¹/	/sʌŋ³/	‘sell’
/sɔŋ¹/	/sɔŋ³/	‘boil (trans)’
/ʃal¹/ (takes /ʌ⁰-/)	/ʃal³/	‘rotten’
/ʃɨn¹/	/ʃɨn³/	‘stretch’
/tal¹/ (takes /ʌ⁰-/)	/tal³/	‘be smart’
/tɔm¹/	/tɔm³/	‘hit (drum)’
/tun¹/	/tun³/	‘lift, pick up’
/tɕɛl¹/	/tɕɛl³/	‘slip and fall’

/tɕin¹/ (takes /ʌ⁰-/)	/tɕin³/	‘be fat’
/tɕɨl¹/	/tɕɨl³/	‘fall down (tree)’; ‘talk’
/tɕɨm¹/	/tɕɨm³/	‘wrestle’
/tsɛl¹/	/tɕɛl¹/	/tɕɛl³/
/tsɨl¹/	/tsɨl³/	‘boil (intrans), warm up’[120]
/xʌŋ¹/	/xʌŋ³/ (takes /ʌ⁰-/)	‘move upwards’
/xɔl¹/	/xɔl³/	‘wash (dishes, body)’
/xɔŋ¹/	/xɔŋ³/	‘come out, be produced’
/xuŋ¹/	/xuŋ³/	‘climb’
TONE 2	TONE 3	
/βɛl²/	/βɛl³/	‘return (intrans)’
/haŋ²/	/haŋ³/	‘not comply’; ‘dry near the fire’
/hum²/	/hum³/	‘pull’
/hun²/	/hun³/	‘create’
/ɟe²/	/ɟe³/	‘revive’
/ɟɔl²/	/ɟɔl³/	‘run’
/kɛl²/	/kɛl³/	‘pour’
/kɔŋ²/	/kɔŋ³/ (takes /ʌ⁰-/)	‘have a narrow edge’
/kʰʌn²/	/kʰʌn³/	‘cut (with sickle)’
/kʰum²/	/kʰum³/	‘crawl’
/lɨŋ²/	/lɨŋ³/	‘drink’
/mɨn²/ (takes /ʌ⁰-/)	/mɨn³/	‘be ripe’
/nɔl²/	/nɔl³/	‘spread out’
/ŋan²/	/ŋan³/	‘be able to (big task)’
/pal²/	/pal³/	‘splint’
/pan²/	/pan³/ (takes /ʌ⁰-/)	‘break, scatter’
/pʌl²/	/pʌl³/	‘become night’
/pe²/	/pe³/	‘take’

[120] Consultant CTT hesitated between tone 2 and tone 3 on Σ_2. For now, I have listed it as a tone 3 stem, in alignment with the general pattern of tone alternation.

/pɨl^{2}/ (takes /ʌ^{0}-/)	/pɨl^{3}/	‘rash’
/pɔl^{2}/	/pɔl^{3}/	‘shove inside, stir’
/p^{h}aŋ^{2}/	/p^{h}aŋ^{3}/	‘stretched out’
/p^{h}ʌl^{2}/	/p^{h}ʌl^{3}/	‘distribute’
/p^{h}ʌn^{2}/	/p^{h}ʌn^{3}/	‘chase’; ‘tell a story’
/ɹim^{2}/	/ɹim^{3}/	‘tame’
/ɹiŋ^{2}/	/ɹiŋ^{3}/	‘shout, make noise’
/ɹɔŋ^{2}/	/ɹɔŋ^{3}/	‘grow’
/saŋ^{2}/	/saŋ^{3}/ (takes /ʌ^{0}-/)	‘be clean, holy’
/sʌm^{2}/	/sʌm^{3}/	‘wear (clothes)’
/se^{2}/	/se^{3}/	‘sing’
/sin^{2}/	/sin^{3}/	‘see, stare’
/sɔl^{2}/	/sɔl^{3}/	‘lead’
/sɔm^{2}/	/sɔm^{3}/	‘hold’
/ʃiŋ^{2}/	/ʃiŋ^{3}/	‘place, put, keep’
/ʃiŋ^{2}/ (takes /ʌ^{0}-/)	/ʃiŋ^{3}/	‘swell’
/tʌn^{2}/	/tʌn^{3}/	‘cut (leaves)’
/te^{2}/	/te^{3}/	‘carry on lap’
/tɨŋ^{2}/ (takes /ʌ^{0}-/)	/tɨŋ^{3}/	‘smell unpleasant’
/tɔŋ^{2}/	/tɔŋ^{3}/	‘sit, stay’
/tɕaŋ^{2}/	/tɕaŋ^{3}/	‘give birth’
/tɕiŋ^{2}/ (takes /ʌ^{0}-/)	/tɕiŋ^{3}/	‘flood’
/tɕɔ^{2}/ (takes /ʌ^{0}-/)	/tɕɔ^{3}/	‘fear’
/tɕɔn^{2}/	/tɕɔn^{3}/	‘become slanted’
/tsɔm^{2}/	/tsɔm^{3}/ (takes /ʌ^{0}-/)	‘sit with knees drawn in’[121]
/xʌl^{2}/	/xʌl^{3}/	‘good’

[121] This stem does not take person indices. It does, however, show stem alternation. The Σ_1 form appears in the expression /tsɔm^{2} dɔ^{3} dɔ^{3}/ ‘sitting with knees pulled in’. The stem /tsɔm^{2}/~/tsɔm^{3}/ cannot take the deverbal nominalising prefix /u^{0}-/.

(takes /ʌ^{0}-/)		
/xuŋ^{2}/	/xuŋ^{3}/	‘feed, take care of’

Table 62 - Verb stem alternation in Muklom.

Appendix B: List of recordings

This appendix provides an overview of all Muklom recordings that have been referred to in this dissertation. In the first table I have listed those recordings which are my own and in the second table I have listed the recordings made by others. Information on data collection methods and file naming conventions can be found in the methodology chapter under section 2.2.1. For each of the recordings in the tables below the elicitation method is specified: free, controlled, or translation. When free elicitation was used, a rough indication of the genre is also provided.

full file name	**abbreviation**	**elicitation**
nst_muk_20151020_01_KV_MM_SC_Tones	20151020_01	controlled
nst_muk_20151127_01_MM_MC_TheChangmiCoupleGetsLost	20151127_01	free: personal narrative
nst_muk_20151208_01_MM_TY_LossAndRediscoveryOfMedicine	20151208_01	free: oral history
nst_muk_20151208_02_MM_TY_TheStoryOfGettingFireFromTheTiger	20151208_02	free: oral history
nst_muk_20151208_03_MM_TY_TheStoryOfGettingFireFromTheTiger	20151208_03	free: oral history
nst_muk_20151208_04_MM_TY_TheStoryOfGettingFireFromTheMonkey	20151208_04	free: oral history
nst_muk_20151208_05_MM_TY_AStoryAboutTheTimeOfCreation	20151208_05	free: oral history
nst_muk_20151228_01_MM_NUC_HierarchicalAgreementElicitation	20151228_01	controlled
nst_muk_20160106_01_MM_YK_AHistoryOfThePeople	20160106_01	free: oral history
nst_muk_20160106_02_MM_YK_MKK_TheStoryOfTheVillageOfWomen	20160106_02	free: oral history
nst_muk_20160106_04_MM_YK_MKK_TheStoryOfRiceBeer	20160106_04	free: oral history
nst_muk_20160106_05_MM_YK_TheStoryOfMolFestival	20160106_05	free: oral history
nst_muk_20160107_04_MM_SHT_MKK_CourtingWithACoin	20160107_04	free: dialogue about customs
nst_muk_20160107_08_MM_YK_MKK_TheMonkeyTeachesTheWomanToGiveBirth	20160107_08	free: oral history

nst_muk_20160108_07_MM_BB_MKK_HistoryOfTheWorldAndTheMuklomPeople_01	20160108_07	free: oral history
nst_muk_20160115_01_MM_MSK_ToneElicitation	20160115_01	controlled
nst_muk_20161223_01_MM_NMN_KCT_MorphologyElicitation_part_1	20161223_01	controlled
nst_muk_20161223_02_MM_NMN_KCT_MorphologyElicitation_part_2	20161223_02	controlled
nst_muk_20170122_01_MM_JerusalemAnaal	20170122_01	song
nst_muk_20170122_02_MM_TN_JerusalemAnaalReadOut	20170122_02	controlled
nst_muk_20170122_03_MM_TN_JerusalemAnaalExplanation	20170122_03	free: explanation
nst_muk_20170124_01_MM_NMN_TeychangYanchangSongMansDesireDiscussion	20170124_01	controlled
nst_muk_20170224_01_MM_CTT_VerbParadigm_01	20170224_01	controlled

Table 63 - Fieldwork recordings by the author.

full file name	abbreviation	elicitation	recorded by
nst-muk_20120217_01_SM_T_Sunumi_ToneMinimalPairs	20120217_01	controlled	Stephen Morey
nst-muk_20120217_02_SM_T_Sunumi_Sentences	20120217_02	controlled	
nst-muk_20120217_03_SM_T_Sunumi_Sentences	20120217_03	controlled	
nst-muk_20120218_02_SM_T_Sunumi_Numerals	20120218_02	controlled	
nst-muk_20120218_03_SM_T_Sunumi_Interrogatives	20120218_03	controlled	
nst-muk_20121103_02_SM_T_Yongngam_RangthipSeExplanation	20121103_02	free: explanation	
nst-muk_20121103_03_SM_T_Yongngam_DogManAndFieldStory	20121103_03	free: oral history	
nst-muk_20121103_04_SM_T_NChangmi_ParadigmElicitation	20121103_04	controlled	
nst-muk_20121104_06_SM_T_NChangmi_NPMarkers	20121104_06	controlled	
nst-muk_20121104_07_SM_T_NChangmi_NPMarkers	20121104_07	controlled	

nst-muk_20121105_05_SM_T_NChangmi_Numerals	20121105_05	controlled	
nst-muk_20121105_06_SM_T_NChangmi_Numerals	20121105_06	controlled	
nst-muk_20121105_07_SM_T_NChangmi_Comparison	20121105_07	controlled	
nst-muk_20121105_08_SM_T_NChangmi_Comparison	20121105_08	controlled	
nst-muk_20121105_10_SM_T_NChangmi_ToneDiscussion	20121105_10	controlled	
nst-muk_20121105_11_SM_T_NChangmi_Expressions	20121105_11	controlled	
SDM31-2009Tascam-001	SDM31-2009	controlled	
SDM31-20100124-095559_JS_E_WordList	20100124-095559	controlled	
SDM31-20100124-100530_JS_E_WordList	20100124-100530	controlled	
SDM31-20100124-102848_JS_E_WordList_p1	20100124-102848	controlled	
SDM31-20100124-103034_JS_E_WordList_p1-2	20100124-103034	controlled	
SDM31-20100124-103507_JS_E_WordList_p3-4	20100124-103507	controlled	
SDM31-20100124-104250_JS_E_WordList_p5-6	20100124-104250	controlled	
SDM31-20100124-105300_JS_E_WordList_p7-8	20100124-105300	controlled	
SDM31-20100124-105856_JS_E_WordList_p9-10	20100124-105856	controlled	
SDM31-20100124-110318_JS_E_WordList_p11-12	20100124-110318	controlled	
SDM31-20100124-111527_JS_E_MinimalPairs	20100124-111527	controlled	
SDM31-20100124-111650_JS_E_MinimalPairs	20100124-111650	controlled	
SDM31-20100124-112046_JS_E_Paradigm	20100124-112046	controlled	
SDM31-20100124-112656_JS_E_Paradigm	20100124-112656	controlled	
541-Kamsing-Yanchang-Kuttum-24-1-12	541	free: dialogue	Meenaxi Barkataki-Ruscheweyh
542-Kuttum-Sunumi-nani-discussion-24-1-12	542	free: dialogue	

544-Moklum-Ngemu-Kuttum-25-1-12	544	free: dialogue	
C63186t	C63186t	translation	Global Network Recordings

Table 64 - Fieldwork recordings by other scholars.

Appendix C: Texts

This appendix contains three fully annotated texts of different genres. With the help of consultants, each of these stories has been transcribed and glossed twice. The first annotated text of a recording attempted to stay as close to the original text as produced by the speaker, without repairing hesitations and false starts, without correcting ungrammatical utterances or improving clarity. The second annotated text was an edited version of the first. A language consultant has helped to reformulate ungrammatical utterances, smooth out hesitations, and improve clarity where the consultant found it necessary to do so. The version that is included in this appendix is the second, edited annotation. The text have been provided with provisional titles. Each Muklom text is here first presented integrally, followed by an English translation, and then glossed utterance by utterance.

1 Courting with a coin

Metadata summary

Recording:	20160107_04.ed
Genre:	dialogue, discussion about an old custom
Speaker:	Shantim Tangha, Munkap Khimhun
Recorded and glossed by:	Mijke Mulder
Translation consultants:	Tchithan Techi, Munkap Khimhun

Text

MKK: βi^{1} ku^{2} ɔ^{2} e^{3}.

SHT: ɔi.

MKK: nɨm^{3} paŋ^{2} nɨŋ^{3} a^{3} ɟa^{2} ɹɔ^{2} hʌn^{3} tʌŋ^{2} ɹi^{3} paŋ^{1} na^{3} ɟɨp^{0} te^{2}, ɟɨp^{0} a^{3} t^{h}ɔ^{3} tɕʌm^{1} mʌl^{2} ɛʔ^{0} tʌ^{0}tin^{1} mʌt^{0} ɛʔ^{0} tʌ^{0}kam^{2} nam^{2} ta^{1}, nɨŋ^{2} ɹi^{3}?

SHT: paŋ^{1} na^{3} ɟɨp^{0} a^{3} t^{h}a^{2}, miʔ^{0} βa^{1} ʃa^{2} paŋ^{1} na^{3} ɟɨp^{0} a^{3} t^{h}a^{2} i^{3} mʌl^{2} ɛʔ^{0} miʔ^{0} nu^{1} tʌŋ^{2} paŋ^{1} nʌŋ^{3} ɟaŋ^{2} tɔŋ^{3} kat^{0} βin^{3} ɛ^{3} tin^{1} maʔ^{0} a^{3} ɟɔ^{3} t^{h}a^{2} u^{0}ɹɛl^{3} ɔ^{4} dɔŋ^{3} t^{h}ɔk^{0} bɨk^{0} kɔʔ^{0} ta^{1} ɹi^{3}.

MKK: k^{h}ʌt^{0} nup^{0} ʃɔʔ^{0}?

SHT: ɟɔ^{3} k^{h}ʌt^{0} nup^{0}.

MKK: ŋɨn^{2} ʃa^{2} huʔ^{0} dɨk^{0} kɔʔ^{0} i^{3}?

SHT: m.

MKK: ŋɨn^{2} ʃi^{3} tɕʌm^{2} tan^{3} ʌŋ^{2} ta^{1}?

SHT: saŋ^{2} ʃɛ^{1}.

MKK: saŋ^{2} ʃɛ^{1}, saŋ^{2} ʃɛ^{1} i^{3}?

SHT: m.

MKK: saŋ^{2} ʃɛ^{1}. e^{2} ʃa^{2} k^{h}ʌt^{0} nup^{0} bal^{3} ɔʔ^{0} huʔ^{0} dɨk^{0}.

SHT: m.

MKK: ɔ. e^{2} ʃi^{3} ɹɛʔ^{0} miʔ^{0} nu^{1} ʃɛ^{3} tɕʌm^{2} lʌŋ^{2} ɛʔ^{0} ta^{1}?

SHT: tɨn^{1} maʔ^{0} mɔʔ^{0} ʌŋ^{2} a^{3} ʝɔ^{3}, βe^{3} t^{h}ʌ^{0}βɛl^{3} ɛʔ^{0} mɔʔ^{0} ɛ^{3}.

MKK: ɔ.

SHT: tɨn^{1} mʌt^{0} le^{1} ʌŋ^{2} a^{3} ʝɔ^{3} lɛ^{3} ʃɨŋ^{3} ɛʔ^{0} mɔʔ^{0} ɛ^{3}.

MKK: ɔ.

Translation

MKK: ‘Old lady!’

SHT: ‘Yeah?’

MKK: ‘A long time ago, when the boys and girls were sleeping in dormitories, how did they fall in love with one another and arrange a marriage?’

SHT: ‘The ones sleeping in the dormitory, the men sleeping in the dormitory, would come to the women’s dormitory to hang out and if a man happened to fall in love, he would sit nearby and tie it (in her shawl) like that.’

MKK: ‘In the shawl?’

SHT: ‘Indeed, a shawl.’

MKK: ‘They would secretly wrap money inside, right?’

SHT: ‘Right.’

MKK: ‘How much money was it?’

SHT: ‘One rupee.’

MKK: ‘One rupee, one rupee, is it?’

SHT: ‘Right.’

MKK: ‘One rupee. They would secretly wrap it there, in the seam of the shawl.’

SHT: ‘Yes.’

MKK: ‘Oh. What would she, the woman, do next?’

SHT: ‘If she did not love him, she would return it.’

MKK: ‘Oh.’

SHT: ‘And if she loved him, she would keep it.’

MKK: ‘Oh.’

Glosses

(1) MKK: βi^{1} ku^{2} ɔ^{2} e^{3}.

βi^{1}-ku^{2} ɔ^{2}ɛ^{3}

grandmother-F.ADULT.GB VOC

MKK: ‘Old lady!’

(2) SHT: ɔi.

ɔi

EXCLAM

SHT: ‘Yeah?’

(3) MKK: nɨm^{3} paŋ^{2} nɨŋ^{3} a^{3} ʝa^{2} ɹɔ^{2} hʌn^{3} tʌŋ^{2} ɹi^{3} paŋ^{1} na^{3} ʝɨp^{0} te^{2},

nɨm^{3}-paŋ^{2}-nɨŋ^{3}=a^{3} ʝa^{2}ɹɔ^{2}-hʌn^{3}=tʌŋ^{2}=ɹi^{3} paŋ^{1}=na^{3} ʝɨp^{0}-te^{2}

a.long.time.ago=at young.man-F.YOUNG=PL=PROX dormitory=in sleep-NMLZ

ʝɨp^{0} a^{3} t^{h}ɔ^{3} tɕʌm^{1} mʌl^{2} ɛʔ^{0} tʌ^{0}tɨn^{1} mʌt^{0} ɛʔ^{0} tʌ^{0}kam^{2} nam^{2} ta^{1},

ʝɨp^{0}-a^{3}=t^{h}i^{3}=ɔ^{3} tɕʌm^{1}-mʌl^{2} ɛʔ^{0} tʌ^{0}-tɨn^{1} mʌt^{0} ɛʔ^{0} tʌ^{0}-kam^{2} nam^{2}-t-a^{1}

sleep-3=DEF=at what-like do RECIP-heart perish do RECIP-propose propose-PST-3

nɨŋ^{2} ɹi^{3}?

nɨŋ^{2}=ɹi^{3}?

3PL=PROX

MKK: ‘A long time ago, when the boys and girls were sleeping in dormitories, how did they fall in love with one another and arrange a marriage?’

(4) SHT: paŋ^{1} na^{3} ʝɨp^{0} a^{3} t^{h}a^{2}, miʔ^{0} βa^{1} ʃa^{2} paŋ^{1} na^{3} ʝɨp^{0} a^{3} t^{h}a^{2}

paŋ^{1}=na^{3} ʝɨp^{0}-a^{3}=t^{h}i^{3}=a^{2} miʔ^{0}-βa^{1}=ʃi^{3}=a^{2} paŋ^{2}=na^{3} ʝɨp^{0}-a^{3}=t^{h}i^{3}=a^{2}

dormitory=in sleep-3=DEF=ABS person-M=DIST=ABS dormitory=in sleep-3DEF=ABS

i^{3} mʌl^{2} lɛʔ^{0} miʔ^{0} nu^{1} tʌŋ^{2} paŋ^{1} nʌŋ^{3} ʝaŋ^{2} tɔŋ^{3} kat^{0} βɨn^{3} ɛ^{3} tɨn^{1}

i^{3}-mʌl^{2}=lɛʔ^{0}	miʔ^{0}-nu^{1}=tʌŋ^{2}	paŋ^{1}=nʌŋ^{3}	ʝaŋ^{2}	tɔŋ^{2}	kat^{0}	βɨn^{3}-ɛ^{3}	tɨn^{1}
PROX-like=FOC	person-F=PL	dormitory=to	pass.time	sit	go	happen.to	heart

maʔ^{0} a^{3} ʝɔ^{3} t^{h}a^{2} u^{0}ɹɛl^{3} ɔʔ^{0} dɔŋ^{3} t^{h}ɔk^{0} bɨk^{0} kɔʔ^{0} ta^{1} ɹi^{3}.

maʔ^{0}-a^{3}=ʝɔ^{3}=t^{h}i^{3}=a^{2}	u^{0}-ɹɛl^{3}=ɔʔ^{0}	dɔŋ^{3}	t^{h}ɔk^{0}	bɨk^{0}	kɔʔ^{0}-t-a^{1}=ɹi^{3}
perish-3=COND=DEF=ABS	NMLZ-be.near=at	likewise	arrive	tie	give-PST-3=INFER

SHT: ‘The ones sleeping in the dormitory, the men sleeping in the dormitory, would come to the women’s dormitory to hang out and if a man happened to fall in love, he would sit nearby and tie it (in her shawl) like that.’

(5) MKK: k^{h}ʌt^{0} nup^{0} ʃɔʔ^{0}?

k^{h}ʌt^{0}-nup^{0}=ʃi^{3}=ɔʔ^{0}

cloth-soft=DIST=at

MKK: ‘In the shawl?’

(6) SHT: ʝɔ^{3} k^{h}ʌt^{0} nup^{0}.

ʝɔ^{3}	k^{h}ʌt^{0}-nup^{0}
indeed	cloth-soft

SHT: ‘Indeed, a shawl.’

(7) MKK: ŋɨn^{2} ʃa^{2} huʔ^{0} dɨk^{0} kɔʔ^{0} i^{3}?

ŋɨn^{2}=ʃi^{3}=a^{2}	huʔ^{0}	dɨk^{0}	kɔʔ^{0}	i^{3}
money=DIST=ABS	secretly	wrap	give	Q.AFF

MKK: ‘They would secretly wrap money inside, right?’

(8) SHT: m.

m

AFF

SHT: ‘Right.’

(9) MKK: ŋɨn^{2} ʃì^{3} tɕʌm^{2} tan^{3} ʌŋ^{2} ta^{1}?

ŋɨn^{2}=ʃì^{3} tɕʌm^{2}=tan^{3} ʌŋ^{2}-t-a^{1}

money=DIST what=as.much.as COP-PST-3

MKK: 'How much money was it?'

(10) SHT: saŋ^{2} ʃɛ^{1}.

saŋ^{2}-ʃɛ^{1}

rupee-one

SHT: 'One rupee.'

(11) MKK: saŋ^{2} ʃɛ^{1}, saŋ^{2} ʃɛ^{1} i^{3}?

saŋ^{2}-ʃɛ^{1} saŋ^{2}-ʃɛ^{1} i^{3}

rupee-one rupee-one Q.AFF

MKK: 'One rupee, one rupee, is it?'

(12) SHT: m.

m

AFF

SHT: 'Right.'

(13) MKK: saŋ^{2} ʃɛ^{1}.

saŋ^{2}-ʃɛ^{1}

rupee-one

MKK: 'One rupee.'

(14) e^{2} ʃa^{2} k^{h}ʌt^{0} nup^{0} bal^{3} ɔʔ^{0} huʔ^{0} dɨk^{0}.

e^{2}-ʃì^{3}=a^{2} k^{h}ʌt^{0}-nup^{0} bal^{3}=ɔʔ^{0} huʔ^{0} dɨk^{0}

NPROX-DIST=ABS cloth-soft seam=at secretly wrap

'They would secretly wrap it there, in the seam of the shawl.'

(15) SHT: m.

m

AFF

SHT: 'Yes.'

(16) MKK: ɔ.

ɔ

INTER

MKK: ‘Oh.’

(17) e^{2} ʃi^{3} ɹɛʔ^{0} miʔ^{0} nu^{1} ʃɛ^{3} tɕʌm^{2} lʌŋ^{2} ɛʔ^{0} ta^{1}?

e^{2}-ʃi^{3}	ɹɛʔ^{0}	miʔ^{0}-nu^{1}=ʃi^{3}=ɛ^{3}	tɕʌm^{2}lʌŋ^{2}	ɛʔ^{0}-t-a^{1}
NPROX-DIST	then	person-F=DIST=ERG	what	do-PST-3

‘What would she, the woman, do next?’

(18) SHT: tɨn^{1} maʔ^{0} mɔʔ^{0} ʌŋ^{2} a^{3} ɟɔ^{3}, βe^{3} t^{h}ʌ^{0}βɛl^{3} ɛʔ^{0} mɔʔ^{0} ɛ^{3}.

tɨn^{1}	maʔ^{0}-m-ɔʔ^{0}	ʌŋ^{2}-a^{3}=ɟɔ^{3}	βe^{3}-t^{h}ʌ^{0}-βɛl^{3}	ɛʔ^{0}-m-ɔʔ^{0}-ɛ^{3}
heart	perish-NEG-3	AUX-3=COND	ITER-CAUS-return	do-NEG-3-REV.NEG

SHT: ‘If she did not love him, she would return it.’

(19) MKK: ɔ.

ɔ

INTER

MKK: ‘Oh.’

(20) SHT: tɨn^{1} mʌt^{0} le^{1} ʌŋ^{2} a^{3} ɟɔ^{3} lɛ^{3} ʃɨŋ^{3} ɛʔ^{0} mɔʔ^{0} ɛ^{3}.

tɨn^{1}	mʌt^{0}	le^{1}	ʌŋ^{2}-a^{3}=ɟɔ^{3}	ʃɨŋ^{3}	ɛʔ^{0}-m-ɔʔ^{0}-ɛ^{3}
heart	destruction	and	COP-3=COND	keep	do-NEG-3-REV.NEG

SHT: ‘And if she loved him, she would keep it.’

(21) MKK: ɔ.

ɔ

INTER

MKK: ‘Oh.’

2 Lost in the jungle

Metadata summary

Recording:	20151127_01.ed
Genre:	narrative, personal
Speaker:	Ms. Changmi
Recorded and glossed by:	Mijke Mulder
Translation consultants:	Tchithan Techi, Ngulang Changmi

Text

MM: ɨn^{2}.

MC: mɛ^{3} ɔ^{2} βaŋ^{3}, mɛ^{3} ɔ^{2} βaŋ^{3} ɟu^{3} ti^{1} ɹi^{3} i^{3}, ba^{3} te^{2}, i^{2} ni^{3} lɛ^{3}. ɟu^{3} ɛʔ^{0} ba^{3} nʌm^{1} p^{h}e^{2} pɨk^{0} ʃɔʔ^{0} ba^{3} ka^{1} ɹi^{2} ɹa^{2} t^{h}ʌ^{0}laŋ^{3} ʃiŋ^{2} ti^{1} ɹi^{3}. t^{h}ʌ^{0}laŋ^{3} ʃiŋ^{3} ɛʔ^{0} ba^{3} mɔ^{3} bɛl^{3} t^{h}a^{2} t^{h}ɔʔ^{0} ka^{1} ɹi^{2} na^{3} ʃiŋ^{3} tɕʌk^{0} ti^{1}. tɕʌm^{2} k^{h}ɔ^{1} ʌ^{0}k^{h}ʌt^{0} t^{h}ɔʔ^{0} pe^{2} mi^{1}. ŋɨn^{2} t^{h}a^{2} t^{h}ɔʔ^{0} ka^{1} ɹi^{2} ʃɔ^{3} ʃiŋ^{3} tɕʌk^{0}. ɟʌk^{0} tsaŋ^{3} pɔl^{2} ka^{1} ti^{1} ɹi^{3}. e^{2} nɔʔ^{0} ka^{3} i^{3} tsɔm^{3} βe^{3} ɟat^{0} ɹi^{1} t^{h}i^{3} tat^{0} sin^{3} tɕʌk^{0} ka^{3} i^{3} ta^{3}. ka^{1} ti^{1} t^{h}a^{2} ba^{3}. t^{h}ɛʔ^{0} ka^{1} t^{h}ɛʔ^{0} ka^{1} t^{h}ɛʔ^{0} ka^{1}. i^{3} ɹi^{3} na^{3} kɔ^{2} ʌŋ^{2} ta^{1} ta^{3}. i^{3} ɹi^{3} kɔ^{2} na^{3} ta^{3}. ka^{1} ti^{1} sɛ^{3} ɔ^{2}. e^{2} t^{h}a^{2} ba^{3} haʔ^{0} k^{h}ɨt^{0} t^{h}a^{2} kʌp^{0} tɕɔŋ^{3} tɕʌk^{0}. ɔ^{3} haʔ^{0} k^{h}ɨt^{0} i^{3} ɹi^{3} ɹi^{3} ɹa^{2} bɔ^{3} ɟat^{0} ɹi^{1} t^{h}a^{2}. i^{3} mʌl^{2} lɛʔ^{0} βe^{3} sin^{3} ka^{1} ti^{1}. sin^{3} kat^{0} ɹɔʔ^{0} sin^{3} kat^{0} ɹɔʔ^{0} sin^{3} kat^{0} ɹɔʔ^{0}. ʌ^{0}lɔ^{1} hʌl^{2} nʌŋ^{3} sɛ^{3} t^{h}ɔk^{0} ka^{1} ti^{1} sɛ^{3} ɟu^{2}. i^{3} ɹɛʔ^{0} ba^{3} ɛ tɕʌm^{2} ʌŋ^{2} a^{3} sɛ^{3}. u^{0}βɛl^{3} sɛ^{3} ʌŋ^{2} i^{3} hɨm^{2} nʌŋ^{3} sɛ^{3} ta^{3}. βe^{3} tat^{0} βɛl^{2} ti^{1} ɔ^{2}. ɟa^{1} ɟi^{2} nʌŋ^{3} sɛ^{3} βɛl^{3} i^{3} t^{h}ɔ^{3} i^{3} lʌm^{2} t^{h}a^{2} ba^{3} ɹɔ^{3} ʌŋ^{2} ta^{3}. tat^{0} bi^{1} ti^{1} tat^{0} ka^{1} ki^{1} lɛ^{3}. ʌ^{0}ɟaʔ^{0} ɟaʔ^{0} nʌŋ^{3} lɛ^{3} xiŋ^{3} tɕi^{3} βʌŋ^{3}. lʌm^{2} kɔ^{2} nʌŋ^{3} t^{h}ɔʔ^{0} t^{h}u^{3} mi^{1} hun^{3}. xiŋ^{3} ti^{1} lɛ^{3} tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} βaŋ^{3} ki^{1}. hiʔ^{0} ni^{3} ɹi^{3} kɔ^{3} ɹʌŋ^{2} pʌl^{3} ɔ^{3} kɔ^{3}, ʃɔl^{2} ʌ^{0}ʃaʔ^{0} lɛ^{3} puːk^{0} ʌ^{0}li^{2} lɛ^{3} sɛ^{3} ʌŋ^{2} na^{3} ɟu^{2}. tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} ni^{3} laŋ^{2}. ŋa^{1} lɛ^{3} tɕɔ^{3} sɛ^{3} bɔ^{3} xɔŋ^{3} βʌŋ^{1} a^{3} laŋ^{2}. ɛ^{3} ke^{2} tɕu^{2} tɕu^{2} ke^{2} tɕu^{2}. ʃɛ^{3} ke^{3} βa^{1} tɕʌm^{2} tʌ^{0}k^{h}i^{3} kɔʔ^{0} p^{h}i^{3} tɔl^{2} ʌ^{0}lʌm^{2} t^{h}i^{3} ta^{3} ba^{3}. ke^{2} tɕu^{2} t^{h}a^{2} tɕu^{2}. βe^{3} xiŋ^{3} ti^{1} ɔ^{2}. ɟɨn^{3} xiŋ^{3} tat^{0} xiŋ^{3} ki^{1} lɛ^{3} muŋ^{1} lɨk^{0} lɨk^{0} sɛ^{3}. tɔl^{2} ʌ^{0}lʌm^{2} t^{h}ɔʔ^{0} tʌ^{0}k^{h}i^{3} mɔʔ^{0}. haʔ^{0} k^{h}ɔ^{2} haʔ^{0} ɟa^{1} tʌ^{0}k^{h}i^{3} mɔʔ^{0} sɛ^{3}. ba^{3} ɹi^{2} nʌŋ^{3} sɛ^{3} t^{h}u^{3} ki^{1} ta^{3}. naŋ^{3} tɨk^{0} ʌŋ^{2} lɛ^{3}. ɟuŋ^{2} lal^{3} tɨk^{0} lɛ^{2}. ŋa^{1} lɛ^{3} sɔk^{0} βi^{3} ɛ^{3} ɹʌp^{0} kʌk^{0}. i^{3} k^{h}uʔ^{0} i^{3} ɹut^{0} ɹʌp^{0} ɹɔk^{0} βʌŋ^{3} lɛ^{2} sɛ^{3} ʌŋ^{2} mɔʔ^{0} ɛ^{3} laŋ^{2}. hiʔ^{0} βa^{1} ma^{3} bat^{0} tʌŋ^{1} ɹi^{3}. ɛ, i^{3} ɹi^{3} kɔ^{2} ɹɔʔ^{0} kɔ^{3} tat^{0} xiŋ^{3} i^{3}. ɟat^{0} ɹi^{1} t^{h}a^{2} i^{3} ɹi^{3} kɔ^{2} na^{3} ʌŋ^{2} na^{3} hɛ^{3} ta^{3}. tat^{0} βe^{3} xʌŋ^{1} ti^{1} ɔ^{2}. βɔt^{0} tɕɔl^{2} t^{h}ɔʔ^{0} tɨm^{3} tʌ^{0}t^{h}an^{1} man^{1} ti^{1}. naŋ^{2} sɛ^{3} ʌŋ^{2} ti^{1}. βɔt^{0} tɕɔl^{2} sɛ^{3} t^{h}ɔʔ^{0} pɨŋ^{1} lik^{0} sɛ^{3} ʌŋ^{2} mɔʔ^{0} ɛ^{3} sɛ^{3} ɟɨn^{3} tʌ^{0}sʌm^{3} tɔl^{3} mɔʔ^{0} sɛ^{3}. e^{2} t^{h}ɔ^{3} ba^{3} naŋ^{3} ti^{1}. ɛ u^{0}tɔŋ^{3} ʌŋ^{2} i^{3} tɔŋ^{2} ta^{3}. ba^{3} te^{2} ɹɛ^{3} βe^{3} bat^{0}, ɛ nʌk^{0} t^{h}ap^{0} na^{3} βʌŋ^{1} u^{3}. tat^{0} tɔŋ^{3} ʌŋ^{2} βe^{3} tat^{0} tɔŋ^{3}. tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} ni^{3} laŋ^{2}. ŋa^{1} tɕɔ^{3} sɛ^{3} xɔŋ^{1} a^{3}. ŋa^{1} ŋa^{1} u^{0}xʌp^{0} ʌŋ^{2} nʌŋ^{3} sɛ^{3} ɟu^{2} ta^{3}. bat^{0} mɔŋ^{1} ɛ^{3} laŋ^{2}, ba^{3} te^{2} ma^{3} lɛ^{3}. tɕʌm^{2} ʌŋ^{2} mɔʔ^{0} ba^{3} nʌŋ^{3} mʌn^{2} tɕu^{3} βʌŋ^{1} ni^{3}. βe^{3} tɔŋ^{3} ɛʔ^{0}, ke^{2} tɕu^{2} βe^{3} tɕu^{2} ti^{1} ɔ^{2}. ke^{2} tɕu^{2} ɹa^{2} tɕu^{2} ɛʔ^{0}, ɔ^{3} lʌm^{2} ɹa^{2} tʌ^{0}sʌm^{3} tɕʌm^{2} ʌŋ^{2} a^{3}. lʌm^{2} ɹi^{3} kan^{2} ɹi^{3} βaŋ^{3} duːk^{0} ɹɔʔ^{0} duːk^{0} ɹɔʔ^{0} kɔ^{3} duːk^{0} tɕu^{3} βʌn^{3} i^{3}. i^{3} ɹɛʔ^{0} nik^{0} a^{3} i^{3} ɹi^{3} nʌŋ^{3} βe^{3} t^{h}u^{3} i^{3} ɟɔ^{3}, ɟan^{2} duːk^{0} mal^{1} ʃa^{2} kʌp^{0} k^{h}i^{3} ɔ^{3} t^{h}a^{2}, ɔ^{3} i^{3} nʌŋ^{3} t^{h}ɔk^{0} tɕɔl^{2} bɔ^{3} laŋ^{2}. dʌŋ^{3} ʃɛ^{1} na^{3} bɔ^{3} tɨm^{3} lɨŋ^{3} xiŋ^{3} i^{3} t^{h}a^{2} tʌ^{0}sʌm^{3} tɕʌm^{2} ʌŋ^{2} a^{3}. e^{2} t^{h}ɔ^{3} ba^{3} xiŋ^{3} ɛʔ^{0} tɨm^{3} t^{h}ʌ^{0}mal^{1} duːk^{0} ti^{1}. xiŋ^{3} ɹɔʔ^{0} xiŋ^{3} ɹɔʔ^{0} sɛ^{3} ʌŋ^{2} ti^{1}. kʌp^{0} mi^{1} hun^{3}. kʌp^{0} mi^{1} hun^{3}. tat^{0} xiŋ^{3} ti^{1}. i^{3} ɹi^{3} kɔ^{2}

nʌŋ³ tat⁰ xʌŋ¹ xʌŋ¹ tʰi³ lɛ³ ʌŋ² mɔʔ⁰. i³ ɹi³ kɔ² nʌŋ³ tat⁰ βe³ ka¹. e² tʰi³ lɛ³ ʌŋ² mɔʔ⁰. e ʌŋ² mɔʔ⁰ te² ta³. kɔn³ ta³ ni³ tan³ sɛ³ tɕuŋ¹ ti¹ hɛ³ ɔ². e² tʰi³ laŋ² laŋ² ʌ⁰huŋ¹ sɛ³. miʔ⁰ ɹut⁰ ɹɔk⁰ βʌŋ³ lɛ² miʔ⁰ ki³ naŋ³ xɔŋ³ βʌŋ³ lɛ², miʔ⁰ tɨn¹ pʰaŋ¹ lɛ² sɛ³ ʌŋ² mi¹ ɛ³ laŋ². tɕʌm¹ mʌl² sɛ³ ʌŋ² βaŋ³ ki¹. ɛ ʌŋ² mɔʔ⁰ te². ke² tɕu² ɹɔʔ⁰ tat⁰ βe³ tɕu² i³ ta³ sɛ³. ba³ te² ɹi³ lɛ³ naŋ³ ti³ ɛʔ⁰ le¹ tʌ⁰paŋ¹ ɟɨp⁰ ta¹ sɛ³. ŋa¹ ɹi³ tɕʌm¹ mʌl² sɛ³ ʌŋ² ti³ ʌŋ³ ta³. i³ ɟʌk⁰ ɟa¹ tʰa² mɔ³ βʌŋ¹ ta¹, u⁰tɕɔ³ βaŋ³ tʰɛ³. piʔ⁰ ɹa² ba³ tsʌl² ɹiŋ¹ le¹ ɟɨp⁰ mɔʔ⁰ ɛ³ laŋ². tʌk⁰ tʰa² pʰu:t⁰ ta¹ ɹi³ e² tʰɔ³ βaŋ³ kʰɔ³ pʌ⁰lɨk⁰ ta¹ ɹi³. e² tʰɔ³ sɛ³ paɹ³ tʰa³ na³ sɛ³ juk⁰ ʃɛ¹ sɛ³ ke² tɕu² sɛ³ βe³ tɕu² i³ tʰɔ³ i² xiŋ³ ti¹ sɛ³ ɟu². tɕʌm¹ mʌl² tat⁰ ɛʔ⁰ ki³ ɔ³ tʰɔʔ⁰ lʌm² tʰa² kʰi³ mi¹ hun³ ʌŋ² ti¹. i³ ɹi³ kɔ² nʌŋ³ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ ʌŋ² i³ tʰɔ³, dʌk⁰ lɔ:t⁰ nʌŋ³ sɛ³ ka¹ i³ tʰɔ³ i², lʌm² kʰuŋ³ sa¹ man³ sa¹ ʌŋ² mɔʔ⁰ ɛ³ laŋ². kʰiŋ³ ɟaŋ¹ ɟaŋ¹ sa¹ lɛ³. ʌ⁰ʃɛ¹ i³ ɹi³ kɔ² nʌŋ³ ɟu³ i³ ta³. ŋa¹ laŋ² laŋ² i³ ɹi³ kɔ² nʌŋ³ kɔ³ ka¹ i³ ta³. e² tʰɔ³ ba³ i³ ɹi³ kɔ² nʌŋ³ sɛ³ ka¹ i³ tʰɔ³ ba³, xiŋ³ ɹɔʔ⁰ xiŋ³ ɹɔʔ⁰ xiŋ³ ɹɔʔ⁰ ɹi³ kʌm² sɛ³ xiŋ³ i³ tʰɔ³ i², man² tʌ⁰tuk⁰ nɔ¹ la² pɨk⁰ sɛ³ ʌŋ² ta¹ ɟu². e² tʰi³ nʌŋ³ sɛ³ tʰu³ ti¹ ɟu². ɹɛʔ⁰ nʌk⁰ ɔ² i³ ɹa² bɔs⁰ ti² tit⁰ na³ hun³ ʌŋ² na³ ɟu². man² tʰɔʔ⁰ i³ ɹa² sɛ³ tuk⁰ ka¹ ta¹ i². pɨk⁰ ʌ⁰pal² tʰɔʔ⁰ i³ ɹa² ʌ⁰tʰa¹ i² ta³. xiŋ³ ɹɔʔ⁰ ɹɔʔ⁰ sɛ³ ʌŋ² i³ tʰɔ³ ba³ ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ sɛ³ ʌŋ² i³ tʰɔ³ i², miʔ⁰ ɹɔŋ³ tʌ⁰tʰuk⁰ ŋe² mɔʔ⁰ ɛʔ⁰ laŋ². nʌk⁰ ɔ² ba³ ɹi² nɔk⁰ haʔ⁰ ɹaʔ⁰ ʌŋ² na³ lɛ³? ɹʌŋ² paŋ³ ɹaʔ⁰ ti¹ hiʔ⁰ tʌŋ² haʔ⁰ ɹaʔ⁰ ʌŋ² na³ lɛ³ ta³. ka¹ ɹɔʔ⁰ ka¹ ɹɔʔ⁰ sɛ³ ʌŋ² i³ tʰɔ³ i², xɨm³ ɟɔŋ² te² tʌŋ² na³ i², nɨŋ² a¹ hɨm² xaŋ¹ ʃɔ³ pal³ βaʔ⁰ ʌŋ² a³ tʰa² ɹɔŋ³ kʰɔ¹ ɛʔ⁰ ɹɔŋ³ tɔŋ² tɕe² mɔʔ⁰ ɛ³ laŋ². ŋa¹ ba³ ba³ ɹi² nɔk⁰ haʔ⁰ xɔŋ³ ɹaʔ⁰ na³ ɟu² ta³. i³ ɹi³ ba³ ɹi² haʔ⁰ tʰa² laŋ² tʌ⁰pɨt⁰ tʌŋ¹ i², xɨm³ ɟɔŋ² bɔ³ laŋ² ta³. ʌki xɨm³ ɟɔŋ² te² i² ta³. nɨm¹ ni³ ba³ ɹi² kɔ² βaŋ³ ɹɨn² xiŋ³ tɕe² ʃɨn² ta³. ba³ te² ɹɛ³ bat⁰ mɔʔ⁰ ɛ³ laŋ², ɛ³ i³ ɹɔʔ⁰ xiŋ³ i³ ɹɔʔ⁰ tɨm² xiŋ³ i³ ta³. ŋa¹ ba³ le¹ bat⁰ mɔŋ¹ ɛ³ laŋ², nɔk⁰ ɔi², i² ni³ lɛ³ tɕuŋ¹ tɨk⁰ kɔ³ ʌŋ² i³ ta³. ʌki¹ tɕuŋ¹ tɨk⁰ i²? ba³ ɹi² kɔ² βaŋ³ ɹɨn² tɕuŋ¹ ti³ ʃɨn² ta³. e² ʃa² ma¹ pɨk⁰ ʌŋ² a³ ʃi³ βaŋ³, nʌm¹ pʰe² pɨk⁰ ʃi³ βaŋ³ tʰa² bɔ³. tɕuŋ¹ ti¹ ɛʔ⁰ i³ nʌŋ³ sɛ³ tʰɔk⁰ dɔk⁰ pʰi³ laŋ². ʌhβɛ tɕʌm¹ mʌl² tɕuŋ¹ ti³ ʃɨn² ta³. ka¹ ɹi² tʰa² tʰɔʔ⁰ e² ʃi³ na³ ʃiŋ³ tɕʌk⁰ ti¹ laŋ² ta³. xɨm³ ʃi³ nʌŋ³ tɕa³ mun¹ tʌŋ² hɨm² ba³ ɹi² kɔ² na³ tʌ⁰pɨt⁰ ki¹ ɛʔ⁰, tɕa³ mun¹ tʌŋ² i³ ɹi³ kɔ² na³. ɟu³ ɹɔʔ⁰ ɟu³ ɹɔʔ⁰ ʌŋ² ʃɨn² ɟu² tʌ⁰bat⁰ mɔʔ⁰ ɛ³. tɕa³ mun¹ tʌŋ² hɨm² nʌŋ³ sɛ³ tʰu³ i³ tʰɔ³, tɕa³ mun¹ tʌŋ² hɨm² nʌŋ³ sɛ³ tʰu³ i³ tʰɔ³, ʌki¹ i³ pʰɔ¹ ni³ na¹ ba³ ɹi² kɔ² βaŋ³ ɹɨn² a³ ta³. i² ni³ lɛ³ tɕuŋ¹ tɨk⁰ bɔ³ ʌŋ² i³ laŋ². e² nʌŋ³ βaŋ³ tʰu³ pʰi³ ta³. ʌkɛ tɕʌm¹ mʌl² tɕuŋ¹ ti³ ʃɨn² tɨn¹ ta³. juŋ² βaŋ³ tʰʌ⁰lɨŋ³ tɕʌk⁰ pʰɨn² lɛ² ta³. juŋ² tʰa² βaʔ⁰ ɹi² nan³ su² su² ta³. kɔk⁰ ni³ ni³ sɛ³ le¹ lɨŋ² mi¹ ɛ³ laŋ². miʔ⁰ kʰuʔ⁰ miʔ⁰ ɹut⁰ tʰa² sɛ³ xu:k⁰ βʌŋ¹. i² ni³ lɛ³ tɕuŋ¹ tɨk⁰ bɔ³ ʌŋ² ti¹ ta³. ka¹ ɹi² tʰɔʔ⁰ e² ʃi³ na³ ʃiŋ³ tɕʌk⁰ ti¹ ɟu² ta³ ba³, dʌk⁰ lɔ:t⁰ sɛ³. ʃi³ na³ dʌk⁰ lɔ:t⁰ na³ sɛ³ ka¹ ɹi² tʰa² e² tʰɔ³ i² ni³ tʰa² nʌm¹ pʰe² ɹi³ na³ tʰu³ ti¹, xɨm³ ɟɔŋ² nʌm¹ pʰe² ɹɔ³. e² tʰɔ³ ba³ tɕa³ mun¹ βa¹ ni³ a³ ba³ te² ɹa² kɔ³ lɛ³ xʌŋ¹ ɛʔ⁰ ka¹ ɹi² tʰa² sɛ³ kɔ³ te² hɔl³ xʌŋ¹ ta¹. te² hɔl³ xʌŋ¹ ŋa¹ ɹi³ kʌm² βe³ bʌn³ nɨŋ², xɨm³ ɟɔŋ² te² hɨm² ʃɔʔ⁰ tɔŋ³ ɛʔ⁰ lɛ³. e² tʰɔ³ i³ ɹɔ³ lʌm² tʰɔl² ʌ⁰tʰa¹ i²? e² ɹa² ɹɔʔ⁰ lʌm² tʰɔl² ɹɔʔ⁰ xʌŋ¹ i³ ta³. tʰa² ɔ³ tʰɔʔ⁰ ɹi³ kʌm² hun³ xʌŋ¹ mɔʔ⁰ ɛ³, ʃɔt⁰ kat⁰ ʌŋ² kɔ³ ɔ³ tʰɔʔ⁰. xʌŋ¹ ɛʔ⁰ ka¹ ɹi² tʰa² sɛ³ hɔl³ ɟɔk⁰. e² tʰɔ³ sɛ³ hɨm² nʌŋ³ sɛ³ tʰu³ taʔ⁰ pʰi³ ɟɔ². hɨm² te² ɔʔ⁰ lɛ² kʌp⁰ tʌ⁰tʰɔl³ lʌp⁰ mi¹. ni³ mi² ni³ sa¹ nu¹ ma³ lɛ³ kʌp⁰ ʃiŋ³ mi¹ pɨk⁰ nʌŋ³ ka¹ ni³ ta³ tʰɔʔ⁰. u⁰tɕuŋ¹ ʌŋ² i³ ɟɔ³ laŋ² tɕʌm¹ mʌl² lɛʔ⁰ sɛ³ bi³ pʰʌ⁰ni³ hɨm² te² tʰɔʔ⁰. mɔ³ bɛl³ kʌp⁰ hɔl³ ti¹ ɟɔ³ ba³, mɔ³ bɛl³ ɔʔ⁰ pʰɔn³ βaŋ³ ti¹. nik⁰ a³ ɟɔ³ kɔm² si² ka³ ɹi² ʃa² pan² βat⁰ ɛʔ⁰, mɔ³ bɛl³ ʃa² mɔk⁰ lʌt⁰ pe² tɕu³ βʌn³ la¹ ɔ³. e² tʰɔ³ ŋɨn² tʰɔʔ⁰ ha³ ɟat⁰ tʰʌ⁰ɹɔ:k⁰ ti¹ sʌ⁰nʌt⁰ ʌ⁰tʰa¹ ʌŋ² ta¹ ɹi³, ka¹ ɹi² ʃɔ³ lɛ³. e² ʃa² mɔk⁰ pe² tɕi³ βʌn³ na³ kɔm² si³ ka² ni³ ɟa³ tʌ⁰tɕɔŋ³ ɛʔ⁰ ta¹. tʌŋ² βaŋ³ ma³ ɹʌp⁰

tʌ⁰tʰɨn³. haŋ² kɔ² na³ i² ni³ ɹi³ tɕʌm¹ mʌl² sɛ³ ʌŋ² βaŋ³ ki¹ ta³. tʌ⁰tʰɨn³ tʌk⁰ ɛʔ⁰ sɛ³ le¹ lɨŋ³ xiŋ³ ti¹ sɛ³. i³ mɔːt⁰ ʌ⁰mʌŋ¹ le¹ ʃiʔ⁰ ɹɔʔ⁰ sɛ³ le¹ ʌŋ² ta¹ ɹʌŋ² pʌl³ tʰɔ³ ɔ³ tʰɔʔ⁰. mʌn¹ pʰʌn³ ʃa² e² ʃì³ tan³ hun³ ɟu².

Translation

MM: ‘Yes.’ MC: ‘We came from Miao, your grandfather, the two of us. We came down to the Namphai field and we parked the car. We parked the car and we also left the mobile phone in the car. We did not bring any clothes. We also left our money in the car. We went empty-handed. ‘Let’s go there for a while and try to see where the jungle starts (and our field ends),’ he said. We went and went and went and went. ‘It was this way’ we said. ‘This way’ we said. Oh, we went. But then we came across a ditch. Oh, this must be the edge of the jungle. We went to look again like this. We kept on going and looking. We went and reached far away. Then, ‘oh, let it be, let’s return home already’ we said. We tried to go back. When we turned back, we said, ‘Where is the road?’ We tried to search, we tried to go. We walked the wrong way. We did not reach the road. We walked. ‘What will happen? Us two at night. There will be wolves and tigers, elephants and buffalo's already. What will become of us?’ I started to be afraid. ‘Oh! Let’s pray, pray. God will show us the way.’ We prayed a prayer. And we walked again. We walked and walked; we were puzzled. The way was not visible. Upside and downside were not distinguishable. ‘Where did we arrive?’ We became tired. We became thirsty. I got cold. ‘My throat is starting to hurt,’ I said that to our father. ‘Let’s try to go this way. The edge of the jungle (the border of the field) will maybe be in this direction.’ We tried to go again. Also, in the cleared area we were tripping over things and getting stuck. We had become tired. Even the cleared field that was completely made level we could not recognise. Then we became tired. ‘‘Oh, let’s sit down.’ Your grandfather said again ‘Hey, don’t be restless. Let’s try and sit for a while, sit.’ ‘What will happen to us?’ I had become afraid. ‘I will cry,’ I said to your grandfather. ‘Nothing will happen, wherever we may go.’ We sat down and we prayed again. We prayed this prayer: ‘Oh let the way be known to us.’ ‘On the way let’s cut this plant (to leave a trail), cutting and cutting away. And then, later, if we arrive here again, when we see this cutting mark, we will be like ‘Oh, we must have reached here already.’ We will know if we are moving around in the same place.’ And then we marked by cutting while we walked. We walked and walked. We didn't find it. We didn't find it. We tried to walk. We went this way, but it was not the way. We tried to go this way again. But no (it was not the way). ‘Oh, it won’t be.’ We were wandering for two hours maybe. And then there was nothing. Our throat became irritated, we became tired, we became anxious. ‘What will happen.’ ‘Oh no, it won’t be. We have to continue to pray,’ we said. Your grandfather over here became tired and lay down to sleep. I said, ‘What is happening to me?’ My limbs were shaking from fear. He slept straight and stiff. My breathing became fast and because of that my head was dizzy. And then, when we had prayed again once, we walked. Whatever we tried, we did not

see the way. When we continued to go and go this way, when we went so far, there was a very small path. A very shiny small one. One said, ‘Let’s go down this way.’ But I said, ‘we should go this way.’ And then, when we went this way, and then we walked, and walked, and walked, when we walked a lot, a tied cow was there and wet cultivation. We reached there. Then ‘Wait a second, this must be near a settlement. They also tied a cow here. There are also fields and gardens here.’ When we walked and walked, when we went and went, people were calling one another. ‘What has happened? Wat happened?’ they said. ‘Wait a second, which tribe’s language will they speak? Will it be Rangpang or our own language?’ we said. When we went and went, the people of Khimyong, they were sitting together at the back of their house, splitting bamboo for a bamboo fence. I thought ‘What language will they speak?’ I asked ‘which village is this is?’ and they said, ‘Khimyong.’ ‘Oh! Khimyong people’ I said. ‘‘You two, from where have you been walking?’ they said. Your grandfather said, ‘Oh! We are just walking around.’ And I said, ‘oh friend, both of us got lost.’ ‘Oh really! You got lost, did you? From where did you two get lost?’ he said. ‘From where that field is, from the Namphai field.’ ‘We arrived here after being lost.’ ‘Oh, how badly did you get lost!’ he said. ‘Also, the car we have left over there.’ We asked in that village ‘where is the house of Chamun's family?’ and they said, ‘Chamun’s family is over there. Go down, go down, both of you!’ they said. When we reached the house of Chamun’s family, when we reached the house of Chamun’s father, he said, ‘Oh, my brother and sister, from where did you come?’ ‘We two got lost. From there we arrive here,’ we said. ‘Oh, how badly you two got lost!’ he said. We said, ‘Give us water to drink!’ ‘Yuck, the water is very dirty!’ We both drank two cups. Our throats had become dry. ‘We two got lost’, we said. ‘We parked our car far away. The car is over there, far away, and we arrived here at Khimyong Namphai.’ The father of Chamun and your grandfather went to bring the car. They went to bring it, and I was waiting for them for a long time, in the house of the Khimyong people. ‘Will there be a shortcut?’ ‘We will take this shortcut.’ Despite that, even though it is a shortcut, it took them a long time to go. They went and brought the car. And then we arrived home. We were not able to make contact with the people at home. We also didn’t tell to Nemi and her mom ‘we will be going to the field.’ If we get lost, how will our family members look for us! If only we had brought a mobile, we would have called. Later on, somebody could have broken the car (window), and might have taken away the mobile. And money, six or seven thousand rupees, was also in the car. That could have been taken away by opium addicts coming across it. Thinking about our things. On the other hand, both of us were like ‘what will happen to us?’ We were thinking about it and going around. Nevertheless, my dreams also become bad at night. That was the story.’

Glosses

(1) MM: ɨn^{2}.

ɨn^{2}

yes

MM: ‘Yes.’

(2) MC: mɛ^{3} ɔ^{2} βaŋ^{3}, mɛ^{3} ɔ^{2} βaŋ^{3} ɟu^{3} ti^{1} ɹi^{3} i^{3}, ba^{3} te^{2},

mɛ^{3}ɔ^{2}=βaŋ^{3}	mɛ^{3}ɔ^{2}=βaŋ^{3}	ɟu^{3}-t-i^{1}=ɹi^{3}	i^{3}	ba^{3}-te^{2}
Miao=from	Miao=from	go.down-PST-1PL=INFER	Q.AFF	2SG.POSS-grandfather

i^{2} ni^{3} lɛ^{3}.

i^{2}-ni^{3}=lɛ^{3}

1EXCL-DU=FOC

MC: ‘We came from Miao, your grandfather, the two of us.’

(3) ɟu^{3} ɛʔ^{0} ba^{3} nʌm^{1} p^{h}e^{2} pɨk^{0} ʃɔʔ^{0} ba^{3} ka^{1} ɹi^{2} ɹa^{2} t^{h}ʌ^{0}laŋ^{3} ʃɪŋ^{2} ti^{1} ɹi^{3}.

ɟu^{3}	ɛʔ^{0}=ba^{3}	nʌm^{1}p^{h}e^{2} pɨk^{0}=ʃi^{3}=ɔʔ^{0}=ba^{3}	ka^{1}ɹi^{2}=ɹi^{3}=a^{2}	t^{h}ʌ^{0}-laŋ^{3}
go.down	do=TOP	Namphai field=DIST=at=TOP	car=PROX=ABS	CAUS-stand

ʃɪŋ^{2}-t-i^{1}=ɹi^{3}

put-PST-1PL=INFER

‘We came down to the Namphai field and we parked the car.’

(4) t^{h}ʌ^{0}laŋ^{3} ʃɪŋ^{3} ɛʔ^{0} ba^{3} mɔ^{3} bɛl^{3} t^{h}a^{2} t^{h}ɔʔ^{0} ka^{1} ɹi^{2} na^{3} ʃɪŋ^{3} tɕʌk^{0} ti^{1}.

t^{h}ʌ^{0}-laŋ^{3}	ʃɪŋ^{3}	ɛʔ^{0}=ba^{3}	mɔ^{3}bɛl^{3}=t^{h}i^{3}=a^{2}=t^{h}ɔʔ^{0}	ka^{1}ɹi^{2}=na^{3}	ʃɪŋ^{3}-tɕʌk^{0}-t-i^{1}
CAUS-stand	put	do=TOP	mobile=DEF=ABS=also	car=in	put-PFV-PST-1PL

‘We parked the car and we also left the mobile phone in the car.’

(5) tɕʌm^{2} k^{h}ɔ^{1} ʌ^{0}k^{h}ʌt^{0} t^{h}ɔʔ^{0} pe^{2} mi^{1}.

tɕʌm^{2}	k^{h}ɔ^{1}	ʌ^{0}-k^{h}ʌt^{0}=t^{h}ɔʔ^{0}	pe^{2}-m-i^{1}
what	cloth	and-cloth=also	take-NEG-1PL

‘We did not bring any clothes.’

(6) ŋɨn^{2} tʰa^{2} tʰɔʔ^{0} ka^{1} ɹi^{2} ʃɔ^{3} ʃiŋ^{3} tɕʌk^{0}.

ŋɨn^{2}=tʰi^{3}=a^{2}=tʰɔʔ^{0} ka^{1}ɹi^{2}=ʃi^{3}=ɔ^{3} ʃiŋ^{3}-tɕʌk^{0}

3PL=DEF=ABS=also car=DIST=at put-PFV

'We also left our money in the car.'

(7) ʝʌk^{0} tsaŋ^{3} pɔl^{2} ka^{1} ti^{1} ɹi^{3}.

ʝʌk^{0} tsaŋ^{3}pɔl^{2} ka^{1}-t-i^{1}=ɹi^{3}

hand empty go-PST-1PL=INFER

'We went empty-handed.'

(8) e^{2} nɔʔ^{0} ka^{3} i^{3} tsɔm^{3} βe^{3} ʝat^{0} ɹi^{1} tʰi^{3} tat^{0} sin^{3} tɕʌk^{0} ka^{3} i^{3} ta^{3}.

e^{2}-ni^{3}=ɔʔ^{0} ka^{3}-i^{3} tsɔm^{3}βe^{3} ʝat^{0}-ɹi^{1}=tʰi^{3} tat^{0} sin^{3}-tɕʌk^{0}ka^{3}-i^{3}=ta^{3}

NPROX-MED=at go-1PL a.short.while jungle-line=DEF try see-PFV go-1PL=QUOT

''Let's go there for a while and try to see where the jungle starts (and our field ends),'

he said.'

(9) ka^{1} ti^{1} tʰa^{2} ba^{3}, tʰɛʔ^{0} ka^{1} tʰɛʔ^{0} ka^{1} tʰɛʔ^{0} ka^{1}.

ka^{1}-t-i^{1}=tʰi^{3}=a^{2}=ba^{3} tʰɛʔ^{0}-ka^{1} tʰɛʔ^{0}-ka^{1} tʰɛʔ^{0}-ka^{1}

go-PST-1PL=DEF=ABS=TOP CNT-go CNT-go CNT-go

'We went and went and went and went.'

(10) i^{3} ɹi^{3} na^{3} kɔ^{2} ʌŋ^{2} ta^{1} ta^{3}.

i^{3}-ɹi^{3}=na^{3} kɔ^{2} ʌŋ^{2}-t-a^{1}=ta^{3}

PROX-PROX=in direction COP-PST-3=QUOT

''It was this way' we said.'

(11) i^{3} ɹi^{3} kɔ^{2} na^{3} ta^{3}.

i^{3}-ɹi^{3} kɔ^{2}=na^{3}=ta^{3}

PROX-PROX direction=in=QUOT

''This way' we said.'

(12) ka^{1} ti^{1} sɛ^{3} ɔ^{2}.

ka^{1}-t-i^{1}=sɛ^{3} ɔ^{2}

go-PST-1PL=COMP EXCLAM

'Oh, we went.'

(13) e^{2} t^{h}a^{2} ba^{3} haʔ^{0} k^{h}ɨt^{0} t^{h}a^{2} kʌp^{0} tɕɔŋ^{3} tɕʌk^{0}.

e^{2}t^{h}a^{2}=ba^{3} haʔ^{0}-k^{h}ɨt^{0}=t^{h}i^{3}=a^{2} kʌp^{0} tɕɔŋ^{3}-tɕʌk^{0}

but=TOP earth-ditch=DEF=ABS succeed meet-PFV

'But then we came across a ditch.'

(14) ɔ^{3} haʔ^{0} k^{h}ɨt^{0} i^{3} ɹi^{3} ɹi^{3} ɹa^{2} bɔ^{3} ʝat^{0} ɹi^{1} t^{h}a^{2}.

ɔ^{3} haʔ^{0}-k^{h}ɨt^{0} i^{3}-ɹi^{3}=ɹi^{3}=ɹi^{3}=a^{2}=bɔ^{3} ʝat^{0}-ɹi^{1}=t^{h}i^{3}=a^{2}

EXCLAM earth-ditch PROX-PROX=PROX=PROX=ABS=indeed jungle-line=DEF=ABS

'Oh, this must be the edge of the jungle.'

(15) i^{3} mʌl^{2} lɛʔ^{0} βe^{3} sin^{3} ka^{1} ti^{1}.

i^{3}-mʌl^{2}=lɛʔ^{0} βe^{3}-sin^{3} ka^{1}-t-i^{1}

PROX-like=FOC ITER-see go-PST-1PL

'We went to look again like this.'

(16) sin^{3} kat^{0} ɹɔʔ^{0} sin^{3} kat^{0} ɹɔʔ^{0} sin^{3} kat^{0} ɹɔʔ^{0}.

sin^{3} kat^{0}-ɹɔʔ^{0} sin^{3} kat^{0}-ɹɔʔ^{0} sin^{3} kat^{0}-ɹɔʔ^{0}

see go-CNT see go-CNT see go-CNT

'We kept on going and looking.'

(17) ʌ^{0}lɔ^{1} hʌl^{2} nʌŋ^{3} sɛ^{3} t^{h}ɔk^{0} ka^{1} ti^{1} sɛ^{3} ʝu^{2}.

ʌ^{0}-lɔ^{1}=hʌl^{2}=nʌŋ^{3}=sɛ^{3} t^{h}ɔk^{0} ka^{1}-t-i^{1}=sɛ^{3} ʝu^{2}

NMLZ-far=very=to=already arrive go-PST-1PL=COMP MIT

'We went and reached far away.'

(18) i^{3} ɹɛʔ^{0} ba^{3} ɛ tɕʌm^{2} ʌŋ^{2} a^{3} sɛ^{3}.

i^{3}-ɹɛʔ^{0}=ba^{3} ɛ tɕʌm^{2} ʌŋ^{2}-a^{3}=sɛ^{3}

PROX-then=TOP EXCLAM what COP-3=COMP

'Then, 'oh, let it be.''

(19) u^{0}βɛl^{3} sɛ^{3} ʌŋ^{2} i^{3} hɨm^{2} nʌŋ^{3} sɛ^{3} ta^{3}.

u^{0}-βɛl^{3}=sɛ^{3} ʌŋ^{2}-i^{3} hɨm^{2}=nʌŋ^{3}=sɛ^{3}=ta^{3}

NMLZ-return=already COP-1PL house=to=already=QUOT

''Let's return home already' we said.'

(20) βe^{3} tat^{0} βɛl^{2} ti^{1} ɔ^{2}.

βe^{3}-tat^{0} βɛl^{2}-t-i^{1} ɔ^{2}

ITER-try return-PST-1PL EXCLAM

'We tried to go back.'

(21) ɟa^{1} ɟi^{2} nʌŋ^{3} sɛ^{3} βɛl^{3} i^{3} t^{h}ɔ^{3} i^{3} lʌm^{2} t^{h}a^{2} ba^{3} ɹɔ^{3} ʌŋ^{2} ta^{3}.

ɟa^{1}-ɟi^{2}=nʌŋ^{3} sɛ^{3}-βɛl^{3}-i^{3}=t^{h}i^{3}=ɔ^{3} i^{3} lʌm^{2}=t^{h}i^{3}=a^{2} ba^{3}-ɹi^{3}=ɔ^{3} ʌŋ^{2}=ta^{3}

leg-back=to COS-return-1PL=DEF=at Q.AFF road=DEF=ABS Q-PROX=at COP=QUOT

'When we turned back, we said, 'Where is the road?''

(22) tat^{0} bi^{1} ti^{1} tat^{0} ka^{1} ki^{1} lɛ^{3}.

tat^{0} bi^{1}-t-i^{1} tat^{0} ka^{1}-ki^{1}=lɛ^{3}

try search-PST-1PL try go-PRT=FOC

'We tried to search, we tried to go.'

(23) ʌ^{0}jaʔ^{0} ɟaʔ^{0} nʌŋ^{3} lɛ^{3} xiŋ^{3} tɕi^{3} βʌŋ^{3}.

ʌ^{0}-ɟaʔ^{0}-ɟaʔ^{0}=nʌŋ^{3}=lɛ^{3} xiŋ^{3}-tɕi^{3}-βʌŋ^{3}

NMLZ-wrong-wrong=to=FOC walk-away-go.up

'We walked the wrong way.'

(24) lʌm^{2} kɔ^{2} nʌŋ^{3} t^{h}ɔʔ^{0} t^{h}u^{3} mi^{1} hun^{3}.

lʌm^{2}-kɔ^{2}=nʌŋ^{3}=t^{h}ɔʔ^{0} t^{h}u^{3}-m-i^{1} hun^{3}

road-direction=to=also arrive-NEG-1PL truly

'We did not reach the road.'

(25) xiŋ^{3} ti^{1} lɛ^{3}, tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} βaŋ^{3} ki^{1}.

xiŋ^{3}-t-i^{1}=lɛ^{3} tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2}-βaŋ^{3}-ki^{1}

walk-PST-1PL=FOC what-like COS-COP-would-PRT

'We walked. 'What will happen?''

(26) hiʔ^{0} ni^{3} ɹi^{3} kɔ^{3} ɹʌŋ^{2} pʌl^{3} ɔ^{3} kɔ^{3}, ʃɔl^{2} ʌ^{0}ʃaʔ^{0} lɛ^{3}

hiʔ^{0}-ni^{3}=ɹi^{3} kɔ^{3} ɹʌŋ^{2}-pʌl^{3}=ɔ^{3} kɔ^{3} ʃɔl^{2} ʌ^{0}-ʃaʔ^{0}=lɛ^{3}

1INCL-DU=PROX PRT sky-night=at PRT wolf and-tiger=FOC

pu:k^{0} ʌ^{0}li^{2} lɛ^{3} sɛ^{3} ʌŋ^{2} na^{3} ɟu^{2}.

pu:k^{0} ʌ^{0}-li^{2}=lɛ^{3} sɛ^{3}-ʌŋ^{2}-n-a^{3} ɟu^{2}

elephant and-buffalo=FOC COS-COP-FUT-3 MIT

‘‘Us two at night. There will be wolves and tigers, elephants and buffalo's already.’’

(27) tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} ni^{3} laŋ^{2}.

tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2}-n-i^{3}=laŋ^{2}

what-like COS-COP-FUT-1PL=indeed

‘‘What will become of us?’’

(28) ŋa^{1} lɛ^{3} tɕɔ^{3} sɛ^{3} bɔ^{3} xɔŋ^{3} βʌŋ^{1} a^{3} laŋ^{2}.

ŋa^{1}=lɛ^{3} tɕɔ^{3}=sɛ^{3}=bɔ^{3} xɔŋ^{3}-βʌŋ^{1}-a^{3}=laŋ^{2}

1SG=FOC fear=COMP=indeed come.out-go.up-3=indeed

‘I started to be afraid.’

(29) ɛ^{3} ke^{2} tɕu^{2} tɕu^{2} ke^{2} tɕu^{2}.

ɛ^{3} ke^{2}tɕu^{2} tɕu^{2} ke^{2}tɕu^{2}

EXCLAM prayer pray prayer

‘‘Oh! Let’s pray, pray.’’

(30) ʃɛ^{3} ke^{3} βa^{1} tɕʌm^{2} tʌ^{0}k^{h}i^{3} kɔʔ^{0} p^{h}i^{3} tɔl^{2} ʌ^{0}lʌm^{2} t^{h}i^{3} ta^{3} ba^{3}.

ʃɛ^{3}ke^{3}-βa^{1} tɕʌm^{2} tʌ^{0}-k^{h}i^{3} kɔʔ^{0}-p^{h}-i^{3} tɔl^{2} ʌ^{0}-lʌm^{2}=t^{h}i^{3}=ta^{3}=ba^{3}

God-M what CAUS-see give-INV-1PL road and-road=DEF=QUOT=TOP

‘‘God will show us the way.’’

(31) ke^{2} tɕu^{2} t^{h}a^{2} tɕu^{2}.

ke^{2}tɕu^{2}=t^{h}i^{3}=a^{2} tɕu^{2}

prayer=DEF=ABS pray

‘We prayed a prayer.’

(32) βe^{3} xiŋ^{3} ti^{1} ɔ^{2}.

βe^{3}-xiŋ^{3}-t-i^{1} ɔ^{2}

ITER-walk-PST-1PL EXCLAM

'And we walked again.'

(33) ɟɨn^{3} xiŋ^{3} tat^{0} xiŋ^{3} ki^{1} lɛ^{3}, muŋ^{1} lɨk^{0} lɨk^{0} sɛ^{3}.

ɟɨn^{3} xiŋ^{3} tat^{0} xiŋ^{3}-ki^{1}=lɛ^{3} muŋ^{1}-lɨk^{0}-lɨk^{0}=sɛ^{3}

HAB walk try walk-PRT=FOC puzzled-INTENS-REDUP=already

'We walked and walked; we were puzzled.'

(34) tɔl^{2} ʌ^{0}lʌm^{2} t^{h}ɔʔ^{0} tʌ^{0}k^{h}i^{3} mɔʔ^{0}.

tɔl^{2} ʌ^{0}-lʌm^{2}=t^{h}ɔʔ^{0} tʌ^{0}-k^{h}i^{3}-m-ɔʔ^{0}

road and-road=also INTR-see-NEG-3

'The way was not visible.'

(35) haʔ^{0} k^{h}ɔ^{2} haʔ^{0} ɟa^{1} tʌ^{0}k^{h}i^{3} mɔʔ^{0} sɛ^{3}.

haʔ^{0}-k^{h}ɔ^{2} haʔ^{0}-ɟa^{1} tʌ^{0}-k^{h}i^{3}-m-ɔʔ^{0}=sɛ^{3}

earth-head earth-leg INTR-see-NEG=3=COMP

'Upside and downside were not distinguishable.'

(36) ba^{3} ɹi^{2} nʌŋ^{3} sɛ^{3} t^{h}u^{3} ki^{1} ta^{3}.

ba^{3}ɹi^{2}=nʌŋ^{3} sɛ^{3}-t^{h}u^{3}-ki^{1}=ta^{3}

which=to COS-arrive-PRT=QUOT

''Where did we arrive?''

(37) naŋ^{3} tɨk^{0} ʌŋ^{2} lɛ^{3}.

naŋ^{3} tɨk^{0} ʌŋ^{2}=lɛ^{3}

tired COS.COP COP=FOC

'We became tired.'

(38) ɟuŋ^{2} lal^{3} tɨk^{0} lɛ^{2}.

ɟuŋ^{2}-lal^{3} tɨk^{0}=lɛ^{2}

water-thirst COS.COP=FOC

'We became thirsty.'

(39) ŋa^{1} lɛ^{3} sɔk^{0} βi^{3} ɛ^{3} ɹʌp^{0} kʌk^{0}.

ŋa^{1}=lɛ^{3} sɔk^{0}βi^{3}=ɛ^{3} ɹʌp^{0} kʌk^{0}

1SG=FOC cold=ERG more bite

'I got cold.'

(40) i^{3} k^{h}uʔ^{0} i^{3} ɹut^{0} ɹʌp^{0} ɹɔk^{0} βʌŋ^{3} lɛ^{2} sɛ^{3} ʌŋ^{2} mɔʔ^{0} ɛ^{3} laŋ^{2}.

i^{3}-k^{h}uʔ^{0}-i^{3}-ɹut^{0} ɹʌp^{0} ɹɔk^{0}-βʌŋ^{3}=lɛ^{2} sɛ^{3}-ʌŋ^{2}-mɔʔ^{0}-ɛ^{3}=laŋ^{2}

1SG.POSS-throat more hurt-go.up=FOC COS-AUX-NEG-REV.NEG=indeed

''My throat is starting to hurt.''

(41) hiʔ^{0} βa^{1} ma^{3} bat^{0} tʌŋ^{1} ɹi^{3}.

hiʔ^{0}-βa^{1}=ma^{3} bat^{0}-t-ʌŋ^{1}=ɹi^{3}

1EXLC-father=DAT say-PST-1SG=INF

'I said that to our father.'

(42) ɛ, i^{3} ɹi^{3} kɔ^{2} ɹɔʔ^{0} kɔ^{3} tat^{0} xiŋ^{3} i^{3}.

ɛ i^{3}-ɹi^{3} kɔ^{2}=ɹi^{3}=ɔʔ^{0} kɔ^{3} tat^{0} xiŋ^{3}-i^{3}

EXCLAM PROX-PROX direction=PROX=at PRT try walk-1PL

''Let's try to go this way.''

(43) ʝat^{0} ɹi^{1} t^{h}a^{2} i^{3} ɹi^{3} kɔ^{2} na^{3} ʌŋ^{2} na^{3} hɛ^{3} ta^{3}.

ʝat^{0}-ɹi^{1}=t^{h}i^{3}=a^{2} i^{3}-ɹi^{3} kɔ^{2}=na^{3} ʌŋ^{2}-n-a^{3}=hɛ^{3}=ta^{3}.

jungle-line=DEF=ABS PROX=PROX direction=in COP-FUT-3=DUB=QUOT

''The edge of the jungle (the border of the field) will maybe be in this direction.''

(44) tat^{0} βe^{3} xʌŋ^{1} ti^{1} ɔ^{2}.

tat^{0} βe^{3}-xʌŋ^{1}-t-i^{1} ɔ^{2}

try ITER-go.up-PST-1PL EXCLAM

'We tried to go again.'

(45) βɔt^{0} tɕɔl^{2} t^{h}ɔʔ^{0} tɨm^{3} tʌ^{0}t^{h}an^{1} man^{1} ti^{1}.

βɔt^{0}-tɕɔl^{2}=t^{h}ɔʔ^{0} tɨm^{3}-tʌ^{0}-t^{h}an^{1} man^{1}-t-i^{1}

weed-PFV-also around-INTR-trip.over be.stuck-PST-1PL

'Also, in the cleared area we were tripping over things and getting stuck.'

(46) naŋ^{2} sɛ^{3} ʌŋ^{2} ti^{1}.

naŋ^{2} sɛ^{3}-ʌŋ^{2}-t-i^{1}

tired COS-COP-PST-1PL

'We had become tired.'

(47) βɔt^{0} tɕɔl^{2} sɛ^{3} t^{h}ɔʔ^{0} pɨŋ^{1} lɨk^{0} sɛ^{3} ʌŋ^{2} mɔʔ^{0} ɛ^{3} sɛ^{3} ɟɨn^{3}

βɔt^{0}-tɕɔl^{2}=sɛ^{3}=t^{h}ɔʔ^{0} pɨŋ^{1}-lɨk^{0}=sɛ^{3} ʌŋ^{2}-m-ɔʔ^{0}-ɛ^{3}=sɛ^{3} ɟɨn^{3}

weed-PFV=COMP=also level-INTENS=already COP-NEG-3-REV.NEG=COMP ABIL

tʌ^{0}sʌm^{3} tɔl^{3} mɔʔ^{0} sɛ^{3}.

tʌ^{0}-sʌm^{3} tɔl^{3}-m-ɔʔ^{0}=sɛ^{3}

TR-know PRT-NEG-3=COMP

'Even the cleared field that was completely made level we could not recognise.'

(48) e^{2} t^{h}ɔ^{3} ba^{3} naŋ^{3} ti^{1}.

e^{2}t^{h}ɔ^{3}=ba^{3} naŋ^{3}-t-i^{1}

and=TOP be.tired-PST-1PL

'Then we became tired.'

(49) ɛ u^{0}tɔŋ^{3} ʌŋ^{2} i^{3} tɔŋ^{2} ta^{3}.

ɛ u^{0}-tɔŋ^{3} ʌŋ^{2}-i^{3} tɔŋ^{2}=ta^{3}

EXCLAM NMLZ-sit COP-1PL sit=QUOT

''Oh, let's sit down.''

(50) ba^{3} te^{2} ɹɛ^{3} βe^{3} bat^{0}, ɛ nʌk^{0} t^{h}ap^{0} na^{3} βʌŋ^{1} u^{3}.

ba^{3}-te^{2}=ɹi^{3}=ɛ^{3} βe^{3}-bat^{0} ɛ nʌk^{0} t^{h}ap^{0}na^{3} βʌŋ^{1}-u^{3}

2SG.POSS-grandfather=PROX=ERG ITER-say EXCLAM PROH restless go.up-2SG

'Your grandfather said again 'Hey, don't be restless.''

(51) tat^{0} tɔŋ^{3} ʌŋ^{2} βe^{3} tat^{0} tɔŋ^{3}.

tat^{0} tɔŋ^{3} ʌŋ^{2} βe^{3}-tat^{0} tɔŋ^{3}

try sit AUX ITER-try sit

''Let's try and sit for a while, sit.''

(52) tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} ni^{3} laŋ^{2}.

tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2}-n-i^{3}=laŋ^{2}

what-like COS-COP-FUT-1PL=indeed

‘‘What will happen to us?’’

(53) ŋa^{1} tɕɔ^{3} sɛ^{3} xɔŋ^{1} a^{3}.

ŋa^{1} tɕɔ^{3} sɛ^{3}-xɔŋ^{1}-a^{3}

1SG fear COS-come.out-3

‘I had become afraid.’

(54) ŋa^{1} ŋa^{1} u^{0}xʌp^{0} ʌŋ^{2} nʌŋ^{3} sɛ^{3} ɟu^{2} ta^{3}.

ŋa^{1} ŋa^{1} u^{0}-xʌp^{0} ʌŋ^{2}-n-ʌŋ^{3}=sɛ^{3} ɟu^{2}=ta^{3}

1SG 1SG NMLZ-cry COP-FUT-1SG=COMP MIT=QUOT

‘‘I will cry…’’

(55) bat^{0} mɔŋ^{1} ɛ^{3} laŋ^{2}, ba^{3} te^{2} ma^{3} lɛ^{3}.

bat^{0}-m-ɔŋ^{1}-ɛ^{3}=laŋ^{2} ba^{3}-te^{2}=ma^{3}=lɛ^{3}

say-NEG-1SG-REV.NEG=indeed 2SG.POSS-grandfather=DAT=FOC

‘...I said, to your grandfather.’

(56) tɕʌm^{2} ʌŋ^{2} mɔʔ^{0} ba^{3} nʌŋ^{3} mʌn^{2} tɕu^{3} βʌŋ^{1} ni^{3}.

tɕʌm^{2} ʌŋ^{2}-m-ɔʔ^{0} ba^{3}-nʌŋ^{3}-mʌn^{2} tɕu^{3}-βʌŋ^{1}-n-i^{3}

what COP-NEG-3 Q-to away-go.up-FUT-1PL

‘‘Nothing will happen, wherever we may go.’’

(57) βe^{3} tɔŋ^{3} ɛʔ^{0}, ke^{2} tɕu^{2} βe^{3} tɕu^{2} ti^{1} ɔ^{2}.

βe^{3}-tɔŋ^{3} ɛʔ^{0} ke^{2}tɕu^{2} βe^{3}-tɕu^{2}-t-i^{1} ɔ^{2}

ITER-sit do prayer ITER-pray-PST-1PL EXCLAM

‘We sat down and we prayed again.’

(58) ke^{2} tɕu^{2} ɹa^{2} tɕu^{2} ɛʔ^{0}, ɔ^{3} lʌm^{2} ɹa^{2} tʌ^{0}sʌm^{3} tɕʌm^{2} ʌŋ^{2} a^{3}.

ke^{2}tɕu^{2}=ɹi^{3}=a^{2} tɕu^{2} ɛʔ^{0}ɔ^{3} lʌm^{2}=ɹi^{3}=a^{2} tʌ^{0}-sʌm^{3} tɕʌm^{2} ʌŋ^{2}-a^{3}

prayer=PROX=ABS pray do EXCLAM road=PROX=ABS CAUS-know what COP-3

‘We prayed this prayer: ‘Oh let the way be known to us.’’

(59) lʌm^{2} ɹi^{3} kan^{2} ɹi^{3} βaŋ^{3} duːk^{0} ɹɔʔ^{0} duːk^{0} ɹɔʔ^{0} kɔ^{3} duːk^{0} tɕu^{3} βʌn^{3} i^{3}.

lʌm^{2}=ɹi^{3} kan^{2}=ɹi^{3}=βaŋ^{3} duːk^{0}-ɹɔʔ^{0} duːk^{0}-ɹɔʔ^{0}=kɔ^{3} duːk^{0}-tɕu^{3}-βʌn^{3}-i^{3}

road=PROX stick=PROX=from cut-CNT cut-CNT=PRT cut-away-go.up-1PL

''On the way let's cut this plant (to leave a trail), cutting and cutting away.''

(60) i^{3} ɹɛʔ^{0} nik^{0} a^{3} i^{3} ɹi^{3} nʌŋ^{3} βe^{3} t^{h}u^{3} i^{3} ɟɔ^{3}, ɟan^{2} duːk^{0} mal^{1} ʃa^{2}

i^{3}-ɹɛʔ^{0} nik^{0}=a^{3} i^{3}-ɹi^{3}=nʌŋ^{3} βe^{3}-t^{h}u^{3}-i^{3}=ɟɔ^{3} ɟan^{2} duːk^{0} mal^{1}=ʃi^{3}=a^{2}

PROX-then later=at PROX-PROX=to ITER-arrive-1PL=COND knife cut mark=DIST=ABS

kʌp^{0} k^{h}i^{3} ɔ^{3} t^{h}a^{2}, ɔ^{3} i^{3} nʌŋ^{3} t^{h}ɔk^{0} tɕɔl^{2} bɔ^{3} laŋ^{2}.

kʌp^{0} k^{h}i^{3}=ɔ^{3}=t^{h}i^{3}=a^{2} ɔ^{3} i^{3}-nʌŋ^{3} t^{h}ɔk^{0}-tɕɔl^{2}=bɔ^{3}=laŋ^{2}

succeed see=at=DEF=ABS EXCLAM PROX=to arrive-PFV=indeed=indeed

''And then, later, if we arrive here again, when we see this cutting mark, we will be like 'Oh, we must have reached here already.'''

(61) dʌŋ^{3} ʃɛ^{1} na^{3} bɔ^{3} tɨm^{3} lɨŋ^{3} xiŋ^{3} i^{3} t^{h}a^{2} tʌ^{0}sʌm^{3} tɕʌm^{2} ʌŋ^{2} a^{3}.

dʌŋ^{3}-ʃɛ^{1}=na^{3}=bɔ^{3} tɨm^{3}-lɨŋ^{3}-xiŋ^{3}-i^{3}=t^{h}i^{3}=a^{2} tʌ^{0}-sʌm^{3} tɕʌm^{2} ʌŋ^{2}-a^{3}

place-one=in=indeed around-circle-walk-1PL=DEF=ABS CAUS-know what COP-3

''We will know if we are moving around in the same place.''

(62) e^{2} t^{h}ɔ^{3} ba^{3} xiŋ^{3} ɛʔ^{0} tɨm^{3} t^{h}ʌ^{0}mal^{1} duːk^{0} ti^{1}.

e^{2}t^{h}ɔ^{3}=ba^{3} xiŋ^{3} ɛʔ^{0} tɨm^{3}-t^{h}ʌ^{0}-mal^{1} duːk^{0}-t-i^{1}

and=TOP walk do around-TR-mark cut-PST-1PL

'And then we marked by cutting while we walked.'

(63) xiŋ^{3} ɹɔʔ^{0} xiŋ^{3} ɹɔʔ^{0} sɛ^{3} ʌŋ^{2} ti^{1}.

xiŋ^{3}-ɹɔʔ^{0} xiŋ^{3}-ɹɔʔ^{0} sɛ^{3}-ʌŋ^{2}-t-i^{1}

walk-CNT walk-CNT COS-AUX-PST-1PL

'We walked and walked.'

(64) kʌp^{0} mi^{1} hun^{3}.

kʌp^{0}-m-i^{1} hun^{3}

find-NEG-1PL truly

'We didn't find it.'

(65) kʌp^{0} mi^{1} hun^{3}.

kʌp^{0}-m-i^{1} hun^{3}

find-NEG-1PL truly

‘We didn't find it.’

(66) tat^{0} xiŋ^{3} ti^{1}.

tat^{0} xiŋ^{3}-t-i^{1}

try walk-PST-1PL

‘We tried to walk.’

(67) i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} tat^{0} xʌŋ^{1} xʌŋ^{1} t^{h}i^{3} lɛ^{3} ʌŋ^{2} mɔʔ^{0}.

i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} tat^{0} xʌŋ^{1} xʌŋ^{1}=t^{h}i^{3}=lɛ^{3} ʌŋ^{2}-m-ɔʔ^{0}

PROX-PROX direction=to try go.up go.up=DEF=FOC COP-NEG-3

‘We went this way, but it was not the way.’

(68) i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} tat^{0} βe^{3} ka^{1}.

i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} tat^{0} βe^{3}-ka^{1}

PROX-PROX direction=to try ITER-go

‘We tried to go this way again.’

(69) e^{2} t^{h}i^{3} lɛ^{3} ʌŋ^{2} mɔʔ^{0}.

e^{2}-t^{h}i^{3}=lɛ^{3} ʌŋ^{2}-m-ɔʔ^{0}

NPROX-DEF=FOC COP-NEG-3

‘But no (it was not the way).’

(70) e ʌŋ^{2} mɔʔ^{0} te^{2} ta^{3}.

e ʌŋ^{2}-m-ɔʔ^{0}-te^{2}=ta^{3}

EXCLAM COP-NEG-3-PROSP=QUOT

‘‘Oh, it won’t be.’’

(71) kɔn^{3} ta^{3} ni^{3} tan^{3} sɛ^{3} tɕuŋ^{1} ti^{1} hɛ^{3} ɔ^{2}.

kɔn^{3}ta^{3}-ni^{3}=tan^{3}=sɛ^{3} tɕuŋ^{1}-t-i^{1}=hɛ^{3} ɔ^{2}

hour-two=as.many.as=DUR wander-PST-1PL=DUB EXCLAM

‘We were wandering for two hours maybe.’

(72) e^{2} tʰi^{3} laŋ^{2} laŋ^{2} ʌ^{0}huŋ^{1} sɛ^{3}.

e^{2}-tʰi^{3}=laŋ^{2}=laŋ^{2} ʌ^{0}-huŋ^{1}=sɛ^{3}

NPROX-DEF=indeed=indeed NMLZ-NEXIST=already

'And then there was nothing.'

(73) miʔ^{0} ɹut^{0} ɹɔk^{0} βʌŋ^{3} lɛ^{2} miʔ^{0} ki^{3} naŋ^{3} xɔŋ^{3} βʌŋ^{3} lɛ^{2},

miʔ^{0} ɹut^{0} ɹɔk^{0}-βʌŋ^{3}=lɛ^{2} miʔ^{0} ki^{3}naŋ^{3} xɔŋ^{3}-βʌŋ^{3}=lɛ^{2}

person throat be.irritated-go.up=FOC person fatigue come.out-go.up=FOC

miʔ^{0} tɨn^{1} pʰaŋ^{1} lɛ^{2} sɛ^{3} ʌŋ^{2} mi^{1} ɛ^{3} laŋ^{2}.

miʔ^{0} tɨn^{1}-pʰaŋ^{1}=lɛ^{2} sɛ^{3}-ʌŋ^{2}-m-i^{1}-ɛ^{3}=laŋ^{2}

person heart-anxious=FOC COS-COP-NEG-1PL-REV.NEG=indeed

'Our throat became irritated, we became tired, we became anxious.'

(74) tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} βaŋ^{3} ki^{1}.

tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2}-βaŋ^{3}-ki^{1}

what-like COS-COP-would-PRT

''What will happen.''

(75) ɛ ʌŋ^{2} mɔʔ^{0} te^{2}.

ɛ ʌŋ^{2}-m-ɔʔ^{0}-te^{2}.

EXCLAM COP-NEG-3-PROSP

''Oh no, it won't be.''

(76) ke^{2} tɕu^{2} ɹɔʔ^{0} tat^{0} βe^{3} tɕu^{2} i^{3} ta^{3} sɛ^{3}.

ke^{2}tɕu^{2}-ɹɔʔ^{0} tat^{0} βe^{3}-tɕu^{2}-i^{3}=ta^{3}=sɛ^{3}

prayer-CNT try ITER-pray-1PL=QUOT=COMP

''We have to continue to pray,' we said.'

(77) ba^{3} te^{2} ɹi^{3} lɛ^{3} naŋ^{3} ti^{3} ɛʔ^{0} le^{1} tʌ^{0}paŋ^{1}

ba^{3}-te^{2}=ɹi^{3}=lɛ^{3} naŋ^{3} ti^{3} ɛʔ^{0} le^{1}-tʌ^{0}-paŋ^{1}

2SG.POSS-grandfather=PROX=FOC be.tired COS.COP do and-CAUS-be.horizontal

ɟɨp^{0} ta^{1} sɛ^{3}.

ɟɨp^{0}-t-a^{1}=sɛ^{3}

sleep-PST-3=COMP

‘Your grandfather over here became tired and lay down to sleep.’

(78) ŋa^{1} ɹi^{3} tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} ti^{3} ʌŋ^{3} ta^{3}.

ŋa^{1}=ɹi^{3} tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2} ti^{3}-ʌŋ^{3}=ta^{3}

1SG=PROX what-like COS-COP COS.COP-1SG=QUOT

‘I said, ‘What is happening to me?’’

(79) i^{3} ɟʌk^{0} ɟa^{1} t^{h}a^{2} mɔ^{3} βʌŋ^{1} ta^{1}, u^{0}tɕɔ^{3} βaŋ^{3} t^{h}ɛ^{3}.

i^{3}-ɟʌk^{0}-ɟa^{1}=t^{h}i^{3}=a^{2} mɔ^{3}-βʌŋ^{1}-t-a^{1} u^{0}-tɕɔ^{3}=βaŋ^{3}=t^{h}i^{3}=ɛ^{3}

1SG.POSS-arm-leg=DEF=ABS move-go.up-PST-3 NMLZ-fear=from=DEF=with

‘My limbs were shaking from fear.’

(80) piʔ^{0} ɹa^{2} ba^{3} tsʌl^{2} ɹiŋ^{1} le^{1} ɟɨp^{0} mɔʔ^{0} ɛ^{3} laŋ^{2}.

piʔ^{0}=ɹi^{3}=a^{2}=ba^{3} tsʌl^{2}ɹiŋ^{1} le^{1}-ɟɨp^{0}-m-ɔʔ^{0}-ɛ^{3}=laŋ^{2}

3SG=DEF=ABS=TOP straigth.stiff and-sleep-NEG-3-REV.NEG=indeed

‘He slept straight and stiff.’

(81) tʌk^{0} t^{h}a^{2} p^{h}u:t^{0} ta^{1} ɹi^{3} e^{2} t^{h}ɔ^{3} βaŋ^{3} k^{h}ɔ^{3} pʌ^{0}lɨk^{0} ta^{1} ɹi^{3}.

tʌk^{0}=t^{h}i^{3}=a^{2} p^{h}u:t^{0}-t-a^{1}=ɹi^{3} e^{2}-t^{h}i^{3}=ɔ^{3}=βaŋ^{3} k^{h}ɔ^{3} pʌ^{0}lɨk^{0}-t-a^{1}=ɹi^{3}

breath=DEF=ABS pant-PST-3=INF NPROX-DEF=at=from head be.dizzy-PST-3=INF

‘My breathing became fast and because of that my head was dizzy.’

(82) e^{2} t^{h}ɔ^{3} sɛ^{3} paɹ^{3} t^{h}a^{3} na^{3} sɛ^{3} ɟuk^{0} ʃɛ^{1} sɛ^{3} ke^{2} tɕu^{2} sɛ^{3}

e^{2}t^{h}ɔ^{3}=sɛ^{3} paɹ^{3}t^{h}a^{3}na^{3}=sɛ^{3} ɟuk^{0}-ʃɛ^{1}=sɛ^{3} ke^{2}tɕu^{2}=sɛ^{3}

and=already prayer=already time-one=already prayer=already

βe^{3} tɕu^{2} i^{3} t^{h}ɔ^{3} i^{2}, xiŋ^{3} ti^{1} sɛ^{3} ɟu^{2}.

βe^{3}-tɕu^{2}-i^{3}=t^{h}i^{3}=ɔ^{3} i^{2} xiŋ^{3}-t-i^{1}=sɛ^{3} ɟu^{2}

ITER-pray-1PL=DEF=at Q.AFF walk-PST-1PL=COMP MIT

‘And then, when we had prayed again once, we walked.’

(83) tɛʌm^{1} mʌl^{2} tat^{0} ɛʔ^{0} ki^{3} ɔ^{3} t^{h}ɔʔ^{0} lʌm^{2} t^{h}a^{2} k^{h}i^{3} mi^{1} hun^{3} ʌŋ^{2} ti^{1}.

tɛʌm^{1}-mʌl^{2} tat^{0} ɛʔ^{0} ki^{3} ɔ^{3}t^{h}ɔʔ^{0} lʌm^{2}=t^{h}i^{3}=a^{2} k^{h}i^{3}-m-i^{1} hun^{3} ʌŋ^{2}-t-i^{1}

like-what try do PRT despite road=DEF=ABS see-NEG-1PL truly AUX-PST-1PL

'Whatever we tried, we did not see the way.'

(84) i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} ka^{1} ɹɔʔ^{0} ka^{1} ɹɔʔ^{0} ka^{1} ɹɔʔ^{0} ka^{1} ɹɔʔ^{0} ʌŋ^{2} i^{3} t^{h}ɔ^{3},

i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} ka^{1}-ɹɔʔ^{0} ka^{1}-ɹɔʔ^{0} ka^{1}-ɹɔʔ^{0} ka^{1}-ɹɔʔ^{0} ʌŋ^{2}-i^{3}=t^{h}i^{3}=ɔ^{3}

PROX-PROX direction=to go-CNT go-CNT go-CNT go-CNT AUX-1PL=DEF=at

dʌk^{0} lɔːt^{0} nʌŋ^{3} sɛ^{3} ka^{1} i^{3} t^{h}ɔ^{3} i^{2}, lʌm^{2} k^{h}uŋ^{3} sa^{1} man^{3} sa^{1}

dʌk^{0}-lɔːt^{0}=nʌŋ^{3}=sɛ^{3} ka^{1}-i^{3}=t^{h}i^{3}=ɔ^{3} i^{2} lʌm^{2} k^{h}uŋ^{3}-sa^{1}-man^{3}-sa^{1}

SUPER-far=to=already go-1PL=DEF=at Q.AFF road path-DIM-small-DIM

ʌŋ^{2} mɔʔ^{0} ɛ^{3} laŋ^{2}.

ʌŋ^{2}-m-ɔʔ^{0}-ɛ^{3}=laŋ^{2}

COP-NEG-3-REV.NEG=indeed

'When we continued to go and go this way, when we went so far, there was a very small path.'

(85) k^{h}iŋ^{3} ɟaŋ^{1} ɟaŋ^{1} sa^{1} lɛ^{3}.

k^{h}iŋ^{3}-ɟaŋ^{1}-ɟaŋ^{1}-sa^{1}=lɛ^{3}

shiny-INTENS-REDUP-DIM=FOC

'A very shiny small one.'[122]

(86) ʌ^{0}ʃɛ^{1} i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} ɟu^{3} i^{3} ta^{3}.

ʌ^{0}-ʃɛ^{1} i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} ɟu^{3}-i^{3}=ta^{3}

NMLZ-one PROX-PROX direction=to go.down-1PL=QUOT

'One said, 'Let's go down this way.''

[122] A path which reflects light because the ground has been smoothed by the feet of the people who walk on it.

(87) ŋa^{1} laŋ^{2} laŋ^{2} i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} kɔ^{3} ka^{1} i^{3} ta^{3}.

ŋa^{1}=laŋ^{2}=laŋ^{2} i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3}=kɔ^{3} ka^{1}-i^{3}=ta^{3}

1SG=indeed=indeed PROX-PROX direction=to=PRT go-1PL=QUOT

'But I said, 'We should go this way.''

(88) e^{2} t^{h}ɔ^{3} ba^{3} i^{3} ɹi^{3} kɔ^{2} nʌŋ^{3} sɛ^{3} ka^{1} i^{3} t^{h}ɔ^{3} ba^{3}, xiŋ^{3} ɹɔʔ^{0} xiŋ^{3} ɹɔʔ^{0}

e^{2}t^{h}ɔ^{3}=ba^{3} i^{3}-ɹi^{3} kɔ^{2}=nʌŋ^{3} sɛ^{3}-ka^{1}-i^{3}=t^{h}i^{3}=ɔ^{3}=ba^{3} xiŋ^{3}-ɹɔʔ^{0} xiŋ^{3}-ɹɔʔ^{0}

and=TOP PROX-PROX direction=to COS-go-1PL=DEF=at=TOP walk-CNT walk-CNT

xiŋ^{3} ɹɔʔ^{0} ɹi^{3} kʌm^{2} sɛ^{3} xiŋ^{3} i^{3} t^{h}ɔ^{3} i^{2}, man^{2} tʌ^{0}tuk^{0} nɔ^{1} la^{2} pɨk^{0}

xiŋ^{3}-ɹɔʔ^{0} ɹi^{3}kʌm^{2}=sɛ^{3} xiŋ^{3}-i^{3}=t^{h}i^{3}=ɔ^{3} i^{2} man^{2} tʌ^{0}-tuk^{0} nɔ^{1}la^{2}-pɨk^{0}

walk-CNT a.long.time=DUT walk-1PL=DEF=at Q.AFF cow INTR-tie type.of.field-field

sɛ^{3} ʌŋ^{2} ta^{1} ɟu^{2}.

sɛ^{3}-ʌŋ^{2}-t-a^{1} ɟu^{2}

COS-COP-PST-3 MIT

'And then, when we went this way, and then we walked, and walked, and walked, when we walked a lot, a tied cow was there and wet cultivation.'

(89) e^{2} t^{h}i^{3} nʌŋ^{3} sɛ^{3} t^{h}u^{3} ti^{1} ɟu^{2}.

e^{2}-t^{h}i^{3}=nʌŋ^{3} sɛ^{3}-t^{h}u^{3}-t-i^{1} ɟu^{2}

NPROX-DEF=to COS-arrive-PST-1PL MIT

'We reached there.'

(90) ɹɛʔ^{0} nʌk^{0} ɔ^{2} i^{3} ɹa^{2} bɔs^{0} ti^{2} tit^{0} na^{3} hun^{3} ʌŋ^{2} na^{3} ɟu^{2}.

ɹɛʔ^{0} nʌk^{0} ɔ^{2} i^{3}-ɹi^{3}=a^{2} bɔs^{0}ti^{2}-tit^{0}=na^{3} hun^{3} ʌŋ^{2}-n-a^{3} ɟu^{2}

then PROH EXCLAM PROX-PROX=ABS village-proximity=in truly COP-FUT-3 MIT

'Then 'Wait a second, this must be near a settlement.''

(91) man^{2} t^{h}ɔʔ^{0} i^{3} ɹa^{2} sɛ^{3} tuk^{0} ka^{1} ta^{1} i^{2}.

man^{2}=t^{h}ɔʔ^{0} i^{3}-ɹi^{3}=a^{2} sɛ^{3}-tuk^{0} ka^{1}-t-a^{1} i^{2}

cow=also PROX-PROX=ABS COS-tie go-PST-3 Q.AFF

''They also tied a cow here.''

(92) pɨk^{0} ʌ^{0}pal^{2} tʰɔʔ^{0} i^{3} ɹa^{2} ʌ^{0}tʰa^{1} i^{2} ta^{3}.

pɨk^{0} ʌ^{0}-pal^{2}=tʰɔʔ^{0} i^{3}-ɹi^{3}=a^{2} ʌ^{0}-tʰa^{1} i^{2}=ta^{3}

field and-garden=also PROX-PROX=ABS NMLZ-EXIST Q.AFF=QUOT

‘‘There are also fields and gardens here.’’

(93) xiŋ^{3} ɹɔʔ^{0} ɹɔʔ^{0} sɛ^{3} ʌŋ^{2} i^{3} tʰɔ^{3} ba^{3} ka^{1} ɹɔʔ^{0} ka^{1} ɹɔʔ^{0}

xiŋ^{3}-ɹɔʔ^{0}-ɹɔʔ^{0} sɛ^{3}-ʌŋ^{2}-i^{3}=tʰi^{3}=ɔ^{3}=ba^{3} ka^{1}-ɹɔʔ^{0} ka^{1}-ɹɔʔ^{0}

walk-CNT-CNT COS-AUX-1PL=DEF=at=TOP go-CNT go-CNT

sɛ^{3} ʌŋ^{2} i^{3} tʰɔ^{3} i^{2}, miʔ^{0} ɹɔŋ^{3} tʌ^{0}tʰuk^{0} ŋe^{2} mɔʔ^{0} ɛʔ^{0} laŋ^{2}.

sɛ^{3}-ʌŋ^{2}-i^{3}=tʰi^{3}=ɔ^{3} i^{2} miʔ^{0} ɹɔŋ^{3}-tʌ^{0}-tʰuk^{0}-ŋe^{2}-m-ɔʔ^{0}-ɛ^{3}=laŋ^{2}

COS-AUX-1PL=DEF=at Q.AFF person together-RECP-shout-loud-NEG-3-REV.NEG=indeed

‘When we walked and walked, when we went and went, people were calling one another.’

(94) tɕʌm^{2}, tɕʌm^{2} ʌŋ^{2} ta^{1} ɔ^{2}.

tɕʌm^{2} tɕʌm^{2} ʌŋ^{2}-t-a^{1} ɔ^{2}

what what COP-PST EXCLAM

‘‘What has happened?’’

(95) tɕʌm^{2} tɕʌm^{2} ʌŋ^{2} ta^{1} ɔ^{2} ta^{3} ɹɛʔ^{0}.

tɕʌm^{2} tɕʌm^{2} ʌŋ^{2}-t-a^{1} ɔ^{2}=ta^{3} ɹɛʔ^{0}

what what COP-PST-3 EXCLAM=QUOT then

‘‘Wat happened?’ they said.’

(96) nʌk^{0} ɔ^{2} ba^{3} ɹi^{2} nɔk^{0} haʔ^{0} ɹaʔ^{0} ʌŋ^{2} na^{3} lɛ^{3}?

nʌk^{0} ɔ^{2} ba^{3}ɹi^{2}nɔk^{0} haʔ^{0} ɹaʔ^{0} ʌŋ^{2}-n-a^{3}=lɛ^{3}

PROH EXCLAM which land speech COP-FUT-3=FOC

‘‘Wait a second, which tribe’s language will they speak?’’

(97) ɹʌŋ^{2} paŋ^{3} ɹaʔ^{0} ti^{1} hiʔ^{0} tʌŋ^{2} haʔ^{0} ɹaʔ^{0} ʌŋ^{2} na^{3} lɛ^{3} ta^{3}.

ɹʌŋ^{2}paŋ^{3} ɹaʔ^{0} ti^{1} hiʔ^{0}-tʌŋ^{2} haʔ^{0} ɹaʔ^{0} ʌŋ^{2}-n-a^{3}=lɛ^{3}=ta^{3}

Rangpang speech or 1INCL-PL land speech COP-FUT-3=FOC=QUOT

‘‘Will it be Rangpang or our own language?’ we said.’

(98) ka^{1} ɹɔʔ^{0} ka^{1} ɹɔʔ^{0} sɛ^{3} ʌŋ^{2} i^{3} t^{h}ɔ^{3} i^{2}, xɨm^{3} ɟɔŋ^{2} te^{2} tʌŋ^{2} na^{3} i^{2},

ka^{1}-ɹɔʔ^{0} ka^{1}-ɹɔʔ^{0} sɛ^{3}-ʌŋ^{2}-i^{3}=t^{h}i^{3}=ɔ^{3} i^{2} xɨm^{3}-ɟɔŋ^{2}-te^{2}=tʌŋ^{2}=na^{3} i^{2}

go-CNT go-CNT COS-AUX-1PL=DEF=at Q.AFF Khimyong-PERS=PL=PRT Q.AFF

nɨŋ^{2} a^{1} hɨm^{2} xaŋ^{1} ʃɔ^{3} pal^{3} βaʔ^{0} ʌŋ^{2} a^{3} t^{h}a^{2}

nɨŋ^{2}-a^{1} hɨm^{2} xaŋ^{1}=ʃɨ^{3}=ɔ^{3} pal^{3}-βaʔ^{0} ʌŋ^{2}-a^{3}=t^{h}i^{3}=a^{2}

3PL-POSS house back.of.house=DIST=at fence-bamboo COP-3=DEF=ABS

ɹɔŋ^{3} k^{h}ɔ^{1} ɛʔ^{0} ɹɔŋ^{3} tɔŋ^{2} tɕe^{2} mɔʔ^{0} ɛ^{3} laŋ^{2}.

ɹɔŋ^{3}-k^{h}ɔ^{1} ɛʔ^{0}ɹɔŋ^{3}-tɔŋ^{2}-tɕe^{2}-m-ɔʔ^{0}-ɛ^{3}=laŋ^{2}

together-cut.in.half.lengthwise do together-sit-PROG-NEG-3-REV.NEG=indeed

'When we went and went, the people of Khimyong, they were sitting together at the back of their house, splitting bamboo for a bamboo fence.'

(99) ŋa^{1} ba^{3} ba^{3} ɹi^{2} nɔk^{0} haʔ^{0} xɔŋ^{3} ɹaʔ^{0} na^{3} ɟu^{2} ta^{3}.

ŋa^{1}=ba^{3} ba^{3}ɹi^{2}nɔk^{0} haʔ^{0} xɔŋ^{3} ɹaʔ^{0}-n-a^{3} ɟu^{2}=ta^{3}

1SG=TOP which land come.out speak-FUT-3 MIT=QUOT

'I thought 'What language will they speak?''

(100) i^{3} ɹi^{3} ba^{3} ɹi^{2} haʔ^{0} t^{h}a^{2} laŋ^{2} tʌ^{0}pɨt^{0} tʌŋ^{1} i^{2},

i^{3}-ɹi^{3} ba^{3}ɹi^{2} haʔ^{0}=t^{h}i^{3}=a^{2}=laŋ^{2} tʌ^{0}-pɨt^{0}-t-ʌŋ^{1} i^{2}

PROX-PROX which village=DEF=ABS=indeed TR-ask-PST-1SG Q.AFF

xɨm^{3} ɟɔŋ^{2} bɔ^{3} laŋ^{2} ta^{3}.

xɨm^{3}-ɟɔŋ^{2}=bɔ^{3}=laŋ^{2}=ta^{3}.

Khimyong=indeed=indeed=QUOT

'I asked, 'Which village is this is?' and they said, 'Khimyong.''

(101) ʌki xɨm^{3} ɟɔŋ^{2} te^{2} i^{2} ta^{3}.

ʌki xɨm^{3}-ɟɔŋ^{2}-te^{2} i^{2}=ta^{3}

EXCLAM Khimyong-PERS Q.AFF=QUOT

''Oh! Khimyong people' I said.'

(102) nɨm^{1} ni^{3} ba^{3} ɹi^{2} kɔ^{2} βaŋ^{3} ɹɨn^{2} xiŋ^{3} tɕe^{2} ʃɨn^{2} ta^{3}.

nɨm^{1}-ni^{3} ba^{3}ɹi^{2} kɔ^{2}=βaŋ^{3} ɹɨn^{2} xiŋ^{3}-tɕe^{2}-ʃ-ɨn^{2}=ta^{3}

2PL-DU which direction=from PRT walk-PROG-DU-2PL=QUOT

''You two, from where have you been walking?' they said.'

(103) ba^{3} te^{2} ɹɛ^{3} bat^{0} mɔʔ^{0} ɛ^{3} laŋ^{2}, ɛ^{3} i^{3} ɹɔʔ^{0}

ba^{3}-te^{2}=ɹi^{3}=ɛ^{3} bat^{0}-m-ɔʔ^{0}-ɛ^{3}=laŋ^{2} ɛ^{3} i^{3}-ɹi^{3}=ɔʔ^{0}

2SG.POSS-grandfather=PROX=ERG say-NEG-3-REV.NEG=indeed EXCLAM PROX-PROX-at

xiŋ^{3} i^{3} ɹɔʔ^{0} tɨm^{2} xiŋ^{3} i^{3} ta^{3}.

xiŋ^{3} i^{3}-ɹi^{3}=ɔʔ^{0} tɨm^{2}-xiŋ^{3}-i^{3}=ta^{3}

walk PROX-PROX=at around-walk-1PL=QUOT

'Your grandfather said, 'Oh! We are just walking around.''

(104) ŋa^{1} ba^{3} le^{1} bat^{0} mɔŋ^{1} ɛ^{3} laŋ^{2}, nɔk^{0} ɔi^{2}, i^{2} ni^{3} lɛ^{3} tɕuŋ^{1}

ŋa^{1}=ba^{3} le^{1}-bat^{0}-m-ɔŋ^{1}-ɛ^{3}=laŋ^{2} nɔk^{0}=ɔi^{2} i^{2}-ni^{3}=lɛ^{3} tɕuŋ^{1}

1SG=TOP and-say-NEG-1SG-REV.NEG=indeed friend=VOC 1EXCL-DU=FOC lost

tɨk^{0} kɔ^{3} ʌŋ^{2} i^{3} ta^{3}.

tɨk^{0}=kɔ^{3} ʌŋ^{2}-i^{3}=ta^{3}

COS.COP=would COP-1PL=QUOT

'And I said, 'Oh friend, both of us got lost.''

(105) ʌki^{1} tɕuŋ^{1} tɨk^{0} i^{2}?

ʌki^{1} tɕuŋ^{1} tɨk^{0} i^{2}

EXCLAM lost COS.COP Q.AFF

''Oh really! You got lost, did you?''

(106) ba^{3} ɹi^{2} kɔ^{2} βaŋ^{3} ɹɨn^{2} tɕuŋ^{1} ti^{3} ʃɨn^{2} ta^{3}.

ba^{3}ɹi^{2} kɔ^{2}=βaŋ^{3} ɹɨn^{2} tɕuŋ^{1} ti^{3}-ʃ-ɨn^{2}=ta^{3}

which direction=from PRT lost COS.COP-DU-2PL=QUOT

''From where did you two get lost?' he said.'

(107) e^{2} ʃa^{2} ma^{1} pɨk^{0} ʌŋ^{2} a^{3} ʃi^{3} βaŋ^{3}, nʌm^{1} p^{h}e^{2}

e^{2}-ʃi^{3}=a^{2}=ma^{1} pɨk^{0} ʌŋ^{2}-a^{3}=ʃi^{3}=βaŋ^{3} nʌm^{1}p^{h}e^{2}

NPROX-DIST=ABS=DAT field COP-3=DIST=from Namphai

pɨk^{0} ʃi^{3} βaŋ^{3} t^{h}a^{2} bɔ^{3}.

pɨk^{0}=ʃi^{3}=βaŋ^{3}=t^{h}i^{3}=a^{2}=bɔ^{3}

field=DIST=from=DEF=ABS=indeed

‘‘From where that field is, from the Namphai field.’’

(108) tɕuŋ^{1} ti^{1} ɛʔ^{0} i^{3} nʌŋ^{3} sɛ^{3} t^{h}ɔk^{0} dɔk^{0} p^{h}i^{3} laŋ^{2}.

tɕuŋ^{1} ti^{3} ɛʔ^{0} i^{3}-nʌŋ^{3} sɛ^{3}-t^{h}ɔk^{0}dɔk^{0}-p^{h}-i^{3}=laŋ^{2}

lost COS.COP do PROX-to COS-arrive-CIS-1PL=indeed

‘‘We arrived here after being lost.’’

(109) ʌhβɛ tɕʌm^{1} mʌl^{2} tɕuŋ^{1} ti^{3} ʃɨn^{2} ta^{3}.

ʌhβɛ tɕʌm^{1}-mʌl^{2} tɕuŋ^{1} ti^{3}-ʃ-ɨn^{2}=ta^{3}

EXCLAM what-like lost COS.COP-DU-2PL=QUOT

‘‘Oh, how badly did you get lost!’ he said.’

(110) ka^{1} ɹi^{2} t^{h}a^{2} t^{h}ɔʔ^{0} e^{2} ʃi^{3} na^{3} ʃiŋ^{3} tɕʌk^{0} ti^{1} laŋ^{2} ta^{3}.

ka^{1}ɹi^{2}=t^{h}i^{3}=a^{2}=t^{h}ɔʔ^{0} e^{2}-ʃi^{3}=na^{3} ʃiŋ^{3}-tɕʌk^{0}-t-i^{1}=laŋ^{2}=ta^{3}

car=DEF=ABS=also NPROX-DIST=in put-PFV-PST-1PL=indeed=QUOT

‘‘Also, the car we have left over there.’’

(111) xɨm^{3} ʃi^{3} nʌŋ^{3} tɕa^{3} mun^{1} tʌŋ^{2} hɨm^{2} ba^{3} ɹi^{2} kɔ^{2} na^{3} tʌ^{0}pɨt^{0} ki^{1} ɛʔ^{0},

xɨm^{3}=ʃi^{3}=nʌŋ^{3} tɕa^{3}mun^{1}=tʌŋ^{2} hɨm^{2} ba^{3}ɹi^{2} kɔ^{2}=na^{3} tʌ^{0}-pɨt^{0}-ki^{1} ɛʔ^{0}

village=DIST=to Chamun=PL house which direction=in TR-ask-PRT do

tɕa^{3} mun^{1} tʌŋ^{2} i^{3} ɹi^{3} kɔ^{2} na^{3}.

tɕa^{3}mun^{1}=tʌŋ^{2} i^{3}-ɹi^{3} kɔ^{2}=na^{3}

Chamun=PL PROX-PROX direction=in

‘We asked in that village ‘where is the house of Chamun's family?’ and they said, ‘Chamun’s family is over there.’’

(112) ɟu^{3} ɹɔʔ^{0} ɟu^{3} ɹɔʔ^{0} ʌŋ^{2} ʃɨn^{2} ɟu^{2} tʌ^{0}bat^{0} mɔʔ^{0} ɛ^{3}.

ɟu^{3}-ɹɔʔ^{0}	ɟu^{3}-ɹɔʔ^{0}	ʌŋ^{2}-ʃ-ɨn^{2}	ɟu^{2}	tʌ^{0}-bat^{0}-m-ɔʔ^{0}-ɛ^{3}
go.down-CNT	go.down-CNT	AUX-DU-2PL MIT		TR-say-NEG-3-REV.NEG

‘‘Go down, go down, both of you!’ they said.’

(113) tɕea^{3} mun^{1} tʌŋ^{2} hɨm^{2} nʌŋ^{3} sɛ^{3} t^{h}u^{3} i^{3} t^{h}ɔ^{3}, tɕea^{3} mun^{1} βa^{1} tʌŋ^{2} hɨm^{2} nʌŋ^{3}

tɕea^{3}mun^{1}=tʌŋ^{2}	hɨm^{2}=nʌŋ^{3}	sɛ^{3}-t^{h}u^{3}-i^{3}=t^{h}i^{3}=ɔ^{3}	tɕea^{3}mun^{1}	βa^{1}=tʌŋ^{2}	hɨm^{2}=nʌŋ^{3}
Chamun=PL	house=to	COS-arrive-1PL=DEF=at	Chamnu	father=PL	house=to

t^{h}u^{3} ɛʔ^{0}, ʌki^{1} i^{3} p^{h}ɔ^{1} ni^{3} na^{1} ba^{3} ɹi^{2} kɔ^{2} βaŋ^{3}

t^{h}u^{3}	ɛʔ^{0}	ʌki^{1}	i^{3}-p^{h}ɔ^{1}	ni^{3}	na^{1}	ba^{3}ɹi^{2}	kɔ^{2}=βaŋ^{3}
arrive	do	EXCLAM	1SG.POSS-older.brother	and	older.sister	which	direction=from

ɹɨn^{2} a^{3} ta^{3}.

ɹɨn^{2}-a^{3}=ta^{3}

PRT-3=QUOT

‘When we reached the house of Chamun’s family, when we reached the house of Chamun’s father, he said, ‘Oh, my brother and sister, from where (did you come)?’’

(114) i^{2} ni^{3} lɛ^{3} tɕuŋ^{1} tɨk^{0} bɔ^{3} ʌŋ^{2} i^{3} laŋ^{2}.

i^{2}-ni^{3}=lɛ^{3}	tɕuŋ^{1}	tɨk^{0}=bɔ^{3}	ʌŋ^{2}-i^{3}=laŋ^{2}
1EXCL-DU=FOC	lost	COS.COP=indeed	COP-1PL=indeed

‘‘We two got lost.’’

(115) e^{2} nʌŋ^{3} βaŋ^{3} t^{h}u^{3} p^{h}i^{3} ta^{3}.

e^{2}-nʌŋ^{3}=βaŋ^{3}	t^{h}u^{3}-p^{h}-i^{3}=ta^{3}
NPROX-to=from	arrive-CIS-1PL=QUOT

‘‘From there we arrive here,’ we said.’

(116) ʌkɛ tɕʌm^{1} mʌl^{2} tɕuŋ^{1} ti^{3} ʃɨn^{2} tɨn^{1} ta^{3}.

ʌkɛ	tɕʌm^{1}-mʌl^{2}	tɕuŋ^{1}	ti^{3}-ʃ-ɨn^{2}-t-ɨn^{1}=ta^{3}
EXCLAM	what-like	lost	COS.COP-DU-2PL-PST-2PL=QUOT

‘‘Oh, how badly you two got lost!’ he said.’

(117) ɟuŋ^{2} βaŋ^{3} tʰʌ^{0}liŋ^{3} tɕʌk^{0} pʰin^{2} lɛ^{2} ta^{3}.

ɟuŋ^{2}=βaŋ^{3} tʰʌ^{0}-liŋ^{3}-tɕʌk^{0}-pʰ-in^{2}=lɛ^{2}=ta^{3}

water=from CAUS-drink-PFV-INV-2PL=FOC=QUOT

'We said, 'Give us water to drink!''

(118) ɟuŋ^{2} tʰa^{2} βaʔ^{0} ɹi^{2} nan^{3} su^{2} su^{2} ta^{3}.

ɟuŋ^{2}=tʰi^{3}=a^{2} βaʔ^{0}ɹi^{2} nan^{3}-su^{2}-su^{2}=ta^{3}

water=DEF=ABS EXCLAM dirty-INTENS-REDUP=QUOT

''Yuck, the water is very dirty!''

(119) kɔk^{0} ni^{3} ni^{3} sɛ^{3} le^{1} liŋ^{2} mi^{1} ɛ^{3} laŋ^{2}.

kɔk^{0}-ni^{3}-ni^{3}=sɛ^{3} le^{1}-liŋ^{2}-m-i^{1}-ɛ^{3}=laŋ^{2}

cup-two-two=already then-drink-NEG-1PL-REV.NEG=indeed

'We both drank two cups.'

(120) miʔ^{0} kʰuʔ^{0} miʔ^{0} ɹut^{0} tʰa^{2} sɛ^{3} xuːk^{0} βʌŋ^{1}.

miʔ^{0}-kʰuʔ^{0}-miʔ^{0}-ɹut^{0}=tʰi^{3}=a^{2} sɛ^{3}-xuːk^{0} βʌŋ^{1}

person-throat-person-throat=DEF=ABS COS-dry go.up

'Our throats had become dry.'

(121) i^{2} ni^{3} lɛ^{3} tɕuŋ^{1} tɨk^{0} bɔ^{3} ʌŋ^{2} ti^{1} ta^{3}.

i^{2}-ni^{3}=lɛ^{3} tɕuŋ^{1} tɨk^{0}=bɔ^{3} ʌŋ^{2}-t-i^{1}=ta^{3}

1EXCL-DU=FOC lost COS.COP=indeed COP-PST-1PL=QUOT

''We two got lost', we said.'

(122) ka^{1} ɹi^{2} tʰɔʔ^{0} e^{2} ʃi^{3} na^{3} ʃiŋ^{3} tɕʌk^{0} ti^{1} ɟu^{2} ta^{3} ba^{3}, dʌk^{0} lɔːt^{0} sɛ^{3}.

ka^{1}ɹi^{2}=tʰɔʔ^{0} e^{2}-ʃi^{3}=na^{3} ʃiŋ^{3}-tɕʌk^{0}-t-i^{1} ɟu^{2}=ta^{3}=ba^{3} dʌk^{0}-lɔːt^{0}=sɛ^{3}

car=also NPROX-DIST=in put-PFV-PST-1PL MIT=QUOT=TOP SUPER-far=already

''We parked our car far away.''

(123) ʃi^{3} na^{3} dʌk^{0} lɔːt^{0} na^{3} sɛ^{3} ka^{1} ɹi^{2} tʰa^{2} e^{2} tʰɔ^{3} i^{2} ni^{3} tʰa^{2}

ʃi^{3}=na^{3} dʌk^{0}-lɔːt^{0}=na^{3}=sɛ^{3} ka^{1}ɹi^{2}=tʰi^{3}=a^{2} e^{2}tʰɔ^{3} i^{2}-ni^{3}=tʰi^{3}=a^{2}

DIST=in SUPER-far=in=already car=DEF=ABS and 1EXCL-DU=DEF=ABS

nʌm^{1} pʰe^{2} ɹi^{3} na^{3} tʰu^{3} ti^{1}, xɨm^{3} ɟɔŋ^{2} nʌm^{1} pʰe^{2} ɹɔ^{3}.

nʌm^{1}pʰe^{2}=ɹi^{3}=na^{3} tʰu^{3}-t-i^{1} xɨm^{3}-ɟɔŋ^{2} nʌm^{1}pʰe^{2}=ɹi^{3}=ɔ^{3}

Namphai=PROX=in arrive-PST-1PL Khimyong Namphai=PROX=at

''The car is over there, far away, and we arrived here at Khimyong Namphai.''

(124) e^{2} tʰɔ^{3} ba^{3} tɕa^{3} mun^{1} βa^{1} ni^{3} a^{3} ba^{3} te^{2} ɹa^{2} kɔ^{3} lɛ^{3} xʌŋ^{1} ɛʔ^{0}

e^{2}tʰɔ^{3}=ba^{3} tɕa^{3}mun^{1} βa^{1} ni^{3}a^{3} ba^{3}-te^{2}=ɹi^{3}=a^{2}=kɔ^{3}=lɛ^{3} xʌŋ^{1} ɛʔ^{0}

and=TOP Chamun father and 2SG.POSS-grandfather=PROX=ABS=PRT=FOC go.up do

ka^{1} ɹi^{2} tʰa^{2} sɛ^{3} kɔ^{3} te^{2} hɔl^{3} xʌŋ^{1} ta^{1}.

ka^{1}ɹi^{2}=tʰi^{3}=a^{2}=sɛ^{3}=kɔ^{3} te^{2} hɔl^{3} xʌŋ^{1}-t-a^{1}

car=DEF=ABS=already=PRT take bring go.up-PST-3

'The father of Chamun and your grandfather went to bring the car.'

(125) te^{2} hɔl^{3} xʌŋ^{1} ŋa^{1} ɹi^{3} kʌm^{2} βe^{3} bʌn^{3} nɨŋ^{2}, xɨm^{3} ɟɔŋ^{2} te^{2} hɨm^{2} ʃɔʔ^{0}

te^{2} hɔl^{3} xʌŋ^{1} ŋa^{1} ɹi^{3}kʌm^{2} βe^{3}-bʌn^{3} nɨŋ^{2} xɨm^{3}-ɟɔŋ^{2}-te^{2} hɨm^{2}=ʃi^{3}=ɔʔ^{0}

take bring go.up 1SG a.long.time ITER-wait 3PL Khimyong-PERS house=DIST=at

tɔŋ^{3} ɛʔ^{0} lɛ^{3}.

tɔŋ^{3} ɛʔ^{0}=lɛ^{3}

sit do=FOC

'They went to bring it, and I was waiting for them for a long time, in the house of the Khimyong people.'

(126) e^{2} tʰɔ^{3} i^{3} ɹɔ^{3} lʌm^{2} tʰɔl^{2} ʌ^{0}tʰa^{1} i^{2}?

e^{2}tʰɔ^{3} i^{3}-ɹi^{3}=ɔ^{3} lʌm^{2}=tʰɔl^{2} ʌ^{0}-tʰa^{1} i^{2}

and PROX-PROX=at road=short NMLZ-EXIST Q.AFF

''Will there be a shortcut?''

(127) e^{2} ɹa^{2} ɹɔʔ^{0} lʌm^{2} tʰɔl^{2} ɹɔʔ^{0} xʌŋ^{1} i^{3} ta^{3}.

e^{2}-ɹi^{3}=a^{2}=ɹi^{3}=ɔʔ^{0} lʌm^{2}=tʰɔl^{2}=ɹi^{3}=ɔʔ^{0} xʌŋ^{1}-i^{3}=ta^{3}

NPROX-PROX=ABS=PROX=at road=short=PROX=at go.up-1PL=QUOT

''We will take this shortcut.''

(128) tʰa^{2} ɔ^{3} tʰɔʔ^{0} ɹi^{3} kʌm^{2} hun^{3} xʌŋ^{1} mɔʔ^{0} ɛ^{3},

tʰa^{2}=ɔ^{3}tʰɔʔ^{0} ɹi^{3}kʌm^{2} hun^{3} xʌŋ^{1}-m-ɔʔ^{0}-ɛ^{3}

but=even.though a.long.time truly go.up-NEG-3-REV.NEG

ʃɔt^{0} kat^{0} ʌŋ^{2} kɔ^{3} ɔ^{3} tʰɔʔ^{0}.

ʃɔt^{0}kat^{0} ʌŋ^{2}=kɔ^{3}=ɔ^{3}tʰɔʔ^{0}

shortcut COP=would=even.though

'Nevertheless, even though there would be a shortcut, it took them a long time to go.'

(129) xʌŋ^{1} ɛʔ^{0} ka^{1} ɹi^{2} tʰa^{2} sɛ^{3} hɔl^{3} ɟɔk^{0}.

xʌŋ^{1} ɛʔ^{0} ka^{1}ɹi^{2}=tʰi^{3}=a^{2} sɛ^{3}-hɔl^{3} ɟɔk^{0}

go.up do car=DEF=ABS COS-bring go.down

'They went and brought the car.'

(130) e^{2} tʰɔ^{3} sɛ^{3} hɨm^{2} nʌŋ^{3} sɛ^{3} tʰu^{3} taʔ^{0} pʰi^{3} ɟɔ^{2}.

e^{2}tʰɔ^{3}=sɛ^{3} hɨm^{2}=nʌŋ^{3} sɛ^{3}-tʰu^{3}-taʔ^{0}-pʰ-i^{3} ɟɔ^{2}

and=already house=to COS-arrive-PST-CIS-1PL MIT

'And then we arrived home.'

(131) hɨm^{2} te^{2} ɔʔ^{0} lɛ^{2} kʌp^{0} tʌ^{0}tʰɔl^{3} lʌp^{0} mi^{1}.

hɨm^{2}-te^{2}=ɔʔ^{0}=lɛ^{2} kʌp^{0} tʌ^{0}-tʰɔl^{3}lʌp^{0}-m-i^{1}

house-PERS=at=FOC succeed TR-contact-NEG-1PL

'We were not able to make contact with the people at home.'

(132) ni^{3} mi^{2} ni^{3} sa^{1} nu^{1} ma^{3} lɛ^{3} kʌp^{0} ʃiŋ^{3} mi^{1}

ni^{3}mi^{2} ni^{3} sa^{1} nu^{1}=ma^{3}=lɛ^{3} kʌp^{0} ʃiŋ^{3}-m-i^{1}

Nemi and child mother=DAT=FOC succeed put-NEG-1PL

pɨk^{0} nʌŋ^{3} ka^{1} ni^{3} ta^{3} tʰɔʔ^{0}.

pɨk^{0}=nʌŋ^{3} ka^{1}-n-i^{3}=ta^{3}=tʰɔʔ^{0}

field=to go-FUT-1PL=QUOT=also

'We also didn't tell to Nemi and her mom 'we will be going to the field.''

(133) u⁰tɕuŋ¹ ʌŋ² i³ ʝɔ³ laŋ² tɕʌm¹ mʌl² lɛʔ⁰ sɛ³ bi³ pʰʌ⁰ni³

u⁰-tɕuŋ¹ ʌŋ²-i³=ʝɔ³=laŋ² tɕʌm¹-mʌl²=lɛʔ⁰ sɛ³-bi³-pʰʌ⁰-n-i³

NMLZ-lost COP-1PL=COND=indeed like-what=FOC COS-search-INV-FUT-1PL

hɨm² te² tʰɔʔ⁰.

hɨm²-te²=tʰɔʔ⁰

house-PERS=also

'If we get lost, how will our family members look for us!'

(134) mɔ³ bɛl³ kʌp⁰ hɔl³ ti¹ ʝɔ³ ba³, mɔ³ bɛl³ ɔʔ⁰ pʰɔn³ βaŋ³ ti¹.

mɔ³bɛl³ kʌp⁰ hɔl³-t-i¹=ʝɔ³=ba³ mɔ³bɛl³=ɔʔ⁰ pʰɔn³-βaŋ³-t-i¹

mobile succeed bring-PST-1PL=COND=TOP mobile=at call-would-PST-1PL

'If only we had brought a mobile, we would have called.'

(135) nik⁰ a³ ʝɔ³ kɔm² si² ka³ ɹi² ʃa² pan² βat⁰ ɛʔ⁰, mɔ³ bɛl³ ʃa² mɔk⁰ lʌt⁰

nik⁰=a³ ʝɔ³ kɔm²si²-ka³ɹi²=ʃi³=a² pan² βat⁰ ɛʔ⁰ mɔ³bɛl³=ʃi³=a² mɔk⁰-lʌt⁰

later=at MIT car=DIST=ABS break hit do mobile=DEF=ABS perhaps-pull.out

pe² tɕu³ βʌn³ la¹ ɔ³.

pe²-tɕu³-βʌn³ la¹ɔ³

take-away-COS might

'Later on, somebody could have broken the car (window), and might have taken away the mobile.'

(136) e² tʰɔ³ ŋɨn² tʰɔʔ⁰ ha³ ʝat⁰ tʰʌ⁰ɹɔːk⁰ ti¹ sʌ⁰nʌt⁰ ʌ⁰tʰa¹ ʌŋ² ta¹ ɹi³,

e²tʰɔ³ ŋɨn²=tʰɔʔ⁰ ha³ʝat⁰ tʰʌ⁰ɹɔːk⁰ ti¹ sʌ⁰nʌt⁰ ʌ⁰-tʰa¹ ʌŋ²-t-a¹=ɹi³

and money=also thousand six or seven NMLZ-EXIST COP-PST-3=INFER

ka¹ ɹi² ʃɔ³ lɛ³.

ka¹ɹi²=ʃi³=ɔ³=lɛ³

car=DIST=at=FOC

'And money, six or seven thousand rupees, was also in the car.'

(137) e^{2} ʃa^{2} mɔk^{0} pe^{2} tɕi^{3} βʌn^{3} na^{3} kɔm^{2} si^{3} ka^{2} ni^{3} ɟa^{3} tʌ^{0}tɕɔŋ^{3} ɛʔ^{0} ta^{1}.

e^{2}-ʃi^{3}=a^{2} mɔk^{0}-pe^{2}-tɕi^{3}-βʌn^{3}-n-a^{3} kɔm^{2}si^{3}-ka^{2}ni^{3}-ɟa^{3} tʌ^{0}-tɕɔŋ^{3} ɛʔ^{0}-t-a^{1}

NPROX-DIST=ABS perhaps-take-away-COS-FUT-3 opium-addict TR-meet do-PST-3

'That could have been taken away by opium addicts coming across it.'

(138) tʌŋ^{2} βaŋ^{3} ma^{3} ɹʌp^{0} tʌ^{0}t^{h}ɨn^{3}.

tʌŋ^{2}βaŋ^{3}=ma^{3} ɹʌp^{0} tʌ^{0}-t^{h}ɨn^{3}.

stuff=DAT more INTR-think

'Thinking about our things.'

(139) haŋ^{2} kɔ^{2} na^{3} i^{2} ni^{3} ɹi^{3} tɕʌm^{1} mʌl^{2} sɛ^{3} ʌŋ^{2} βaŋ^{3} ki^{1} ta^{3}.

haŋ^{2} kɔ^{2}=na^{3} i^{2}-ni^{3}=ɹi^{3} tɕʌm^{1}-mʌl^{2} sɛ^{3}-ʌŋ^{2}-βaŋ^{3}-ki^{1}=ta^{3}

opposite direction=in 1EXCL-DU=PROX what-like COS-COP-would-PRT=QUOT

'On the other hand, both of us were like 'what will happen to us?''

(140) tʌ^{0}t^{h}ɨn^{3} tʌk^{0} ɛʔ^{0} sɛ^{3} le^{1} lɨŋ^{3} xiŋ^{3} ti^{1} sɛ^{3}.

tʌ^{0}-t^{h}ɨn^{3}tʌk^{0} ɛʔ^{0}=sɛ^{3} le^{1}-lɨŋ^{3}-xiŋ^{3}-t-i^{1}=sɛ^{3}

INTR-worry do=COMP and-circle-walk-PST-1PL=COMP

'We were worrying and going around.'

(141) i^{3} mɔːt^{0} ʌ^{0}mʌŋ^{1} le^{1} ʃiʔ^{0} ɹɔʔ^{0} sɛ^{3} le^{1} ʌŋ^{2} ta^{1}

i^{3}-mɔːt^{0} ʌ^{0}-mʌŋ^{1} le^{1}-ʃiʔ^{0}-ɹɔʔ^{0}=sɛ^{3} le^{1}-ʌŋ^{2}-t-a^{1}

1SG.POSS-dream and-dream then-be.bad-CNT=COMP then-AUX-PST-3

ɹʌŋ^{2} pʌl^{3} t^{h}ɔ^{3} ɔ^{3} t^{h}ɔʔ^{0}.

ɹʌŋ^{2}-pʌl^{3}=t^{h}i^{3}=ɔ^{3}=ɔ^{3}t^{h}ɔʔ^{0}

sky-night=DEF=at=despite

'Nevertheless, my dreams also become bad at night.'

(142) mʌn^{1} p^{h}ʌn^{3} ʃa^{2} e^{2} ʃi^{3} tan^{3} hun^{3} ɟu^{2}.

mʌn^{1}p^{h}ʌn^{3}=ʃi^{3}=a^{2} e^{2}-ʃi^{3}=tan^{3} hun^{3} ɟu^{2}

story=DEF=ABS NPROX-DIST=as.much.as truly MIT

'That was the story.'

3 The accidental invention of rice beer

Metadata summary

Recording:	20160106_04.ed
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Speaker:	Yonglat Khimhun, Munkap Khimhun
Recorded and glossed by:	Mijke Mulder
Translation consultants:	Tchithan Techi, Munkap Khimhun, Munson Khimhun

Text

MKK: ɟɔ^{3} i^{3} pʰɔ^{1}, nʌk^{0} βe^{3} u^{3}. nʌk^{0} βe^{3} tʰa^{2} ɔ^{3} ɟɔ^{3}. ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0}. e^{2} ʃa^{2} miʔ^{0} nu^{1} ʃɨ^{3} ba^{3} ɹi^{2} βaŋ^{3} ʌŋ^{2} ta^{1}. e^{2} tʰi^{3} pʰʌŋ^{3} tɕʌm^{2} miʔ^{0} nu^{1}. e^{2} tʰɔ^{3} tɕʌm^{1} mʌl^{2} lɛʔ^{0} ʌŋ^{2} ta^{1}. e^{2} tʰi^{3} [unclear] ma^{3} nɛ^{3} ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0} na^{2} nʌk^{0} hɔl^{3} ta^{3} bat^{0} ta^{1} ɹi^{3} i^{2}.

YK: ɨn^{2}.

MKK: ɹɛʔ^{0} e^{2} tʰi^{3} βaŋ^{3} pʰʌŋ^{3} stat^{0} u^{3}. tɕʌm^{1} mʌl^{2} ʌŋ^{2} ta^{1}. tʰaŋ^{3} a^{3} bat^{0} tu^{1} tʰi^{3} lɛ^{2}.

YK: ɨn^{2}. miʔ^{0} nu^{1} ʃɨ^{3} ma^{3} ŋaʔ^{0} kuŋ^{1} ni^{3} ŋaʔ^{0} luk^{0} ʃa^{2} u^{3} nu^{1} ni^{3} βa^{1} ʌŋ^{2} ta^{1}.

MKK: ɟɔ^{3}.

YK: e^{2} tʰa^{2} hɔl^{3} tɕʌk^{0} ta^{1}. ɹɛʔ^{0} piʔ^{0} tʰɛ^{3} ba^{3} ɟa^{3} ʃɨʔ^{0} kʌp^{0} ta^{1} ti^{3}. i^{3} nu^{1} βa^{1} ŋʌm^{2} pʰʌk^{0} mɔŋ^{1} ta^{3}. ɹʌŋ^{2} te^{2} ʌŋ^{2} ta^{1} ɹi^{3}.

MKK: ɟɔ^{3}, tɕʌm^{2} ma^{3}, tɕʌm^{2} tʰa^{2} ta^{1} ta^{3} i^{2}. ɟɔ^{3}.

YK: puːk^{0} ɹa^{2} pʰʌŋ^{3} luŋ^{2} mʌt^{0} mɛ^{2} tɔk^{0} tʰɔ^{3} xɔŋ^{1} ta^{1} ta^{3} mʌn^{1} pʰʌn^{3} na^{3} bat^{0} a^{3}. ɹʌŋ^{2} te^{2} nu^{1} tʰɛ^{3} bat^{0} ta^{1} ti^{3}, ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0} ɹa^{2} i^{3} nu^{1} βa^{1} ɟu^{2}, i^{3} ɹi^{3} nʌk^{0} hɔl^{3} u^{3} ɟu^{2} ta^{3}. u^{3} hɨm^{2} te^{2} βa^{1} ma^{3} bat^{0} ta^{1} ɟu^{2}. e^{2} tʰa^{2} ɹɨn^{2} u^{3} hɨm^{2} te^{2} βa^{1} tʰɛ^{3} ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0} tʰa^{2} hɔl^{3} ta^{1} ti^{3}. piʔ^{0} tʰɛ^{3} i^{3} nu^{1} βa^{1} tʌŋ^{2} tʰa^{2} hɔl^{3} tu^{1} ta^{3}. ŋa^{1} a^{3} i^{3} ɹa^{2} pʰʌk^{0} mɔŋ^{1}. piʔ^{0} tʰa^{2} e^{2} tʰɔʔ^{0} sɛ^{3} ɟɔl^{2} tɕu^{3} βʌŋ^{1} ta^{1}. ɹɛʔ^{0} u^{3} hɨm^{2} te^{2} βa^{1} tʰɛ^{3} tat^{0} hʌl^{1} ta^{1} ti^{3}. βʌŋ^{1} pʰu^{3} lɛ^{2} ta^{1} tat^{0} hʌl^{1} kɔ^{3} ɛʔ^{0} tʰɔʔ^{0}, piʔ^{0} tʰa^{2} βʌŋ^{1} mɔʔ^{0} hun^{3} ʌŋ^{2} ta^{1}. ɹɛʔ^{0} e^{2} tʰɔ^{3} u^{3} hɨm^{2} te^{2} βa^{1} tʰɛ^{3} i^{3} ɹi^{3} tɨl^{2} ɹi^{3} mɛ^{3} saʔ^{0} u^{3} ɟu^{2} ta^{3}. ɹu^{1} tʰa^{2} tɕɔn^{3} duːk^{0} ɛʔ^{0}, e^{2} tʰɔʔ^{0} tɨl^{2} tʰa^{2} pʌk^{0} kɔʔ^{0} ta^{1}. tɨl^{2} tat^{0} pʌk^{0} kɔʔ^{0} a^{3} tʰa^{2} tʰɔʔ^{0} saʔ^{0} mɔʔ^{0} ʌŋ^{2} ta^{1}. i^{3} nʌp^{0} a^{3} nʌk^{0} ka^{1} pʰu^{3} ta^{3} bat^{0} ta^{1}, u^{3} hɨm^{2} te^{2} βa^{1} tʰi^{3} ma^{3}. u^{3} pʰʌk^{0} ʌ^{0}na^{3} ɟʌp^{0} ɟʌp^{0} sɛ^{3} bʌn^{3} laŋ^{3} a^{3} tʰa^{2} ti^{3}, u^{3} hɨm^{2} te^{2} nu^{1} tʰi^{3} ma^{3} bat^{0} ta^{1} nʌŋ^{1} tʰa^{2} i^{3} ɹa^{2} sɛ^{3} tʌ^{0}hun^{3} tu^{1} i^{2} ta^{3}. u^{3} sa^{1} ɟʌm^{2} na^{3} laŋ^{3} tɕe^{2} ta^{1} tʰɔ^{3} piʔ^{0} a^{3} i^{3} ɹa^{2} tat^{0} pʌk^{0} kɔʔ^{0} tʌŋ^{1} ta^{3} bat^{0} ta^{1}. tɨl^{2} tʰa^{2} tɨŋ^{2} ɛʔ^{0} pi^{2} ma^{3} tʌ^{0}hun^{3} ta^{1}. i^{3} ɹɛʔ^{0} piʔ^{0} a^{3} e^{2} tʰa^{2} tʰak^{0} kʌk^{0} a^{3} tʰɔ^{3} kʰʌm^{2} ma^{3} tʌ^{0}hun^{3} ti^{3} ta^{1}, ɹu^{1} tuŋ^{3} kaŋ^{2} ɔʔ^{0}. e^{2} tʰi^{3} βaŋ^{3} i^{2} a^{3} pi^{2} ɹa^{2} kʌp^{0} ti^{1}. pi^{2} ɹu^{1} tʌ^{0}mɨŋ^{3} i^{3}, ɹa^{2}.

Translation

MKK: Okay, brother, not yet. Not yet, please. Catfish and ‘frog fish’. That woman was from where? That beginning, a woman. And what it was like. That [unclear] I mean catfish and frog fish, she said, ‘Don’t bring them’, right?

YK: Yes.

MKK: Then first start from there. As it was. Like you have just said.

YK: Yes. The catfish and frog fish were the parents of this woman.

MKK: Okay.

YK: But he brought them. Then she took it badly. ‘I do not eat the meat of my parents’ she said. She was from the sky, you see.

MKK: Okay, why, why did he do that? Okay.

YK: At the creation and destruction time, this is where the elephant came from, they say in the story. The woman from the sky said, ‘These are my parents. Do not bring catfish and frog fish.’ She said this to her husband. But her husband brought catfish and frog fish. She said, ‘You brought my parents. I do not eat this.’ She then ran away from there. Then her husband tried to call her. When he called ‘Come here!’, she did not come. Then her husband said, ‘This rice you can eat.’ He cut a rope and plucked it open and with that he hung up a bag of rice for her. She did not eat the rice that he tried to hang up with a rope for her. And she said, ‘Do not come tomorrow.’ When she was standing and flapping her ears, he said to his wife ‘Did you turn into this?’ While she was standing with her son, he said, ‘I tried to hang this up for you.’ When the rice was smelling, it became yeast. Then, when she tried to bite it, it had turned into rice beer, because of the rope. From there we have this yeast. We call it yeast rope, this.

Glosses

(1) MKK: ɟɔ^{3} i^{3} p^{h}ɔ^{1}, nʌk^{0} βe^{3} u^{3}.

ɟɔ^{3}	i^{3}-p^{h}ɔ^{1}	nʌk^{0}-βe^{3}-u^{3}
yes	1SG.POSS-older.brother	PROH-yet-2SG

MKK: ‘Okay, brother, not yet.’

(2) nʌk^{0} βe^{3} t^{h}a^{2} ɔ^{3} ɟɔ^{3}.

nʌk^{0}-βe^{3}	t^{h}=a^{2}	ɔ^{3}	ɟɔ^{3}.
PROH-yet	DEF=ABS	EXCLAM	MIT

‘Not yet, please.’

(3) ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0}.

ŋaʔ^{0}-kuŋ^{1} ŋaʔ^{0}-luk^{0}

catfish fish-frog

‘Catfish and ‘frog fish’.’

(4) e^{2} ʃa^{2} miʔ^{0} nu^{1} ʃi^{3} ba^{3} ɹi^{2} βaŋ^{3} ʌŋ^{2} ta^{1}.

e^{2}-ʃi^{3}=a^{2} miʔ^{0}-nu^{1}=ʃi^{3} ba^{3}ɹi^{2}=βaŋ^{3} ʌŋ^{2}-t-a^{1}

NPROX-DIST=ABS person-F=DIST which=from COP-PST-3

‘That woman was from where?’

(5) e^{2} t^{h}i^{3} p^{h}ʌŋ^{3} tɕʌm^{2} miʔ^{0} nu^{1}.

e^{2}-t^{h}i^{3} p^{h}ʌŋ^{3} tɕʌm^{2} miʔ^{0}-nu^{1}

NPROX-DEF begin what person-F

‘That beginning, a woman.’

(6) e^{2} t^{h}ɔ^{3} tɕʌm^{1} mʌl^{2} lɛʔ^{0} ʌŋ^{2} ta^{1}.

e^{2}t^{h}ɔ^{3} tɕʌm^{1}=mʌl^{2}=lɛʔ^{0} ʌŋ^{2}-t-a^{1}

and what=like=FOC COP-PST-3

‘And what it was like.’

(7) e^{2} t^{h}i^{3} [unclear] ma^{3} nɛ^{3} ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0} na^{2} nʌk^{0} hɔl^{3} ta^{3}

e^{2}-t^{h}i^{3} [unclear] ma^{3}nɛ^{3} ŋaʔ^{0}-kuŋ^{1} ŋaʔ^{0}-luk^{0}=ni^{3}=a^{2} nʌk^{0}-hɔl^{3}=ta^{3}

NPROX-DEF [unclear] like[123] catfish fish-frog=MED=ABS PROH-bring=QUOT

bat^{0} ta^{1} ɹi^{3} i^{2}.

bat^{0}-t-a^{1}=ɹi^{3} i^{2}

say-PST-3=INF Q.AFF

‘That [unclear] I mean catfish and frog fish, she said, ‘Don’t bring them’, right?’

[123] Indo-Aryan loan.

(8) YK: ɨn^{2}.

ɨn^{2}

yes

YK: ‘Yes.’

(9) MKK: ɹɛʔ^{0} e^{2} tʰi^{3} βaŋ^{3} pʰʌŋ^{3} stat^{0} u^{3}.

ɹɛʔ^{0} e^{2}-tʰi^{3}=βaŋ^{3} pʰʌŋ^{3} stat^{0}-u^{3}

then NPROX-DEF=from begin start[124]-2SG

MKK: ‘Then first start from there.’

(10) tɕʌm^{1} mʌl^{2} ʌŋ^{2} ta^{1}.

tɕʌm^{1}=mʌl^{2} ʌŋ^{2}-t-a^{1}

what=like COP-PST-3

‘As it was.’

(11) tʰaŋ^{3} a^{3} bat^{0} tu^{1} tʰi^{3} lɛ^{2}.

tʰaŋ^{3}=a^{3} bat^{0}-t-u^{1}=tʰi^{3}=lɛ^{2}.

now=at say-PST-2SG=DEF=FOC

‘Like you have just said.’

(12) YK: ɨn^{2}.

ɨn^{2}

yes

YK: ‘Yes.’

(13) miʔ^{0} nu^{1} ʃi^{3} ma^{3} ŋaʔ^{0} kuŋ^{1} ni^{3} ŋaʔ^{0} luk^{0} ʃa^{2}

miʔ^{0}-nu^{1}=ʃi^{3}=ma^{3} ŋaʔ^{0}-kuŋ^{1} ni^{3} ŋaʔ^{0}-luk^{0}=ʃi^{3}=a^{2}

person-F=DIST=DAT catfish and fish-frog=DIST=ABS

[124] English loan.

u³ nu¹ ni³ βa¹ ʌŋ² ta¹.

u³-nu¹ ni³ βa¹ ʌŋ²-t-a¹.

3SG.POSS.DIST-mother and father COP-PST3

‘The catfish and frog fish were the parents of this woman.’

(14) MKK: ɟɔ³.

ɟɔ³

okay

MKK: ‘Okay.’

(15) YK: e² tʰa² hɔl³ tɕʌk⁰ ta¹.

e²tʰa² hɔl³-tɕʌk⁰-t-a¹

but bring-PFV-PST-3

YK: ‘But he brought them.’

(16) ɹɛʔ⁰ piʔ⁰ tʰɛ³ ba³ ɟa³ ʃiʔ⁰ kʌp⁰ ta¹ ti³.

ɹɛʔ⁰ piʔ⁰=tʰi³=ɛ³=ba³ ɟa³ʃiʔ⁰ kʌp⁰-t-a¹=ti³

then 3SG=DEF=ERG=TOP bad receive-PST-3=HS

‘Then she took it badly.’

(17) i³ nu¹ βa¹ ŋʌm² pʰʌk⁰ mɔŋ¹ ta³.

i³-nu¹-βa¹ ŋʌm² pʰʌk⁰-m-ɔŋ¹=ta³

1SG.POSS-mother-fathermeat eat-NEG-1SG=QUOT

‘‘I do not eat the meat of my parents’ she said.’

(18) ɹʌŋ² te² ʌŋ² ta¹ ɹi³.

ɹʌŋ²-te² ʌŋ²-t-a¹=ɹi³

sky-PERS COP-PST-3=INFER

‘She was from the sky, you see.’

(19) MKK: ɟɔ^{3}, tɕʌm^{2} ma^{3}, tɕʌm^{2} tʰa^{2} ta^{1} ta^{3} i^{2}.

ɟɔ^{3} tɕʌm^{2}=ma^{3} tɕʌm^{2}=tʰi^{3}=a^{2} ta^{1} ta^{3} i^{2}

okay what=DAT what=DEF=ABS [unclear][125] Q.AFF

MKK: 'Okay, why, why did he do that?'

(20) ɟɔ^{3}.

ɟɔ^{3}

okay

'Okay.'

(21) YK: puːk^{0} ɹa^{2} pʰʌŋ^{3} luŋ^{2} mʌt^{0} mɛ^{2} tɔk^{0} tʰɔ^{3} xɔŋ^{1} ta^{1} ta^{3}

puːk^{0}=ɹi^{3}=a^{2} pʰʌŋ^{3}luŋ^{2}mʌt^{0}mɛ^{2} tɔk^{0}=tʰi^{3}=ɔ^{3} xɔŋ^{1}-t-a^{1}=ta^{3}

elephant=PROX=ABS creation.destruction time=DEF=at come.up-PST-3=QUOT

mʌn^{1} pʰʌn^{3} na^{3} bat^{0} a^{3}.

mʌn^{1}pʰʌn^{3}=na^{3} bat^{0}-a^{3}

story=in say-3

YK: 'The elephant came into existence at the creation and destruction time, they say in the story.'

(22) ɹʌŋ^{2} te^{2} nu^{1} tʰɛ^{3} bat^{0} ta^{1} ti^{3}, ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0} ɹa^{2}

ɹʌŋ^{2}-te^{2}-nu^{1}=tʰi^{3}=ɛ^{3} bat^{0}-t-a^{1}=ti^{3} ŋaʔ^{0}-kuŋ^{1}ŋaʔ^{0}-luk^{0}=ɹi^{3}=a^{2}

sky-PERS-F=DEF=ERG say-PST-3=HS catfish fish-frog=PROX=ABS

i^{3} nu^{1} βa^{1} ɟu^{2}, i^{3} ɹi^{3} nʌk^{0} hɔl^{3} u^{3} ɟu^{2} ta^{3}.

i^{3}-nu^{1}-βa^{1} ɟu^{2} i^{3}-ɹi^{3} nʌk^{0}-hɔl^{3}-u^{3} ɟu^{2}=ta^{3}

1SG.POSS-mother-father MIT PROX-PROX PROH-bring-2SG MIT=QUOT

'The woman from the sky said, 'These are my parents. Do not bring catfish and frog fish.''

[125] The consultant was able to identify the sounds and tones in what was said by the speaker but not able to assign a meaning to them.

(23) u^{3} hɨm^{2} te^{2} βa^{1} ma^{3} bat^{0} ta^{1} ɟu^{2}.

u^{3}-hɨm^{2}-te^{2}-βa^{1}=ma^{3} bat^{0}-t-a^{1} ɟu^{2}

3SG.POSS.DIST-house-PERS-M=DAT say-PST-3 MIT

'She said this to her husband.'

(24) e^{2} t^{h}a^{2} ɹɨn^{2} u^{3} hɨm^{2} te^{2} βa^{1} t^{h}ɛ^{3}

e^{2}-t^{h}i^{3}=a^{2} ɹɨn^{2} u^{3}-hɨm^{2}-te^{2}-βa^{1}=t^{h}i^{3}=ɛ^{3}

NPROX-DEF=ABS PRT 3SG.POSS.DIST-house-PERS-M=DEF=ERG

ŋaʔ^{0} kuŋ^{1} ŋaʔ^{0} luk^{0} t^{h}a^{2} hɔl^{3} ta^{1} ti^{3}.

ŋaʔ^{0}-kuŋ^{1} ŋaʔ^{0}-luk^{0}=t^{h}i^{3}=a^{2} hɔl^{3}-t-a^{1}=ti^{3}

catfish fish-frog=DEF=ABS bring-PST-3=HS

'But her husband brought catfish and frog fish.'

(25) piʔ^{0} t^{h}ɛ^{3} i^{3} nu^{1} βa^{1} tʌŋ^{2} t^{h}a^{2} hɔl^{3} tu^{1} ta^{3}.

piʔ^{0}=t^{h}i^{3}=ɛ^{3} i^{3}-nu^{1}-βa^{1}=tʌŋ^{2}=t^{h}i^{3}=a^{2} hɔl^{3}-t-u^{1}=ta^{3}

3SG=DEF=ERG 1SG.POSS-mother-father=PL=DEF=ABS bring-PST-2SG=QUOT

'She said, 'You brought my parents.''

(26) ŋa^{1} a^{3} i^{3} ɹa^{2} p^{h}ʌk^{0} mɔŋ^{1}.

ŋa^{1}=a^{3} i^{3}-ɹi^{3}=a^{2} p^{h}ʌk^{0}-m-ɔŋ^{1}

1SG=ERG PROX-PROX=ABS eat.hard-NEG-1SG

''I do not eat this.''

(27) piʔ^{0} t^{h}a^{2} e^{2} t^{h}ɔʔ^{0} sɛ^{3} ɟɔl^{2} tɕu^{3} βʌŋ^{1} ta^{1}.

piʔ^{0}=t^{h}i^{3}=a^{2} e^{2}-t^{h}i^{3}=ɔʔ^{0} sɛ^{3}-ɟɔl^{2}-tɕu^{3}-βʌŋ^{1}-t-a^{1}

3SG=DEF=ABS NPROX-DEF=at COS-run-away-go.up-PST-3

'She then ran away from there.'

(28) ɹɛʔ^{0} u^{3} hɨm^{2} te^{2} βa^{1} t^{h}ɛ^{3} tat^{0} hʌl^{1} ta^{1} ti^{3}.

ɹɛʔ^{0} u^{3}-hɨm^{2}-te^{2}-βa^{1}=t^{h}i^{3}=ɛ^{3} tat^{0} hʌl^{1}-t-a^{1}=ti^{3}

then 3SG.POSS.DIST-house-PERS-M=DEF=ERG try call-PST-3=HS

'Then her husband tried to call her.'

(29) βʌŋ^{1} pʰu^{3} lɛ^{2} ta^{1} tat^{0} hʌl^{1} kɔ^{3} ɛʔ^{0} tʰɔʔ^{0},

βʌŋ^{1}-pʰ-u^{3}=lɛ^{2}=ta^{3} tat^{0} hʌl^{1} kɔ^{3} ɛʔ^{0}=tʰi^{3}=ɔʔ^{0}

go.up-CIS-2SG=FOC=QUOT try call would do=DEF=at

piʔ^{0} tʰa^{2} βʌŋ^{1} mɔʔ^{0} hun^{3} ʌŋ^{2} ta^{1}.

piʔ^{0}=tʰi^{3}=a^{2} βʌŋ^{1}-m-ɔʔ^{0} hun^{3} ʌŋ^{2}-t-a^{1}

3SG=DEF=ABS go.up-NEG-3 truly AUX-PST-3

'When he called 'Come here!', she did not come.'

(30) ɹɛʔ^{0} e^{2} tʰɔ^{3} u^{3} hɨm^{2} te^{2} βa^{1} tʰɛ^{3} i^{3} ɹi^{3} tɨl^{2} ɹi^{3}

ɹɛʔ^{0} e^{2}-tʰi^{3}=ɔ^{3} u^{3}-hɨm^{2}-te^{2}-βa^{1}=tʰi^{3}=ɛ^{3} i^{3}-ɹi^{3} tɨl^{2}=ɹi^{3}

then NPROX-DEF=at 3SG.POSS.DIST-house-PERS-M=DEF=ERG PROX-PROX rice=PROX

mɛ^{3} saʔ^{0} u^{3} ɟu^{2} ta^{3}.

mɛ^{3} saʔ^{0}-u^{3} ɟu^{2}=ta^{3}

ABIL eat.soft-2SG MIT=QUOT

'Then her husband said, 'This rice you can eat.''

(31) ɹu^{1} tʰa^{2} tɕɔn^{3} duːk^{0} ɛʔ^{0}, e^{2} tʰɔʔ^{0} tɨl^{2} tʰa^{2} pʌk^{0} kɔʔ^{0} ta^{1}.

ɹu^{1}=tʰi^{3}=a^{2} tɕɔn^{3} duːk^{0} ɛʔ^{0} e^{2}-tʰi^{3}=ɔʔ^{0} tɨl^{2}=tʰi^{3}=a^{2} pʌk^{0} kɔʔ^{0}-t-a^{1}

rope=DEF=ABS pluck cut do NPROX-DEF=at rice=DEF=ABS hang.up give-PST-3

'He cut a rope and plucked it open and with that he hung up a bag of rice for her.'

(32) tɨl^{2} tat^{0} pʌk^{0} kɔʔ^{0} a^{3} tʰa^{2} tʰɔʔ^{0} saʔ^{0} mɔʔ^{0} ʌŋ^{2} ta^{1}.

tɨl^{2} tat^{0} pʌk^{0} kɔʔ^{0}-a^{3}=tʰi^{3}=a^{2}=tʰi^{3}=ɔʔ^{0} saʔ^{0}-m-ɔʔ^{0} ʌŋ^{2}-t-a^{1}

rice try hang.up give-3=DEF=ABS=DEF=at eat.soft-NEG-3 AUX-PST-3

'Though he tried to hang up rice with a rope for her, she did not eat.'

(33) i^{3} nʌp^{0} a^{3} nʌk^{0} ka^{1} pʰu^{3} ta^{3} bat^{0} ta^{1},

i^{3}nʌp^{0}=a^{3} nʌk^{0}-ka^{1}-pʰ-u^{3}=ta^{3} bat^{0}-t-a^{1}

tomorrow=at PROH-go-INV-2SG=QUOT say-PST-3

u^{3} hɨm^{2} te^{2} βa^{1} t^{h}i^{3} ma^{3}.

u^{3}-hɨm^{2}-te^{2}-βa^{1}=t^{h}i^{3}=ma^{3}

3SG.POSS.DIST-house-PERS-M=DEF=DAT

'And she said, 'Do not come tomorrow.''

(34) u^{3} p^{h}ʌk^{0} ʌ^{0}na^{3} ɟʌp^{0} ɟʌp^{0} sɛ^{3} bʌn^{3} laŋ^{3} a^{3} t^{h}a^{2} ti^{3},

u^{3}-p^{h}ʌk^{0} ʌ^{0}-na^{3} ɟʌp^{0} ɟʌp^{0}-sɛ^{3} bʌn^{3} laŋ^{3}-a^{3}=t^{h}i^{3}=a^{2}=ti^{3}

3SG.POSS.DIST-ear and-ear wave wave-COMP wait stand-3=DEF=ABS=HS

u^{3} hɨm^{2} te^{2} nu^{1} t^{h}i^{3} ma^{3} bat^{0} ta^{1} nʌŋ^{1} t^{h}a^{2} i^{3} ɹa^{2}

u^{3}-hɨm^{2}-te^{2}-nu^{1}=t^{h}i^{3}=ma^{3} bat^{0}-t-a^{1} nʌŋ^{1}=t^{h}i^{3}=a^{2} i^{3}-ɹi^{3}=a^{2}

3SG.POSS.DIST-house-PERS-F=DEF=DAT say-PST=3 2SG=DEF=ABS PROX=PROX=ABS

sɛ^{3} tʌ^{0}hun^{3} tu^{1} i^{2} ta^{3}.

sɛ^{3}-tʌ^{0}-hun^{3}-t-u^{1} i^{2}=ta^{3}

COS-INTR-create-PST-2SG Q.AFF=QUOT

'He said to his wife, who was standing and already flapping her ears: 'Did you turn into this?''

(35) u^{3} sa^{1} ɟʌm^{2} na^{3} laŋ^{3} tɕe^{2} ta^{1} t^{h}ɔ^{3} piʔ^{0} a^{3} i^{3} ɹa^{2}

u^{3}-sa^{1}-ɟʌm^{2}=na^{3} laŋ^{3}-tɕe^{2}-t-a^{1}=t^{h}i^{3}=ɔ^{3} piʔ^{0}=a^{3} i^{3}-ɹi^{3}=a^{2}

3SG.POSS.DIST-company=in stand-PROG-PST-3=DEF=at 3SG=ERG PROX-PROX=ABS

tat^{0} pʌk^{0} kɔʔ^{0} tʌŋ^{1} ta^{3} bat^{0} ta^{1}.

tat^{0} pʌk^{0} kɔʔ^{0}-t-ʌŋ^{1}=ta^{3} bat^{0}-t-a^{1}

try hang.up give-PST-1SG=QUOT say-PST-3

'While she was standing with her son, he said, 'I tried to hang this up for you.''

(36) tɨl^{2} t^{h}a^{2} tɨŋ^{2} ɛʔ^{0} pi^{2} ma^{3} tʌ^{0}hun^{3} ta^{1}.

tɨl^{2}=t^{h}i^{3}=a^{2} tɨŋ^{2} ɛʔ^{0} pi^{2}=ma^{3} tʌ^{0}-hun^{3}-t-a^{1}

rice=DEF=ABS smell do yeast=DAT INTR-create-PST-3

'When the rice was smelling, it became yeast.'

(37) i^{3} ɹɛʔ^{0} piʔ^{0} a^{3} e^{2} t^{h}a^{2} t^{h}ak^{0} kʌk^{0} a^{3} t^{h}ɔ^{3} k^{h}ʌm^{2} ma^{3} tʌ^{0}hun^{3}

i^{3}ɹɛʔ^{0}	piʔ^{0}=a^{3}	e^{2}-t^{h}i^{3}=a^{2}	t^{h}ak^{0}	kʌk^{0}-a^{3}=t^{h}i^{3}=ɔ^{3}	k^{h}ʌm^{2}=ma^{3}	tʌ^{0}-hun^{3}
then	3SG=ERG	NPROX-DEF=ABS	try	bite-3=DEF=at	rice.beer=DAT	INTR-create

ti^{3} ta^{1}, ɹu^{1} tuŋ^{3} kaŋ^{2} ɔʔ^{0}.

ti^{3}-t-a^{1}	ɹu^{1}	tuŋ^{3}kaŋ^{2}=ɔʔ^{0}
COS.COP-PST-3	rope	because=at

'Then, when she tried to bite it, it had turned into rice beer, because of the rope.'

(38) e^{2} t^{h}i^{3} βaŋ^{3} i^{2} a^{3} pi^{2} ɹa^{2} kʌp^{0} ti^{1}.

e^{2}-t^{h}i^{3}=βaŋ^{3}	i^{2}=a^{3}	pi^{2}=ɹi^{3}=a^{2}	kʌp^{0}-t-i^{1}
NPROX-DEF=from	1EXCL-ERG	yeast=PROX=ABS	obtain-PST-1PL

'From there we have this yeast.'

(39) pi^{2} ɹu^{1} tʌ^{0}mɨŋ^{3} i^{3}, ɹa^{2}.

pi^{2}	ɹu^{1}	tʌ^{0}-mɨŋ^{3}-i^{3}	i^{3}-ɹi^{3}=a^{2}
yeast	rope	TR-name-1PL	PROX-PROX=ABS

'We call it yeast rope, this.'

Appendix D: Vocabulary

The following word list, consisting of 2610 entries, has been extracted by means of the software tool Pathway (SIL) from the lexicon I built in FLEx (SIL).[126] Following the convention used in this dissertation, tones are marked with the superscript numbers 1, 2, and 3 after the syllable (see section 3.2.1.1). Tonelessness is indicated with superscript zero. Tones were identified with the assistance of consultants. Lack of a superscript number indicates that the tone category of the syllable could not be determined yet, either because consultants did not agree on the category or because the lexeme could not be checked for tone with consultants yet for reasons of time. Long duration of round back vowels is indicated when known by means of <:>.

Since the form of nominalised verbs and adjectives is not fully predictable (see section 6.1.1.4), forms with the nominalising prefixes /u^0-/ and /ʌ^0-/ are listed separately. Nouns which contain the prefix /ʌ^0-/, i.e. nominalised adjectives, can best be translated into English as an adjectival form. Where Muklom uses nominalised adjectives, English tends to use predicative adjectives. The meaning of verbs with a valency changing prefix, /tʌ^0-/~/t^{h}ʌ^0-/, is not fully predictable (see section 6.1.7), hence these forms are listed separately as well.

Lexemes are listed according to their initial phoneme. The Writing Systems settings that I use in FLEx allow for phonetic as well as phonemic transcription, which is useful. At the same time, these settings cause some lexicon headings to subsume multiple onsets, for example /k^h/ and /k/. This can be changed, but then the option to type phonetic transcriptions will be lost, so for now I have chosen to leave it as it is.

a

[126] Downloaded from software.sil.org/pathway/ and software.sil.org/fieldworks/.

a$_4$ EXCLAM (call animal)
a^1~a^3~ɔʔ^0 3
a^2 *post* ABS
a$^3_2$ *post* in, at
a$^3_1$ MIT
ahβe EXCLAM (surprise)
ai^2 VOC
akɛ EXCLAM (surprise)
aki EXCLAM (surprise)
akβei EXCLAM (surprise)
alɛ EXCLAM (surprise)
aŋ EXCLAM (call cow)
aɹa$_2$ EXCLAM (surprise)
aɹe EXCLAM (surprise)

b

ba^1 lɨm^2 *n* place where the soul of the deceased dwells
ba$^3_1$ TOP
ba$^3_2$ 2SG.POSS
ba^3 ʝa^3 yesterday
ba^3 luk^0 1) when **2)** ever
ba^3 luk^0 luk^0 ɔ^1 sometimes
ba^3 luk^0 ɔ^1 when
ba^3 na^3 where
ba^3 nʌŋ^3 where to
ba^3 ɹa^2 which, what
ba^3 ɹe^3 which, what
ba^3 ɹi^2 which, what
ba^3 ɹɔʔ^0 where
ba^3 βa^1 sweetheart
bal^3 *n* **1)** edge **2)** seam **3)** tips of head hair
ban^2 *n* **1)** flour **2)** powder
ban^3 *n* silk (of corn)
baŋ$^2_1$ cut at the roots
baŋ$^2_3$ finished
baŋ$^2_4$ 1) *adj* deaf **2)** *v* be deaf
baŋ$^2_5$ 1) *adj* diluted, tasteless **2)** *v* be diluted, be tasteless
baŋ$^3_2$ uproot
bat$^0_2$ *v* say, answer
bat^0 tan^2 *v* tell a story
baʔ^0 *v* become stuck
baʔ^0 kɛ^2 *n* type of plant
be^3 *v* hang, spread (e.g. cloth)
bɛ^3 1) Q **2)** indeed
bɛk^0 *v* bleat
bɛŋ^1 bɛŋ^1 ONOM
bɛʔ^0 *v* throw down, push down
bɛʔ^0 tɛʌk^0 *v* throw away
bi^1~bi^3 *v* search
bi^2 bi^2 INTENS
bi^2 bɔ^3 li^2 lɔ^3 going up and down (landscape) (EUPH)
bi^3 bu^2 bi^3 ba^3 wearing wide loose clothes (EUPH)
bi^3 lʌk^0 *n* type of plant
bɨk^0 1) *n* knot **2)** *v* tie
bɨk^0 bɔʔ^0 bik^0 baʔ^0 emotion of feeling uncomfortable in the throat or stomach (EUPH)
bɨk^0 bɔʔ^0 lɨk^0 lɔʔ^0 going up and down (on cylindrical object) (EUPH)
bɨl^1 *n* lip
bɨŋ$^1_1$ *v* sit on a nest, den, or dwelling hole
bɨŋ$^1_3$ *n* dew
bɨŋ$^1_2$ *v* burry, insert, put inside
bɨŋ$^2_1$ 1) *adj* deep **2)** *v* be deep
bɨŋ$^2_2$ *n* **1)** den, big nest **2)** pit **3)** pond **4)** hole
bɔ *n* Bo (clan)
bɔ^2 1) *adj* protruding, swollen **2)** *v* protrude, be swollen
bɔ$^3_2$ 1) Q.PLR **2)** indeed
bɔ^3 bʌŋ^1 *n* papaya tree
bɔ^3 lɔŋ^3 naked
bɔ^3 ti^1 *n* papaya
bɔk^0 bɔk^0 INTENS
bɔl^1 *n* tree for animal sacrifice
bɔl^2 *n* type of basket
bɔn^3 1) *adj* closed **2)** *v* lock, close, tie, turn off, stop
bɔŋ^1 1) *adj* thick (hair) **2)** *v* be thick (hair)
bɔŋ^1 bɔŋ^1 INTENS
bɔŋ^1 te^2 *n* Bongtai (tribe)
bɔŋ^2 *v* bellow (of cow)
bɔt$^0_1$ *n* striking (against sth)
bɔt^0 k^{h}i^2 *n* ashes, dust
bɔt^0 xam^1 1) not properly tied, loose **2)** have a screw loose (metaphor)
bɔʔ$^0_1$ 1) *adj* elevated, protruding (belly) **2)** *v* protrude
bɔʔ$^0_2$ *n* throat
bɔʔ$^0_4$ *v* soak
bɔʔ$^0_3$ *v* carry on back
bɔʔ^0 xi^3 heartburn

buk⁰₁ *n* **1)** clay **2)** mud
buk⁰ saʔ⁰ *n* type of tree
buk⁰ saʔ⁰ ɟʌk⁰ *n* type of leaf for packing rice
bun³ kʰi³ *n* type of millet
bʌ⁰li³ *num* four
bʌ⁰nʌp⁰ a³ this morning
bʌ⁰ŋa³ five
bʌ⁰pʌl³ a³ this night
bʌl¹₁ *v* experience a sudden shock of fear
bʌl³₁ *v* tap
bʌl³₂ *n* being full, being satisfied
bʌn² 1) ahead, first, already **2)** go ahead
bʌn² lʌm² half-hearted
bʌn³ *v* wait, stop
bʌŋ¹ *n* **1)** tree **2)** wood
bʌŋ¹ kʰɛ² *n* tapioca
bʌŋ¹ kʰɔl² *n* type of bark
bʌŋ¹ kiŋ² *n* branch
bʌŋ¹ lɔ¹ *n* thin board
bʌŋ¹ tʰaʔ⁰ *n* thick board, log
bʌŋ¹ tʰʌm *n* vegetation
bʌŋ¹ ti¹ *n* fruit
bʌt⁰₂ *v* take out, dig out
bʌt⁰₁ hang on a hook

d

dal¹ 1) *adj* rough, hard, course **2)** *v* be rough, be hard, be course
dan₂ *v* deny, object
dan³ little bit
daŋ¹ lik⁰ replying nonsense
daŋ¹ lik⁰ saŋ¹ lik speaking carelessly, ruthless, without mercy (EUPH)
daʔ⁰ *n* crossbow
daʔ⁰ san¹ *n* **1)** arrow **2)** crossbow
dɛ⁰hɨŋ³ *n* Dehing (river)
dɛ¹ *v* transfer
dɨp⁰ *v* deceive
dɨk⁰ *v* wrap
dɨk⁰ dɨk⁰ INTENS
dɨk⁰ dɔk⁰ dɨk⁰ dak⁰ direct, fast, and fair transaction (EUPH)
dɨŋ¹ dɨŋ¹ INTENS
dɨŋ² dɨŋ² INTENS
dɨp⁰ 1) *n* button **2)** *v* button up
dɔ¹ bat⁰ *n* **1)** week **2)** Sunday
dɔ² la¹ *n* Venus
dɔk⁰₂ *v* **1)** knock **2)** strike (of snake)
dɔk⁰₁ change colour, infected by fungus
dɔm¹ *adj* very short hair
dɔn¹ *v* shiver
dɔn³ *v* hop
dɔŋ tsɨt⁰ *n* type of bug
dɔŋ βa¹ *n* Dongwa (character from mythology)
dɔŋ¹ be inside (liquid in container)
dɔŋ¹ de¹ *v* transfer back and forth from one container into another
dɔŋ³₂ 1) likewise, similarly, too, as well **2)** as said
dɔt⁰₂ *adj* curly (hair)
dɔt⁰₁ *v* fold
duːk⁰₁ *adj* **1)** blind **2)** with closed eyes
duːk⁰₂ *v* **1)** cut **2)** kill
duk⁰₁ until
duŋ¹ɛ² *n* Dunghi (tribe)
dʌk⁰₁ SUPER
dʌk⁰₂ *adj* other
dʌm¹~dʌm³ 1) *adj* covering a horizontal surface **2)** *v* cover a horizontal surface
dʌn³ *v* separate (trans)
dʌn³ de³ *v* sort
dʌŋ¹ *v* support the head while lying
dʌŋ¹ dʌŋ¹ only
dʌŋ³₂ *v* **1)** place **2)** perch
dʌŋ³ ɟʌŋ³ *n* custom
dʌŋ³ ʌ⁰ɟʌŋ³ *n* custom
dʌp⁰ *v* fold, layer
dʌp⁰ nʌk⁰ *v* step over

e

e² ni³ *dem* DEM.MED
e² ʃi³ *dem* DEM.DIST

e^{2} tʰa^{2} *conn* but
e^{2} tʰi^{3} *dem* DEM.DEF
e^{2} tʰɔ^{3} *conn* and

ɛ

ɛ$^{3}_{2}$ REV.NEG
ɛ$^{3}_{1}$ *post* with (instr)
ɛ^{3}~a^{3} *post* ERG
ɛʔ$^{0}_{2}$ 1) do, AUX **2)** LINK

h

ha^{2} *adj* angry, disobedient
ha^{3} *v* puff
ha^{3} ɟat^{0} *n* thousand
hal^{1} tʌk^{0} ritual after death
ham^{1} 1) *v* take a step, step **2)** *n* step
ham^{2} *adj* smell
ham^{2} tɨŋ^{2} *v* smell
ham^{3} hɛl^{3} *v* yawn
haŋ^{1} *n* ell
haŋ^{2} sɨk^{0} *n* Hangsik (tribe)
haŋ^{2}~haŋ$^{3}_{2}$ not comply
haŋ^{2}~haŋ$^{3}_{1}$ *v* dry (wet feet, hands) (next to fire)
haŋ$^{3}_{1}$ *n* opposite
haŋ$^{3}_{2}$ *adj* (short) distance away
haŋ^{3} hɛl^{3} *n* type of ant
haŋ^{3} kɔ^{2} na^{3} the opposite way
haŋ^{3} lʌl^{3} *n* not complying
haŋ^{3} pit^{0} *n* not complying
hap$^{0}_{2}$ *v* **1)** shoot (ball, gun), kick **2)** spray
haʔ^{0} *n* **1)** land, earth, ground **2)** village **3)** level
haʔ^{0} dʌŋ^{3} *n* place
haʔ^{0} kan^{2} *n* mountain
haʔ^{0} kʰi^{2} *n* Haqkhi (tribe)
haʔ^{0} kʰun^{2} *n* Hakhun (tribe)
haʔ^{0} kuŋ^{1} ʃɨn^{3} *v* earthquake
haʔ^{0} laŋ^{2} *n* Haqlang (tribe)
haʔ^{0} sɔŋ^{3} *n* **1)** village **2)** livelihood **3)** civilisation **4)** society **5)** family
haʔ^{0} ʃɨm^{3} *v* earth slide
haʔ^{0} ʃɔ^{1} *n* edge of a hill
haʔ^{0} ʃɔŋ^{1} *n* small elevated area in a field
haʔ^{0} ʃuŋ^{2} *n* Haqchum (tribe)
haʔ^{0} tɕɛŋ^{2} *n* Hacheng (tribe)
haʔ^{0} tʰuŋ^{2} *n* plain
haʔ^{0} tɨt^{0} *n* Tutsa (tribe)
haʔ^{0} βi^{3} *n* Havi (tribe)
hɛ^{3} DUB
hɛt^{0} ʃɔŋ^{2} *v* sneeze
hɛt^{0} tɕi^{2} *v* sneeze
hi^{1} *n* dog
hit^{0} *v* **1)** shave **2)** peel, scrape (potato)
hiʔ^{0} ni^{3} 1) *pro* 1INCL.DU **2)** 1INCL.DU.POSS
hiʔ^{0} tʌŋ^{2} 1) *pro* 1INCL **2)** 1INCL.POSS
hɨ^{0}mi^{2} *n* foxtail millet
hɨl^{1} *n* mons Venus
hɨl^{1} kʰʌŋ^{2} *n* dickhead (lit. mons Venus forehead)
hɨm^{2} *n* house
hɨm^{2} kʰuŋ^{1} tʰʌk^{0} *n* neighbor
hɨm^{2} mɔŋ^{2} tʌp^{0} *n* indoor fireplace
hɨm^{2} ɹɔŋ^{3} housewarming
hɨm^{2} tit^{0} te^{2} *n* neighbor
hɨŋ^{2} *n* thousand
hɨp^{0} hɨp^{0} ONOM
hɨt^{0} dɛʔ^{0} hiccup
hɔ^{1} *n* uncle, maternal
hɔ^{1} ki^{1} *n* brother or sister in law
hɔ^{1} ki^{1} nu^{1} *n* sister in law
hɔ^{1} ki^{1} βa^{1} *n* brother in law
hɔ^{1} tɕa^{1} *n* father in law
hɔ^{3} ɹi^{3} ɹɔ^{2} *n* mustard plant
hɔk$^{0}_{1}$ *v* growl
hɔk$^{0}_{2}$ *v* repair
hɔk^{0} lɔm^{3} *n* type of tree
hɔl^{3} *v* **1)** carry **2)** bring
hɔl^{3} dap^{0} *n* pocket
hɔm^{3} bɔŋ^{2} *n* type of tree
hɔp^{0} *v* cover
hɔt$^{0}_{2}$ 1) *adj* dry, irritated **2)** *v* be dry, be irritated
hɔt^{0} bat^{0} *v* lie (not tell the truth)
hu^{1} hu^{1} ONOM

huk⁰ kʰuʔ⁰ *n* dry waste and dust
hum²~hum³ *v* stretch, pull
hun²~hun³ *v* **1)** make, create, build, prepare **2)** change into (intrans)
hun³ **1)** truly **2)** only, just
huŋ¹₂ **1)** *adj* NEG.EXIST **2)** *v* NEG.EXIST
huŋ¹₁ *n* trunk of body
huŋ² *n* length
huŋ³ central, middle
huŋ³ kʰɔm¹ *n* stool (furniture)
huʔ⁰ dip⁰ *v* lie
huʔ⁰~hɔt⁰ **1)** *adj* stealing **2)** *v* steal **3)** secretly
hʌl¹~hʌl³ *v* call
hʌl²₁ *adj* very
hʌl²₂ *adj* **1)** difficult **2)** be difficult
hʌm² *adj* **1)** brown, purple **2)** be brown, be purple
hʌn¹₁ **1)** *adj* much, a lot of **2)** *v* be much, be many
hʌn¹₂ *n* body
hʌn³₁ F.YOUNG
hʌn³₂ *v* believe
hʌt⁰ *v* keep (animals)

i

i¹~i³ 1PL
i²₁ **1)** *pro* 1EXCL **2)** 1EXCL.POSS
i²~i³ *v* scream
i³₄ Q.AFF
i³₂ 1SG.POSS
i³ ɟi² a³ after (long time)
i³ kʰun³ nɛʔ⁰ four days after tomorrow
i³ nɨŋ³ two years from now
i³ nʌp⁰ tomorrow
i³ paŋ² next year
i³ ɹɛʔ⁰ then
i³ ɹi³ *dem* DEM.PROX
i³ sin³ nɛʔ⁰ three days after tomorrow
i³ sʌn³ nɛʔ⁰ day after tomorrow
i³ tan³ this much
i³ tʰɔn³ nɛʔ⁰ two days after tomorrow

ɨ

ɨn¹ ka¹ ku² *n* fox
ɨn¹~ɨn²~ɨn³ 2PL
ɨn² yes
ɨn² ɛ³ yes

ɟ

ɟa¹ *n* **1)** leg, foot **2)** root
ɟa¹ kʌp⁰ *n* **1)** under leg calf muscle **2)** back of the knee
ɟa¹ mal¹ *n* footprint
ɟa¹ mɨk⁰ *n* ankle bone
ɟa¹ ŋʌp⁰ *n* instep
ɟa¹ pʰa³ *n* forefoot
ɟa¹ si² *n* toe
ɟa¹ te³ *n* lap
ɟa¹ tʰɔm² *n* heel
ɟa¹ tɔ¹ *n* ankle
ɟa¹ tsʌn² *n* heel cord, Achilles tendon
ɟa¹ tʌl² *n* ball of the foot
ɟa¹ xɔŋ¹ *n* shoe
ɟa¹ βɔk⁰ *n* calf of the leg
ɟa² hʌn³ *n* virgin, young woman
ɟa² ɹɔ² *n* virgin, young man
ɟa³₃ *n* time, occasion
ɟa³₂ **1)** *n* addiction **2)** *v* be addicted
ɟa³ ɟɔŋ² *n* name of month
ɟa³ kʰɔ² 1) front **2)** first **3)** before, ago
ɟa³ kʰɔ² na³ in front of
ɟa³ kʰʌɹŋ² *n* shadow
ɟa³ mʌt⁰ new moon
ɟa³ nʌm² *n* month of year
ɟa³ pʰɨn² *n* month of the year
ɟa³ pi² *n* **1)** moon **2)** month
ɟa³ sal²₁ *n* month of the year
ɟa³ si¹ *n* name of month
ɟa³ sɔl² *n* name of month

ɟa³ ʃiʔ⁰ bad
ɟa³ tɨl² *n* name of month
ɟa³ tɨm³ full moon
ɟa³ tɔm² *n* month of year
ɟa³ tu³ *n* name of month
ɟa³ xa *n* name of month
ɟa³ xʌl² good
ɟa³ xʌŋ² *n* name of month
ɟal² *v* become numerous
ɟam² *n* gong
ɟam³ *v* flatten sth by rolling over it
ɟan¹ *v* overtake, pass by, cross over
ɟan² *n* **1)** iron **2)** knife
ɟan² hi² *n* sheath
ɟan² hi² pʌk⁰ *n* rope of dao sheath
ɟan² man³ *n* Yanman (village)
ɟan² tɕip⁰ *n* scissors
ɟan² tɔŋ *n* dao
ɟan² tsaŋ³ *n* Yanchang (clan)
ɟan² xi² *n* small knife
ɟan³ *v* jump over
ɟaŋ²₂ **1)** *adj* ripe **2)** *adj* done, cooked **3)** *v* be ripe **4)** *v* be done, cooked
ɟaŋ² ɟaŋ² INTENS, shiny, bright
ɟaŋ² tɔŋ³ *v* sit, pass time
ɟat⁰₁ *n* jungle, forest
ɟat⁰ ɹi¹ boundary
ɟaʔ⁰ *adj* **1)** abnormal, bad **2)** wrong, incorrect
ɟe²~ɟe³ *v* revive
ɟe³ *v* unload
ɟi¹ *n* intestine
ɟi² **1)** *n* back **2)** *post* back, behind, after **3)** second **4)** younger
ɟi³ a³ after
ɟi³ kʰɔ² na³ behind
ɟi³ kɔ² na³ towards the back (of)
ɟi³ kɔ³ **1)** *n* back, backside of the body **2)** behind
ɟi³ na³ after
ɟi³ ɔ³ after
ɟi³ ɔʔ⁰ after
ɟi³ βaŋ³ from
ɟɨk⁰ *v* apply (oil)
ɟɨm²₂ *adj* buttery taste
ɟɨm²₁ **1)** *adj* melted **2)** *v* melt
ɟɨn¹ **1)** *adj* smooth, even **2)** *v* be smooth
ɟɨn¹ lɛ³ ɟɛ² slow and steady
ɟɨn²₁ already
ɟɨn² ɟaŋ² se³ *n* love song
ɟɨn² se³ *n* love song
ɟɨn³₁ **1)** ABIL, can **2)** PSSB, be possible **3)** PERMIS, be allowed to
ɟɨn³₂ HAB
ɟɨn³ tʌŋ¹ kat⁰ *v* overcome
ɟɨp⁰ *v* sleep
ɟɨp⁰ tɕɨŋ¹ *n* bed
ɟɔ¹ tʰa² ɔ³ lɛ³ okay then (closing off a conversation)
ɟɔ³₁ **1)** COND **2)** when
ɟɔ³₂ **1)** MIT **2)** yes, indeed
ɟɔ³ ɹɔŋ² *n* Jorong (village)
ɟɔk⁰₂ *v* swallow
ɟɔk⁰ ɟɔk⁰ INTENS
ɟɔl²~ɟɔl³ *v* run
ɟɔŋ¹ bal¹ *n* insect, worm
ɟɔŋ² **1)** *adj* big **2)** *n* length **3)** *n* chapter **4)** *v* be big
ɟɔŋ² kuk⁰ *n* Yongkuk (tribe)
ɟɔŋ² ti² *n* relative belonging to the same clan (sexual relationship prohibited)
ɟɔʔ⁰₁ mate (intercourse)
ɟɔʔ⁰₃ *v* shove aside
ɟu¹ βʌŋ¹ future
ɟu² MIT
ɟu³~ɟɔk⁰ *v* go down
ɟuk⁰₁ *n* time, occasion
ɟuk⁰₂ *n* type of basket
ɟuk⁰ li² *n* Jogley (tribe)
ɟum¹~ɟum³ *v* **1)** sweep **2)** wipe
ɟun¹ te² *n* **1)** relative **2)** friend
ɟuŋ ʃʌm *n* Yungsham (village)
ɟuŋ¹₁ **1)** *adj* lazy **2)** *v* be lazy
ɟuŋ¹₂ **1)** shrink down **2)** flail
ɟuŋ¹ naŋ¹ *v* be lazy
ɟuŋ²₂ *n* **1)** water **2)** river
ɟuŋ²₁ overripe
ɟuŋ² ban² *n* devil, ghost, demon
ɟuŋ² ɟʌp⁰ *v* swim
ɟuŋ² lal¹~ɟuŋ² lal³ **1)** thirsty **2)** be thirsty
ɟuŋ² pʰaŋ² *n* river bank
ɟuŋ² ʌ⁰ban² *n* evil spirits
ɟuŋ² ʌ⁰ɟat *n* jungle, forest, uninhabitable area
ɟuŋ² xʌŋ² *n* type of vegetable
ɟuŋ³ **1)** *adj* blazing **2)** *v* blaze (fire), flame
ɟuŋ³ naŋ³ **1)** *n* resentment **2)** *v* hold a grudge
ɟup⁰ *v* cover, wrap in sth
ɟuʔ⁰ pɔ² *n* **1)** grey mouse **2)** mouse

ɟuʔ⁰ ʃɔŋ² *n* big type of rat
ɟʌk⁰ *n* **1)** hand, arm **2)** leaf
ɟʌk⁰ kuʔ⁰ *n* elbow
ɟʌk⁰ ma³ ɟa¹ ma³ rash
ɟʌk⁰ pʰaŋ³ *n* stretched hand
ɟʌk⁰ si¹ *n* upper arm muscle
ɟʌk⁰ si² *n* finger
ɟʌk⁰ sɔm³ *n* work
ɟʌk⁰ tɔ¹ *n* wrist
ɟʌk⁰ tuŋ² *n* middle (not high or low)
ɟʌk⁰ tuŋ² na³ between
ɟʌk⁰ ʌ⁰ɟa¹ *n* limbs
ɟʌl¹~ɟʌl³ *v* peel off
ɟʌm² *n* company
ɟʌm² na³ with
ɟʌm² nʌŋ³ to
ɟʌm² ɔʔ⁰ with
ɟʌm² te² *n* companion
ɟʌn² *v* come out (liquid, grain)
ɟʌŋ² slowly
ɟʌŋ² sɛ³ ɟʌŋ² step by step, slowly, bit by bit
ɟʌp⁰₁ *v* **1)** wave, beckon **2)** flap, fan **3)** winnow (second stage), remove fine chaff
ɟʌp⁰ ɟa³ *v* play (for fun)
ɟʌp⁰ ʃiʔ⁰ ɟa³ kʰaʔ⁰ naughty (EUPH)

k-kʰ

ka¹~ka³~kat⁰ *v* **1)** go **2)** happen **3)** manage, run
ka³₂ *v* write
ka³₁ 1) *adj* open (mouth) **2)** *v* be open (of mouth)
ka³ la² non-tribal
ka³ liŋ¹ *v* swing (like a monkey)
ka³ luŋ² *n* door
ka³ luŋ² kɔ¹ *n* threshold, frame beam
ka³ ni³ *n* **1)** opium **2)** poppy
ka³ ɹa¹ *v* **1)** be similar **2)** be united, not divided
ka³ ɹa³ ʃɛ¹ same size, same amount, same age
kak⁰₂ *v* **1)** peel **2)** break in two
kam¹₁ spread open
kam¹₂ 1) *n* wear **2)** *v* wear on the head or face
kam² *v* **1)** propose (for marriage) **2)** make a match (marriage)
kam³ 1) *n* work **2)** *v* work
kam³ pil³ ti¹ *n* Indian grapefruit
kan²₁ *n* stick
kan²₂ *n* hill, mountain
kan² tʰaʔ⁰ *n* stick
kaŋ¹ 1) *adj* erect, stick-like **2)** *n* stalk **3)** *n* stick **4)** *n* penis
kaŋ²₁ M.ADULT
kaŋ²₂ *n* **1)** steepness, slope **2)** edge
kaŋ² na³ at the edge of
kaŋ³ ɟaŋ³ *v* hurry
kaŋ³ kap⁰ *n* three main, interconnected pillars of the house
kap⁰ *n* tongs
kat⁰ *v* burn, give off heat
kaʔ⁰ *n* chin, jaw
kaʔ⁰ ɟɨn³ often, frequently
kaʔ⁰ ʃɛ¹ at the same time
kaʔ⁰ tɔm² ti¹ *n* type of fruit
ke³ tʰɔm³ *n* mortar and pestle
kɛ¹ 1) *adj* twisted **2)** *v* twist
kɛk⁰ kɛk⁰₁ INTENS
kɛk⁰ kɛk⁰₂ ONOM
kɛl² *n* goat
kɛl² diŋ² *n* earthworm
kɛl² βut⁰ *n* sheep (neologism)
kɛl²~kɛl³ *v* pour
kʰa³ 1) *adj* hollow, open **2)** *n* opening, hollow, hole **3)** *v* be open, be wide
kʰa³ pʰuŋ³ case (justice)
kʰak⁰ *n* bag
kʰam² 1) *adj* hot, warm, heated, boiled **2)** *v* be warm, be hot
kʰan³ *v* pour
kʰaŋ³ *n* type of basket
kʰaŋ³ pit⁰ *n* twin
kʰaʔ⁰₃ 1) *adj* bitter **2)** *v* be bitter
kʰaʔ⁰₂ *v* get angry
kʰaʔ⁰ ʃi³ ti¹ *n* type of bitter fruit
kʰaʔ⁰ tɔ³ *n* type of bitter fruit
kʰe³ *v* **1)** sow **2)** plant
kʰɛk⁰ *adj* urgent

kʰɛl³ *v* play
kʰɛŋ² kʰɔm¹ *n* scissors
kʰi² 1) *adj* grey, mat, light 2) *v* be grey, be mat, be light
kʰi² lʌk⁰ *n* Khilak (tribe)
kʰi³₁ *v* 1) see 2) look at
kʰi³ lɔ¹~kʰi³ lɔːt⁰ *v* hug
kʰiŋ¹ *n* lumber area, lower back
kʰiŋ¹ dɔt⁰ *n* modern skirt
kʰiŋ³₁ *n* type of basket
kʰiŋ³₂ 1) *adj* shiny 2) *v* be shiny
kʰit⁰ *n* silver
kʰiʔ⁰ tun¹ ɹʌŋ¹ tun¹ be careful (EUPH)
kʰɨn² 1) *n* claw 2) *v* scratch with nails, claws
kʰɨt⁰ *v* dig out
kʰɔ kaŋ *n* headscarf
kʰɔ na³ on top of
kʰɔːt⁰ *v* scoop out (water)
kʰɔ¹ 1) *adj* being cut in half lengthwise 2) *v* cut in half lengthwise 3) CLF (long, cut lengthwise)
kʰɔ² kʰam² *v* be tiring
kʰɔ² lik⁰ *v* sacrifice oneself
kʰɔ² tɕip⁰ *n* hair clip
kʰɔ²~kʰɔ³ *n* 1) head 2) hair 3) first 4) top 5) before
kʰɔ³ *v* grub
kʰɔ³ hi² *n* deer
kʰɔ³ lat⁰ *n* hair pin made of buffalo bone
kʰɔ³ pɔk⁰ *n* hat
kʰɔ³ pɔŋ³ *n* well
kʰɔ³ puŋ² pa³ ʃaŋ² thank you (lit. white hair, red teeth)
kʰɔ³ ɹun² *n* head hair
kʰɔ³ suŋ³ *n* 1) cock's comb 2) traditional hair bun
kʰɔ³ ʃɨt⁰ *n* comb
kʰɔ³ tʰuŋ² *n* crown (of the head)
kʰɔ³ ti² *n* brain
kʰɔ³ tsɨp⁰ *n* dandruff
kʰɔ³ tum³ *n* hair tail
kʰɔ³ xɔŋ² kɔ³ na³ upside down
kʰɔk⁰₁ *adj* rough
kʰɔk⁰₂ 1) *n* partition, room 2) *v* make a cube shape
kʰɔl² *n* 1) bark (of tree) 2) covering 3) skin
kʰɔʔ⁰ mɛn³ *n* turmeric
kʰuːp⁰ *n* 1) skin 2) husk 3) bark 4) peel
kʰuk⁰ *v* 1) cackle 2) howl 3) snore
kʰum *adj* tingling
kʰum βa¹ *n* Khumwa (character from mythology)
kʰum²~kʰum³ *v* crawl
kʰun³ tsaŋ²₂ *n* 1) heart (older meaning) 2) liver (new meaning)
kʰun³ tsaŋ²₁ *n* banana flower
kʰuŋ¹ *n* nose
kʰuŋ¹ bɨŋ² *n* nostril
kʰuŋ¹ kɔŋ² *n* nose ridge
kʰuŋ¹ lit⁰ snot
kʰuŋ¹ tʰit⁰ snot
kʰuŋ¹ tʰʌk⁰ *n* surrounding, compound
kʰuŋ¹ xʌŋ¹ *n* snub nose
kʰuŋ² *n* plate
kʰuŋ² sa¹ *n* bowl
kʰuŋ² ʌ⁰kɔːk⁰ *n* tableware
kʰuŋ³₂ *n* underneath
kʰuŋ³₁ *n* track, narrow path
kʰuŋ³ na³ underneath
kʰuʔ⁰ *v* smoke
kʰuʔ⁰ pɔn² *n* local garlic
kʰuʔ⁰ tiŋ² *n* owl
kʰʌ⁰sʌŋ³ *n* Kharsang (town)
kʰʌ⁰tɕʌŋ² *n* Khachal (tribe)
kʰʌk⁰ *v* 1) bind, wrap around 2) bind hair into ponytail
kʰʌk⁰ la¹ right, correct
kʰʌl¹ 1) *adj* active, restless, alert 2) *v* be active, restless, alert
kʰʌl¹ huŋ² wooden handcuffs
kʰʌl¹ tɕɨŋ¹ *n* stretcher for dead body
kʰʌm² *n* 1) alcohol 2) water (in certain compounds)
kʰʌm² buŋ² *n* water bag of foetus
kʰʌm² sɨm² *n* pus
kʰʌm² ti² *n* strong rice beer
kʰʌn² measure unit (for opium)
kʰʌn²~kʰʌn³ *v* cut (with sickle)
kʰʌn³ quality
kʰʌn³ ʃɛ¹ ʃɛ¹ same
kʰʌŋ² *n* forehead
kʰʌp⁰₁ *n* jug
kʰʌp⁰₂ *n* ring, bangle
kʰʌp⁰₃ *v* wear (band, bracelet, ring)
kʰʌt⁰₃ *n* cloth
kʰʌt⁰ nup⁰ *n* shawl
kʰʌt⁰ sʌm³ *n* blanket
ki¹ *n* brother in law

ki² *v* tie up
kim² tɕiŋ² *n* Chamchang (tribe)
kiŋ¹ **1)** *adj* old (things) **2)** *v* be old (things)
kiŋ² *n* branch
kiŋ² kaŋ² nearby
kit⁰ *n* corner
kit⁰ kɔ¹ *n* corner
kit⁰ nuŋ¹ *n* corner
kiʔ⁰₁ *n* **1)** hook **2)** fishing hook
kiʔ⁰₂ *adj* cold
kiʔ⁰ pʌk⁰ dead silent
kɨm² kɛ² *n* pumpkin
kɨm² kʰi² *n* type of vegetable
kɨm² tɕɛl³ *n* cucumber
kɨp⁰ **1)** *v* seal (with a lid) **2)** *n* lid
kɨt⁰ ɹi² *n* type of bark
kɔːk⁰ *n* cup
kɔ¹₁ *n* **1)** threshold, beam **2)** side beams of the fire place
kɔ¹ haʔ⁰ kaŋ² haʔ⁰ *n* hilly land
kɔ¹ kaŋ² *n* hilly area
kɔ¹ ti³ tɕɨk⁰ *n* type of pot
kɔ²₂ *n* direction
kɔ²₁ **1)** *adj* few, little **2)** *v* decrease
kɔ² kɔ² almost, about to
kɔ² nʌŋ³ towards
kɔ³₂ will, would
kɔ³₁ *n* genitals
kɔ³ dʌl² *n* praying mantis
kɔ³ ɛʔ⁰ because
kɔ³ lɛ³ **1)** like this **2)** therefore
kɔ³ ɹɔt⁰ *n* saw
kɔk⁰₁ *adj* flappy (ears)
kɔk⁰₂ *n* lashes
kɔk⁰₃ *n* grasshopper
kɔk⁰ pʰan¹ *n* butterfly
kɔk⁰ pi *n* type of insect
kɔm¹ *adj* round
kɔm² ɟɨm² *n* ground mushroom
kɔm² puŋ² kaŋ² xʌt⁰ headlong (EUPH)
kɔm² tɔŋ³ kaŋ² nɔŋ³ headlong (EUPH)
kɔŋ¹ *n* stalk
kɔŋ²~kɔŋ³ **1)** *adj* having a narrow edge **2)** *n* ridge, edge **3)** *v* be a narrow edge
kɔŋ³ pʰaʔ⁰ *n* news, message
kɔt⁰ **1)** *adj* bent **2)** *v* bend
kɔʔ⁰~kɔt⁰ **1)** *v* give **2)** *v* have intercourse **3)** CAUS
ku² **1)** F.ADULT.GB **2)** old (for female)
kuk⁰ *v* remove bark from a tree
kuk⁰ ŋɛ² *n* meercat
kum³ **1)** *adj* insufficient, inadequate **2)** *v* be very little, be insufficient
kun³ dan¹ *n* Kundan (character from mythology)
kuŋ¹₁ *n* halm
kuŋ¹₂ *n* area, space
kuŋ¹ tɔm time of shortage before first harvest
kuŋ¹ tɔm² se³ *n* song for time of scarcity before harvest
kuŋ² **1)** *adj* lame, paralysed **2)** *v* be lame, be paralysed
kuŋ² tʌm² pu² *n* prawn
kut⁰ tɔm³ *n* Kuttom (village)
kut⁰ tɔm³ ti¹ *n* type of grain or berries
kuʔ⁰ *n* festival
kuʔ⁰ ʌ⁰mɔl² *n* Mol festival
kʌ⁰diŋ dɔt⁰ kneel down
kʌ⁰dʌk⁰ *n* toy bow for children
kʌ⁰lɔ² **1)** fast **2)** early
kʌ⁰lɔʔ⁰ *n* gourd
kʌ⁰ɹa¹ **1)** *v* be similar **2)** combine well
kʌ⁰ɹɛl² **1)** slow **2)** *adj* late **3)** *v* be slow, late **4)** *v* loiter
kʌ⁰ɹiŋ¹ kʌ⁰ɹuŋ¹ making noise (EUPH)
kʌk⁰₁ *adj* glassy (potato, tuber)
kʌk⁰₂ *v* bite
kʌl¹ *n* kidney
kʌl² *n* hearth rack
kʌm¹₁ *n* waist, middle
kʌm¹₂ **1)** PROG **2)** during
kʌm² *v* believe, trust
kʌm² kʌm² about to be
kʌm² lʌm² *v* trust, believe
kʌm³ *v* put and keep in the mouth
kʌp⁰ *v* **1)** find **2)** obtain **3)** receive **4)** succeed

l

la li sufficient
la¹₂ *adj* stiff
la¹₃ M
la² *v* grow, sprout
lak⁰₂ **1)** *adj* open **2)** *v* open
lak⁰₁ *n* type of tree

lak⁰ lɔ¹ *n* shield
lal¹~lal³ 1) *n* hunger, thirst **2)** *v* be hungry, be thirsty
lan³ 1) *adj* unrolled **2)** *v* unroll
lan³ bat⁰ *v* tell openly
laŋ¹ 1) *adj* hard, firm **2)** *v* be hard, firm
laŋ¹ ma² *n* lama, Buddhist teacher
laŋ²₃ then
laŋ²₁ *n* eagle
laŋ²₂ 1) indeed, yes **2)** ASS **3)** easy, direct, clear
laŋ² ŋɛ² *n* type of eagle
laŋ² sɔl¹ *n* type of eagle
laŋ² tɕiŋ² *n* Langching (tribe)
laŋ² tʰam³ bu² *n* type of eagle
laŋ³ *v* stand
lap⁰ *v* split (bamboo strip, by hand)
lat⁰ 1) *adj* stiff **2)** *v* be stiff
laʔ⁰ *v* have intercourse
le¹ *conn* then, and
le¹ bat⁰ *n* servant, worker
lɛ³ FOC
li₃ *v* be sufficient
li²₁ *n* seed
li²₂ *n* **1)** buffalo **2)** cattle
li² pʰʌk⁰ se³ *n* buffalo sacrifice song
li² ʌ⁰man² *n* cattle
li³ *v* reach, grab
lik⁰ 1) *adj* turning from their word, lying **2)** *v* turn **3)** *v* exchange
lim¹~lim³ 1) *adj* overflowing, flooding **2)** *v* flood **3)** *v* overflow
lin² 1) *adj* passed **2)** *v* pass
lin³ lʌk⁰ pass time happily
liŋ¹ CLF (long, whole)
liŋ² liŋ² 1) if **2)** as long as **3)** until
lip⁰ *v* shine
lip⁰ lip⁰ INTENS
lit⁰₁ *v* give light
lit⁰₃ *v* give way
liʔ⁰ 1) *adj* heavy **2)** *v* be heavy
lɨk⁰₁ *n* **1)** text, word **2)** writing, script
lɨk⁰₂ sick, having to vomit
lɨk⁰₃ *n* gall (bladder)
lɨk⁰₄ 1) *n* necklace **2)** *v* wear (necklace)
lɨk⁰ dan³ 1) *adj* objecting **2)** *v* object
lɨk⁰ ka³ *v* write
lɨk⁰ lɨk⁰ INTENS
lɨk⁰ lɔk⁰ rinse
lɨk⁰ pʰʌt⁰ *v* **1)** study **2)** read
lɨk⁰ ʌ⁰ŋɨn² *n* silver, precious metals
lɨk⁰ βɨt⁰ write
lɨm² tɨk⁰ *n* natural death
lɨm³ *v* cook, prepare food
lɨm³ tʰam³ *n* medium, person who can talk to the deceased
lɨŋ ʌ⁰lak⁰ *n* thick jungle
lɨŋ²~lɨŋ³ *v* drink
lɨŋ³ 1) around **2)** turning (of wheel)
lɨp⁰ 1) *adj* deep **2)** *v* sink away (in mud)
lɨt⁰ *v* grind
lɔ¹ CLF (flat)
lɔ¹ lɔ¹ CLF (flat)
lɔ¹~lɔːt⁰ *v* **1)** grab, catch **2)** hold **3)** touch
lɔ¹~lɔ²~lɔt⁰ 1) *adj* far, long (horizontally), tall, wide **2)** *adj* fast **3)** *v* be far
lɔ³₁ *adj* having a broken bottom
lɔ³₂ *n* type of edible creeper
lɔ³ kɔŋ³ *n* spoon
lɔ³ lin³ plain wedding guests
lɔ³ lʌk⁰ *n* type of tree
lɔ³ ti¹ *n* gourd
lɔk⁰₁ -less, without
lɔk⁰₂ *v* pull (tooth)
lɔk⁰ lɔk⁰ INTENS
lɔm² 1) *adj* warm **2)** *v* be warm
lɔm³ kʰɨŋ³ *n* type of insect
lɔŋ¹ *n* stone, rock
lɔŋ¹ kɛ³ *n* Longkey (village)
lɔŋ¹ man³ *n* stone for sharpening knives
lɔŋ¹ saŋ¹ *n* Longsang (village)
lɔŋ¹ tɕaŋ² *n* Longchang (tribe)
lɔŋ¹ tɔk⁰ *v* stone fry
lɔŋ³ ɹi² *n* Longri (tribe)
lɔʔ⁰ container made of calabash
luːk⁰₂ *n* flying fox (bat)
luːk⁰₁ 1) *adj* tall **2)** high
luk⁰ *n* frog
luk⁰ luk⁰ INTENS
luk⁰ tɔŋ ku² *n* one big frog
lum *v* play (with toy)
lum lʌk⁰ *v* play (with toy)
lun² 1) *adj* alive **2)** *v* be alive
luŋ¹ many
luŋ² pʰi² *n* Lungphi (tribe)
luŋ² βʌŋ² *n* chief (highest)

lʌ⁰ɟʌk⁰ 1) *adj* bad, naughty 2) *v* be bad, naughty
lʌk⁰₁ *v* forget
lʌk⁰₂ *v* sting
lʌk⁰ kʰuʔ⁰ *n* the spot just underneath the sternum
lʌl³ *v* pry, wiggle
lʌm¹ *v* take on, accept another religion
lʌm² *n* 1) road 2) way, manner
lʌm³ *v* wear, put on (loin cloth)
lʌm³ sʌm³ *n* loin cloth
lʌŋ² *adj* adult
lʌŋ² ku² *n* knee
lʌŋ² sa¹₁ *n* shin
lʌŋ³ ti² *n* bone marrow
lʌp⁰₁ tail feathers
lʌp⁰₂ *v* mate (animals)
lʌp⁰₄ *v* 1) reach, arrive 2) catch (the bus)
lʌp⁰ kʰaʔ⁰ *n* bitter tea
lʌp⁰ sɨm² *n* sweet tea
lʌp⁰ ʃaŋ² *n* black tea (lit. red tea)
lʌt⁰ *v* take out, pull out

m

m- *pfx* NEG
ma³ *post* DAT
ma³ kan² *n* type of bamboo
ma³ kan² tɔŋ² *n* Makantong (village)
ma³ kat⁰ *n* pepper
ma³ ma³ different, separate
mak⁰₁ *v* pretend to hit
mak⁰₂ *v* craft, make, create
mal¹ 1) *adj* scratched 2) *v* become scratched
man¹ 1) *adj* caught in a trap 2) *v* be caught in a trap
man¹ tsʌ⁰ɹe³ *n* dragonfly
man² *n* 1) cattle 2) cow 3) bovine
man³₁ *v* sharpen (metal)
man³₂ *adj* little, few
maŋ² *n* vagina
mat⁰₁ *v* hang
mat⁰₂ *v* invite for a festive event
maʔ⁰~mʌt⁰ 1) *n* destruction 2) *v* perish 3) *v* be destroyed 4) *v* become lost 5) *v* die
mɛ¹ *n* tail
mɛ¹ hɔ² *n* fermented dried bamboo
mɛ¹ xi² *n* fermented bamboo
mɛ²₁ *adj* true, truly
mɛ² mɛ² truly, of blood
mɛ³ *v* ABIL (know)
mɛ³ ɔ² *n* Miao
mi² *v* stroke
mi² te² *n* Maitai (tribe)
mi³ kʌm¹ *n* sibling in the middle
mik⁰ *v* lick
min²₁ type of orchid or creeper
min²₂ 1) *adj* yellow, golden, light pink 2) *v* be yellow, golden, light pink
min³ *v* catch with sticky rubber juice
miŋ¹ 1) *adj* small 2) *v* be small
miʔ⁰ *n* person
miʔ⁰ duk⁰ xɔŋ *v* saddening
miʔ⁰ kʰɔ² xɨp⁰ se³ *n* head hunting song
miʔ⁰ lʌŋ² *n* adult
miʔ⁰ pat⁰ miʔ⁰ ɟa³ surprising
miʔ⁰ pɔʔ⁰ *n* 1) simple, humble, quiet person 2) person with disability
miʔ⁰ pɔʔ⁰ ŋʌm² ɹɔʔ⁰ simple, humble, quiet person
miʔ⁰ pʌk⁰ miʔ⁰ lʌk⁰ boring
miʔ⁰ tɕɔ xɔŋ scary, dangerous
miʔ⁰ tɨn¹ ʌ⁰ʃiʔ⁰ pitiful
miʔ⁰ tsɨk⁰ miʔ⁰ ɹɨk⁰ disgusting
mɨk⁰ *n* eye
mɨk⁰ ɹun² *n* eyebrow
mɨk⁰ ɹʌŋ² slanted eyes
mɨk⁰ suk⁰ *v* hate
mɨk⁰ ʃɨt⁰ *n* tear
mɨn² bʌŋ¹ *n* type of tree
mɨn² ki² *n* axe
mɨn²~mɨn³ 1) *adj* ripe 2) *v* be ripe
mɨŋ² *n* land, nation, country
mɨŋ² kaŋ² *n* 1) world 2) society
mɨŋ³ 1) *n* name 2) *v* call (a name) 3) *v* mean
mɨt⁰₁ *v* go out (intrans), extinguish
mɨt⁰₂ *v* wash (the face)
mɨt⁰ kan² *n* needle
mɔːt⁰ *v* weed (by hand)
mɔ¹ ha¹ *n* 25 paise
mɔ²~mɔt⁰ *v* shake (intrans)

mɔ³ kʰaŋ³ *n* pan (with ears)
mɔ³ tʰɔ³ la³ ti¹ *n* orange
mɔk⁰₁ *adj* intoxicated, drunk, high, stoned
mɔk⁰₆ *v* ache (head)
mɔk⁰₂ pretend to, almost do sth
mɔk⁰₅ *n* horse
mɔk⁰₃ perhaps
mɔk⁰₄ *v* thunder
mɔk⁰ tɔk⁰ illness involving headache, allergic reaction, vomiting
mɔl²₂ 1) *n* Mol festival **2)** *v* celebrate Mol festival
mɔl²₁ *n* paddy pestle
mɔl² tɔp⁰ *n* log drum
mɔl² tsal² *v* do festive dancing
mɔl³ *v* fight, have an argument
mɔŋ² *n* **1)** inside **2)** during **3)** within
mɔŋ² na³ inside
mɔŋ² nʌŋ³ inside
mɔŋ² ɔ³ within, during
mɔŋ² ɔʔ⁰ within, inside
mɔŋ² tʰʌm³ will, thinking
mɔŋ² βaŋ³ from inside
mɔt⁰ *v* blow
mɔʔ⁰ *v* deny, say nay
muk⁰ lɔm² *n* Muklom (tribe)
mun *adj* dim (light)
muŋ dement, without knowing
muŋ² ɹaŋ² *n* Morang (tribe)
muŋ² ʃʌŋ² *n* Muishaung (tribe)
muŋ² tan³ *n* **1)** spiritual realm **2)** heaven
mut⁰ *n* crumb
mʌk⁰ *adj* black
mʌl 1) *adj* poisoned **2)** *v* poison
mʌl² *post* like, as
mʌn¹ pʰʌn²~mʌn¹ pʰʌn³ 1) *n* history **2)** *v* tell a story
mʌn¹ tɔ² *n* picture
mʌn¹~mʌn³ 1) *n* infection **2)** *v* become infected
mʌn² mʌn² repeatedly
mʌŋ¹ 1) *n* dream **2)** *v* dream
mʌŋ² 1) *adj* dead **2)** *adj* excruciatingly slow **3)** *n* corps
mʌŋ² mʌŋ² INTENS
mʌŋ³ 1) *adj* stopped **2)** *adj* fainted **3)** *v* stop, rest
mʌŋ³ βa³ regret, feel guilty, feel sorry
mʌt⁰ mɛ¹ nu¹ *n* sister in law
mʌt⁰ tɕa² *n* Matcha (clan)

n

n- *pfx* FUT
n~ni² *det* MED
na¹ *n* older sister
na¹ kʰɔ² *n* oldest sister
na¹ mɛŋ² *n* cat
na³₁ *n* ear
na³₂ *post* in
na³ baŋ² deaf
na³ bɨŋ² *n* ear cavity
na³ kʰa³ *n* ear cavity
na³ lɔŋ² *n* Nalong (village)
na³ mʌn³ *n* oil
na³ ti¹ *n* earlobe
nal²₂ *adj* new
nal² pʌŋ² *n* fire torch
nal² tʰuŋ² *n* irrigated paddy field
nal² tɔŋ³ *n* wet field
nam² *n* grass
nam³ *v* mix (liquids)
nan βa¹ Nanwa (character form mythology)
nan³ 1) *adj* dirty **2)** *v* be dirty
naŋ¹ *n* straw, hay (of paddy)
naŋ³ *v* be tired
naŋ³ ɛ³ COMP, than
naŋɔ *n* Nango (character from mythology)
nap⁰ bʌŋ¹ *n* banana tree
nap⁰ ɟʌk⁰ *n* banana leaf
nap⁰ kʰi² *n* type of wild banana
nap⁰ kʌm¹ *n* type of wild banana
nap⁰ kʌm¹ ɟʌk⁰ *n* type of leaf for packing rice
nap⁰ ŋak⁰ *n* domesticated banana tree
nap⁰ pʰan³ *n* type of leaf for packing rice
nap⁰ pɔk⁰ *n* banana flower
nap⁰ ti¹ *n* banana
naʔ⁰₂ *v* provoke
naʔ⁰₁ *n* bee
naʔ⁰ pɔʔ⁰ *n* beehive
naʔ⁰ ɹi² very
naʔ⁰ ti² *n* honey
naʔ⁰ tɨp⁰ *n* bee nest
nɛ² 1) *adj* little, few **2)** *v* be little, few

ni¹ *n* aunt, paternal
ni¹ tɕa¹ *n* mother in law
ni¹ʝa³ *n* self (reflexive)
ni³₁ *conn* and
ni³₂ 1) *adj* two 2) DU
ni³ a³ *conn* and
ni³ ʝaŋ² *n* child
ni³~n *det* MED
nik⁰ later
nik⁰ ʝa³ later in the evening
nɨl¹ 1) *adj* reverse, incorrect 2) *v* be reverse, be incorrect
nɨm¹ 1) *pro* 2PL 2) 2PL.POSS
nɨm³₂ 1) *adj* short, low 2) *v* be short, be low
nɨm³ nɨŋ³ *n* two years ago
nɨm³ ŋɛ² *n* three years ago
nɨm³ paŋ² *n* last year
nɨm³ paŋ² nɨm³ nɨŋ³ *n* a long time ago
nɨm³ paŋ² nɨŋ³ *n* many years ago, a long time ago
nɨn¹ *v* dance
nɨŋ¹ kʰʌn² because
nɨŋ² 1) *pro* 3PL 2) 3PL.POSS
nɔ² *n* 1) younger sibling 2) baby
nɔ² hɔl³ tɕɨŋ¹ *n* uterus
nɔ² ʝi² *n* youngest sibling
nɔ² kʰɔ¹ miscarriage
nɔ² li² kʰaŋ³ kʰi² miscarriage
nɔ² maʔ⁰ miscarriage
nɔ² nɔ² *n* baby
nɔ² ti² kʰaŋ² kʰi² *n* orphan
nɔ² ti² sa¹ *n* orphan
nɔ³ βa¹ *n* Nowa (character from mythology)
nɔk⁰ *n* friend
nɔk⁰ ʝaʔ⁰ *n* Nokja (tribe)
nɔl¹ *v* mix
nɔl¹ buʔ⁰ harsh (beating)
nɔl² sal² *v* spread out and dry in the sun
nɔl²~nɔl³ *v* spread out
nɔŋ² *n* drum
nɔŋ² βɨn³ tʰuk⁰ *n* front wall of the house
nɔŋ³ tʰʌm² *n* Nongtham (village)
nɔp⁰ *v* 1) convert (intrans) 2) enter, go inside
nɔt⁰ *v* rub (e.g. between hands)
nu¹ 1) *n* mother 2) F 3) *n* wife
nu¹ na³ βa¹ *n* brother in law
nu¹ nu¹ *n* sweetheart
nu¹ βa¹ *n* 1) ancestors 2) parents
nu³ dɔŋ² 'lifetime payment' to the family of the bride
nuk⁰₁ 1) *n* desire 2) *v* like
nuk⁰₂ put hands together (respectful greeting)
nuk⁰₃ *v* scrub
nuk⁰ nap⁰ worship
nuŋ¹ *v* give birth (animal)
nuŋ² *n* mouth
nuŋ² bɨl¹ *n* lip
nup⁰ *adj* 1) soft 2) smooth
nʌk⁰₁ *adj* dark
nʌk⁰₂ PROH
nʌk⁰₃ *v* wear, put on (shoes)
nʌk⁰₄ *v* step, stamp, kick
nʌk⁰ kʰɔ¹ type of wedding
nʌk⁰ pɨn¹ type of wedding
nʌl¹ 1) *adj* slippery 2) *v* be slippery
nʌm¹ *n* sesame seed
nʌm¹ ʝa³ aubergine (colour)
nʌm²₁ 1) *adj* rotting, decaying, breaking down 2) *v* rot, decay, break down
nʌm²₂ *n* 1) property 2) asset
nʌm² ʝɔŋ² *n* name of month
nʌm² nu¹ *n* daughter in law
nʌm² sa¹ *n* name of month
nʌm³₁ *v* borrow
nʌm³₂ *n* stalk (paddy)
nʌn³ *v* have doubts about sb, suspect
nʌŋ¹ *pro* 2SG
nʌŋ³₁ *v* wear, put on (skirt)
nʌŋ³₂ *post* towards
nʌp⁰ *n* morning
nʌp⁰ kʰaʔ⁰ early morning
nʌt⁰ *v* grab forcefully, knead

ŋ

ŋa laŋ *n* mithun
ŋa tsɔŋ *n* rhinoceros
ŋa tsɔŋ ŋa laŋ *n* large animals
ŋa¹ *pro* 1SG
ŋam³ *n* width

ŋam³ puŋ¹ ŋam³ ʃaŋ² acting carelessly, ruthless, without mercy
ŋan¹ *n* strip (of fabric)
ŋan²~ŋan³ *v* ABIL (big tasks)
ŋaʔ⁰ *n* fish
ŋaʔ⁰ bʌŋ¹ tsɨp⁰ *n* type of fish
ŋaʔ⁰ kuŋ¹ *n* type of fish
ŋaʔ⁰ luk⁰ *n* type of fish
ŋaʔ⁰ mɛ² *n* type of fish
ŋaʔ⁰ miʔ⁰ *n* merman, mermaid
ŋaʔ⁰ pu³ *n* eel
ŋaʔ⁰ suʔ⁰ *n* type of fish
ŋaʔ⁰ tɕʌŋ² *n* type of fish
ŋaʔ⁰ tɔm¹ *n* type of fish
ŋaʔ⁰ tsɔl³ βiʔ⁰ *n* type of fish
ŋaʔ⁰ xiŋ² *n* mountain goat
ŋaʔ⁰ xiʔ⁰ ʝa² hʌn³ *n* young girls (lit. fish poop girls)
ŋaʔ⁰ βɔ¹ kʰɔ² *n* type of fish
ŋaʔ⁰ βɔk⁰ tɔk⁰ *n* type of fish
ŋe tɕaŋ *n* Ngechang (village)
ŋe² loud
ŋe² muŋ² *n* Ngaimong (tribe), Ngemu (clan)
ŋɛl² *n* **1)** snow **2)** hail
ŋɛl³ 1) *adj* itchy **2)** *v* itch
ŋɛl³ ʝɔ² *v* be jealous
ŋik⁰ *v* turn away from
ŋɨl² *v* gnarl
ŋɨn² *n* money
ŋɨt⁰ *v* laugh
ŋɔ¹ *v* fry
ŋɔm *adj* mute
ŋɔp⁰ flapping of wings through the air
ŋɔt⁰₁ *v* achieve
ŋɔt⁰₂ *v* bend
ŋum¹ 1) *adj* rolled up **2)** *v* roll up
ŋuŋ³ βa¹ *n* chief (second in rank)
ŋʌm² *n* **1)** meat, flesh **2)** animal, game
ŋʌm² ʃiʔ⁰ ŋʌm² kʰaʔ⁰ *n* dangerous animals
ŋʌm² ʌ⁰ŋaʔ⁰ *n* all types of animals
ŋʌm³ kʰi³ person with a strong spirit, witchcraft
ŋʌp⁰ tsaŋ² *n* velum

ɔ

ɔ²₂ EXCLAM (encouraging)
ɔ²e³ VOC
ɔ³ *post* at, in
ɔ³tʰɔʔ⁰₁ 1) (not) even **2)** whatever, any
ɔ³tʰɔʔ⁰₂ 1) nevertheless **2)** even though, despite
ɔi² VOC
ɔʔ⁰ *post* at, in

p-pʰ

pa³ *n* tooth
pa³ kɨm² *n* molar tooth
pa³ tʌt⁰ tʌt⁰ INTENS
pal² 1) *n* fenced off garden **2)** *v* fence off
pal² bʌŋ¹ *n* hedge
pal²~pal³ *v* splint
pan¹ *v* flatten
pan²~pan³ 1) *adj* broken **2)** *v* cut (meat), break (glass) **3)** *v* scatter
pan³ ʝan³₂ suddenly
pan³ ʝan³₁ *v* cut a whole animal into pieces
pan³ ʝɔŋ² wide
paŋ¹₁ *n* dormitory
paŋ¹₂ 1) *adj* flat, horizontal **2)** *v* lie down
paŋ¹ pɔŋ¹ *n* boys' dormitory
paŋ²~paŋ³ *n* year
paŋ³ *v* divorce
pat⁰₂ *n* **1)** time **2)** era
pat⁰₃ *v* cross
pat⁰ ʝa³ *v* be surprised
pat⁰ ʌ⁰ʝat⁰ *n* long ago
paʔ⁰₁ *v* spread (intrans)
paʔ⁰₂ *n* spear
paʔ⁰ pʰuŋ² bɨl³ augury with a spear
pe²~pe³ *v* take
pɛ¹ *n* vagina
pɛl³ 1) *adj* prohibited (for ritual reasons) **2)** *n* prohibition (for ritual reasons)
pɛʔ⁰ *adj* **1)** not spicy, not matured (of pepper) **2)** not dry yet, not matured (of bamboo)

pʰ~pʰʌ⁰₂ INV
pʰ~pʰʌ⁰₁ CIS
pʰ~pʰʌ⁰₃ OBL, INGR
pʰa³ lɔŋ³ *n* long pants
pʰak⁰ *v* glare
pʰaŋ¹ shine through
pʰaŋ²₂ *n* **1)** sand (stone dust and gravel) **2)** grain
pʰaŋ²₃ *n* cannabis
pʰaŋ²₁ **1)** *adj* mentally disturbed **2)** *v* be mentally disturbed
pʰaŋ²~pʰaŋ³ *adj* stretched out, flat, open, spread out
pʰaŋ³ *n* cheek
pʰat⁰ *v* vomit
pʰaʔ⁰₂ *v* spill, fall outside
pʰaʔ⁰ li² *n* bitter tea
pʰaʔ⁰ tʰɔŋ³ *n* mortar and pestle
pʰe³ *n* outside, distance away
pʰɛŋ² *adj* flat
pʰi¹ ʌ⁰βɔ¹ *n* birds
pʰi³ *v* pluck, pull out
pʰik⁰ ask a question
pʰin³ **1)** *n* treatment (medicine) **2)** *v* apply, dress, treat (medical)
pʰiŋ¹ pʰi² liŋ² li³ living carelessly, free, without worrying about the future, steady
pʰit⁰ *v* **1)** wring out **2)** milk (a cow)
pʰɨn¹~pʰɨn³ *v* sew
pʰɨn² bʌŋ¹ *n* type of tree
pʰɔ¹ *n* older brother
pʰɔ¹ kʰɔ² *n* oldest brother
pʰɔ³~pʰɔːt⁰ *v* smoke (food)
pʰɔk⁰ *v* explode
pʰɔŋ³ *n* leaves that cover the ridge of the roof
pʰɔŋ³ huŋ¹ tsʌm¹ huŋ¹ unsatisfied soul who has not received offerings, cremation without offerings
pʰɔt⁰ *v* boil (intrans)
pʰɔt⁰ la¹ suddenly
pʰu² *v* blow, pant
pʰuk⁰₁ *n* **1)** sprout **2)** sapling
pʰuk⁰₂ squirt out (blood)
pʰun¹ *n* red meat
pʰun² *n* cloud
pʰut⁰ *adj* filled
pʰuʔ⁰ revenge
pʰʌ⁰li² *n* tongue
pʰʌ⁰lʌp⁰ *n* tea
pʰʌk⁰₁ *n* handle of knife
pʰʌk⁰₂ *v* eat (hard foods)
pʰʌk⁰₃ *n* arm pit
pʰʌk⁰ sʌt⁰ *n* food
pʰʌk⁰ ʌ⁰sʌt⁰ *n* food
pʰʌk⁰ βʌk⁰ *n* bat
pʰʌl²~pʰʌl³ *v* **1)** distribute **2)** split
pʰʌn² *n* **1)** type, species **2)** clan
pʰʌn² ɹɨp⁰ all types
pʰʌn² tɕi¹ *n* coriander
pʰʌn²~pʰʌn³₁ **1)** *n* story **2)** *v* tell a story, tell **3)** *v* happen
pʰʌn²~pʰʌn³₂ *v* **1)** chase away **2)** hunt **3)** follow
pʰʌn³ tɕʌn³ *v* tell a story
pʰʌŋ¹ *adj* visible
pʰʌŋ² ɹɨm³ ɹaŋ² *n* rainbow
pʰʌŋ³ *n* **1)** beginning **2)** first **3)** start
pʰʌŋ³ luŋ² mʌt˺ mɛ² creation and destruction time
pʰʌt⁰₁ *v* boil in bamboo
pʰʌt⁰₂ *v* wash (hair only)
pi² *n* yeast
pit⁰ *adj* soft
piʔ⁰₂ **1)** *pro* 3SG **2)** 3SG.POSS.PROX
pɨk⁰ *n* field
pɨk⁰ ʌ⁰pal² *n* fields and gardens
pɨl¹ **1)** *adj* green, blue **2)** *v* be green, blue
pɨl² afterbirth
pɨl² puŋ³ *n* flower
pɨl²~pɨl³ **1)** *adj* rash **2)** *v* rash
pɨn² sa¹ *n* type of ant
pɨn³ *n* piece
pɨŋ¹ **1)** *adj* tasty **2)** *v* be tasty
pɨŋ³ *adj* filled, closed
pɨt⁰ *v* ask a question
pɔ³ **1)** *adj* perforated, broken **2)** *v* be perforated, be broken
pɔ³ pi² *n* type of insect
pɔk⁰ *v* wear on the head
pɔk⁰ pɔk⁰ INTENS
pɔl² *n* **1)** floor beam **2)** tree (archaic)
pɔl² ti¹ bʌŋ¹ ti¹ *n* fruit
pɔl² ʌ⁰bʌŋ¹ *n* trees
pɔl²~pɔl³ *v* shove inside, stir
pɔl³₁ *n* cob (corn)
pɔl³₂ *n* insomnia
pɔn³ tʰai² *n* Ponthai (tribe)

pɔŋ¹ M.YOUNG
pɔŋ³ *v* blow (wind)
pɔt⁰ pɔt⁰ INTENS
pɔʔ⁰₁ *adj* simple, humble, quiet
puːk⁰ *n* elephant
puːk⁰ ʌ⁰li² *n* large herbivorous wild animals
pu²~puk⁰ *v* fly
pu³₂ *n* snake
pu³₁ *v* hide
pu³ kal² *n* cobra
pu³ tsʌm¹ *n* house lizard
puk⁰ *n* stomach (organ)
puŋ¹ kʰaʔ⁰ very angry
puŋ²₃ 1) *adj* white, light grey **2)** *v* be white, light grey
puŋ²₂ steamed (rice)
puŋ²₄ *n* corn
puŋ²₁ *n* breast
puŋ² ban³ *n* corn silk
puŋ² pɔl³ *n* corn cob
puŋ² ti¹ *n* nipple
puŋ² ɓɔŋ² *n* corn
puŋ³₂ 1) *n* flower **2)** *v* bloom
puŋ³₁ *n* fat of meat
put⁰ put⁰ INTENS
puʔ⁰~pɔt⁰ *v* carry on the back
pʌ⁰lik⁰ dizzy
pʌ⁰ɹu¹ *n* **1)** cooked vegetables and or meat **2)** vegetable
pʌk⁰₁ silent
pʌk⁰₂ *v* hang with rope or knot
pʌk⁰₃ *n* wrist
pʌk⁰₄ *v* be passed down, inherit
pʌk⁰ lʌk⁰ 1) *v* irritate **2)** *v* squeeze **3)** *n* irritation **4)** *n* boredom
pʌl²~pʌl³ 1) *n* night **2)** *v* become night
pʌn¹ *v* crush
pʌn² tu² *n* type of basket
pʌn³ ʝɔl²~pʌn³ ʝɔl³ *v* diminish
pʌn³ ʝʌn³ dwindle, suffer from attrition
pʌŋ¹ *n* ankle or arm ornament
pʌŋ³ *v* forbid
pʌt⁰ *v* throw
pʌt⁰ pʌt⁰ INTENS

ɹ

ɹal² *n* enemy
ɹal² lɔŋ³ *n* war
ɹam² 1) *adj* thin **2)** *v* be thin
ɹan¹ 1) *adj* withered (plant), dried (fish) **2)** *v* wither
ɹan³ *n* veranda, front entrance
ɹan³ tʌp⁰ *n* veranda fireplace
ɹaŋ¹ *n* bone
ɹaŋ¹ tɕam² *n* skeleton
ɹaŋ²₁ 1) *n* rack, frame **2)** *v* build a rack, build a cremation stack
ɹaŋ²₃ *n* hunter's den, tree house
ɹaŋ²₂ *n* reason
ɹaŋ² ʝɔŋ² largest type of dowry and wedding price (one buffalo)
ɹaŋ² ɹaŋ² INTENS
ɹaŋ³₂ first, before
ɹaŋ³₁ equivalent
ɹaŋ³ man³ stylish, vain
ɹap⁰₁ *v* cut open
ɹap⁰₂ *adj* moist
ɹap⁰₃ 1) *adj* sticky **2)** *v* stick
ɹaʔ⁰ 1) *n* speech **2)** *n* rule, law **3)** *v* speak **4)** *v* sound, make sound
ɹaʔ⁰ ɓan² tit⁰ *v* chat
ɹe² kʰuŋ¹ *n* Rekhung (clan)
ɹe² ɹʌŋ³ *v* do
ɹɛl² 1) slow **2)** late
ɹɛl³₁ *adj* some, few
ɹɛl³₂ 1) *adj* near **2)** *v* be near
ɹɛʔ⁰ then
ɹi¹₂ *n* boundary
ɹi¹₁ *n* spider thread
ɹi¹ kʰaʔ⁰ *n* type of bitter fruit
ɹi² *n* cane
ɹi²~ɹik⁰ *v* **1)** buy **2)** marry (male agent)
ɹi³ 1) INF **2)** of course, you see
ɹi³~ɹ *det* PROX
ɹim¹ *v* crawl
ɹim² ɹʌŋ² *v* take care of
ɹim²~ɹim³ *v* raise (animals)
ɹiŋ²~ɹiŋ³ *v* **1)** shout **2)** make noise
ɹiŋ³ ɹak⁰ scream
ɹiʔ⁰ dirt

ɹɨl³ *v* skewer
ɹɨm¹ ɹɨm¹ scattered
ɹɨm²₁ *v* extinguish
ɹɨm²₂ 1) *adj* sexually satisfying **2)** *adj* sweet (archaic) **3)** *v* satisfy sexually
ɹɨn³₂ *v* have diarrhoea
ɹɨp⁰ *v* smoke (e.g. cannabis)
ɹɔːp⁰₂ *v* twist
ɹɔːp⁰₁ *v* drive, hunt
ɹɔ² *v* play a lot
ɹɔ² bʌn² βa¹ *n* type of centipede
ɹɔ² naʔ⁰ *n* type of centipede
ɹɔ² ɹak⁰ *v* play (of children)
ɹɔ³₁ *adj* crazy
ɹɔk⁰₁ *v* set fire to
ɹɔk⁰₂ *v* push from the side
ɹɔk⁰₃ multiple of ten
ɹɔl³ *n* **1)** age **2)** lifespan **3)** generation **4)** life
ɹɔl³ luŋ² *n* life
ɹɔm² ɹaŋ² *n* rack, frame
ɹɔm²~ɹɔm³ *v* chant, pray
ɹɔm³ tʌm³ blessing by a maternal uncle
ɹɔŋ¹ 1) *adj* strong **2)** *v* be strong
ɹɔŋ² *n* horn
ɹɔŋ²~ɹɔŋ³ *v* grow, increase, prosper
ɹɔŋ³₁ together
ɹɔt⁰₂ *v* rub
ɹɔt⁰₁ *v* make, construct (mechanical things)
ɹɔʔ⁰ CNT
ɹu¹ *n* **1)** rope **2)** creeper
ɹum³ *adj* **1)** together **2)** equal
ɹun² *n* **1)** hair **2)** small feathers
ɹun² ɹaŋ² *n* Ronrang (tribe)
ɹun³ hun² traditional singing of stories
ɹun³ βa¹ se³ βa¹ *n* singer of the runhun song, person leading the runhun song
ɹuŋ¹ 1) *adj* dried up, evaporated **2)** *v* evaporate till dried up
ɹuŋ² *n* halm
ɹup⁰ unite
ɹut⁰ *n* windpipe
ɹut⁰ tuŋ³ *n* voice box, voice
ɹuʔ⁰ communal fishing
ɹʌk⁰ ɹi³ *v* be ashamed
ɹʌk⁰ ɹʌk⁰ INTENS
ɹʌm² *v* enjoy, like
ɹʌm² baŋ² bʌŋ¹ *n* type of tree
ɹʌm² tsʌm³ curious
ɹʌn¹~ɹʌn³ 1) *adj* torn **2)** *v* tear (in two), rip
ɹʌŋ lɔm Ranglom (village)
ɹʌŋ¹ tun¹ avoid, keep safe from
ɹʌŋ²₁ *n* **1)** feather **2)** wing
ɹʌŋ²₂ *n* **1)** sky **2)** God
ɹʌŋ² buk⁰ *n* shade
ɹʌŋ² fra³ *n* Rangfra (deity)
ɹʌŋ² ʝa³ *n* evening
ɹʌŋ² kan² *n* lightning
ɹʌŋ² lip⁰ *v* lightning shoots across the sky
ɹʌŋ² lɔm² *v* be warm
ɹʌŋ² lɔm² tɕi² *n* sweat
ɹʌŋ² mɛ² 1) *n* sunshine **2)** *v* the sun shines
ɹʌŋ² muŋ cloudy weather
ɹʌŋ² nɛʔ⁰ 1) *n* afternoon **2)** *v* be afternoon
ɹʌŋ² nʌp⁰ *n* morning
ɹʌŋ² paŋ³ *n* Rangpang (group of tribes)
ɹʌŋ² pɔŋ³ 1) *n* wind, air **2)** *v* blow (wind)
ɹʌŋ² puk⁰ *n* airplane
ɹʌŋ² pʌl³ *n* night
ɹʌŋ² sal² *n* sun
ɹʌŋ² ʃaʔ⁰ striking of lightning
ɹʌŋ² tɕɔ² *n* summer
ɹʌŋ² tʰɨp⁰ 1) time of destruction **2)** destruction, annihilation
ɹʌŋ² tse³ 1) *n* rain **2)** *v* rain
ɹʌŋ³ *adj* early
ɹʌŋ³ ka³ *v* praise
ɹʌp⁰₁ more
ɹʌp⁰₂ 1) *adj* looking good, matching well **2)** *v* match **3)** fix, add
ɹʌp⁰ nɛ³ very

S

sa¹ 1) *n* offspring, child **2)** DIM
sa¹ mal² *n* person with tiger spirit, shaman, priest
sa¹ nu¹ βa¹ *n* husband and wife
sa¹ ŋa³ *n* servant, disciple
sa³ bɔn³ *n* soap

sa³ ɟuŋ² *n* Sajung (clan)
sa³ tsɨŋ² *n* Saching (village)
sa³ βɨt⁰ numb, tingling feeling (in limbs)
sa³ βʌt⁰ *n* land leech
sal²₁ F
sal²₂ *n* **1)** day **2)** sun
sam² *n* side, ribs
sam² kaŋ² na³ at the side of
sam² kɔ² na³ towards the side of
sam³ *v* cut
san¹ hap⁰ *n* bow and arrow
san¹ ɹɔŋ² *n* arrow
san² *n* barrel
san³ lʌk⁰ *n* bamboo spoon
san³ tʰɨŋ² *n* bracelet
saŋ² *n* rupee
saŋ²~saŋ³ 1) *adj* clean **2)** *adj* holy **3)** *v* be clean
saŋ³ ɹɔŋ² *n* type of bitter fruit
saʔ⁰ ɟuk⁰ *n* mortar
saʔ⁰ kʰuːp⁰ *n* husk
saʔ⁰ kʰup⁰ tʌ⁰tʰɨm³ name giving augury
saʔ⁰ nɨn *n* sticky rice
saʔ⁰ tsʌm¹ *n* type of paddy
saʔ⁰ xaŋ² *n* type of tree
saʔ⁰~sʌt⁰ *v* eat (soft foods)
se²~se³ 1) *n* song **2)** *v* sing
seʔ⁰ *n* remnant of beer brewing process
sɛ³ 1) COMP **2)** COS **3)** DUR **4)** anymore **5)** already
sɛŋ₂ *n* gemstone
si si INTENS
si² 1) *n* finger **2)** toe
si² hɔŋ³ *n* middle finger
si² ku² *n* thumb
si³ ɹu³ ti¹ *n* grapefruit (largest type)
sin²~sin³ *v* see, stare
siŋ¹ 1) *adj* stinky smell **2)** *v* stinky smell
siŋ¹ sa¹ *n* holy basil
siŋ¹ sa¹ dʌŋ² ɹʌk⁰ *n* herbs
sɨk⁰ *v* notch
sɨm¹₁ *n* salt
sɨm¹₃ 1) *adj* blue, purple **2)** *v* be blue, be purple
sɨm¹₂ *n* net-like filter for making beer
sɨm¹ kʰak⁰ *n* (net-like) bag
sɨm¹ kʰaʔ⁰ too salty
sɨm² 1) *adj* salty **2)** *adj* sweet **3)** *v* be salty **4)** *v* be sweet
sɨm² sɨm² INTENS
sɨm² tʰʌŋ² *n* firefly
sɨm³ xi² sweet and salty at the same time
sɨŋ¹ *adj* true
sɨp⁰₂ *n* type of fan palm leaf used for roofing
sɨp⁰₃ *v* destroy completely
sɨp⁰₄ *n* ant
sɨp⁰ lɨp⁰ *n* cockroach
sɨp⁰ sɨp⁰ ONOM
sɨt⁰ 1) *n* urine **2)** *v* urinate
sɔ² tɨk⁰ *n* unnatural death
sɔk⁰ *v* bark, cough
sɔk⁰ lɔk⁰ cough, attract a cough
sɔk⁰ nɔk⁰ *n* corner, edge
sɔl²~sɔl³ *v* lead
sɔm²~sɔm³ *v* **1)** hold, uphold **2)** take **3)** use, carry
sɔŋ¹~sɔŋ³ *v* boil (rice)
sɔŋ² 1) *adj* cold **2)** *v* be cold
sɔŋ³₂ *v* dwell
sɔt⁰ *v* **1)** grill **2)** burn **3)** cremate
su¹ *n* grandchild
su² su² INTENS
su³ nu¹ *n* doll
suk⁰₁ *v* skewer
suk⁰₂ *n* shoulder
suk⁰ kaŋ² *n* shoulder (entire)
suŋ¹ *n* bump (of buffalo, bull)
suŋ³ ɹaŋ³ 1) *n* joy **2)** *v* be happy
suŋ³ ʌ⁰se³ *n* song
sut⁰ *v* point at
sut⁰ βik⁰ *n* type of mosquito
suʔ⁰ *n* thorn
suʔ⁰ tɔm *n* type of plant
suʔ⁰~sut⁰₂ *v* stab
suʔ⁰~sut⁰₁ *v* shove inside, stir
sʌ⁰nʌt⁰ *n* seven
sʌ⁰ɹe² *n* hunter
sʌk⁰₁ *v* **1)** lock **2)** close **3)** put inside
sʌk⁰₂ *n* **1)** trunk of body **2)** entire body
sʌk⁰ sʌk⁰ INTENS
sʌk⁰ xʌl² 1) *adj* healthy **2)** *v* be healthy
sʌl βʌŋ *n* wedding day
sʌl² kiŋ² *n* Salking (tribe)
sʌm hɨl la *n* sorghum
sʌm¹~sʌm³ 1) *adj* talented **2)** *v* understand, know
sʌm² *n* plains, non-tribal, stranger
sʌm²~sʌm³ *v* **1)** wear **2)** put on (clothes)

sʌm³ xɔŋ¹ *n* shirt, cardigan, sweater
sʌŋ¹~sʌŋ³ *v* sell
sʌŋ² βal² *n* Sangwan (tribe)
sβa EXCLAM (exhalation)

ʃ

ʃ DU
ʃa³ hundred
ʃak⁰ ɹal² *n* type of spider
ʃal¹~ʃal³ 1) *adj* rotten **2)** *v* be rotten
ʃaŋ βʌŋ² ʝan³ *v* high-jump
ʃaŋ¹ pʰɔːt⁰ *n* small boiled and peeled yam
ʃaŋ² 1) *adj* red **2)** *v* be red
ʃaɔ EXCLAM (surprise)
ʃat⁰ *v* get up, wake up
ʃaʔ⁰ *n* tiger
ʃaʔ⁰ kʰɔ² xɨp⁰ se³ *n* tiger killing song
ʃɛ¹₁ 1) *adj* full **2)** *v* be full
ʃɛ¹₂ *adj* one
ʃɛke³ βa¹ *n* God, Lord
ʃi¹ la¹ *n* **1)** statue **2)** idol
ʃi³ *v* lack energy, lack power
ʃi³ tʰu² *n* condiment
ʃi³~ʃ *det* DIST
ʃi³ki¹ 12.5 paise
ʃiŋ² ke² *n* peas, beans
ʃiŋ² ɹɔŋ² *n* red pea
ʃiŋ² tɔm³ *n* soybean
ʃiŋ²~ʃiŋ³₂ *v* put, place, keep, save
ʃiŋ²~ʃiŋ³₁ 1) *adj* swollen, swelling **2)** *v* swell
ʃiʔ⁰ *adj* bad, ugly
ʃiʔ⁰~ʃɨt⁰ 1) *adj* destroyed **2)** *v* be destroyed
ʃɨn¹~ʃɨn³ 1) *n* tension **2)** *v* stretch **3)** *v* quake
ʃɨt⁰₁ *v* brush (hair)
ʃɨt⁰₂ *v* check the sound of the log drum
ʃɔ¹ hɛ³ lak⁰ tɔŋ² *n* Shohelaktong (village)
ʃɔk⁰ ʃɔk⁰ INTENS
ʃɔl² *n* wolf
ʃɔl² ʌ⁰ʃaʔ⁰ *n* large carnivorous wild animals
ʃɔm¹₁ *n* **1)** medicine, drug **2)** hospital
ʃɔm¹₂ *v* finish completely
ʃɔm¹ ʌ⁰βaʔ⁰ *n* medicines
ʃɔŋ² *n* shortage
ʃɔŋ² ʌ⁰tɕʌm³ *n* famine
ʃɔŋ³ *v* settle down, sit low
ʃɔŋ³ nɔl³ *n* type of bitter fruit
ʃɔp⁰ 1) *adj* tangled (of hair), messy **2)** *v* crumple (paper)
ʃu² ʃu² INTENS
ʃum³ *v* worship, praise
ʃum³ nuk⁰ worship
ʃup⁰ *v* consume
ʃʌm² *n* **1)** face **2)** appearance, sight
ʃʌm² ʃɛ¹ ʃɛ¹ same in appearance
ʃʌm² ʃɔk⁰ *n* mirror
ʃʌn³ stubbles
ʃʌp⁰ *n* bear

t-tɕ-tʰ-ts

t~taʔ⁰ PST
ta³₁ *v* want
ta³₃ QUOT
ta³ hi¹ *n* blood
ta³ kʰun³ nɛʔ⁰ four days before yesterday
ta³ sin³ nɛʔ⁰ three days before yesterday
ta³ sʌn³ nɛʔ⁰ day before yesterday
ta³ tʰɔn³ nɛʔ⁰ two days before yesterday
ta³ βe³ again
tak⁰ tak⁰ INTENS
tal¹ *n* thick bamboo rope
tal¹~tal³ 1) *adj* smart **2)** *n* knowledge **3)** *v* be smart
tal² *v* taste
tan³ *post* as much as, as many as
tap⁰ *n* **1)** tent **2)** shed
tat⁰₁ 1) try **2)** may
tat⁰₂ 1) *v* hear **2)** *v* listen, obey **3)** to understand
tat⁰ tat⁰ INTENS
taʔ⁰₁ *n* strength
taʔ⁰₃ taboo, curse, abnormality
taʔ⁰₂ *n* sinew, tendon
taʔ⁰ ɹɔŋ¹ 1) *adj* strong **2)** *v* be strong
tɕal² F.YOUNG
tɕan¹₁ fear of heights
tɕan² 1) wood **2)** firewood

tɕan³ *v* prune
tɕaŋ βʌŋ tɔm² curfew
tɕaŋ¹ mi² *n* Changmi (clan)
tɕaŋ² bʌŋ¹ *n* tree used for fish poisoning
tɕaŋ² ʝʌk⁰₂ *n* leaf used for fish poisoning
tɕaŋ² tɔm³ *n* fruit of a type of tree
tɕaŋ²~tɕaŋ³ *v* give birth
tɕaŋ³ 1) *adj* light of weight **2)** *v* be light of weight
tɕaʔ⁰ *n* diamond, jewel
tɕaʔ⁰ ni³ nʌm² *n* valuable possessions
tɕe² PROG
tɕɛl¹~tɕɛl³ *v* slip and fall
tɕɛl³₂ 1) *adj* flat, squashed **2)** *v* flatten, squash
tɕɛn³₁ alone, only
tɕɛn³₂ equally, both
tɕɛn³ tɕɛn³ 1) alone **2)** only
tɕi *n* egg
tɕi tɕi EXCLAM (disgust)
tɕi¹ lɛ¹ *n* type of lizard with hard skin
tɕi²₁ *adj* **1)** fresh (of plants, bamboo, and trees) **2)** moist
tɕi²₂ *n* **1)** liquid **2)** broth
tɕi³ tɕu² ni³ nu² wearing wide loose clothes
tɕin¹~tɕin³ 1) *adj* fat **2)** *v* be fat
tɕiŋ²₁ *n* arm band
tɕiŋ²₂ *n* root
tɕiŋ²~tɕiŋ³ 1) *adj* swelling (of water) **2)** *v* swell (water), flood
tɕip⁰₁ *v* **1)** cut (with scissors) **2)** press together, close together
tɕik⁰₁ *n* **1)** pot **2)** cooking pot
tɕik⁰₃ *v* roll
tɕik⁰ ʝa¹ *n* tripod
tɕik⁰ kʰuk⁰ *n* basket
tɕik⁰ kʰuŋ³ *n* space underneath elevated house
tɕil¹~tɕil³₁ *v* talk
tɕil¹~tɕil³₃ *v* fall down (tree)
tɕim¹~tɕim³ *v* wrestle
tɕim³ *v* plane an edge (wood)
tɕim³ bʌŋ¹ *n* type of tree
tɕin³ *v* knit
tɕiŋ¹₁ *n* place, location
tɕiŋ¹₂ OBL
tɕit⁰ *v* rub, file
tɕit⁰ tɕit⁰ INTENS
tɕɔ²~tɕɔ³ *v* fear
tɕɔ³ *v* wash dishes
tɕɔ³ pan²~tɕɔ pan³ 1) *n* fear **2)** *v* be afraid
tɕɔk⁰₂ *v* take off (clothes, peel)
tɕɔk⁰₄ *n* deer
tɕɔk⁰₅ *v* scoop up (paddy)
tɕɔk⁰ tɕɔk⁰₁ ONOM
tɕɔk⁰ ʌ⁰βʌk⁰ *n* medium-sized animals
tɕɔl²₂ 1) *adj* easy **2)** *v* be easy
tɕɔl²₁ PRF
tɕɔn²~tɕɔn³ *v* become slanted
tɕɔŋ³₂ *v* meet
tɕɔŋ³ kʰʌm² *n* umbrella
tɕu³ away
tɕu³ tɕu³₁ INTENS
tɕu³~tɕuk⁰ *v* request, ask for
tɕuk⁰ *n* sty
tɕuŋ¹₁ 1) *adj* wandering **2)** *v* get lost
tɕuŋ¹₂ *n* navel
tɕuŋ¹ ɹɔŋ³ postnatal ritual
tɕʌk⁰₁ PFV
tɕʌk⁰ tɕʌk⁰ ONOM
tɕʌm tʰɔʔ⁰ ʌŋ² mɔʔ⁰ nothing
tɕʌm¹ mʌl² how, in what manner
tɕʌm¹~tɕʌm² what
tɕʌm² li² what thing
tɕʌm² lʌŋ² what
tɕʌm² ma³ why
tɕʌm² ma³ ta³ kɔ³ ɛʔ⁰ because
tɕʌm² tan³ how many, how much
tɕʌm² ʌŋ² what
tɕʌm³₂ *n* famine
tɕʌm³ lal³ *n* hunger, being hungry
tɕʌŋ¹ *n* scrotum
tɕʌŋ¹ ti¹ *n* testicle
tɕʌŋ³₂ 1) *adj* enough, sufficient **2)** *v* be enough, sufficient
tɕʌŋ³ lʌŋ³ *n* Changlang (town)
tɕʌt⁰ *v* grow up
tɕys EXCLAM (chase away animals)
te²₃ *n* grandfather
te²₂ PROSP
te²₁ 1) person belonging to a group of people (NMLZ) **2)** person belonging to a place (NMLZ) **3)** owner (NMLZ) **4)** agent (NMLZ)
te² kʰil² *n* Tekhil (clan)
te²~te³ *v* carry on the lap
te³ tsi³ *n* Techi (clan)

tɛ³ 1) HORT 2) MIT
tɛl³ *n* oil
tɛn³ pɔŋ³ *n* Margherita (town)
tʰ~tʰi³ *det* DEF
tʰa¹ ɹu² ɹu² a little bit
tʰak⁰ *v* try (medicine, clothes)
tʰal² *n* area in front of the house
tʰaŋ¹ *n* 1) cost 2) price
tʰaŋ¹ kum³ cheap
tʰaŋ¹ lʌm² *n* dowry
tʰaŋ¹ tsan¹ expensive
tʰaŋ³ a³ now
tʰap⁰ *n* fungal infection of baby
tʰaʔ⁰₂ CLF (long)
tʰaʔ⁰ kʰun² *n* big type of edible root
tʰe² *n* type of reptile
tʰi² 1) *adj* sharp 2) *v* be sharp
tʰik⁰ huŋ¹ ʝuk⁰ huŋ¹ not giving offerings to a deceased person
tʰik⁰ huŋ¹ sik⁰ huŋ¹ a person who died an unnatural death
tʰin² *v* be destroyed
tʰin² ʝan² *v* be destroyed
tʰɨk⁰ la¹ correct
tʰɨŋ²₁ 1) *adj* unripe, uncooked, not done yet 2) *v* be unripe, be uncooked, not be done yet 3) raw
tʰɨŋ²₃ 1) *adj* awake 2) *v* wake up
tʰɨŋ²₂ 1) *n* weed 2) small grasses, sprouts
tʰɨŋ² nam² *n* grasses
tʰɨŋ³ *adj* 1) sealed 2) virgin
tʰɨp⁰ annihilation
tʰɨp⁰ ɹʌŋ² pʰʌŋ³ creation and destruction time, old times
tʰɨt⁰₁ *v* clear the nose
tʰɔ¹ *n* lungs
tʰɔ² lɛ³ hɔ² hastily
tʰɔl² 1) *adj* short 2) *v* be short
tʰɔm¹ *n* paddy mortar
tʰɔm² *v* finish
tʰɔŋ¹ *n* pillar
tʰɔŋ¹ huŋ³ *n* central pillar (of house)
tʰɔŋ² *n* custom, culture, religion
tʰɔŋ² kiŋ¹ *n* traditional practices
tʰɔŋ² ʌ⁰le² *n* customs, culture
tʰɔt⁰₂ *v* pin
tʰɔʔ⁰₃ also, too
tʰɔʔ⁰₄ *det* any, whatever, whichever
tʰuːk⁰ *v* spit
tʰuːk⁰ tɕi³ bɔl² *n* foam from the mouth
tʰuːt⁰ *v* dig
tʰu¹ *v* 1) hit against, bump into 2) push
tʰu¹~tʰut⁰ *v* crush, pulverise, grind
tʰu¹li¹ *n* 50 paise
tʰu³~tʰɔk⁰ *v* arrive, reach
tʰuk⁰₁ *v* billow (dust), be thrown up (dust)
tʰuk⁰₂ *v* 1) cover a vertical surface 2) enclose (with partitioning walls)
tʰun³₁ very
tʰun³₂ *v* finish
tʰuŋ²₂ 1) *adj* plain, level 2) *v* be plain, be level
tʰup⁰ *n* bladder, bag
tʰʌ⁰bat⁰ *v* say to one another
tʰʌ⁰dɨk⁰ wrapped around
tʰʌ⁰dɨk⁰ tʰʌ⁰de³ indirect, beating around the bush
tʰʌ⁰dʌn³ *v* separate from one another
tʰʌ⁰dʌn³ de³ *v* be different
tʰʌ⁰ʝi² 1) *det* all, each 2) *pro* all, each
tʰʌ⁰ʝɔŋ² *v* 1) enlarge 2) lift up
tʰʌ⁰ʝɔʔ⁰ *v* gather, collect
tʰʌ⁰laŋ³ *v* place, make sth stand
tʰʌ⁰laʔ⁰ *v* have intercourse with one another
tʰʌ⁰li³ *n* flea
tʰʌ⁰lit⁰ *v* turn on (light)
tʰʌ⁰lɔm² *v* warm up (trans)
tʰʌ⁰lun² *v* rescue, save
tʰʌ⁰lʌp⁰ *v* mate with one another (animals)
tʰʌ⁰lʌt⁰ *v* come out, stick out
tʰʌ⁰mal¹ *v* scratch
tʰʌ⁰mɨt⁰ *v* extinguish (trans)
tʰʌ⁰mɔl³ *v* fight with one another, have an argument with one another
tʰʌ⁰mɔt⁰ *v* shake (trans)
tʰʌ⁰mʌn² *v* be patient
tʰʌ⁰mʌŋ³ *v* slow down, stop
tʰʌ⁰mʌt⁰ *v* 1) lose (trans) 2) destroy
tʰʌ⁰nan³ *v* make sth lean against sth
tʰʌ⁰nɛʔ⁰ *n* today
tʰʌ⁰ni³ both
tʰʌ⁰nuk⁰ *v* like one another
tʰʌ⁰nʌn³ *v* have doubts about one another, suspect one another
tʰʌ⁰ɹik⁰ 1) *n* wedding 2) *v* marry one another
tʰʌ⁰ɹɨk⁰ *n* louse
tʰʌ⁰ɹɔːk⁰ six
tʰʌ⁰ɹɔl³ *v* 1) run parallel, go together 2) be in love

tʰʌ⁰ɹəl³ bʌl³ *v* be in love
tʰʌ⁰ɹu³ *n* big type of rodent
tʰʌ⁰ɹʌn³ *v* be torn
tʰʌ⁰ɹʌŋ³ ka³ *v* be proud
tʰʌ⁰βan³ *v* make sth or sb go up, make sth or sb swing
tʰʌ⁰βat⁰ *v* hit one another, fight with one another
tʰʌ⁰βʌn *v* group together, gather
tʰʌk⁰ upwards
tʰʌl² *n* **1)** face **2)** surface
tʰʌl² pʰaŋ³ *n* cheeks
tʰʌl² ɹaŋ¹ *n* cheekbone
tʰʌm² *n* marshy land
tʰʌm² kɔk⁰ *n* Thamkok (tribe)
tʰʌm² lɔm² *n* Thamlom (village)
tʰʌm² pʰʌŋ² *n* Thamphang (tribe)
tʰʌm³ 1) *adj* late **2)** *v* be late
tʰʌm³ βa¹ bat⁰ βa¹ *n* person leading Runhun song
tʰʌŋ¹ tʰʌŋ¹ INTENS
tʰʌt⁰ *adj* mature (of pepper)
ti¹₁ 1) *n* tip, fruit **2)** CLF (spherical, small)
ti¹₂ *coordconn* or
ti¹ xi² *n* sour fruits
ti²₁ *n* trap
ti²₂ *n* **1)** strong rice beer **2)** extract
ti² tsʌn³ *v* set up a trap
ti³ HS
ti³ ti³ INTENS

ti³~tɨk⁰₁ *v* COS.COP, become
ti³~tɨk⁰₂ *v* **1)** die **2)** kill
tɨk⁰₁ *v* serve out
tɨt⁰ *n* proximity
tɨt⁰ na³ near
tɨk⁰ *n* chest
tɨk⁰ ʃiʔ⁰ *n* unnatural death
tɨk⁰ tɕam² *n* chest
tɨkʰak⁰ *n* Tikhak (tribe)
tɨl²₂ 1) *adj* hot, spicy **2)** *adj* irritating **3)** *v* be spicy
tɨl²₁ *n* **1)** rice **2)** food
tɨl² ʃɔŋ *n* lunch, light meal in the afternoon
tɨl³ *v* patch (fix the roof with a leaf)
tɨm² 1) *adj* smell, pleasant **2)** *v* smell pleasant
tɨm³₁ *v* put into liquid, submerge
tɨm³ xiŋ³ *v* walk around and sprinkle
tɨn¹ *n* **1)** heart (new meaning) **2)** liver (older meaning)
tɨn¹ ɟuŋ¹ *v* feel sad, feel down
tɨn¹ kʰaʔ⁰~tɨn¹ kʰʌt⁰ 1) *n* anger **2)** *v* be angry
tɨn¹ maʔ⁰~tɨn¹ mʌt⁰ 1) *n* love **2)** *v* love
tɨn¹ mʌŋ³ *n* patience
tɨn¹ nup⁰ *n* gentleness
tɨn¹ ŋɛl³ *n* jealousy
tɨn¹ ʃiʔ⁰~tɨn¹ ʃɨt⁰ 1) *n* compassion **2)** *v* feel compassion
tɨn¹ ʌ⁰tal³ *n* heart and mind
tɨn¹ βa¹ mɔŋ² βa¹ *n* person who gives a right judgement
tɨŋ²~tɨŋ³ 1) *adj* smelly **2)** *v* unpleasant smell
tɨŋ³ *n* offering to pacify spirits
tɨŋ³ hun³ *v* offer to pacify or appease the spirits
tɨp⁰₁ *v* box, hit with force, pound
tɨp⁰₂ *n* nest
tɨp⁰₃ *v* ferment (rice beer)
tɔːk⁰₂ *v* winnow (first stage)
tɔːk⁰₁ *v* snap a picture
tɔ¹ 1) *adj* opening up, splitting open **2)** *v* open up (of tree blossoms)
tɔ² *v* put straight up
tɔk⁰₈ *n* back of the neck
tɔk⁰₇ *n* step of ladder
tɔk⁰₆ *n* aunt, maternal
tɔk⁰₅ *v* (stone) fry
tɔk⁰₄ *n* time
tɔk⁰₃ *v* hatch (intrans)
tɔk⁰ hɔl³ *v* lead along
tɔk⁰ tɔk⁰ INTENS
tɔk⁰ tsɨk⁰ *n* hollow at the base of the skull at the back of the neck
tɔk⁰ tu tɔk⁰ βat⁰ doze off (head falling backwards)
tɔl³₁ *v* forgive
tɔm₂ *v* spin thread around a wheel
tɔm¹ 1) *adj* round **2)** *v* mould (clay) into a round shape
tɔm¹~tɔm³ *v* **1)** play, hit (drum) **2)** whistle **3)** hit
tɔm²₂ *adj* three
tɔm²₁ *v* **1)** be finished **2)** lie deserted
tɔm²₃ 1) *nomprt* TRI **2)** *verbprt* TRI
tɔm² ɹuŋ³ time of hunger before the harvest
tɔn² lɔŋ¹ *n* hammer
tɔŋ tɔŋ INTENS
tɔŋ² *n* **1)** stem (of tree) **2)** genealogy
tɔŋ²~tɔŋ³ *v* **1)** sit **2)** stay **3)** live
tɔŋ³ nɨl¹ wrong side up
tɔp⁰₁ *v* twist
tɔp⁰₂ *v* castrate

tɔt⁰ lɔt⁰ mad, confused
tɔʔ⁰ *v* come up (of banana flower)
tsal² ɹɔŋ² lɔŋ¹ *n* type of sacred stone
tsam² 1) *adj* wet 2) *v* be wet
tsan¹ 1) *adj* hard 2) *adj* strong, energetic 3) *v* be hard 4) *v* be strong, be energetic
tsaŋ¹ *n* sticky rubber juice
tsaŋ² *n* wild pepper plant
tsaŋ² ʝʌk⁰ *n* type of leafy vegetable
tsaŋ² kʰu² *n* Sichuan pepper corn
tsaŋ² pɔl² empty
tsaŋ² ɹɔŋ *n* type of creeper
tsaŋ² tsɨp⁰ *n* shrewmouse
tsaʔ⁰ tsaʔ⁰ INTENS
tse³ *v* shower, rain
tse³ ɹɨm² me³ ɹɔ³ tiny amount (EUPH)
tsɛl¹~tsɛl³ *v* split by tearing
tsɛʔ⁰ *adj* hard to remove, hard to take out
tsi³ ʝa³ *n* spirit
tsi³ ʝa³ kʰʌŋ² *n* soul, spirit
tsin³ kʰɔ¹ laŋ² *n* cinnamon
tsip⁰ *v* chirp (of bird)
tsɨ EXCLAM (chase away animals)
tsɨk⁰₁ *n* small grains (chicken food)
tsɨk⁰ ɹɨk⁰ 1) *n* disgust 2) *v* despise, feel disgust, be repulsed
tsɨk⁰ tsɨk⁰ INTENS
tsɨl *adj* glassy (mainly for yam)
tsɨl¹~tsɨl²~tsɨl³ *v* boil, warm up (intrans)
tsɨm² baŋ² βut⁰ *n* moss
tsɨŋ²₂ *n* ginger
tsɨŋ²₁ 1) *adj* immovable, tight 2) *v* be immovable
tsɨŋ² sa¹ *n* Chingsa (village)
tsɨp⁰₁ *v* suck
tsɨp⁰₂ *n* scales
tsɔk⁰₂ *v* gore
tsɔk⁰ tsɔk⁰ INTENS
tsɔm²~tsɔm³ *adj* sitting with knees drawn in
tsɔm³ ɹe³ a short while
tsɔm³ βe³ a short while
tsɔn¹ tsaŋ² *n* squirrel
tsɔŋ *n* type of horn
tsɔŋ¹ *n* bundle
tsɔŋ¹ tsɔŋ¹ INTENS
tsɔŋ² *n* fish trap (basket)
tsɔŋ² pʰuŋ³ *n* area between shoulder blades
tsɔŋ³ *v* wear in the ear
tsɔp⁰ *v* sop, dip
tsɔʔ⁰~tsɔt⁰ (tɕɔt⁰) *v* have sexual intercourse
tsu³ tsu³ INTENS
tsum³ ɹaŋ² *v* dress up, decorate
tsum³ ʌ⁰ɹaŋ² *n* attire, decoration
tsun³ *v* draw off (rice beer)
tsut⁰ *n* clitoris
tsut⁰ ti¹ *n* clitoris
tsʌ⁰ɹɔ¹ *n* finger millet
tsʌk⁰₂ *adj* narrow
tsʌl² 1) *adj* straight (hair) 2) *v* be straight (hair)
tsʌm¹ *n* rice (unhusked)
tsʌm¹ naŋ¹ *n* straw of paddy, hay of paddy
tsʌm¹ tuːk⁰ se³ *n* paddy harvest song
tsʌm¹ xʌŋ¹ *n* straw of paddy, hay of paddy
tsʌm³ *v* suffer
tsʌm³ naŋ³ 1) tired 2) hardship, long-lasting suffering 3) punishment
tsʌŋ³ *n* fine
tsʌp⁰ *v* burn (intrans)
tsʌt⁰ *v* hammer into shape (iron), hammer straight (iron)
tuːk⁰₂ 1) *n* scales 2) *v* weigh
tuːk⁰₁ *v* 1) pluck 2) break (a stick) 3) harvest
tu¹ 1) *adj* blunt 2) *v* be blunt
tu³ *v* peck
tuk⁰ nʌk⁰ busy
tum³ *v* bind hair into a bun
tun¹~tun³ *v* 1) lift up 2) pick up
tun² bʌŋ¹ *n* type of tree
tuŋ¹₁ *v* hurt
tuŋ¹₂ *adj* loud
tuŋ¹₃ *n* taro
tuŋ¹ ku² *n* taro
tuŋ¹ tuŋ¹ INTENS
tuŋ² lɨm² *n* Cholim (tribe)
tuŋ² tʌŋ² ɹɔ³ ɹʌŋ² news, situation
tuŋ³ *n* cylinder
tuŋ³ kaŋ² 1) for that reason 2) due to 3) because of
tut⁰ *n* Tut (village)
tut⁰ sa¹ *n* Tutsa (tribe)
tʌ⁰~tʰʌ⁰- 1) *pfx* CAUS 2) *pfx* RECIP 3) *pfx* INTR 4) *pfx* TR 5) *pfx* MED
tʌ⁰kam¹ spread open
tʌ⁰kam² nam² *v* arrange a marriage
tʌ⁰kʰam² *v* warm up, heat up

tʌ⁰kʰʌt⁰ *v* fight
tʌ⁰kɔŋ³ *v* put on the narrow side
tʌ⁰kɔt⁰ *v* have intercourse with one another
tʌ⁰kum³ *v* lower (volume)
tʌ⁰miŋ³ *v* be called
tʌ⁰paŋ¹ *v* lie down
tʌ⁰paŋ³ *v* divorce
tʌ⁰pʰak⁰ *v* spread out
tʌ⁰pʰaŋ² *v* spread out
tʌ⁰pʰɛŋ² *v* put flat
tʌ⁰pʰik⁰ *v* cross
tʌ⁰pʰin² *v* endure
tʌ⁰pʰʌn³ *v* tell
tʌ⁰pʰʌŋ³ *v* start
tʌ⁰piŋ³ *v* fill, close
tʌ⁰pɔ³ *v* make a hole, perforate
tʌ⁰pʌk⁰ *v* hang with a rope or knot
tʌ⁰saŋ³ *v* clean
tʌ⁰sɛʔ⁰ *n* star
tʌ⁰sik⁰ *v* **1)** miss **2)** remember
tʌ⁰sil³ **1)** sleepy **2)** be sleepy
tʌ⁰sip⁰ *v* destroy completely
tʌ⁰ʃɛ¹ *v* fill
tʌ⁰ʃit⁰ *v* destroy
tʌ⁰ʃɔŋ³ *v* let settle down
tʌ⁰tal³ *v* train, teach
tʌ⁰tal³ te² *n* teacher
tʌ⁰tɕɛn³ all the time
tʌ⁰tɕim³ *v* wrestle one another
tʌ⁰tɕɔl² *v* make easier, make lighter
tʌ⁰tɕɔl³ *v* be unknowing, be confused
tʌ⁰tɕɔn³ *v* cut slanted
tʌ⁰tɕɔŋ³ *v* meet one another
tʌ⁰tɕɔt⁰ *v* have intercourse with one another
tʌ⁰tʰak⁰ *v* try on (clothes)
tʌ⁰tʰi² *v* sharpen
tʌ⁰tʰin² *v* destroy
tʌ⁰tʰin² ʝan² *v* destroy
tʌ⁰tʰiŋ³ *v* arrange
tʌ⁰tʰim³ *v* meet, come near
tʌ⁰tʰin³ *v* think
tʌ⁰tʰuːt⁰₂ *v* make sb dig
tʌ⁰tʰuːt⁰₁ *v* move a bit
tʌ⁰tʰu¹ *v* hit sth
tʌ⁰tʰuŋ¹₁ *v* gather
tʌ⁰tʰuŋ¹₂ *v* stack
tʌ⁰tʰuŋ² *v* make level
tʌ⁰tit⁰ *v* touch (body against body)
tʌ⁰tɨp⁰₁ *v* keep for fermenting
tʌ⁰tɨp⁰₂ *v* hit one another
tʌ⁰tɔːk *v* click photos
tʌ⁰tɔ¹ *v* open up, split open
tʌ⁰tɔ² *v* put straight up
tʌ⁰tsɛʔ⁰ *v* tighten
tʌ⁰tsɨl¹ *v* speed up, tighten
tʌ⁰tsɨl² *v* let boil, warm up
tʌ⁰tsɔl *v* stretch (legs)
tʌ⁰tsɔt⁰ *v* have intercourse with one another
tʌ⁰tsʌp⁰₁ *v* make the fire flame
tʌ⁰tsʌp⁰₂ *v* join, put together, link
tʌ⁰tʌŋ¹ *v* be blocked, be obstructed
tʌ⁰xɔ¹ *v* become restless, become bored, become irritated
tʌ⁰xɔŋ³ *v* **1)** draw (water), create (fire), produce (trans) **2)** provide
tʌ⁰xuk⁰ *v* dry (trans)
tʌk⁰₂ **1)** *adj* ill **2)** *n* pain **3)** *v* hurt (intrans)
tʌk⁰₃ *n* time, occasion
tʌk⁰₄ *n* breath
tʌk⁰₁ *v* burn
tʌk⁰ hum²~tʌk⁰ hum³ **1)** *n* taking breath **2)** *v* take breath
tʌk⁰ ʌ⁰sa³ *n* sickness
tʌl *v* select
tʌm³ *v* make pointed
tʌn²~tʌn³ *v* cut (leaf by leaf)
tʌŋ¹₃ *n* bottom
tʌŋ¹₂ **1)** *adj* obstructed, blocked **2)** *v* obstruct, block **3)** *v* arrest, halt
tʌŋ¹₁ *v* protect
tʌŋ¹ ɹaŋ² *v* tell sb not to do sth
tʌŋ²₁ **1)** PL **2)** whole
tʌŋ²₂ *n* bad spirit
tʌŋ² haʔ⁰ *n* Tangha (clan)
tʌŋ² lɔm² rich
tʌŋ² ʃiʔ⁰ poor
tʌŋ² te² nu¹ *n* female master, owner
tʌŋ² βaŋ³ *n* things, stuff
tʌŋ³ **1)** *v* cut across **2)** cut to divide into pieces
tʌŋ³ ʝɔŋ² thick (e.g. braid, arm)
tʌŋ³ kɔ² *n* half
tʌŋ³ sa¹ *n* Tangsa (tribe)
tʌp⁰₁ *v* cut (in small pieces)
tʌp⁰₂ *n* fireplace
tʌp⁰ kɔ¹ *n* wooden side plank of fireplace

u

u⁰- *v > n pfx* NMLZ
u⁰baŋ²₁ *n* being deaf
u⁰baŋ²₂ *n* being tasteless, being diluted
u⁰bat⁰ *n* saying, answering
u⁰be³ *n* hanging, spreading (e.g. cloth)
u⁰bɛk⁰ *n* bleating
u⁰bɛʔ⁰ *n* throwing down, pushing down
u⁰bi³ *n* searching
u⁰bɨŋ¹₁ *n* burying, inserting, putting inside
u⁰bɨŋ¹₂ *n* sitting on a nest, a den, or a hole
u⁰bɔ² *n* protruding, swelling
u⁰bɔn³ *n* closing
u⁰bɔŋ¹ *n* being thick (of hair)
u⁰bɔŋ² *n* bellowing (of cow)
u⁰bɔʔ⁰ *n* swelling of belly (illness or pregnancy)
u⁰bʌl¹ *n* experiencing a sudden shock of fear
u⁰bʌl³ *n* being full, being satisfied
u⁰bʌn³ *n* waiting, stopping
u⁰dal¹ *n* being rough, being hard, being course
u⁰dɛ¹ *n* transferring
u⁰dip⁰ *n* lying (not speaking truth)
u⁰dɨp⁰ *n* buttoning up
u⁰dɔn³ *n* hopping
u⁰duːk⁰ *n* **1)** cutting **2)** killing
u⁰dʌm³ *n* covering a horizontal surface
u⁰dʌn³ *n* separating
u⁰dʌŋ¹ *n* supporting the head while lying
u⁰dʌŋ³ *n* placing, sitting (on elevated spot, birds)
u⁰dʌŋ³ dʌŋ³ scattered
u⁰dʌp⁰ *n* folding, layering
u⁰ha³ *n* puffing
u⁰ham¹ *n* taking a step, stepping
u⁰ham² *n* smelling
u⁰haŋ³₁ *n* not complying
u⁰haŋ³₂ *n* drying (next to fire)
u⁰hɔl³ *n* bringing, carrying
u⁰hɔt⁰ *n* stealing
u⁰hum³ *n* stretching, pulling
u⁰hun³ *n* making, creating
u⁰hʌl³ *n* calling
u⁰hʌm² *n* being brown, being purple
u⁰hʌn³ *n* believing
u⁰i³ *n* screaming
u⁰jɔʔ⁰ *n* shoving aside
u⁰ɟa³ *n* being addicted
u⁰ɟal² *n* becoming numerous
u⁰ɟam³ *n* making sth flat by rolling over it
u⁰ɟaŋ²₁ *n* **1)** being ripe **2)** being done, being cooked
u⁰ɟe³₁ *n* unloading
u⁰ɟe³₂ *n* reviving
u⁰ɟɨk⁰ *n* applying (oil)
u⁰ɟɨm² *n* melting
u⁰ɟɨn¹ *n* being smooth
u⁰ɟɨp *n* sleeping
u⁰ɟɔk *n* going down
u⁰ɟɔl³ *n* running
u⁰ɟɔŋ² *n* being big
u⁰ɟum³ *n* sweeping
u⁰ɟuŋ¹ *n* being lazy
u⁰ɟuŋ² *n* ripening
u⁰ɟuŋ³ *n* blazing (of fire)
u⁰ɟup⁰ *n* covering, wrapping in sth
u⁰ɟʌl³ *n* peeling off
u⁰ɟʌn² *n* coming out (liquid, grain)
u⁰ɟʌp⁰ *n* **1)** waving, beckoning **2)** winnowing (second stage), removing fine chaff
u⁰ka³₁ *n* opening
u⁰ka³₂ *n* writing
u⁰kam² *v* proposing (for marriage)
u⁰kat⁰₁ *n* going
u⁰kat⁰₂ *n* burning, giving off heat
u⁰kɛ¹ *n* twisting
u⁰kɛl³ *n* pouring
u⁰kʰam² *n* being warm, being hot
u⁰kʰan³ *n* pouring
u⁰kʰe³ *n* sowing, planting
u⁰kʰɛl³ *n* playing
u⁰kʰi³ *n* seeing, looking at
u⁰kʰiŋ³ *n* being shiny
u⁰kʰɨn² *n* scratching (with nails), clawing
u⁰kʰɨt⁰ *n* digging out
u⁰kʰɔ¹ *n* cutting in half lengthwise

uᵒkʰɔkᵒ *n* making a cube shape
uᵒkʰum³ *n* crawling
uᵒkʰʌl¹ *n* being active, being restless, being alert
uᵒkʰʌn³ *n* cutting (with sickle)
uᵒki² *n* tying up
uᵒkiŋ¹ *n* being old
uᵒkɔːtᵒ *n* giving
uᵒkɔ² *n* decreasing
uᵒkɔm¹ *n* being round
uᵒkum³ *n* being insufficient, being inadequate
uᵒkuŋ² *n* being lame, being paralysed
uᵒkʌkᵒ *n* biting
uᵒkʌm² *n* believing, trusting
uᵒkʌm³ *n* putting and keeping in the mouth
uᵒla² *n* growing, sprouting
uᵒlan³ *n* unrolling
uᵒlaŋ¹ *n* being hard, being firm
uᵒlaŋ³ *n* standing
uᵒlaʔᵒ *n* having intercourse
uᵒli³ *n* reaching, grabbing
uᵒlim¹ *n* overflowing
uᵒlim³ *n* flooding
uᵒlin² *n* passing
uᵒliʔᵒ *n* being heavy
uᵒlɨm³ *n* cooking, preparing food
uᵒlɨŋ³ *n* drinking
uᵒlɨpᵒ *n* sinking away (in mud)
uᵒlɨtᵒ *n* grinding
uᵒlɔːtᵒ *n* grabbing, catching, holding
uᵒlɔ¹ *n* being long
uᵒlɔm² *n* being warm
uᵒlun² *n* being alive
uᵒlʌkᵒ *n* stinging
uᵒlʌl *n* prying, wiggling
uᵒlʌm¹ *n* converting to a religion (intrans)
uᵒmal¹ *n* scarring
uᵒman¹ *n* being ensnared
uᵒman³ *n* sharpening (metal)
uᵒmi² *n* stroking
uᵒmin² *n* being yellow, being pink
uᵒmin³ *n* catching with sticky rubber juice
uᵒmɨn³ *n* being ripe
uᵒmɨtᵒ₁ *n* going out (of fire)
uᵒmɨtᵒ₂ *n* washing (face)
uᵒmɔl² *n* celebrating Mol festival
uᵒmɔl³ *n* fighting
uᵒmɔtᵒ₂ *n* blowing
uᵒmɔtᵒ₁ *n* shaking (intrans)
uᵒmʌn³ *n* being infected
uᵒmʌtᵒ *n* perishing
uᵒnam³ *n* mixing (liquids)
uᵒnan³ *n* being dirty
uᵒnaŋ³ *n* being tired
uᵒnɨl¹ *n* being reverse
uᵒnɨm³ *n* being short, being low
uᵒnɨn¹ *n* dancing
uᵒnɔl¹ *n* mixing
uᵒnɔl³ *n* spreading out
uᵒnɔtᵒ *n* rubbing
uᵒnukᵒ₁ *n* liking
uᵒnukᵒ₂ *n* scrubbing
uᵒnuŋ¹ *n* giving birth (of animal)
uᵒnʌkᵒ *n* stepping, stamping
uᵒnʌl¹ *n* being slippery
uᵒnʌm² *n* rotting, decaying, breaking down
uᵒnʌm³ *n* borrowing
uᵒnʌn³ *n* doubting, suspecting
uᵒnʌŋ³ *n* wearing, putting on (skirt)
uᵒnʌtᵒ *n* grabbing forcefully, kneading
uᵒŋan³ *n* being able to (big task)
uᵒŋɛl³ *n* itching
uᵒŋikᵒ *n* turning away from
uᵒŋɨl² *n* gnarling
uᵒŋɨtᵒ *n* laughing
uᵒŋɔ¹ *n* frying
uᵒŋɔtᵒ *n* achieving
uᵒŋum¹ *n* rolling up
uᵒpal² *n* fencing off
uᵒpan¹ *n* flattening
uᵒpan³ *n* breaking, scattering
uᵒpaŋ¹ *n* lying down
uᵒpaŋ³ *n* divorcing
uᵒpaʔᵒ *n* spreading (intrans)
uᵒpe³ *n* taking
uᵒpɛl³ *n* being prohibited (for ritual reasons)
uᵒpʰakᵒ *n* glaring
uᵒpʰaŋ² *n* being mentally disturbed
uᵒpʰatᵒ *n* vomiting
uᵒpʰaʔᵒ *n* spilling, falling outside
uᵒpʰi³ *n* plucking, pulling out
uᵒpʰikᵒ *n* asking a question
uᵒpʰin³ *n* applying, dressing, treating (medical)
uᵒpʰɨn³ *n* sewing

u⁰pʰɔːt⁰ *n* smoking (food)
u⁰pʰɔt⁰ *n* boiling (intrans)
u⁰pʰu² *n* blowing, panting
u⁰pʰʌk⁰ *n* eating (hard foods)
u⁰pʰʌl³ *n* distributing
u⁰pʰʌn³₁ *n* chasing away, hunting, following
u⁰pʰʌn³₂ *n* telling a story
u⁰pʰʌŋ¹ *n* being visible
u⁰pʰʌŋ³ *n* beginning
u⁰pʰʌt⁰₁ *n* boiling in bamboo
u⁰pʰʌt⁰₂ *n* washing (hair)
u⁰pɨl¹ *n* being green, being blue
u⁰pɨl³ *n* having a rash
u⁰pɨŋ¹ *n* being tasty
u⁰pɨŋ³ *n* filling, closing
u⁰pɔ³ *n* being perforated
u⁰pɔl³ *n* shoving inside, stirring
u⁰pɔt⁰ *n* carrying on the back
u⁰pu³ *n* hiding
u⁰puk⁰ *n* flying
u⁰puŋ² *n* being white
u⁰puŋ³ *n* blooming
u⁰pʌn¹ *n* crushing
u⁰pʌŋ³ *n* forbidding
u⁰rɔt⁰ *n* rubbing
u⁰ɹam² *n* being thin
u⁰ɹan¹ *n* withering
u⁰ɹap⁰ *n* cutting open
u⁰ɹɛl³ *n* being near
u⁰ɹik⁰ *n* buying
u⁰ɹim¹ *n* crawling
u⁰ɹim³ *n* raising (animals)
u⁰ɹiŋ³ *n* shouting, making noise
u⁰ɹɨm² *n* sexually exciting
u⁰ɹɨn³ *n* having diarrhea
u⁰ɹɔ² *n* playing a lot
u⁰ɹɔ³ *n* being crazy
u⁰ɹɔm² *n* chanting, praying
u⁰ɹɔŋ¹ *n* being strong
u⁰ɹɔŋ³ *n* growing, increasing, prospering
u⁰ɹɔp⁰ *n* driving, hunting
u⁰ɹuŋ¹ *n* evaporating till dried up
u⁰ɹʌm² *n* enjoying, liking
u⁰ɹʌn³ *n* tearing (in two), ripping
u⁰sam³ *n* cutting
u⁰saŋ³ *n* being clean
u⁰sin³ *n* seeing, staring
u⁰siŋ¹ *n* stinking
u⁰sɨm² *n* **1)** being salty **2)** being sweet
u⁰sɔk⁰ *n* barking, coughing
u⁰sɔl³ *n* leading
u⁰sɔm³ *n* holding, upholding, taking, using, carrying
u⁰sɔŋ³ *n* boiling (rice)
u⁰sɔt⁰ *n* grilling, burning, cremating
u⁰sut⁰₁ *n* shoving inside, stirring
u⁰sut⁰₂ *n* stabbing
u⁰sʌm³₂ *n* wearing, putting on (clothes)
u⁰sʌm³₁ *n* understanding, knowing
u⁰sʌŋ³ *n* selling
u⁰sʌt⁰ *n* eating (soft foods)
u⁰ʃal³ *n* rotting
u⁰ʃaŋ² *n* being red
u⁰ʃat⁰ *n* getting up, waking up
u⁰ʃɛ¹ *n* being full
u⁰ʃi³ *n* lacking energy, lacking power
u⁰ʃiŋ³₁ *n* swelling
u⁰ʃiŋ³₂ *n* putting, placing, keeping, saving
u⁰ʃɨn³ *n* stretching
u⁰ʃɨt⁰₁ *n* checking the sound of the log drum
u⁰ʃɨt⁰₃ *n* being destroyed
u⁰ʃɨt⁰₂ *n* brushing (hair)
u⁰ʃɔm¹ *n* finishing completely
u⁰ʃɔŋ³ *n* settling down, sitting low
u⁰ʃɔp⁰ *n* crumpling (of paper)
u⁰ʃup⁰ *n* consuming
u⁰tal² *n* tasting
u⁰tal³ *n* being smart
u⁰tat⁰ *n* hearing, listening, obeying
u⁰tɕan³ *n* pruning
u⁰tɕaŋ³ *n* giving birth
u⁰tɕɛl³₁ *n* slipping and falling
u⁰tɕɛl³₂ *n* flattening, squashing
u⁰tɕin³ *n* being fat
u⁰tɕiŋ³ *n* swelling (of water)
u⁰tɕip⁰ *n* **1)** cutting (with scissors) **2)** pressing together, closing together
u⁰tɕik⁰ *n* rolling
u⁰tɕɨl³₂ *n* falling down (of tree)
u⁰tɕɨl³₁ *n* talking
u⁰tɕɨm³₂ *n* planing an edge (of wood)
u⁰tɕɨm³₁ *n* wrestling
u⁰tɕɨn³ *n* knitting
u⁰tɕɔ³₁ *n* fearing
u⁰tɕɔ³₂ *n* washing (dishes)
u⁰tɕɔn³ *n* becoming slanted

uᵒtɕɔtᵒ *n* having intercourse
uᵒtɕukᵒ *n* requesting, asking for
uᵒtɕuŋ¹ *n* getting lost
uᵒte³ *n* carrying on the lap
uᵒtʰakᵒ *n* trying on (clothes)
uᵒtʰi² *n* being sharp
uᵒtʰin² *n* being destroyed
uᵒtʰɨŋ² *n* waking up
uᵒtʰɔkᵒ *n* arriving, reaching
uᵒtʰɔm² *n* finishing
uᵒtʰɔtᵒ *n* pinning
uᵒtʰuːkᵒ *n* spitting
uᵒtʰuːtᵒ *n* digging
uᵒtʰukᵒ *n* billowing (dust), being thrown up (dust)
uᵒtʰun³ *n* finishing
uᵒtʰuŋ² *n* being plain, being level
uᵒtʰutᵒ *n* crushing, pulverising, grinding
uᵒtʰʌm³ *n* being late
uᵒtikᵒ *n* serving out
uᵒtɨkᵒ *n* dying
uᵒtɨl² *n* being hot, being spicy
uᵒtɨm² *n* smelling pleasant
uᵒtɨm³ *n* putting into liquid, submerging
uᵒtɨŋ³ *n* smelling unpleasant
uᵒtɨpᵒ *n* boxing, hitting with force, pounding
uᵒtɔːkᵒ₂ *n* winnowing (first stage)
uᵒtɔːkᵒ₁ *n* snapping a picture
uᵒtɔ² *n* putting straight up
uᵒtɔkᵒ₁ *n* hatching (intrans)
uᵒtɔkᵒ₂ *n* (stone) frying
uᵒtɔl³ *n* forgiving
uᵒtɔm¹ *n* molding (clay) into a round shape
uᵒtɔm² *n* finishing
uᵒtɔm³ *n* playing (an instrument)
uᵒtɔŋ³ *n* sitting, staying, living
uᵒtɔpᵒ₁ *n* twisting
uᵒtɔpᵒ₂ *n* castrating
uᵒtɔʔ *n* coming up (of banana flower)
uᵒtsan¹ *n* being hard, being strong
uᵒtsɛl³ *n* splitting by tearing
uᵒtsipᵒ *n* chirping (of bird)
uᵒtsɨl² *n* boiling (intrans)
uᵒtsɔŋ³ *n* wearing in the ear
uᵒtsɔtᵒ *n* having sexual intercourse
uᵒtsun³ *n* drawing off (rice beer)
uᵒtsʌl² *n* being straight (of hair)
uᵒtsʌpᵒ *n* burning (intrans)
uᵒtu¹ *n* being blunt
uᵒtu³ *n* pecking
uᵒtukᵒ₁ *n* weighing
uᵒtukᵒ₂ *n* plucking, breaking, harvesting
uᵒtuŋ¹ *n* hurting
uᵒtʌpᵒ *n* cutting (into small pieces)
uᵒxam¹ *n* being loose, being easy to remove
uᵒxapᵒ *n* letting go, releasing
uᵒxi² *n* being sour
uᵒxiŋ³ *n* walking
uᵒxɨm¹ *n* tingling (of mouth)
uᵒxɔl³ *n* washing (of body, hands, dishes)
uᵒxɔm³ *n* leaving (trans), sparing, protecting
uᵒxɔŋ *n* putting on the foot, putting on the trunk of the body
uᵒxɔŋ³ *n* drawing (water), creating (fire), producing
uᵒxɔtᵒ *n* washing (clothes)
uᵒxuŋ³₂ *n* keeping, feeding (animals)
uᵒxuŋ³₁ *n* going up, ascending, climbing
uᵒxʌl³ *n* getting better, being healed, becoming better (character)
uᵒxʌŋ³ *n* going up
uᵒxʌpᵒ *n* crying, weeping
uᵒxʌtᵒ *n* falling
uᵒβal² *n* **1)** being thin (as a sheet) **2)** being shallow (of water)
uᵒβatᵒ₁ *n* **1)** braiding **2)** weaving
uᵒβatᵒ₂ *n* hitting, beating
uᵒβɛl³ *n* returning
uᵒβɛʔᵒ *n* counting, folding
uᵒβɨŋ¹ *n* being thick
uᵒβɔl³ *n* lying down
uᵒβɔn³ *n* broadcasting, scattering (seed)
uᵒβuŋ¹ *n* rising (of bread), swelling (of blister)
uᵒβuŋ³ *n* being light (not dark)
uᵒβʌl³ *n* crowing of rooster
uᵒβʌŋ³ *n* going up
u¹~u³ 2SG
u³ *poss* 3SG.POSS.DIST
u³ tʌŋ² *interrog* **1)** who (Q) **2)** what (Q)
u³mɛ³ *n* being able to

ʌ⁰ *coordconn* and
ʌ⁰- *adj > n pfx* NMLZ
ʌ⁰baŋ² *n* diluted, tasteless
ʌ⁰bɨŋ² *n* deep
ʌ⁰bɔ² *n* protruding, swollen
ʌ⁰bɔn³ *n* closed
ʌ⁰bɔŋ¹ *n* thick (of hair)
ʌ⁰dal¹ *n* rough, hard, coarse
ʌ⁰dɔm¹ *n* very short-haired
ʌ⁰dɔt⁰ *n* curly (of hair)
ʌ⁰duːk⁰ *n* blind, with closed eyes
ʌ⁰dʌk⁰ *n* other
ʌ⁰dʌm¹ *n* covering a horizontal surface
ʌ⁰ham² *n* smelly
ʌ⁰haŋ³ *n* a distance away, keeping distance
ʌ⁰huŋ¹ *n* NEXIST
ʌ⁰huʔ⁰ *n* thief
ʌ⁰hʌl² *n* difficult
ʌ⁰hʌm² *n* brown, purple
ʌ⁰hʌn¹ *n* much, many
ʌ⁰ʝal² *n* numerous
ʌ⁰ʝaŋ² *n* **1)** ripe **2)** cooked, done
ʌ⁰ʝaʔ⁰ *n* abnormal, wrong, idiotic
ʌ⁰ʝɨm²₁ *n* tasting buttery
ʌ⁰ʝɨm²₂ *n* melted
ʌ⁰ʝɨn¹ *n* smooth
ʌ⁰ʝɔŋ² *n* big
ʌ⁰ʝuŋ¹ *n* lazy
ʌ⁰ʝuŋ³ *n* blazing
ʌ⁰kɛ¹ *n* twisted
ʌ⁰kʰa³ *n* open, wide
ʌ⁰kʰam² *n* hot, warm
ʌ⁰kʰaʔ⁰ *n* bitter
ʌ⁰kʰi² *n* grey, mat, light-coloured
ʌ⁰kʰiŋ³ *n* shiny
ʌ⁰kʰɔ¹ *n* cut in half lengthwise
ʌ⁰kʰɔk⁰ *n* rough
ʌ⁰kʰu¹ nine
ʌ⁰kʰʌl¹ *n* active, restless, alert
ʌ⁰kiŋ¹ *n* old (of things)
ʌ⁰kiʔ⁰ *n* cold
ʌ⁰kɔ² *n* being few, being little
ʌ⁰kɔm¹ *n* round
ʌ⁰kɔŋ³ *n* having a narrow edge
ʌ⁰kɔt⁰ *n* bent
ʌ⁰kum³ *n* insufficient, inadequate
ʌ⁰kuŋ² *n* lame, paralysed
ʌ⁰la¹ *n* stiff
ʌ⁰lak⁰ *n* open
ʌ⁰lan³ *n* unrolled
ʌ⁰laŋ¹ *n* hard, firm
ʌ⁰laŋ² laŋ² *n* easy, direct, clear
ʌ⁰lat⁰ *n* stiff
ʌ⁰lik⁰ *n* untrustworthy
ʌ⁰lim¹ *n* overflowing, flooding
ʌ⁰lin² *n* passed
ʌ⁰liʔ⁰ *n* heavy
ʌ⁰lɨp⁰ *n* deep
ʌ⁰lɔ¹ *n* **1)** long **2)** fast
ʌ⁰lɔ³ *n* having a broken bottom
ʌ⁰lɔm² *n* warm
ʌ⁰luːk⁰ *n* tall
ʌ⁰lun² *n* alive
ʌ⁰mal¹ *n* scratched
ʌ⁰man¹ *n* ensnared
ʌ⁰man³ *n* little, few
ʌ⁰mɛ² *n* true
ʌ⁰min² *n* yellow, pink
ʌ⁰miŋ¹ *n* small
ʌ⁰mɨn² *n* ripe
ʌ⁰mɔk⁰ *n* intoxicated, drunk, high, stoned
ʌ⁰mʌk⁰ *n* black
ʌ⁰mʌŋ² *n* dead
ʌ⁰mʌŋ³ *n* stopped
ʌ⁰nal² *n* new
ʌ⁰nan³ *n* dirty
ʌ⁰ni³ two
ʌ⁰ni³ tɔm² *n* little, few
ʌ⁰nɨl¹ *n* reverse
ʌ⁰nɨm³ *n* short, low
ʌ⁰nuːp⁰ *n* soft, smooth
ʌ⁰nʌl¹ *n* slippery
ʌ⁰nʌm² *n* rotting, decaying, breaking down
ʌ⁰ŋɛl³ *n* itchy
ʌ⁰ŋum¹ *n* rolled up
ʌ⁰pan³ *n* broken, scattered
ʌ⁰paŋ¹ *n* flat, horizontal
ʌ⁰pɛl³ *n* prohibited (for ritual reasons)

ʌ⁰pʰaŋ² *n* mentally disturbed
ʌ⁰pʰɛŋ² *n* flat
ʌ⁰pʰut⁰ *n* filled
ʌ⁰pʰʌŋ¹ *n* visible
ʌ⁰pɨl¹ *n* green, blue
ʌ⁰pɨl² *n* rash
ʌ⁰pɨŋ¹ *n* tasty
ʌ⁰pɨŋ³ *n* filled up, closed
ʌ⁰pɔ³ *n* perforated
ʌ⁰puŋ² *n* white
ʌ⁰ɹam² *n* thin
ʌ⁰ɹan¹ *n* withered
ʌ⁰ɹap⁰₁ *n* sticky
ʌ⁰ɹap⁰₂ *n* moist
ʌ⁰ɹɛl³₂ *n* some, few
ʌ⁰ɹɛl³₁ *n* close by
ʌ⁰ɹɨm² *n* sexually exciting
ʌ⁰ɹɔ² ɹɔ² one by one
ʌ⁰ɹɔ³ *n* crazy
ʌ⁰ɹɔŋ¹ *n* strong
ʌ⁰ɹum³ *n* together, equal
ʌ⁰ɹuŋ¹ *n* dried up, evaporated
ʌ⁰ɹʌn³ *n* torn
ʌ⁰ɹʌŋ³ ɹʌŋ³ a³ fast, early, soon
ʌ⁰ɹʌp⁰ *n* look good, match well
ʌ⁰saŋ³ *n* clean
ʌ⁰si² ten
ʌ⁰siŋ¹ *n* stinky smell
ʌ⁰sɨm¹ *n* dark blue, dark purple
ʌ⁰sɨm² *n* **1)** salty **2)** sweet
ʌ⁰sɨŋ¹ *n* true
ʌ⁰sɔŋ² *n* cold
ʌ⁰sʌm¹ *n* talented
ʌ⁰ʃal¹ *n* rotten
ʌ⁰ʃaŋ² *n* red
ʌ⁰ʃɛ¹₁ *n* full
ʌ⁰ʃɛ¹₂ *n* **1)** one **2)** same
ʌ⁰ʃɛ¹ lɛ ʌ⁰ʃɛ¹ lɛ one after another
ʌ⁰ʃɛ¹ ʃɛ¹ one by one
ʌ⁰ʃʌt⁰ *n* eight
ʌ⁰tal¹ *n* smart
ʌ⁰tɕaŋ³ *n* light (not heavy)
ʌ⁰tɕi² *n* fresh (of plants)
ʌ⁰tɕin¹ *n* fat
ʌ⁰tɕiŋ² *n* swelling (of water)
ʌ⁰tɕɔ² ʌ⁰pan² *n* terrified, anxious
ʌ⁰tɕɔl² *n* easy
ʌ⁰tɕɔŋ³ *n* random
ʌ⁰tɕʌŋ³ *n* enough, sufficient
ʌ⁰tʰa¹ *n* EXIST
ʌ⁰tʰi² *n* sharp
ʌ⁰tʰɨŋ²₂ *n* awake
ʌ⁰tʰɨŋ²₁ *n* **1)** unripe **2)** uncooked
ʌ⁰tʰɨŋ³ *n* **1)** sealed **2)** virgin
ʌ⁰tʰɔl² *n* short
ʌ⁰tʰuŋ² *n* plain, level
ʌ⁰tʰʌ⁰ɹʌŋ² *n* alive
ʌ⁰tʰʌm³ *n* late
ʌ⁰tɨl² *n* hot, spicy
ʌ⁰tɨm² *n* smelling pleasant
ʌ⁰tɨŋ² *n* smelling unpleasant
ʌ⁰tɔ¹ *n* opening up, splitting open
ʌ⁰tɔ² *n* straight up
ʌ⁰tɔm¹ *n* round
ʌ⁰tɔm² *n* three
ʌ⁰tsan¹ *n* hard, strong
ʌ⁰tsɛl³ *n* split by tearing
ʌ⁰tsɛʔ⁰ *n* hard to remove, hard to take out
ʌ⁰tsɨŋ² *n* immovable
ʌ⁰tsɔm³ *n* sit with knees drawn in
ʌ⁰tsʌk⁰ *n* narrow
ʌ⁰tsʌl² *n* straight (of hair)
ʌ⁰tu¹ *n* blunt
ʌ⁰tuŋ¹ *n* loud
ʌ⁰tʌk⁰ *n* ill
ʌ⁰xam¹ *n* loose, easy to remove
ʌ⁰xaʔ⁰ *n* right side
ʌ⁰xi² *n* sour
ʌ⁰xɨm¹ *n* tingling (of mouth)
ʌ⁰xɨt⁰ *n* left side
ʌ⁰xuk⁰ *n* dry
ʌ⁰xʌl² *n* good
ʌ⁰xʌŋ³ *n* upwards
ʌ⁰βal² *n* **1)** thin (as a sheet) **2)** shallow (of water)
ʌ⁰βɨŋ¹ *n* thick
ʌ⁰βuŋ¹ *n* risen (bread), swollen (blister)
ʌ⁰βuŋ³ *n* light (not dark)
ʌhʌi EXCLAM (surprise)
ʌŋ¹~ʌŋ²~ʌŋ³~ɔŋ¹ 1SG
ʌŋ² *v* AUX, COP, be
ʌŋ² kɔ³ ɛʔ⁰ for that reason

xak⁰ ɹal² *n* type of poisonous spider
xam xam INTENS
xam¹ 1) *adj* loose, easy to remove 2) *v* be loose, be easy to remove
xam² *n* hive, cluster
xam² xal¹ *n* spider
xam³ toast
xaŋ¹ *n* back side of house
xaŋ²₂ *v* unbind
xaŋ²₁ *n* type of basket
xaŋ³ haʔ⁰ *n* dry land
xaŋ³ pɨk⁰ *n* shifting cultivation field
xap⁰ *v* release, let go
xaʔ⁰ *adj* right side
xe² *n* bridge
xe² ɹi¹ *n* ladder, steps, stairs
xi¹ dedicated, sacred
xi² 1) *adj* sour 2) *v* be sour
xi² βa¹ *n* son in law
xik⁰ *n* nephew, niece
xiŋ² bʌŋ¹ *n* Banyan tree
xiŋ² xɔŋ³ *n* scorpion
xiŋ³ *v* walk
xit⁰ wrestle, fight about something
xiʔ⁰ 1) *n* faeces 2) *v* defecate
xɨl² *n* charcoal
xɨm βa¹ *n* Khimwa
xɨm¹ 1) *adj* tingling (of mouth) 2) *v* tingle (of mouth)
xɨm³ *n* village
xɨm³ hun³ *n* Khimhun (clan)
xɨm³ ʝɔŋ² *n* Khimyong (village)
xɨp⁰ cover with branches or leaves
xɨt⁰ *adj* left side
xɔ¹ *v* be bored, become restless
xɔk⁰ *n* 1) nail 2) hoof 3) claw
xɔl¹~xɔl³ *v* wash (body, hands, dishes)
xɔm³₁ *v* leave, spare, protect
xɔm³₂ make a false step
xɔŋ¹ *v* put on the foot, put on the trunk of the body, cover with a basket
xɔŋ¹~xɔŋ³ *v* come out, come up
xɔŋ²₁ *n* type of basket
xɔt⁰ *v* wash (clothes)
xuːk⁰ *adj* dry
xuŋ¹~xuŋ³ *v* go up, ascend, climb
xuŋ² *n* buttocks
xuŋ²~xuŋ³ *v* keep, feed (animals)
xʌl²~xʌl³ 1) *adj* good 2) *v* be good 3) very
xʌm² *n* mat
xʌŋ¹ *n* dry weeds, dry grass
xʌŋ¹~xʌŋ³ 1) *adj* going up 2) *v* go up
xʌp⁰ *v* cry, weep
xʌt⁰ *v* fall

β

βa¹ 1) *n* father 2) M 3) forefather 4) NMLZ, one, person 5) thing, one (NMLZ?)
βa¹ βa¹ *n* sweetheart
βa² mɔŋ² *n* inside
βa² βa² INTENS
βa³ dial. var. of **βaŋ³₂**
βal² 1) *adj* thin (as a sheet) 2) *adj* shallow (of water) 3) *v* be thin (as a sheet) 4) *v* be shallow (of water)
βan fertile (land)
βan¹ group
βan² *v* discuss
βan² tit⁰ *v* chat
βan³ COS
βaŋ haʔ⁰ *n* flat land
βaŋ² *n* big flattened bamboo strips for floor or wall
βaŋ² ʝum³ broom
βaŋ² kʰuŋ³ *n* bamboo floor
βaŋ³₂ (dial. var. **βa³**) *post* 1) from 2) since
βaŋ³ na³ from
βat⁰₁ *v* 1) braid 2) weave
βat⁰₂ *v* hit, beat
βat⁰ βat⁰ INTENS
βaʔ⁰ *n* bamboo
βaʔ⁰ lɨŋ² augury with a leaf
βaʔ⁰ mɛ¹ *n* bamboo sprout, bamboo shoot

βaʔ⁰ pʰaŋ² *n* Waphang (village)
βaʔ⁰ pʰɔk⁰ augury with bamboo
βaʔ⁰ pʰʌt⁰ ɨl² *n* bamboo-steamed rice
βaʔ⁰ sɨŋ² nɔŋ² *n* bamboo instrument with two strings
βaʔ⁰ βʌn² *n* raft, boat
βe³ 1) ITER, again, back 2) CNT, still, yet
βɛ¹ *v* row, peddle
βɛl¹ βɛl' rippling (water), snaking, twisting (snake)
βɛl²~βɛl³ *v* return, go back, come back
βɛʔ⁰₂ every
βɛʔ⁰₁ *v* 1) count 2) fold
βi¹ *n* grandmother
βi¹ tum³ *n* great grandmother
βi² *n* monkey
βi² βi² INTENS
βi³ βi³ INTENS
βik⁰ *n* 1) husk (rice shell) 2) ground husk
βiŋ² *n* 1) hip, thigh 2) groin
βit⁰ *v* fart
βiʔ⁰ stripe
βɨn¹ *n* guest
βɨn³ ɛ³ happen to
βɨŋ¹ 1) *adj* thick 2) *v* be thick
βɨt⁰ βɛ² *n* type of scaled animal
βɔ hɨl¹ *n* wedge
βɔ sʌm kʰam² *n* slanting end of a roof, edge of roof leaves
βɔ tɕʌl² *n* slanted roof beam
βɔ¹ *n* 1) bird 2) chicken
βɔ¹ bi² *n* type of bird
βɔ¹ bɔ *n* type of bird
βɔ¹ bʌŋ¹ *n* Wobang (village)
βɔ¹ dɔk⁰ *n* green bird, red on chin
βɔ¹ ʝuk⁰ *n* bulbul
βɔ¹ kaʔ⁰ ʝap⁰ before the cock crows, early morning
βɔ¹ kʰa² *n* crow
βɔ¹ kʰɨm *n* type of bird
βɔ¹ kip⁰ βɔ¹ bi² *n* type of bird
βɔ¹ kiʔ⁰ *n* parrot
βɔ¹ kɔŋ² ɹɔŋ² *n* peacock
βɔ¹ kʌm *n* swan
βɔ¹ min² ti *n* type of yellow bird
βɔ¹ ŋʌk⁰ epilepsy
βɔ¹ pi³ *n* type of bird
βɔ¹ pit⁰ *n* duck
βɔ¹ ɹak⁰ *n* type of bird
βɔ¹ ɹaŋ² *n* hornbill
βɔ¹ ɹi² *n* weaver bird
βɔ¹ sa¹ *n* 1) baby bird 2) chick 3) penis
βɔ¹ sɨm¹ pɔŋ¹ *n* type of bird
βɔ¹ sʌk⁰ *n* sparrow
βɔ¹ ʃup⁰ tɕʌl² *n* type of bird
βɔ¹ tal *n* woodpecker
βɔ¹ taɹiɹɔŋ *n* type of bird
βɔ¹ tɕi¹ *n* egg
βɔ¹ tɕi¹ kak⁰ augury with eggs
βɔ¹ tɕuŋ³ *n* type of bird
βɔ¹ tʰaŋ³ sa¹ *n* chick
βɔ¹ tʰʌ⁰ɹɨk⁰ *n* pheasant
βɔ¹ tɔkʰu *n* wild dove
βɔ¹ tset⁰ kʰu *n* type of bird
βɔ¹ xɨt⁰ *n* type of bird
βɔ¹ βʌl³ kʰɔ² before the cock crows, early morning
βɔ³ kɔŋ² pʰʌn² tɕi¹ *n* type of leafy vegetable
βɔk⁰₁ *n* stomach, belly
βɔk⁰₂ *v* 1) brood, sit on eggs 2) hatch (intrans)
βɔl¹ βɔl¹ revolving
βɔl² ti¹ *n* shell tied to waist cord (amulet)
βɔl³ *v* lie down
βɔn³ *v* broadcast, scatter (seed)
βɔŋ² *n* rice (husked, uncooked)
βɔŋ² mal² *n* broken grain
βɔt⁰ *v* weed (with tool)
βuk⁰ *v* jump, dive
βuŋ¹ 1) *adj* risen (bread), swollen (blister) 2) *v* rise (bread), swell (blister)
βuŋ³ 1) *adj* light (not dark) 2) *v* be light (not dark)
βuŋ³ kaʔ⁰ ɹak⁰ early morning
βut⁰ *n* fur
βʌk⁰ *n* pig
βʌk⁰ ŋʌk⁰ type of illness
βʌl¹ *n* 1) fire 2) light
βʌl¹ bɔt⁰ fire from striking stones against one another
βʌl¹ kʰit⁰ *n* lucifer
βʌl¹ kʰuʔ⁰ *v* smoke (of fire)
βʌl¹ mɔt⁰ tuŋ³ *n* blowing pipe for fire
βʌl¹ tɕɨt⁰ *n* fire-saw
βʌl³ *v* crowing of rooster
βʌn¹ 1) *n* group 2) *v* group
βʌn² 1) *adj* soft (of potato) 2) *v* be soft
βʌn² tɕap⁰ *n* fan, winnow
βʌn² tɨm¹ *n* type of woven object

βʌŋ¹~βʌŋ³ *v* **1)** go inside **2)** go up, climb **3)** continue, keep **4)** AUX, go, would **5)** marry (for women only)

βʌŋ² *n* paternal uncle

βʌŋ² tɕa² *n* princess

βʌŋ² βa¹ *n* Wangwa (character from mythology)

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