
A Grammar of Tuli

Submitted by
Chenxi Meng, M.Phil.

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Abstract

The thesis is the first fairly comprehensive descriptive grammar of Tulil, a non-Austronesian language spoken by approximately 2,000 speakers on East New Britain Island, Papua New Guinea. The analysis in this grammar is based on primary field data collected during 9 months of fieldwork in the area, which comprises 12 hours of text data, complemented by participant observation, elicitation and stimulus-based elicitation.

The grammar provides an overview of all levels of grammar, covering phonology (ch.2), basic clause structure (ch.3), word class (ch.4), noun phrase structure (ch.5), prepositions (ch.6), demonstratives (ch.7), verb complex (ch.8), verb morphology (ch.9), nominal classification (ch.10), coordination (ch.11) and subordination (ch.12).

Notable features of the language include split intransitivity, complex nominal classification system and complex verb morphology.

There are two sub-systems of the nominal classification system in Tulil: a nominal class system (11 different classes including distinction in sex, size, shape), and a gender system (3 classes, only include sex). Different sub-systems are involved in different morphosyntactic contexts: the nominal class system is mainly used inside the noun phrase, manifested as an enclitic as the last component of a core NP; and the gender system is used for various person indexes such as verb indexes, possessive indexes, etc., and the free pronominals/demonstratives can involve both systems.

Verb morphology in Tulil is fairly complex. Multiple stems are involved in the formation of verbs related to different grammatical categories. Verb morphology involves mainly prefixing, including person/number/gender/tense portmanteau prefixes marking A/S_A arguments, and reduplication (marking imperfective aspect). Multiple stems are involved derivational processes include the applicative suffix and incorporation. The morphophonological pattern of verb inflection in Tulil is not immediately transparent, and involves an interaction between initial consonant mutation and reduplication of the stems.

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 accepted for the award of any other degree or diploma. No other person's work has been used without due acknowledgment 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.

2 May, 2018

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"Η κάθε λέξη είναι μια έξοδος
για μια συνάντηση, πολλές φορές ματαιωμένη,
και τότε είναι μια λέξη αληθινή, σαν επιμένει στη συνάντηση."

Γιάννης Ρίτσος, *Το νόημα της απλότητας*

"Every single word is an exodus
for a meeting, cancelled many times,
it is a true word when it insists on the meeting."

Yannis Ritsos, *The meaning of simplicity* (tr. Rae Dalven)

Abbreviations and conventions

Conventions used in examples

In the body of the thesis, words/unterrances in the Tulil language are in italics, and the free translation are in single quotes (‘). Ungrammatical forms are marked by asterisks (*).

Glossed examples in this grammar follow the glossing conventions suggested by Lehmann (2004) and the Leipzig Glossing Rules (Comrie et al., 2015). Each example consists of at least four lines, and an example is shown:

- L1: orthographic representation of the utterance, separated into morphemes (italics);
- L2: interlinear morphemic glossing;
- L3: a free translation into English in single quotation marks (‘), with reference number in square brackets.

- (1) *iep i-tir liu tuk = a et-e, “me nging?”*
3SG.F 3SG.F.PST-ask return give = PAT 3SG.F-QUOT and 2SG
‘She asked back, said, “And you?”’ [LN-SL-007]

Symbols used in representation of the examples are shown in Table 1.

Orthography

Orthographical representation is shown in Table 2, with comparison with other two types of orthographies used in 1) (Lindrud & Nicholson, n.d) and 2) (Laufer, 1959a).

Abbreviations

Table 1: Symbols used in examples

symbol	use	line
-	affixation	L1, L2
=	cliticization	L1, L2
~	reduplication	L1, L2
+	verbal derivation	L1, L2
.	glossing with multiple words/abbreviations	L2
“”	quote inside the free translation as well as L1 (e.g. direct speech)	L1, L3
(lit.)	literal meaning	L3
()	omitted contexts not overtly expressed in the current utterance (and help for understanding)	L3
[]	Explanation of words/utterances that helps understanding	L3

Table 2: Orthographic representations of phonemes in Tulil

IPA	Orthography	Laufer	Lindrud&Nicholson
/p/	<i>p</i>	<i>p</i>	<i>p</i>
/b/	<i>b</i>	<i>b</i>	<i>b</i> intervocalic: <i>mb</i>
/t/	<i>t</i>	<i>t</i>	<i>t</i>
/d/	<i>d</i>	<i>d</i>	<i>d</i> intervocalic: <i>nd</i>
/k/	<i>k</i>	<i>k</i>	<i>k</i>
/g/	<i>g</i>	<i>q</i>	<i>g</i> intervocalic: <i>ngg</i>
/s/	<i>s</i>		
/β/	<i>v</i>	<i>v</i>	<i>v</i>
/m/	<i>m</i>	<i>m</i>	<i>m</i>
/n/	<i>n</i>	<i>n</i>	<i>n</i>
/ŋ/	<i>ng</i>	<i>g</i>	<i>ng</i>
/r/	<i>r</i>	<i>r</i>	<i>r</i>
/l/	<i>l</i>	<i>l</i>	<i>l</i>
/w/	<i>u</i>	<i>u</i>	<i>w</i>
/j/	<i>i</i>	<i>i</i>	<i>y</i>
/a/	<i>a</i>	<i>a</i>	<i>aa</i>
/e/	<i>e</i>	<i>e</i>	<i>e</i>
/ə/	<i>ə</i>	<i>a</i>	<i>a, e</i>
/i/	<i>i</i>	<i>i</i>	<i>i</i>
/o/	<i>o</i>	<i>o</i>	<i>o</i>
/u/	<i>u</i>	<i>u</i>	<i>u</i>

Abbreviations used in glossing

1	first person
2	second person
3	third person
AL	alienable possession
APPL	applicative
ART	article
AUG	augmentative (nominal class)
CLF	nominal class
CLU	cluster (nominal class)
COM	comitative
CON	continuous
COND	conditional
CVB	converb
DIM	diminutive (nominal class)
DIST	<i>mu</i> distal demonstrative
DIST.INVS	<i>umu</i> (distal) invisible demonstrative
DL	dual
EP	end.point
F	feminine (gender)
FEM	feminine (nominal class)
FLAT	flat (nominal class)
GER	gerund
HORT	hortative
HUM	human (nominal class)
IAM	<i>bə</i> iamitive
IDEO	ideophone
IPFV	imperfective
INAL	inalienable possession
INF	infinitive
INSTR	instrumental

Abbreviations used in glossing (continued)

INTJ	interjection
IRR	irrealis
LOC	locative
M	masculine (gender)
MASC	masculine (nominal class)
N	neuter (gender)
NEG	negation
NMLZ	nominalization
NPST	non-past
NSPEC	non-specific
PAT	patientive
PL	plural
PN	proper noun
POSS	possessive pronoun
PROXS	<i>vi</i> proximal speaker demonstrative
PROXH	<i>bət</i> proximal hearer demonstrative
PST	past
PURP	purposive
QUOT	quotative
RED	reduplication (of adjective/numeral etc.)
REFL/RECP	reflexive/reciprocal
SEG	segment (nominal class)
SLE	long (nominal class)
SPH	spherical (nominal class)
SR	subordinator <i>to</i>
TOP	topic marking

Chapter 1

Introduction

1.1 Overview of the Tulil speakers and the language

The Tulil language is spoken on the island of New Britain of Papua New Guinea. It is spoken by approximately 2000 people as of year 2000 according to Ethnologue (Simons & Fennig, 2017), spreading over four villages (Tulil 1, Tulil 2, Kadaulung and Toma). The Tulil people are referred to by their neighbours as ‘Taulil’, and ‘Tulil’ is the name they call themselves. The Butam people also live among the Tulil people, and none of them is known to possess knowledge of the Butam language that has to be considered extinct, after the last speaker died in 1938 (Laufer, 1959a).

According to the oral history being passed on among the Tulil people¹, Tulils, as well as Butams, both migrated from New Ireland Island long time ago, before the Tolais’ arrival. According to this oral history, Tulils departed from Namatanai, and landed in New Britain from Ataliklikun Bay in Epelik (named after a lady who died during the process of migration), in between the Keravat river and Tivanakot river, and gradually moved inland. Butams, on the other hand, departed from Siar and landed from the east where the Varangoi river meets the sea. The two groups later became one during an era of constant tribal fights with Tolais and Bainings, and since then live in the ‘buffer area’ between these two big ethnic groups. It is reported that the Butam group was wiped out after constant raids from the nearby tribes in 1880s, and a few survivors sought protection from the Tulil and since then living among them (Parkinson, 2010:75).

The majority of the Tulil ethnic group is residing in Tulil 1 and Tulil 2, in a narrow area between the Tolais in Rapitok, and the Bainings in Gaulim. There is no clear geographic boundary between the two villages, and the division may only be an administrative one: Tulil 1 is based on Protestant institution and Tulil 2 on Catholic one. Except for these two villages, a few families live in Toma with the

1. Collected from Ludwick Rickie (LR_TH).

Figure 1.1: East New Britain Province, from Stebbins (2011:2)



Figure 1.2: Tulil area



Tolais, and Kaulung is the place where the descendants of Butams mainly live (Figure 1.2).

The Tulil people share some cultural commonalities (such as the matrilineal moieties system, cf. §1.3) with the Austronesian groups, e.g. Tolais who migrated to New Britain Island fairly recently². But the Tulil language is usually suggested to be grouped with Baining languages (cf. Stebbins, 2005), the non-Austronesian languages spoken by the Baining people who are considered to be the original inhabitants of the island, as a Baining-Tulil subgroup under the ‘East Papuan Phylum’ (proposed by Wurm, 1975). Detailed typological features concerning Tulil in reference to the East Papuan languages is discussed in §1.4.

As a result of close contact with Tolai, the daily use of the Tulil language contains a relatively large amount of vocabulary borrowed from Tolai. However, a recent detailed review of Tulil vocabulary found only around 3% of the known vocabulary (41 of 1207 items) are definite cognates with Tolai (Stebbins et al., 2017:807). Similarly, there is little immediately obvious shared vocabulary between Tulil and the Baining languages, and reconstruction of Proto Baining requires further work in this area.

Tulil people are mostly bilingual or multilingual – most of them speak Kuanua (language of the Tolai people on the island), as well as Tok Pisin. The language is endangered: although some children are still acquiring the language, it is common to find middle-aged people who are not fluent speakers of the language.

In this grammar, analyses of collected data from recent fieldwork are presented. A study of this previously under-described language is of interest to the extent that it adds to the understanding of the typological and historical features of Baining-Tulil and Papuan languages in the region.

1.2 Subsistence

The Tulil people practice swidden horticulture as their subsistence base, growing a wide range of starch crops such as sweet potatoes, bananas and taro, as well as beans and various leafy vegetables. A few households also grow rice but the quantity is fairly small. This is supplemented by gathering of wild vegetables, fruits, nuts, as well as hunting animals such as wild pigs, flying fox and cuscus. Fishing is also practised in small waterbodies such as creeks, for small fish, shrimps and eels. Common domestic animals for food use include chicken and pigs, usually only prepared for bigger events and feasts. Foods from the store also consist an important part of the current diet, especially tin fish, instant noodles, rice and

2. It is commonly agreed that the Tolais migrated into the area from New Ireland in recent time and pushed the Baining people westwards, though it seems impossible to date the event (Epstein, 1969; Neumann, 1992).

sugar.

The Tulil villages are fairly accessible with paved roads and PMVs (public moter vehicles), thus it is not particularly difficult for people to travel to big towns such as Kokopo (within an hour's travel) for shopping and selling products in the market. However, few villagers have jobs in town, and most cash comes from copra and cocoa production. Cash is used to buy foods, clothes, alcohol, as well as paying for services such as healthcare and school fees. People have access to primary education inside the two villages (two elementary schools and one primary school³), though children who can continue with secondary education or higher are few, and the drop-out rate is high.

1.3 Social organization

Although the Tulil language shares more commonalities with the Baining languages compared to the nearby Austronesian languages, the Tulils are in many aspects culturally similar to the Tolais. They are matrilineal like the nearby Melanesian groups (e.g. Tolai), while the Bainings are mostly cognatic (bilateral); and they have a moiety system.

1.3.1 Descent groups

Tulil has a matrilineal descent system, which comprises two exogamous moieties and several clans within each moiety (a general term for moiety and clan is *molimoli vətə* in Tulil, lit. 'segment of people'). That is to say, any individual belongs to the moiety/clan of their mother by birth, and all marriages have to take place between members of the two different moieties. The two moieties of Tulil people are identified by different names: *Kəmatarə* 'big bird' and *Kəvuik* 'small bird'⁴. There are 10 clans in the *Kəmatarə* group (*Kətəbekpoi*, *Matən*, *Gəgalip*, *Iluvən*, *Pokopok*, *Marmar*, *Kalulu*, *Topabek*, *Tourobung* and *Togugun*) and 5 clans in the *Kəvuik* group (*Məlaməlaivon*, *Vəkeitebova*, *Tokəpal*, *Lirakuna*, and *Vəlaur*). As long as a marriage happens across the boundaries between two moieties, it can take place between any of the clans.

This organization is similar to other Melanesian systems in the area (north-eastern coast of New Britain, extended to Duke of York Islands, and northern New

3. The primary education system in Papua New Guinea consists of 2 years in a local community elementary school (the medium of instruction is the local language), and 6 years in a primary school (the medium of instruction is Tok Pisin or English).

4. A traditional story told by Ludwick Rickie suggest the mythical origin of these two groups: there were two moons named *kəmatarə* and *kəvuikə* (= *e* is the feminine class marking, given that the moon *vəgam = e* belongs to the feminine nominal class, cf. §10.1.1). One time they were quarrelling about the way they will live. *Kəvuikə* said, 'we will metamorphosize, like the shrimps'. *Kəmatarə* said, 'no, we will be born and die, like the mushrooms.'

Ireland)(Rivers, 1914:503), where a specific person also belongs to one of two matrimoieties (the general term for moiety and clan is *vunatarai* in Tolai language) named after birds, insects, or legendary ancestors.

1.3.2 Kinship

In terms of the typology of kinship terminology systems drawn up by Morgan (1871), Tulil has a classificatory kinship system that is similar to the “Iroquois”-type, in which father’s sister and brother are termed differently from those of mother’s sister and brother, and parallel cousins are distinguished from cross-cousins.

In the Tulil kinship system (Figure 1.3), the distinction of generation is important: Tulil has four distinct levels of terms for +2, +1, 0 and -1 generation. -2 generation has one general term *iaia* ‘grandchild’⁵ which is the same as +2 male term *iaia* ‘grandfather’. Also, there are two additional terms for -2 generation when the ego is female: *kəla* ‘grandson’ and *kəle*⁶ ‘granddaughter’ (the general term *iaia* can also be used when the ego is female).

Similar to the Iroquois-type system, father’s brother is called ‘father’ *mama*, and mother’s sister is called ‘mother’ *nane*. Mother’s brother and father’s sister have distinct terms: ‘uncle’ *laika*⁷ and ‘aunt’ *vove* (same term as ‘grandmother’). Mother’s brother’s wife is also called *vove*, and father’s sister’s husband is also called *laika*. In generation 0, only the children of ‘uncle’ and ‘aunt’ (cross-cousins) have distinct terms ‘cousin’ *məlna* (M) and *məlne* (F), and parallel cousins are called *mativon* ‘brother’ and *bon* ‘sister’. In generation -1, there are special terms for the reciprocal kinship of ‘uncle’ and ‘aunt’ - *kəvova* ‘nephew’ and *kəvove*⁸ ‘niece’, all other -1 generation relatives are *vila* ‘son’ and *vile* ‘daughter’.

There are some affinal kinship terms that are not reflected in the chart, and are listed in Table 1.1.

Many but not all of the terms for kin relations are inalienably possessed nouns (§4.2.4), and the rules for categorization are not clear so far (for instance, consanguineal vs. affinal, given that certain affinal terms are also inalienably possessed, such as *banie* ‘daughter-in-law’ and *təvət* ‘sister-in-law’ and kinship terms like *nane* ‘mother’ and *mama* ‘father’ are alienably possessed).

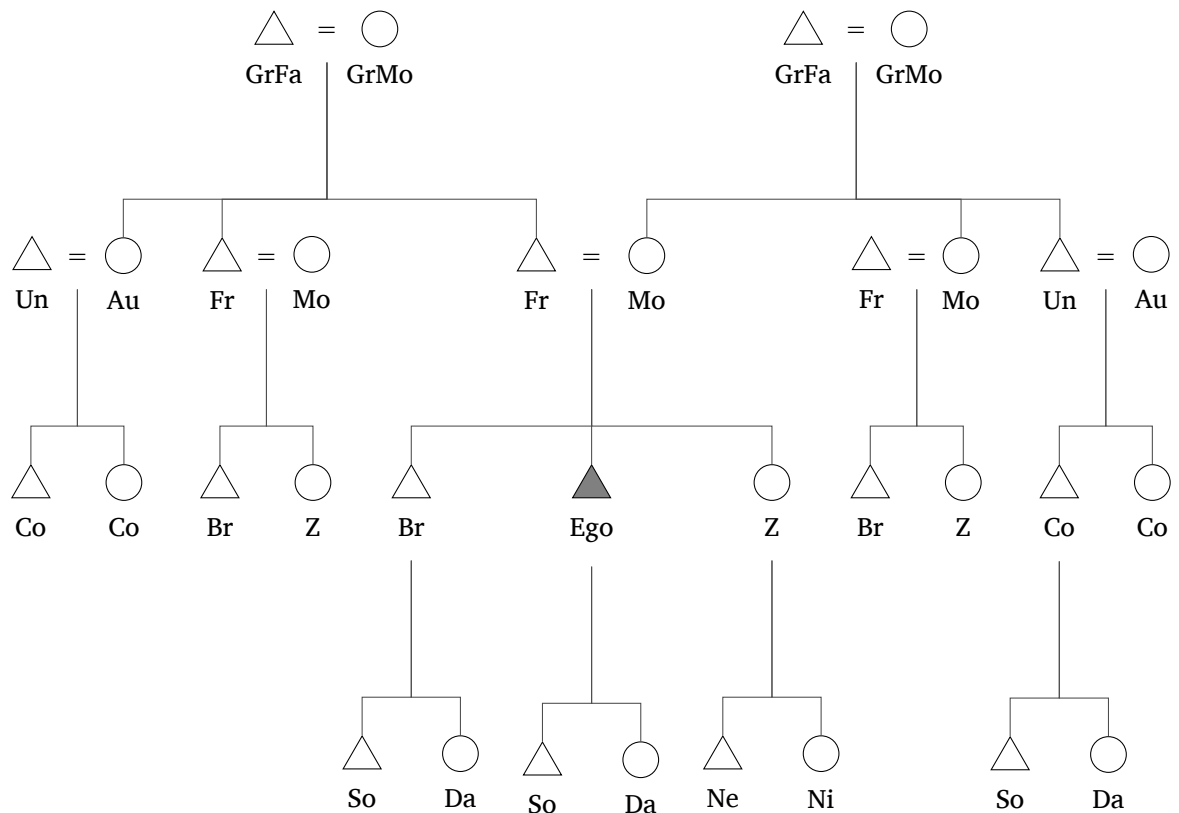
5. It is suggested by speakers that the term *iaie* that is used specifically for female ‘granddaughter’ exists, but rarely used in nowadays speech.

6. Literal meaning: ‘torch’.

7. Literal meaning: ‘a big man’.

8. Literal meaning: ‘male dog’ and ‘female dog’.

Figure 1.3: Tulil kinship system chart



1.3.3 Expected behaviors related to kinship

As clan membership is passed on through the matrilineal line, the life of an individual is to a great extent bound to the maternal relatives. The maternal uncles have an important role in making decisions and performing rites concerning important life events of an individual such as initiation, marriage and funeral.

The relationship between oneself and one's cross-cousins of the opposite sex is an avoidance relationship, and subject to a number of taboos: they are not allowed to talk, touch each other, or stay in one house / one enclosed area. Pronouncing the names of cross-cousins of the opposite sex is also taboo and only used for cursing.

1.4 Previous work on Tulil

Previous published materials on Tulil involve German missionary Carl Laufer's paper (1950), introducing the people of Tulil and presenting a brief grammatical sketch. This paper was partially based on data collected by earlier missionary Futscher, and after the publication of the paper, Futscher's original notes were published by Laufer as a micro-film (Futscher, 1959; Laufer, 1959b). The microfilm

Table 1.1: Kinship terms in Tulil

generation	code	glossing	SG
+ 2	GrFa	‘grandfather’	<i>iaia</i>
	GrMo	‘grandmother’	<i>vove</i>
+ 1	Fa	‘father’	<i>mama</i>
	Mo	‘mother’	<i>nane</i>
	Un	‘uncle’	<i>laika</i>
	Au	‘aunt’	<i>vove</i>
0	‘Br’	‘brother’	<i>mativon</i>
	‘Z’	‘sister’	<i>bon</i>
	‘Co (M)’	‘cousin (male)’	<i>məlna</i>
	‘Co (F)’	‘cousin (female)’	<i>məlne</i>
-1	So	‘son’	<i>vila</i>
	Da	‘daughter’	<i>vile</i>
	Ne	‘nephew’	<i>kəvova</i>
	Ni	‘niece’	<i>kəvove</i>
-2	GrSo, GrDa	‘grandchild’	<i>iaia</i>
	(F’s) GrSo	‘(women’s) grandson’	<i>kəla</i>
	(F’s) GrDa	‘(women’s) granddaughter’	<i>kəle</i>
in-laws	in-law (general)	‘in-law’	<i>mukəm</i>
	SiHu	‘brother-in-law’	<i>vara</i>
	BrWi	‘sister-in-law’	<i>təvət</i>
	CoHu	‘brother-in-law’	<i>mativon</i>
	CoWi	‘sister-in-law’	<i>bon</i>
	DaHu	‘son-in-law’	<i>makuta</i>
	SoWi	‘daughter-in-law’	<i>banie</i>

copy contains a 3-page history of Tulil and a 22-page sketch of the Tulil grammar.

SIL researchers Lindrud and Nicholson worked on the language in 1981, compiled a note on sound system, several pages of example sentences, and a wordlist (Lindrud & Nicholson, n.d). In 2002, Stebbins worked with a Tulil speaker who had intermarried into the Baining group and the outcome was a wordlist, and grammatical notes. Cindy Schneider also collected several texts (comprising 51mins of recordings). Tulil language consultant Louise Gulua and Maria Rickie collected several stories from the speakers, and compiled a story book, with no recordings.

A limited set of data of the Butam language is also published by Laufer as a summary of Futscher's work (Laufer, 1959a), comprising around 200 words and a brief grammar sketch. Butam is no longer spoken and the last speaker died in 1938. According to Laufer, this speaker's language ability is in doubt, and the accuracy of the information provided can not be guaranteed.

1.5 Typological profile

As mentioned earlier, Tulil (Butam), along with the Baining languages, is usually grouped into the East Papuan languages, which are thought to be the descendants of the languages spoken by the original inhabitants of Island Melanesia, before the more recent settlement of the Austronesian people. East Papuan languages are usually reported to show more influence from Austronesian languages than other Papuan languages, due to their geographical vicinity. Dunn et al. (2002) examine the structural features of the East Papuan languages from a typological point of view. Among the similarities proposed for these languages, the pronominal system is often highlighted for grouping purposes. Ross (2001, 2005) provides evidence to suggest a East Papuan group based on comparison of the pronoun paradigms. Also, descriptive data suggests that almost all of the East Papuan languages have some sort of nominal classification system (cf. Terrill, 2002). Though it is pointed out that gender system are not impossible to be borrowed (Dunn et al., 2002:29), both the Tulil and the Butam language show nominal classification systems similar to the Baining languages (nominal classification system of Tulil is elaborated in this study, cf. chapter 10) and complex to an extent that it does not seem to be easily borrowed.

A list of relevant typological features of Tulil is provided in Table 1.2, with reference to features of both the western Oceanic branch of the Austronesian family and the Trans New Guinean type Papuan languages (features of the two groups adapted from Ross, 1996:186). Table 1.3 compares the features of Tulil to both Tolai (Mosel, 1984) and Mali Baining (Stebbins, 2011). The bolded features in both Tables show the features that other groups have that are similar to the Tulil language.

Tulil has a fairly simple phonological system, similar to what is observed for most Papuan languages (Foley, 1986:48-64). It has a phoneme inventory of medium size, with 15 consonants and 6 vowels (cf. §2). Four places (bilabial, alveolar, palatal and velar) and six manners (stop, nasal, fricative, trill, lateral and approximant) of articulation are distinguished. The stop series include voiceless (p, t, k) and voiced stops (b, d, g). The voiced stops are always prenasalized.

The basic order of clausal constituents is SVO, with split-intransitivity alignment

Table 1.2: Typological features of Tulil

	Western Oceanic	Trans New Guinean	Tulil
Constituent order	SVO	SOV	SVO (Split-S)
Use of article	preposed article	no article	prefixed article (borrowing/proper names)
Position of modifier	postposed	postposed	postposed
Position of possessor NP	postposed	preposed	preposed
Possession system: Alienable/inalienable	yes	yes	yes
Inalienable Possessive pronouns	suffixed to possessee	pre-/in-fixed to possessee	proclitic to possessee
Alienable Possessive pronouns	suffixed to a classifier	preposed	preposed
Subject referencing	prefix or proclitic	portmanteau suffix (with TAM)	portmanteau prefix (with tense)
Marking of TAM	prefix/proclitic (mood/aspect); reduplication (continuative)	portmanteau suffix (TAM)	portmanteau prefix (tense); reduplication (imperfective); particles (mood)
Pronoun system: inclusive/exclusive	yes	no	no
Position of adpositions	preposition	postposition	preposition
Nominal classification	no	simple	complex

Table 1.3: Typological features of Tulil comparing to Tolai and Mali Baining

	Tolai	Mali	Tulil
Constituent order	SVO	SVO (Split-S)	SVO (Split-S)
Use of article	preposed article	preposed article	prefixed article (borrowing/proper names)
Position of modifier	postposed	postposed	postposed
Position of possessor NP	postposed	preposed	preposed
Possession system: Alienable/inalienable	yes	yes	yes
Inalienable Possessive pronouns	suffixed to possessee	proclitic to possessee	proclitic to possessee
Alienable Possessive pronouns	suffixed to a classifier	preposed	preposed
Subject referencing	prefix or proclitic	prefix (with tense)	portmanteau prefix (with tense)
Marking of TAM	prefix/proclitic reduplication	prefix (with tense)	portmanteau prefix (tense); reduplication (imperfective); particles (mood)
Pronoun system: inclusive/exclusive	yes	no	no
Position of adpositions	preposition	postposition	preposition
Nominal classification	no	complex	complex

type considering intransitive subject. Usually the A/S_A argument is not expressed by full noun phrases, but by the compulsory portmanteau person prefixes on verbs (A/S_A arguments expressed by NP constitute approximately 12% among all cases)⁹.

Unlike in Tolai and Baining languages, where preposed articles are utilized for marking definiteness in common nouns, Tulil only has a prefixal article *a-* which marks borrowed words (cf. §4.2). Proper names also take articles in Tulil: the articles are *to* for men and *e* for women. This is similar to the Tolai language where names of men are marked by *to* and women by *la* (Mosel, 1984:17-19).

Tulil makes a distinction between alienable and inalienable possession (cf. §4.2.4, §5.8), marked by different possessor indexes attaching to a possessed noun. Inalienable possessive indexes differ from alienable possessive indexes in 1SG and 3SG, and these inalienable possessive indexes tend to cliticized to the possessum. The

9. Count of A arguments in NP: 24; A/S_A arguments in NP: 104; A arguments without NP: 342, A/S_A arguments without NP: 443, based on annotated corpus of GRAID annotation in (Meng, to appear).

items that conform to the syntactic pattern of inalienable possession are mostly body parts and kinships, but not all members of these categories are inalienably possessed.

Tulil does not have an inclusive/exclusive distinction in the 1st person pronominals. This distinction is often found in Austronesian languages, but is not common in Papuan languages, except East Papuan languages. However, the feature is not known to be present in Papuan languages in East New Britain (Dunn et al., 2002:40). Tulil pronominals make a three-way number distinction: singular, dual and plural.

Tulil has a category of prepositions (Tolai has prepositions and Baining postpositions) with a large set of members, which shows a certain degree of heterogeneity in terms of morphosyntax (§6).

Concerning the function of demonstratives as spatial deictics, the relative distance may be measured based on the position of the speaker exclusively, or the speaker and hearer. As pointed out by Foley (1986:75), Papuan languages most commonly have a deictic system of the first type, ranging from a two-term system ('this' and 'that') to more complicated ones with other parameters such as visibility and elevation, while Austronesian languages usually have a three-way distance distinction (close to speaker, close to hearer, and away from both). Both Mali Baining (Stebbins, 2011:76-82) and Tolai (Mosel, 1982) in the area seem to have a system of the first type, with additional parameters pertaining to landscapes, etc. Tulil uses a combination of the two types, like some other Papuan languages such as Fore (Scott 1978). Tulil shows a three-way distinction on the distance scale: near speaker, near hearer, and away from both; on a larger distance scale, other parameters are also involved, such as elevation and specific landmarks such as the sea (§7).

Verb morphology in Tulil is fairly complex (cf. §9). Multiple stems are involved in the formation of verbs related to different grammatical categories. Verb morphology involves mainly prefixing, including A/S_A person/number/gender/tense portmanteau prefixes and reduplication (imperfective aspect). Derivational processes include the applicative suffix and incorporation. The morphophonological pattern of verb inflection in Tulil is not immediately transparent, and involves an interaction between initial consonant mutation and reduplication of stems (§2.5.5). Mood in Tulil is marked by adverbial particles.

Tulil has a rather complex nominal classification system, with 11 different nominal classes based on sex, size and shape, usually manifested in NP-related structures, and a smaller system of 3 gender distinctions (masculine, feminine, neuter), manifested as person indexes on verbs, possessives, etc (§10). Nominal classification has been proposed as a possible distinctive characteristic common to the

non-Austronesian languages of the Bismarck Archipelago, Bougainville, and the Solomons region (Terrill, 2002), and is not found in any of the Austronesian languages of the area. However, among these languages, only the Baining languages have a large set of distinctions (Stebbins, 2005, 2011:136-155), similar to what we find in Tulil.

1.6 The data

The corpus which forms the basis of this description of Tulil was mostly collected by myself during nine months of field work in Papua New Guinea from November to December, 2012 and from January to September 2014. Out of these nine months I spent the whole time in Tulil village 1/2, and a couple of days in Kadaulung village with the Butam descendents. The language description presented in this thesis is based on the dialect spoken in Tulil village 1/2. Up to this stage, few dialectal variations have been noticed of the Tulil language as a whole. In addition to that, recordings collected by Schneider (transcribed by me and informants) were also incorporated into the corpus and used as material for the analysis of this grammar.

I recorded about 21.5 hours of texts (both audio and video) in total, from 40 different speakers (25 male, 15 female), ranging in age from 14 to about 82. The description presented in this grammar is based on about 13.5 hours of these recordings which are transcribed and translated in Elan¹⁰. They comprise mostly narratives and procedural texts. There are also some conversations, songs and stimulus-based elicitation. Other types of recorded material such as community meetings and classroom interactions are not yet transcribed and thus were not included.

The recorded material is supplemented by field notes of elicitation sessions and participant observation. In addition to that, I used the following wordlist, questionnaires and stimuli: Swadesh list (207 items), Dahl's questionnaire on tense and aspect categories (Dahl 1985), BowPed topological stimulus (Bowerman & Pederson, 1992), each with one male and one female speakers.

A lexical database in Toolbox format based on this corpus consists of about 1286 entries at present.

I worked with 6 informants on transcribing and elicitation (each worked for different period/length of times): Donald Puongo, Elsie Evan, Kalistus Luaina, Louis Gulua, Maria Rikie, Wenzel Mogor (in alphabetic order).

The writing of this grammar is mainly based on the basic descriptive framework, and does not explicitly commit to on any specific theoretical frameworks.

10. <https://tla.mpi.nl/tools/tla-tools/elan/>, Max Planck Institute for Psycholinguistics, The Language Archive, Nijmegen, The Netherlands.

Chapter 2

Phonology

Similar to what is observed for most Papuan languages (Foley, 1986:48-64), the phonological system in Tulil is relatively straightforward and simple. This chapter begins with a description of the phoneme system and phonetic realization of segments (consonants §2.1, vowels §2.2) and phonotactics (§2.3). The following section on suprasegmental features (§2.4) briefly describes stress assignment, with instrumental analyses of sentential intonation. Other morphophonological processes (such as affix interactions and morphophonemic alternations) are described in Section §2.5. In §2.6 a brief description of loanword adaptation is given.

Some acoustic analyses are given throughout the chapter: the analyses of individual phonemes are mostly based on a Swadesh list collected from two speakers: LG (Luisa Gulua, female) and DP (Donald Puongo, male), and the sentence examples are extracted from the texts.

2.1 Consonant inventory

Table 2.1 lists the full inventory of consonant phonemes in Tulil¹¹. The language has 15 consonants (among which /s/ is a borrowed phoneme thus is shown in parenthesis), with 4 places of articulation, and a two-way voicing distinction in stops (voiced vs. voiceless). Minimal and near-minimal pairs showing phonemic contrasts for consonants are given in Table 2.2.

2.1.1 Stops

Stops contrast in phonation (voiced vs. voiceless) and 3 different places of articulation (labial, alveolar, velar).

11. Symbols in the square brackets show the orthographic representation, if different from the phonemic representation. Examples will all be given in the orthographic, rather than the phonemic transcription. Details of the orthography of the language can be found in **Abbreviations and conventions**.

Table 2.1: Consonant phonemes in Tulil

	Labial	Alveolar	Palatal	Velar
Stop	p/b	t/d		k/g
Fricative	β [v]	(s)		
Nasal	m	n		ŋ [ng]
Lateral		l		
Approximant	w [u]		j [i]	
Trill		r		

Voiced stops /b/, /d/ and /g/ in Tulil only occur as syllable onsets. The series of voiced stops are prenasalized. The reason that [m]/[n]/[ŋ] are not phonemic in this case is that the language does not allow multiple consonants (except semi vowels /w/ and /j/) as onsets (cf. §2.3). When occurring intervocalically, the prenasalized stops quite commonly surface as nasal + stop sequence, whereby the nasal forms the coda of the preceding and the stop the onset of the following syllable, such as /li^mbəti/ → [lim.bəti]. The contrast of phonetic length between [m]/[n]/[ŋ] as prenasalized parts and as phonemes, and their inaudibility would still need further acoustic investigation to be confirmed.

Examples of instrumental representations of voiced stop /b/ can be seen in Figure 2.1.

$$(2) \quad /b, d, g/ \rightarrow [{}^m b, {}^n d, {}^ŋ g]$$

Voiceless stops are pronounced with or without aspiration word-initially or intervocalically in free variation. The following figure shows the word *pet* pronounced by the same speaker (LG), with aspiration on the initial voiceless stop /p/ (Figure 2.2b) and without (Figure 2.2a).

When occurring at the end of a word, voiceless stops /p/, /t/, /k/ are realized as either unreleased stops [p̚], [t̚], [k̚], aspirated released stops [pp^h], [tt^h] or [kk^h] or nasal released stops [ppⁿ], [ttⁿ], [kkⁿ] (some examples can be seen in Figure 2.1, 2.2a and 2.2b).

$$(3) \quad /p, t, k/ \rightarrow \begin{cases} [p̚, t̚, k̚] \sim [pp^h, tt^h, kk^h] \sim [pp^n, tt^n, kk^n] / *_\# \\ [p, t, k] \sim [p^h, t^h, k^h] / \text{elsewhere} \end{cases}$$

A cluster of nasal coda plus voiceless stop onset is not permitted in Tulil root morphemes, but is allowed when a word is formed by reduplication (such as

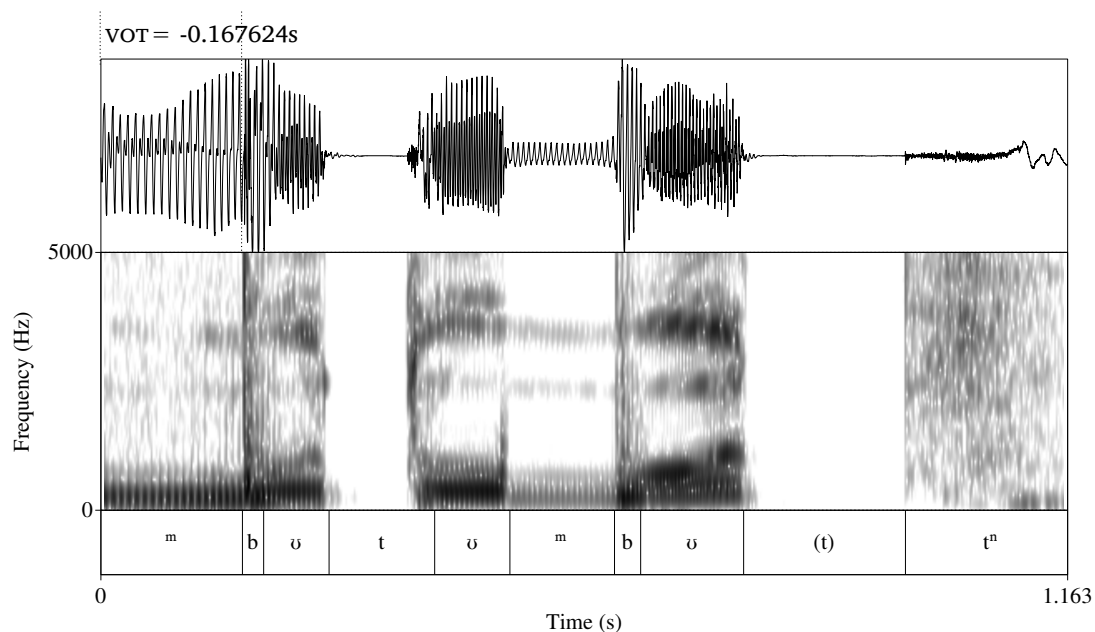
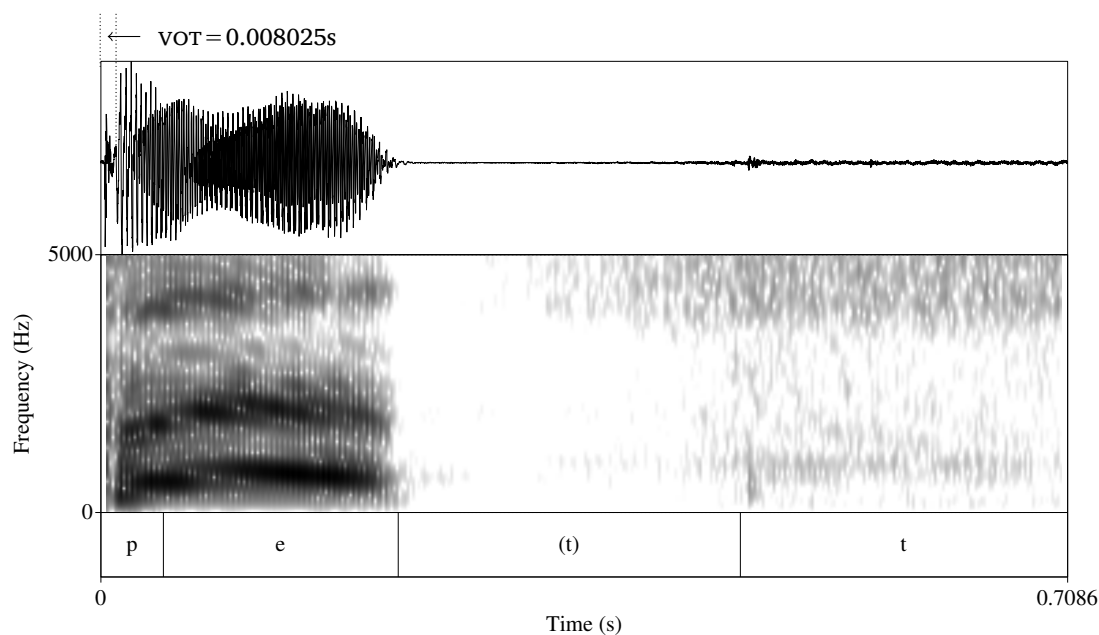
Table 2.2: Consonant (near-)minimal pairs

	Initial	Intervocalic	Final
p : b	/but/ 'thick' /put/ 'red'	/mətəbale/ 'snake.sp.' /kəpalə/ 'faeces'	— ^a
t : d	/tau/ 'meet' /dau/ 'mushroom'	/vətə/ 'meat' /vədə/ 'for'	—
k : g	/kup/ 'hook' /gup/ 'hunt'	/loka/ 'man' /loga/ 'bench'	—
b : m	/be/ 'at' /me/ 'and'	/bəlbəl/ 'saliva' /məlməl/ 'clean'	—
d : n	/dok/ 'kill' /nok/ 'hand'	/idə/ 3N.POSS.AL /inə/ 2PL.POSS.AL	—
g : ŋ	/gun/ 'count' /ŋun/ 1DL	/Vərgoi/ 'river.name' /dəŋoi/ 'mustard'	—
p : t : k	/pir/ 'story' /tir/ 'ask' /kir/ 'stick.into'	/pipilək/ 'choose' /tiritirit/ 'drizzle' /tikilik/ 'small'	(underlyingly /β/) /tət/ 'sugar' /tək/ 'throw'
b : d : g	/bu/ 'heart' /du/ 1PL.POSS.AL /gu/ 'which'	/təbærtəm/ 'afternoon' /tədərŋəp/ 'be.quiet' /təgər/ 'chant; spell'	—
m : n : ŋ	/mi/ 'suck' /ni/ 'chew' /ŋi/ 2SG	/tome/ SUB /tone/ 'bone' /toŋe/ 'erected'	/təm/ 'know' /tən/ 'think' /təŋ/ 'put.on'
b : β	/bərən/ 'mountain' /βərən/ 'black'	/kəbərɯ/ 'ashamed' /kəβərɯ/ 'ash'	—
p : β	/pir/ 'story' /βir/ 'weave'	/tipur/ 'bush' /iβur/ 'sell'	neutralized (cf. §2.1.1)
l : r	/lake/ 'lake' /rake/ 'tree.sp.'	/uləŋge/ 'tear' /urəŋge/ 'flat.river'	/kəl/ 'face' /kər/ 'rise'
s : t	/siti/ 'city' /ti/ 'parent'	/masin/ 'machine' /gati/ 'share'	/polis/ 'police' /bulit/ 'glue trap'

^a Voiced stops in Tulil never occur word-finally.

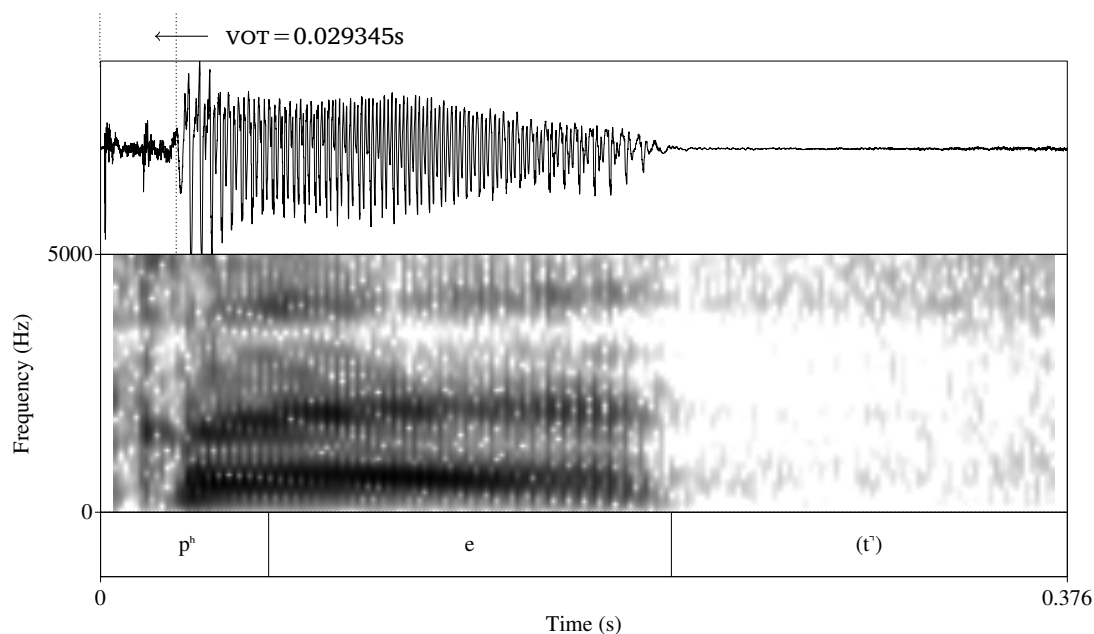
təŋg~təgət = *a* 'one by one') or has a reduplicated form that is not analyzable synchronically (*kətongtong* 'butterfly'¹²). The nasal + voiceless stop cluster can also

12. when used as a noun root the form is *kətongtong*, and when used with nominal classifier such as =*e*, the last phoneme becomes /g/ *kətongtoge*. It is a special case because no any other similar examples are found,

Figure 2.1: *butubut* ‘thick’ (speaker: DP)Figure 2.2a: *pet* ‘wide’ (speaker: LG)

be observed in cliticization. For instance, the directional proclitic *mən* = ‘from’ does not affect the following voiceless stop: /*mən*/ ‘from’ + /*təvənmə*/ ‘after’ → [*mən = təvənmə*] ‘from after (something)”; /*mən*/ ‘from’ + /*kia*/ ‘first’ → [*mən = kia*] ‘from the beginning’. This may suggest the possibility of a historical rule for the voiceless stops to become voiced after nasals resulting in effectively prenasalised

and will not be considered as adding any new phonological rules.

Figure 2.2b: *pet* ‘wide’ (speaker: LG)

stops¹³.

The phoneme /p/ is somehow special in the following senses: 1) it never occurs word-finally (word-final [p] is in fact an allophone of /β/ rather than /p/, as will be explained below in §2.1.2); 2) the words where /p/ occurs word-initially are mostly borrowed words, ideophones, or possibly onomatopoeia originated words such as names of drums, etc. see Table 2.3. This may suggest that initial /p/ was not native to the Tulil language. One interesting observation is that the word *pir* in Kuanua, while having two meanings ‘(tell) a story’ and ‘weave’, adapted into Tulil to *pir* and *vir* respectively. It may suggest that the latter is borrowed into the language earlier.

2.1.2 Fricatives

There are two fricative phonemes in Tulil: bilabial fricative /β/ and alveolar fricative /s/.

The alveolar fricative /s/ only occurs in loanwords, such as *a-sipet* ‘shovel’ and *a-sol* ‘salt’ (borrowings of Tok Pisin). This suggests /s/ as a loan phoneme (§2.6.1). In many cases, the /s/ in the source language can also be adapted to /t/ when entering Tulil, and the use of both /t/ and /s/ can be observed (e.g. *a-tol* ‘salt’ is also found in the corpus; *a-sto* and *a-tito* ‘store’). The occurrence of this phoneme may be relatively recent, given that words borrowed earlier seem to only use /t/ (e.g. *a-tade* [ataⁿde] n. ‘Sunday; church’ *tade* v. ‘worship’; but never **sade*).

13. This voicing rule exists in Mali Baining (Stebbins, 2011:19-20).

Table 2.3: List of /p/-initial words in Tulil

	form	gloss
borrowing	<i>pir</i>	n./v. ‘(tell) story’ (Kuanua)
	<i>pəkət</i>	n. ‘knife’ (Kuanua)
	<i>purpur</i>	n. ‘flower’ (Kuanua)
	<i>pato</i>	n. ‘duck’ (Tok Pisin)
	<i>pipilək</i>	v. ‘choose’ (Kuanua)
	<i>par</i>	v. ‘finish’ (Kuanua)
	<i>poto</i>	n./v. ‘(take) photo’ (Tok Pisin)
ideophone	<i>pələpələp</i>	‘lightning’
	<i>pərəpərət</i>	‘sparkling’
onomatopoeia originated	<i>pəkupake</i>	‘bamboo drum’

The contrast between [p] and [β] is neutralized in word-final position: final [p] in word roots always becomes [β] after encliticization (§2.4), and [β] never occurs word-finally. There is no general rule suggesting that [p] can become [β] intervocally to explain this phenomenon (given that there are words like *tipur* ‘bush’, where [p] occurs intervocally), thus it can be deduced that word final [p] is underlyingly /β/. The Tulil orthography does not reflect the final devoicing of /β/. For instance, [kəβop] is underlyingly /kəβoβ/, and is represented as *kəvop* in the orthography (cf. Table 1, orthography).

Table 2.4: Examples of final devoicing of /β/

root	encliticization	after
[kəβop] n. ‘dog’	= [a] SG.CLF:MASC	[kəβoβ = a] ‘a male dog’
	= [e] SG.CLF:FEM	[kəβoβ = e] ‘a female dog’
[mərop] v. ‘bury’	= [a] 3SG.M.PAT	[məroβ = a] ‘bury him’
	= [idə] 3N	[məroβ = idə] ‘bury it’

When a word with final /p/ is borrowed into Tulil, it is treated as having an underlying /β/ as the final consonant phoneme. So the Kuanua word *tirip* ‘young coconut’, when borrowed into Tulil, becomes /tiriβ/ underlyingly (loan phonology, cf. §2.6).

- (4) [tirip] ‘young.coconut’ + = [a] SG.CLF:MASC → [tiriβ = a] ‘a young coconut’

The bilabial stops /b, p/ and the bilabial fricative /β/ are also involved in some morphophonological rules such as assimilation of the initial /β/ of nominal class marking, and initial consonant mutation of verb roots.

Also, bilabial fricative /β/ tends to be realized with less friction ([β̥]) intervocally:

$$(5) \ /β/ \rightarrow \begin{cases} [β] / V_V \\ [p] / _ \# \\ [β̥] / \text{elsewhere} \end{cases}$$

2.1.3 Nasals

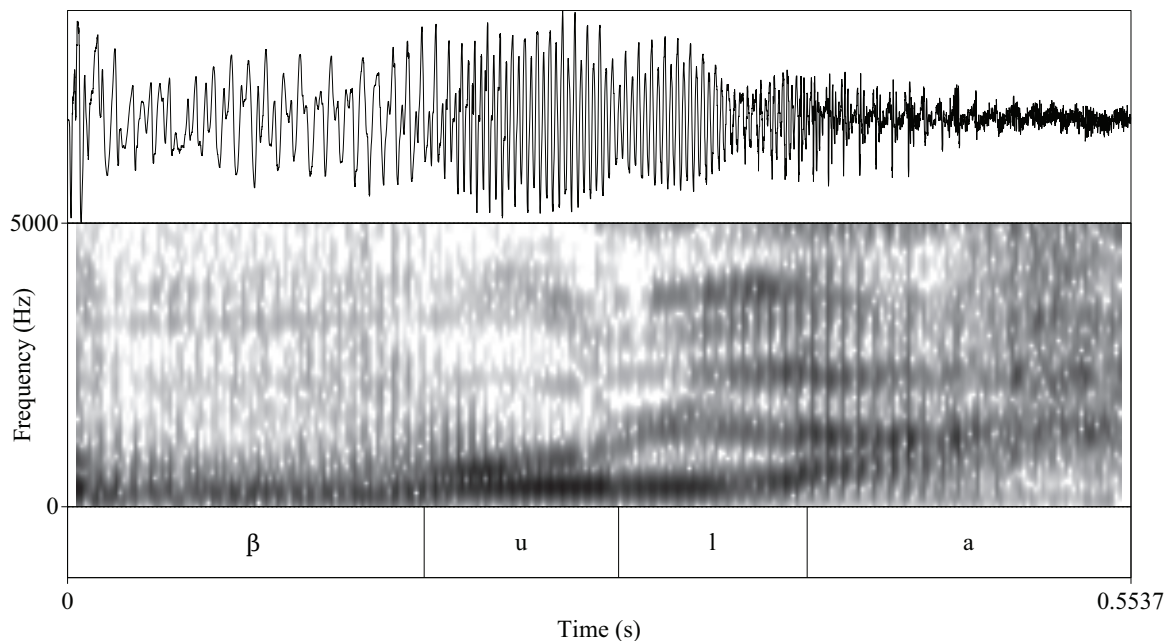
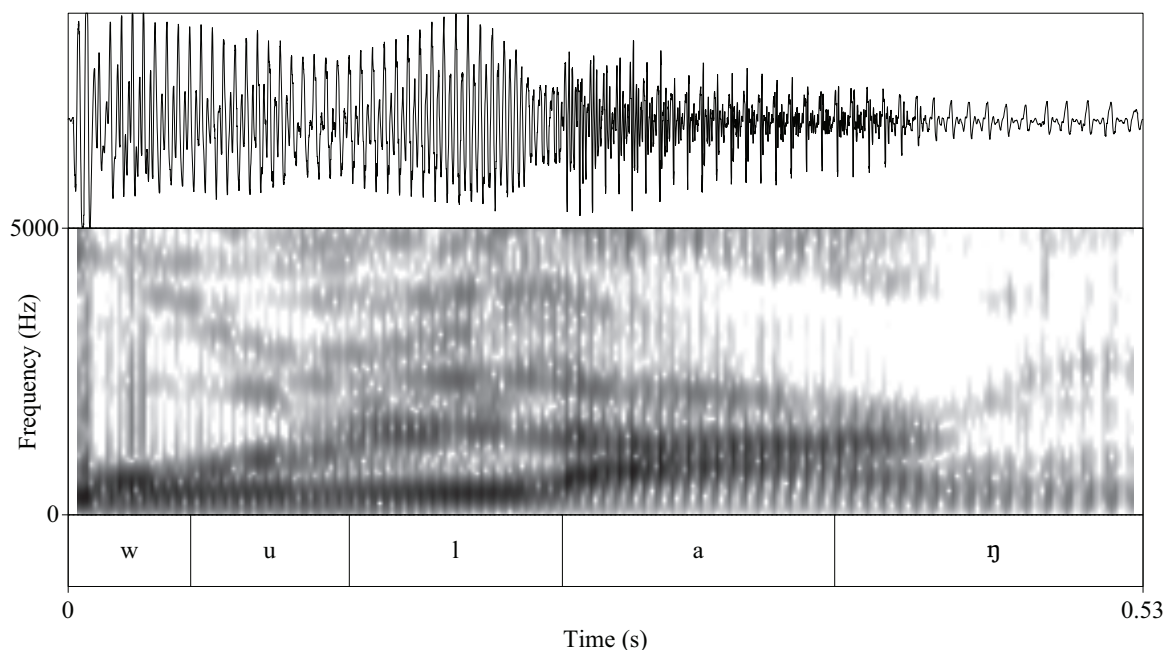
One thing to note about the nasal series is that they do not cooccur with prenasalized voiced stops of the same place (* /mb/, * /nd/, * /ŋg/). In example 7, a morphophonological (assimilation) rule is applied to syllable-initial phoneme /β/ in the nominal class marking, changing it to /b/ according to the preceding /m/ (cf. §2.5.3). Then given the restriction of * /mb/, the /m/ is deleted. Even though in this case, the surface form usually still has an [m] due to the prenasalization, the [m] can be inaudible or not pronounced at all according to speakers.

- (6) ‘feather’ + SG.CLF:FLAT
 /mərim/ + = /βoi/ → /mərim/ + = /boi/ → /məriboi/ → [məri^mboi]

2.1.4 Approximant /w/ and /j/

/w/ and /j/ are labial and palatal approximants. Their allophones have similar instrumental properties as the high vowels /u/ and /i/, but are analyzed as consonants due to phonotactic reasons (they occur as medial of a syllable, cf. §2.3). /w/ and /j/ are still transcribed as *u* and *i* in orthography for keeping the representation simple (for instance, the word /joj/ ‘water’ is transcribed as *ioi* in the orthography).

Figure 2.3a and Figure 2.3b show the contrast between initial *v* and *w* in the two words, where the former shows more friction.

Figure 2.3a: *vula* ‘night’ (speaker: DP)Figure 2.3b: *(w)ulang* ‘yellow’ (speaker: DP)

2.2 Vowel inventory

2.2.1 Simple vowels

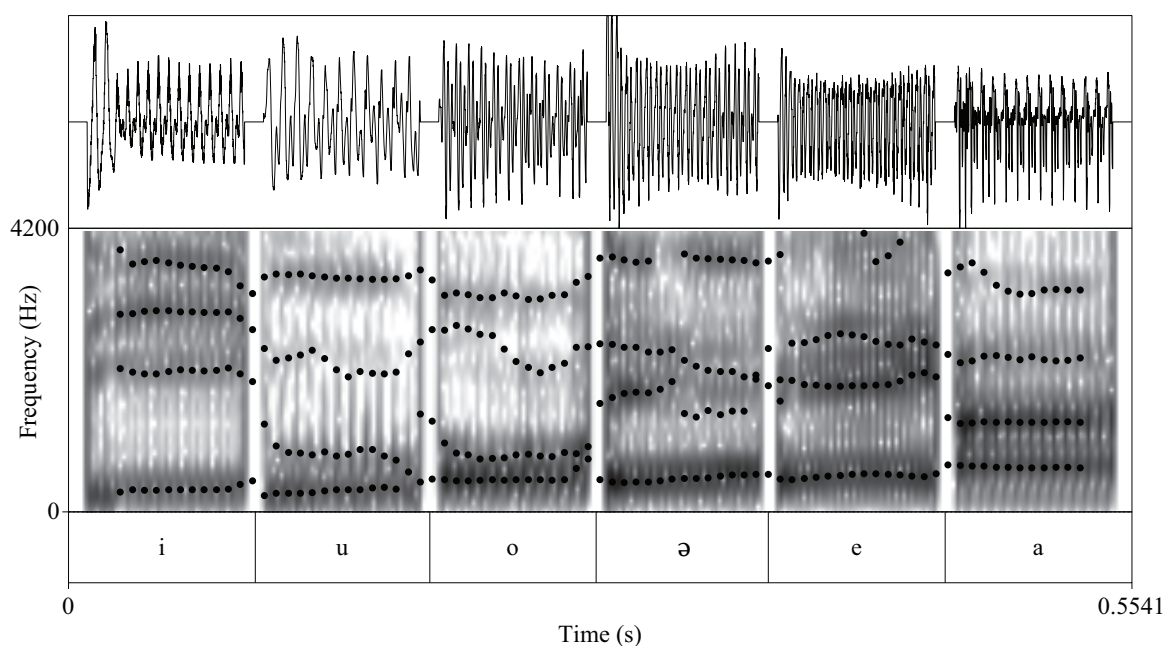
There are 6 simple vowels in Tulil, as shown in Table 2.5. Example formants of these vowels are given in Figure 2.4 (vowels occurring in interconsonantal position, words *tipur* ‘bush’ *tone* ‘bone’ *tekilik* ‘small’ *tarə* ‘many’ *turin* ‘fire’ *tənət* ‘float’

speaker: DP).

Table 2.5: Vowel phoneme in Tulil

	Front	Central	Back
High	i		u
Mid	e	ə	o
Low		a	

Figure 2.4: Example formants of vowels (speaker: DP)



The two high vowels /i/ and /u/ have allophones [ɪ] and [ʊ] in close syllables:

$$(7) /i/ \rightarrow \begin{cases} [\text{ɪ}] / \text{closed syllable} \\ [i] / \text{elsewhere} \end{cases}$$

$$(8) /u/ \rightarrow \begin{cases} [\text{ʊ}] / \text{closed syllable} \\ [u] / \text{elsewhere} \end{cases}$$

Schwa is comparatively weak in Tulil. For instance, /ə/ between stops/fricatives and liquid is often shortened or deleted in fast speech:

- (9) ‘scratch’ /kəri/ > [k^həri] ~ [k^həri] ~ [k^hri]
 ‘pierce’ /vələk/ > [vələk] ~ [vəlok] ~ [vlok]

Also, /ə/ is often deleted when combining with another vowel during suffixation/encliticization (cf. §2.5.1). And there are certain cases where /ə/ can be deleted or inserted between consonants (cf. §2.5.2).

These facts may suggest that schwa has limited distribution and may be epenthetic historically, however, its occurrence is not fully predictable synchronically (cf. Blevins & Pawley, 2010; Evans & Miller, 2016). For instance, the ending schwa cannot be predicted by word class or phonological contexts: e.g. near minimal pairs *məgunə* v. ‘swallow’ and *gun* v. ‘count’; *vətə* v. ‘fish in creek’ n. ‘protein’, *pət* v. ‘break’ and *vət* class marking meaning ‘one segment of’.

Vowels seldom occur word-initially: 1) initial high vowels /i/ and /u/ are analyzed as approximants /j/ and /w/; 2) /a/ mostly occurs as initials when it is the affixal article (cf. §4.2), or person prefix; or initial of particles such as *ar* ‘still’; 3) /ə/ never occurs word-initially; 4) /o/ occurs once as initial *oraorong* ‘big noise’, and on its own as the topic marker *o*; 5) /e/ occurs as person prefix.

(Near-)Minimal pairs of vowels occurring in interconsonantal and final positions are shown in Table 2.6.

Table 2.6: Vowel (near-)minimal pairs

	Interconsonantal	Final
a	/tar/ ‘stick.into’	/ba/ ‘in’
ə	/tər/ ‘meet’	/bə/ IAM
e	/ter/ ‘dig.out’	/be/ ‘at’
i	/tir/ ‘ask’	/bi/ ‘where’
o	/tor/ ‘wood’	/bo/ ‘up’
u	/tur/ ‘wash’	/bu/ ‘heart’

2.2.2 Vowel combination

Tulil avoids identical vowel sequences on the surface, and two vowels of the same quality usually merge into one in surface realization, given that there is no observable length difference between a single and a double vowel. This phonological rule does not only apply word internally (affixation), but also between words inside a phrase (cliticization), and in fast speech across word boundaries.

This process is commonly observed in 1) patientive marking = *a* PAT and borrowing article *a*- ART of the following noun; 2) noun class marking = *a* SG.CLF:MASC and = *e* SG.CLF:FEM with the index of the following demonstrative *a*- 3SG.M- and *e*- 3SG.F-.

- (10) a. PAT = *a* + ART *a-* > *a*
 b. CLF:MASC = *a* + ART.M *a-* > *a*
 c. CLF:FEM = *e* + ART.F *e-* > *e*

Another hiatus resolution rule that is phonological involves the vowel /ə/, which is always comparatively weak. The combination of [ə] with other vowels is not found in the data, and /ə/ is always lost in the process of affixation and cliticization when combining with other vowels. This type of hiatus always arises when verbs ending in vowels combine with 1) the patientive marking = *a* (11a), as well as 2) the O/S_o pronouns starting with vowels such as = *e* 3SG.F.PAT (11b).

- (11) a. *telə* ‘search’ + = *a* PAT > *tel* = *a*
 b. *mərkətə* ‘leave.behind’ + = *e* 3SG.F.PAT > *mərkət* = *e*

All other vowel combinations exist in surface realizations in Tulil, as shown in Table 2.7. /i/ and /u/ are analyzed as approximant /j/ and /w/ in word initial, syllable medial and coda positions (§2.3), such as *iaia* /jaja/ ‘grandpa’. Based on the stress pattern, and phonotactic considerations, only /ai/ can be analyzed as a real diphthong in Tulil.

Table 2.7: Vowel combinations

	a	e	i	o	u
a	-	/a'en/ ‘fish’	/twain/ ‘egg’	/ra'ot/ ‘drag’	/ta'uk/ ‘grab’
e	/ve'al/ ‘gap’	-	/re'it/ ‘slope’ /ne'rejta/ ‘six’	/vare'ot/ ‘long.time’	/təre'uk/ ‘thing’
i	/ja'ja/ ‘grandpa’	/jep/ ‘she’	-	/Bi'or/ ‘Tolai’	/viw/ ‘sea’
o	/vo'aw/ ‘bush.rat’	/do'edə/ ‘tongs’	/vo'in/ ‘devil’	-	/ki'ow/ ‘mouth’
u	/tu'ar/ ‘shout’	/mu'ek/ ‘puke’	/bəru'i/ ‘heart’	/tirbu'ok/ ‘people who ask a lot’	-

Given that for most Tulil roots, the stress is on the last syllable, it is fairly straightforward to assign some vowel sequences to two syllables rather than one. For instance, *rei* /re'i/ ‘move’ has the stress on the last /i/ rather than on the sequence /ei/, and the same situation is found with *tauk* /ta'uk/ ‘grasp’ and *laik* /la'ik/ ‘big’. A different case is exemplified by the word *ioi* /joj/ ‘water’, in which not only the initial, but also the coda can be analyzed as a glide /j/ (similarly,

/w/ for /u/, as in *miau* /mi'aw/ 'fly'). These two cases exclude many of the vowel sequences occurring in Tutil.

However, in fast speech, certain vowel combinations tend to be shortened, such as /ae/ (/aen/ 'fish'), /oi/ (/voïn/ 'devil'); but in careful speech the stress pattern (a slight rise on the second vowel of the combination) is usually quite audible. Given that the stress pattern of Tutil is not clear by now, the analysis of diphthong remains preliminary. For *ai*, the word /'twain/ 'egg' shows the necessity to recognize /ai/ as a diphthong, because the coda can only be one consonant, and the /i/ in /ai/ in this case cannot be analyzed as an /j/.

2.3 Phonotactics

The phonotactic formula of a syllable in Tutil is:

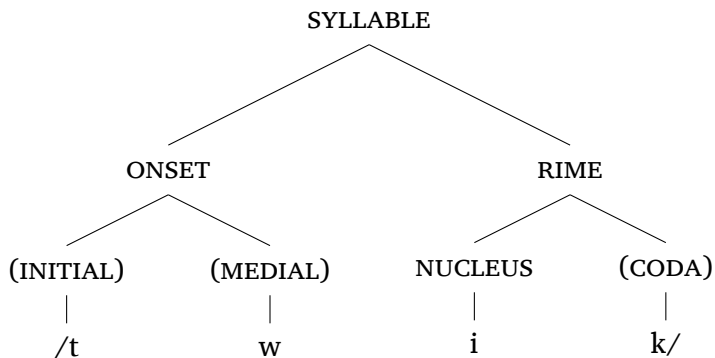
$$\sigma \rightarrow (C)(C)V(C)$$

This means that Tutil allows the following six syllable types: v, CV, VC, CVC, CCV, CCVC (examples can be found in Table 2.8).

Roots consist of one or more syllables. Five syllables seems to be the limit for root morphemes: one example is found and it is an ideophone (/kələkələŋər/ 'shining').

$$W \rightarrow \sigma^*$$

Figure 2.5: Syllable structure, e.g. *tuik* /twik/ 'suspect'



Restrictions of phonemes occurring in different positions:

INITIAL: All consonants;

MEDIAL: Approximant /w/ and /j/;

NUCLEUS: All vowels (simple vowels and diphthongs);

CODA: All consonants except voiced stops

Table 2.8: Allowed syllable types in Tulil

syllable types	examples	
V	/o/ TOP	/ele/ 'tree.sp.'
CV	/ta/ 3PL	/vume/ 'slap'
VC	/ar/ 'still'	/mi.or/ 'tomorrow'
CVC	/tir/ 'ask'	/mikmik/ 'suck'
CCV	/vrivrite/ 'chicken.shit'	/twaina/ 'one egg'
CCVC	/twain/ 'egg (PL)'	/djur/ 'beetle (PL)'

2.4 Suprasegmental features

2.4.1 Stress

Stress is not contrastively utilized in Tulil words. Note that the stress analysis given here is very preliminary and only based on auditory impression thus far, and Tulil may not be a language that takes word-level stress as a prominent feature as languages like English (cf. Goedemans & van Zanten, 2014). Most Tulil words have their stress on the last syllables, signalled by a combination of slightly higher intensity, lengthening of the vowel and (possibly) vowel quality. Pitch is not a predictable indicator of stress: words in isolation commonly have a higher pitch in the first syllable, while in a sentence the last syllable of a word can get a higher pitch. However, the difference between stressed and unstressed syllables in regard to all these variables is not very prominent, and is subject to the position in an intonation contour. Affixation and cliticization do not change the placement of stress, thus a noun root such as /kə'gor/ 'eel', after encliticization of the nominal class marking, still has its stress on the penultimate syllable /kə'gora/ 'a eel'. To give a more precise description of the manifestation of these variables, a detailed instrumental analysis will need to be carried out in future studies.

2.4.2 Intonation

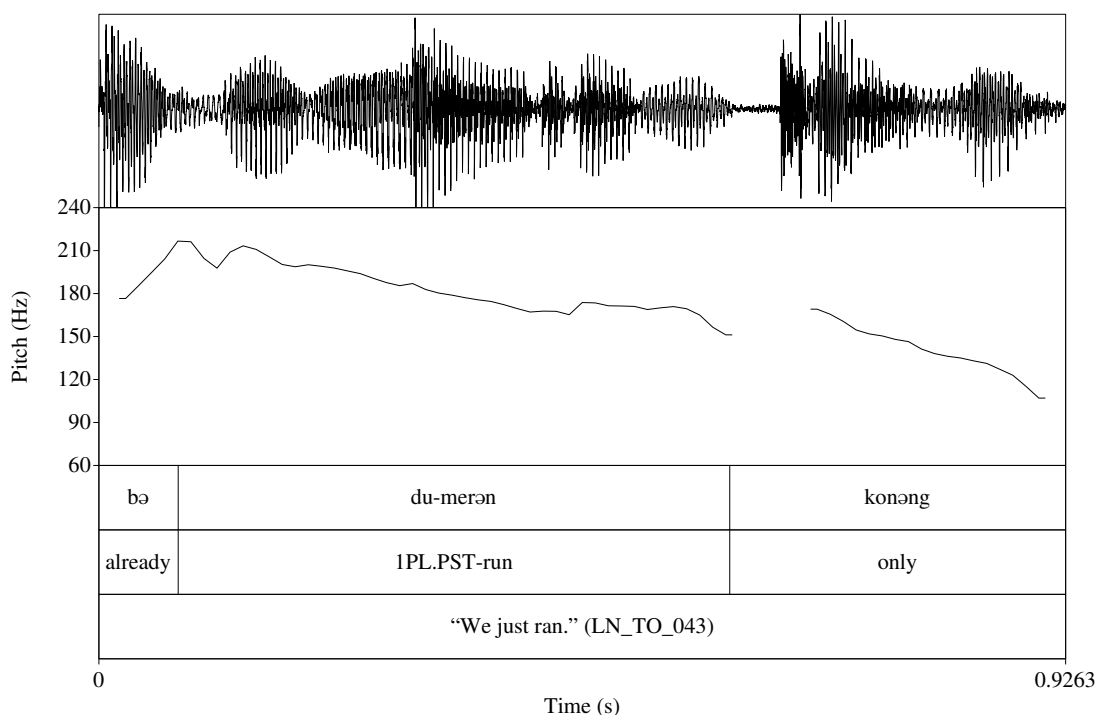
Pitch contours of basic Tulil sentences are described in this section, including intonation of declarative sentences, polar questions and constituent questions.

2.4.2.1 Declarative sentence

Simple declarative clauses (both verbal and non-verbal) show a peak on one or more stressed constituents of the sentence, and gradually fall after the last peak towards the end of the sentence across the last syllables. There is (at least) one

pitch peak before the intonation drops. The pitch contours of a verbal clause can be seen in Figure 2.6 and that of a non-verbal clause is shown in Figure 2.7. In the first sentence, the highest pitch is the beginning of the verb (person index), and a smaller peak at the beginning of the particle *konəŋ* ‘only’. In the second one, the highest peak is the subject *ttia* ‘dad’ and another rise when the second NP occurs. The general tendency of the pitch contours of both sentences are falling towards the end of the utterance.

Figure 2.6: Declarative sentence: verbal



In a complex declarative sentence, the intonation of the last constituents of each clause shows a falling-rising pattern, except for the last sentence (see Figure 2.8a to 2.8c).

2.4.2.2 Questions

The pitch range is generally higher in questions, especially in polar questions. We can see the frame of pitch in Figure 2.6 to 2.8c is 60-240Hz for declarative sentences, while for polar questions it is 120-300Hz (Figure 2.11), in order to position the pitch figures in the middle of the frame.

For constituent questions, there is a slight rise-falling pattern on the question word, otherwise the general tendency of the sentence is falling, similar to declarative sentences. Figure 2.9 shows a constituent question with the question word

Figure 2.7: Declarative sentence: non-verbal

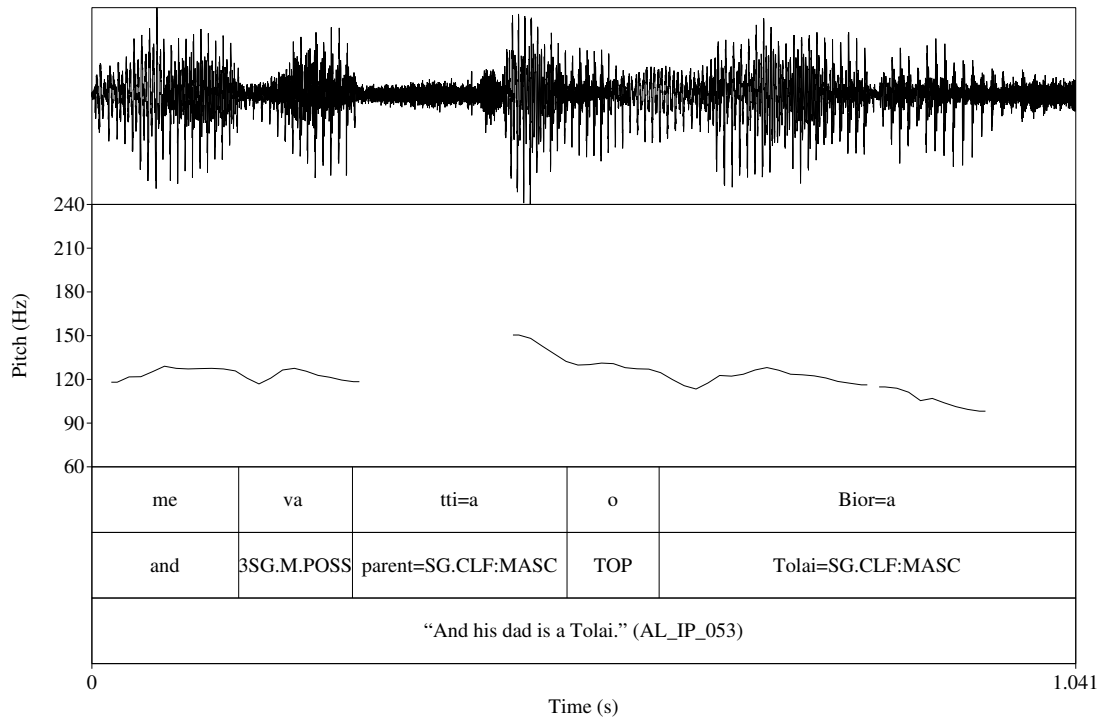


Figure 2.8a: Complex declarative sentence part 1

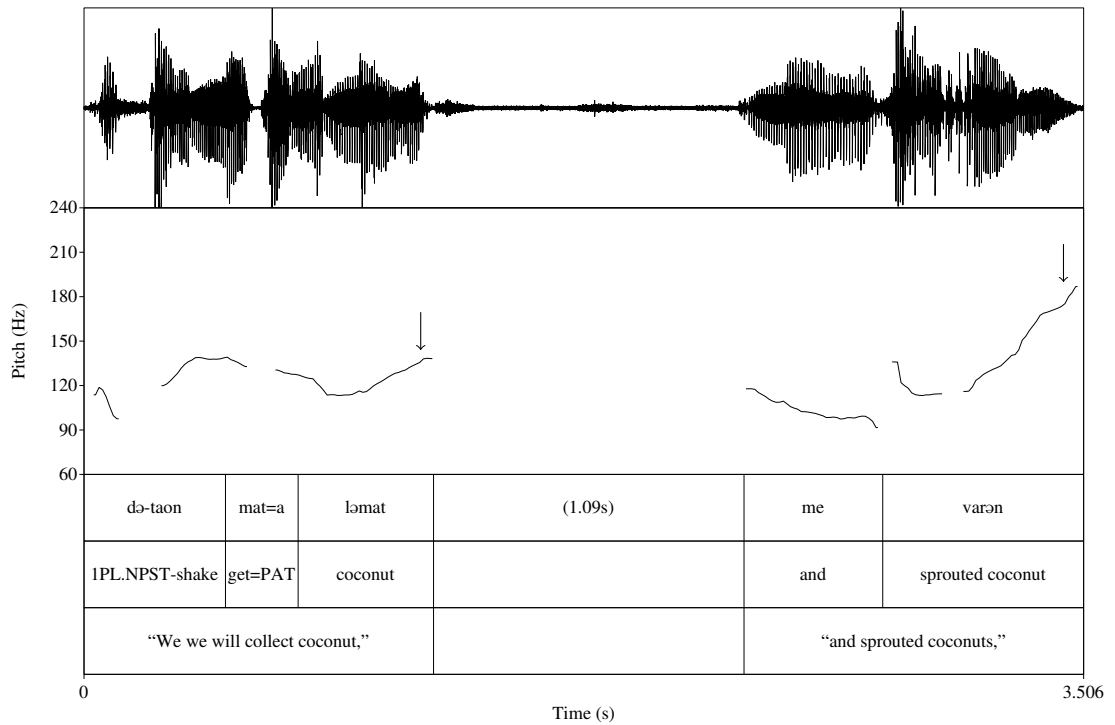


Figure 2.8b: Complex declarative sentence part 2

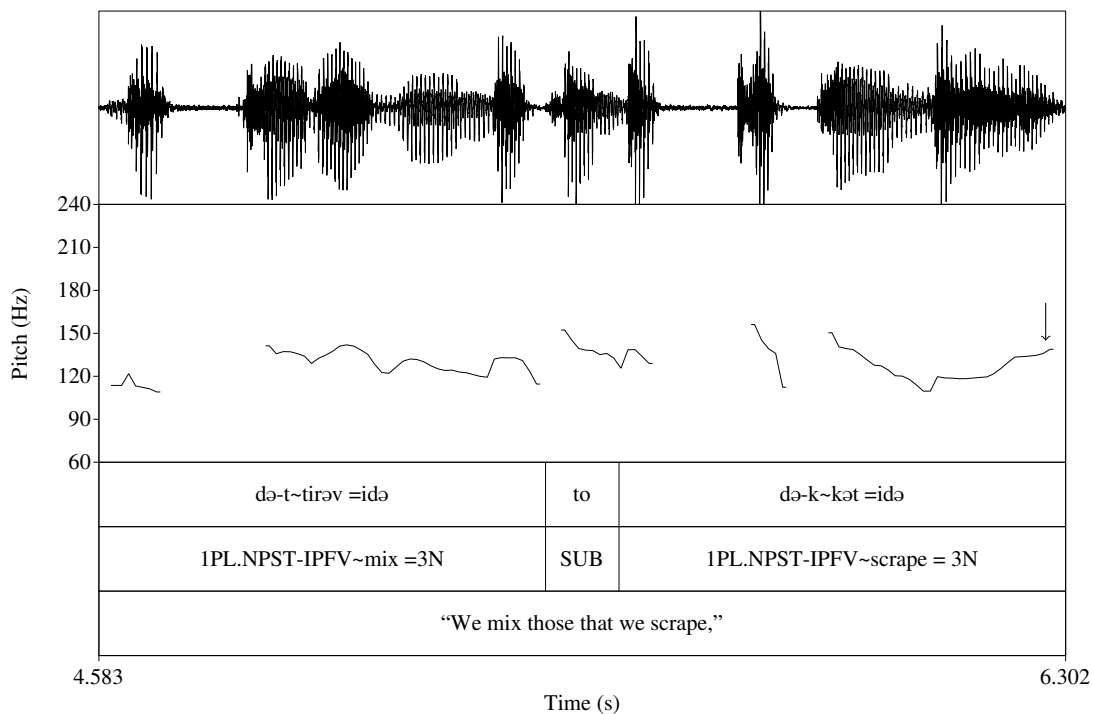
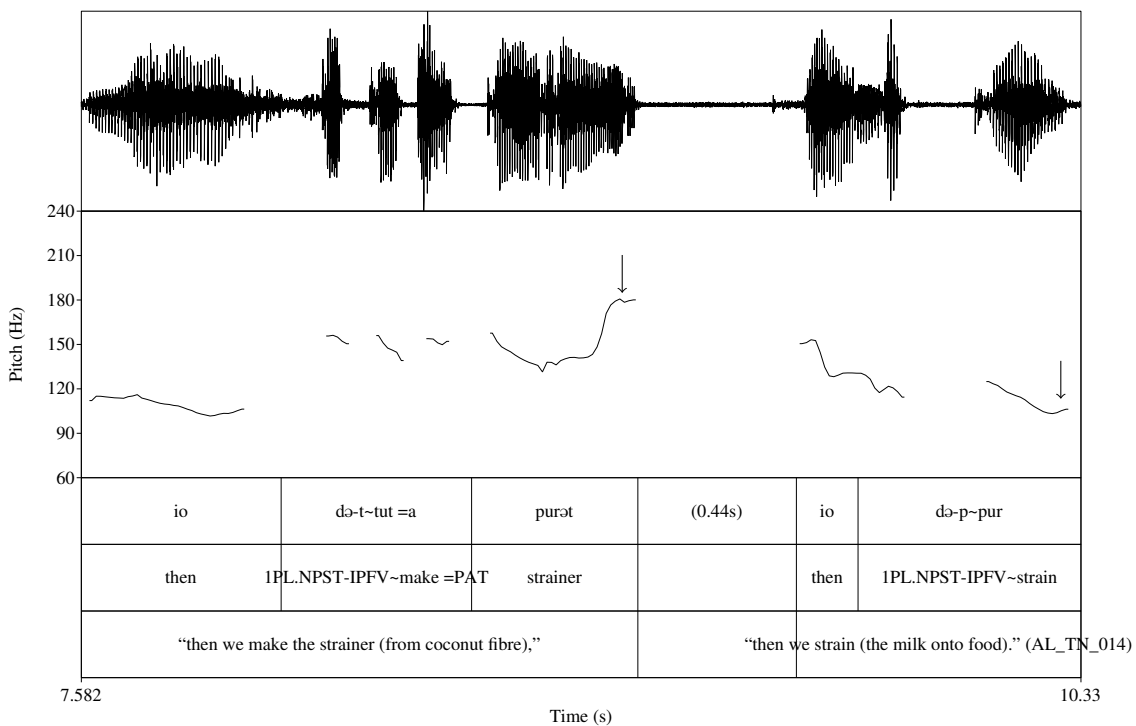
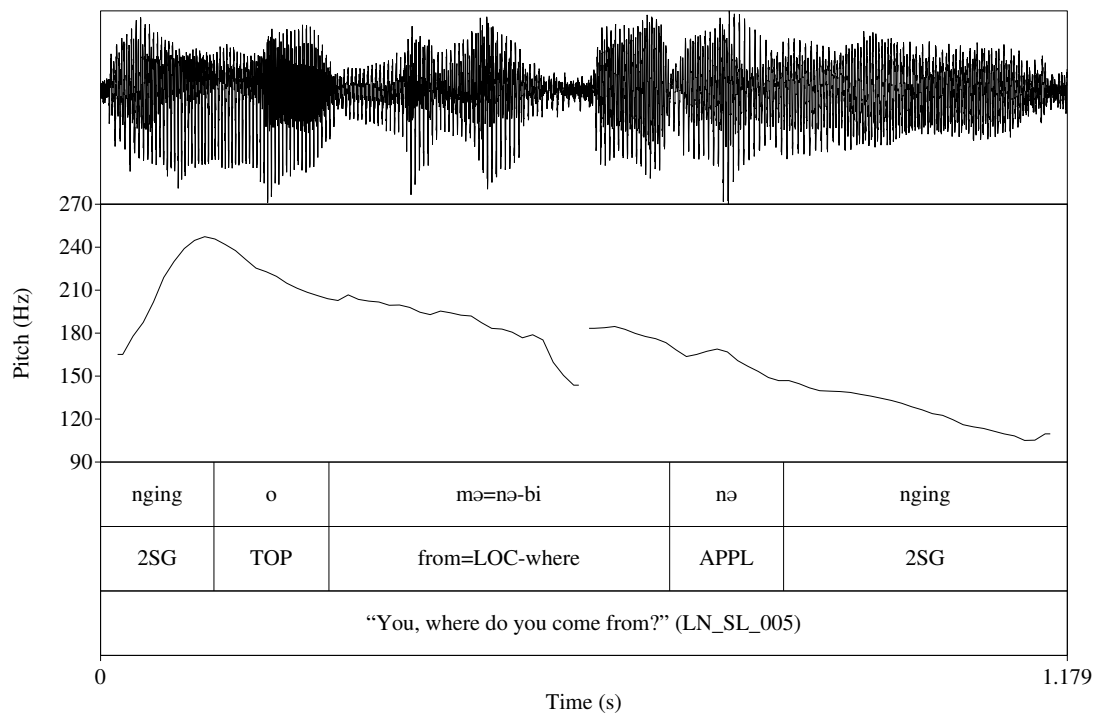


Figure 2.8c: Complex declarative sentence part 3



(*mə=nə-bi* ‘from=LOC-where’) in the middle of the sentence; and Figure 2.10 shows a constituent question with question word (*nəbi* ‘where’) at the end of the sentence.

Figure 2.9: Constituent question with question word in the middle of the sentence



Intonation is the only cue to distinguish a declarative sentence from a polar question. Polar questions (Figure 2.11) also show a steep rise and fall on the last word of the utterance, where the rising may form the highest peak of the whole sentence, and the falling end point is still higher compared to other part of the utterance, differing from both declaratives and constituent questions, where the end point of the sentence always shows a low point in the whole sentence.

If the question offers alternatives, as in Figure 2.12, there is usually a peak on the first alternative, and falling towards the end of the utterance.

2.5 Morphophonology

In this section, morphophonemic processes in Tulil will be discussed. Most affixal and cliticization interactions are regular and can be captured by rules, except certain cases of initial consonant mutation. Reduplication is also observed in Tulil, especially in verbs.

The formation of Tulil verb stems involves complex interaction between person indexing prefixes, reduplication, basic verb forms and/or roots. The surface forms

Figure 2.10: Constituent question with question word on the last syllable

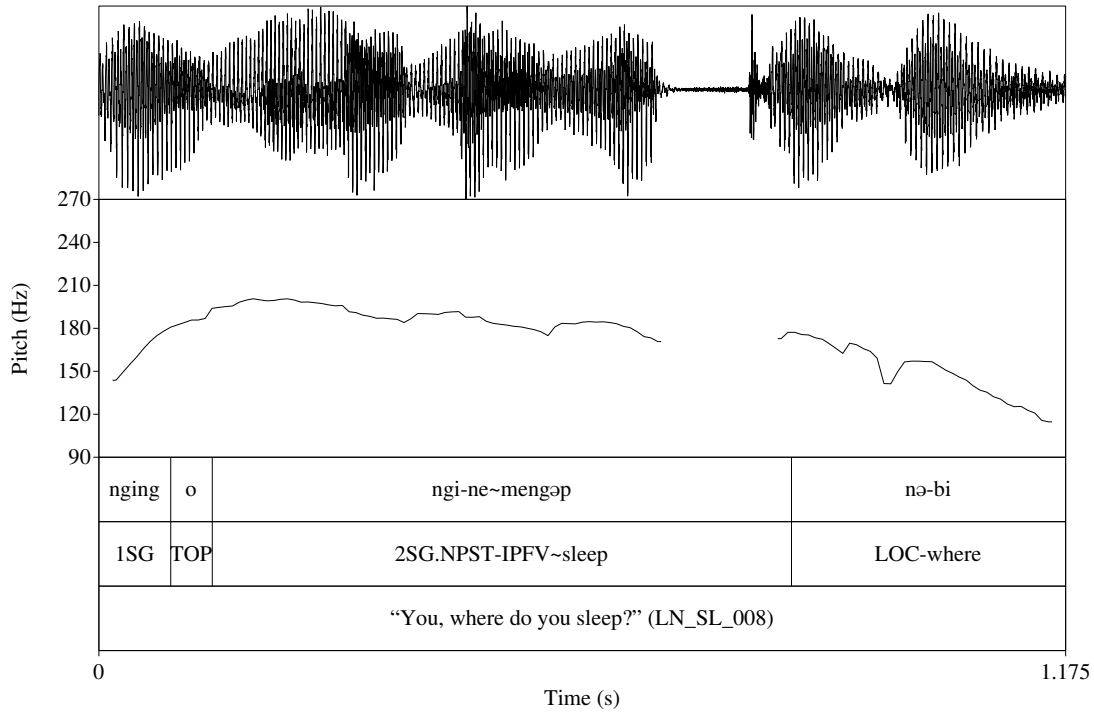


Figure 2.11: Polar question

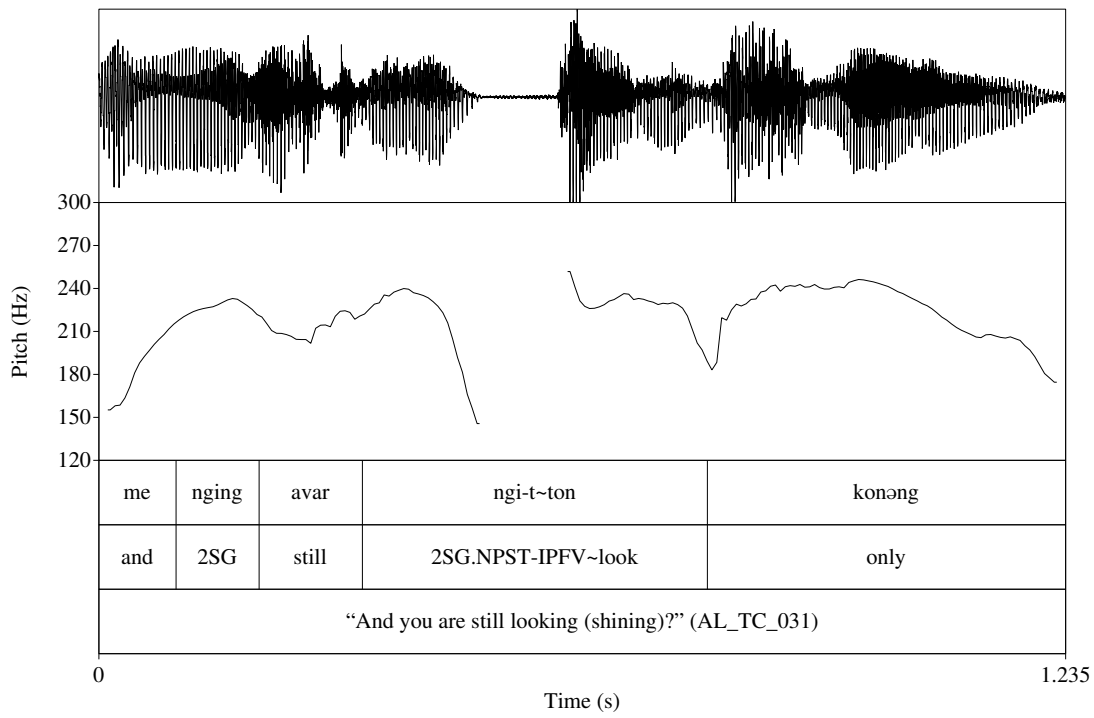
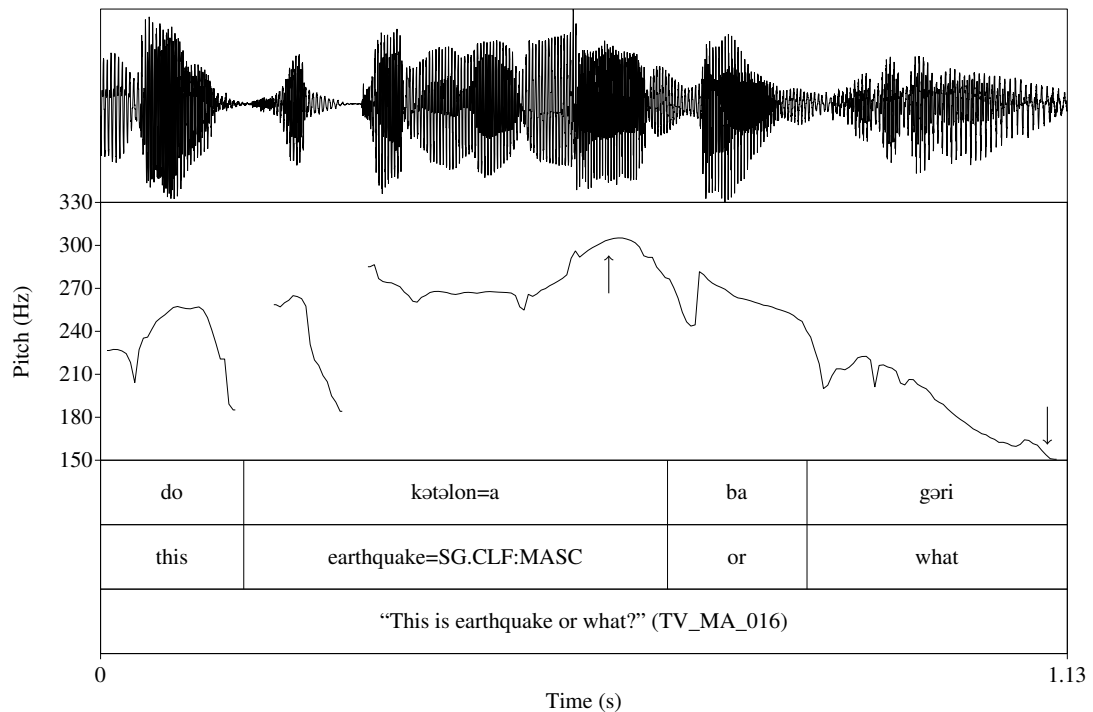


Figure 2.12: Alternative question



show relatively sufficient regularities that can lend themselves to morphophonological generalization, but the inflectional class of a verb cannot predict all of its forms. Verb morphology will be discussed in details in §9.

2.5.1 Hiatus resolution

As mentioned earlier (§2.2.2), Tulil has a phonological rule that avoids identical vowel sequences, and the two vowels usually merge into one in surface realization. Another rule is that /ə/ is always deleted when combined with another vowel.

There is one hiatus restriction that is morphophonological: when verbs ending in vowels combine with the patientive marking =*a*, the patientive marking is not surfaced, except when the verb ends in *ə*. Tulil verb stems only end in *ə*, *e*, *i* and *u*. The output of these endings interacting with =PAT are shown in Table 2.9 (the first column). The table also shows the interaction of these verb endings with patientive pronominals, when the changes in surface forms are merely phonological (the surface realization is shown in square brackets). For instance, in (12a), the patientive marking =*a* does not surface after the verb *toti* ‘see’ which has a vowel ending, and the patientive pronoun =*a* 3SG.M.PAT does surface after the same verb in (12b).

Table 2.9: Hiatus resolution

Verb endings	= <i>a</i> PAT	= <i>a</i> 3SG.M.PAT	= <i>e</i> 3SG.F.PAT	= <i>ip</i> 3DL.M
<i>ə</i>	<i>a</i>	<i>ə a</i> [a]	<i>ə e</i> [e]	<i>ə ip</i> [ip]
<i>e</i>	<i>e</i>	<i>e a</i>	<i>e</i> [e]	<i>e ip</i>
<i>i</i>	<i>i</i>	<i>i a</i>	<i>i e</i>	<i>i ip</i> [ip]
<i>u</i>	<i>u</i>	<i>u a</i>	<i>u e</i>	<i>u ip</i>

- (12) a. *b= itə-toti (= a) kəpalə nə-bo.*
 IAM = 3DL.M.PST-see (= PAT) shit LOC-UP
 ‘They (dl.m.) saw shit up there.’ [AK-FH-014]
- b. *ngang o bə= ngə-toti = a.*
 1SG TOP IAM = 1SG.PST-see = 3SG.M.PAT
 ‘I saw him.’ [AL-DA-125]

2.5.2 Vowel deletion and insertion

/ə/ in the last syllable between liquid /r/ /l/ and alveolar nasal /n/ is often deleted during suffixation/encliticization. This can happen in two kinds of morphological processes:

- (13) **NP formed by cliticization of class markings with initial vowels to noun or adjective root**
- a. *vərən* adj. ‘black’ + = *a* SG.CLF:MASC → *vərna* ‘a black man’
- b. *bərən* n. ‘mountain’ + = *e* SG.CLF:FEM → *bərne* ‘a hill’
- c. *mələn* n. ‘cousin’ + = *ip* DL.CLF:MASC → *məlɪp* ‘two cousins (m.)’
- (14) **verbs encliticized by patientive marking = *a* or pronouns with initial vowels**
- a. *verən* ‘climb’ v. + = *a* PAT → *verna*
- ip-vern* = *a* *vudulung=e* *nə-m~bo.*
 3DL.M.PST-climb = PAT malay.apple = SG.CLF:FEM LOC-CON~UP
 ‘They (dl.m) climbed up the malay apple tree.’ [TV-MA-012]
- b. *morən* ‘cover’ v. + = *ip* 3DL.M → *mornip*

bokbok i-to a-matanitu, b = idā-morn
 talk 3N-belong.to ART-government(Tolai) IAM = 3N.PST-cover
 = *ip ti ava dā-leir nā tang.*
 = 3DL.M lest again 1PL.NPST-destroy LOC REFL/RECP
 ‘The law of the government, it protects (lit. covers) them lest that we
 harm each other.’ [JK-TS-076]

A schwa can also be inserted in certain contexts. The applicative morpheme *m* and *n* that are used for derivation in verbs and prepositions have the following allomorphs:

- (15) a. $m \rightarrow \begin{cases} m\text{ə} / \text{V_ng, C_C} \\ m / \text{other} \end{cases}$
 b. $n \rightarrow \begin{cases} n\text{ə} / \text{*_C} \\ n / \text{other} \end{cases}$

Take two derived prepositions¹⁴ *magem* ‘leave behind’ and *bətm* ‘next to’ for example: The first word has a vowel, and the second word has a consonant *t* preceding the morpheme *m*. Thus according to the rule in 15a, the allomorph of *magem* is *magemə* before *ng* and *magem* in other cases; and the allomorph of *bətm* is *bətmə* before consonants and *bətm* before vowels. Sentence examples are provided:

- (16) a. *nging o bə = ngi-taro magemə ngang.*
 2SG TOP IAM = 2SG.PST-be.hurry leave.behind 1SG
 ‘You are (moving) fast and leaving me behind.’ [LR-DW-027]
- b. *ta to da tə-mətor to tə-p~pi magem ta*
 3PL SR PURP 3PL.PST-sit SR 3PL.PST-IPFV~walk leave.behind 3PL
o a-Uramət.
 TOP ART-PN
 ‘Those who stayed because they [another group] went away leaving
 them behind, are *Uramət*.’ [KM-BS-025]
- c. *du-merən ko magem = a.*
 1PL.PST-escape only leave.behind = 3SG.M.PAT
 ‘We (pl.) just ran away, leaving him behind.’ [LN-TO-044]

14. The derived forms do not necessarily have identifiable roots: for instance, *magem* is derived from preposition *məge*, but for *bətm*, the root *bət* cannot be easily associated with the demonstrative *bət* ‘proximal (near listener)’. See §6.2.

- (17) a. *mārek vavat bātma ngən be māna~mānan.*
 thank very with 2PL at GER~listen.
 ‘Thank you (pl.) very much for listening.’ [AL-DA-159]
- b. *du-t~tade nā-mumə be Tokua bātma ta.*
 1PL.PST-IPFV~worship LOC-DOWN.DIST at PN with 3PL
 ‘We were worshipping down there at Tokua with them.’
 [SV-N1-165]
- c. *lāt nā ngun bātma =a nane.*
 arrive APPL 1PL with =PAT mum
 ‘We (pl.) arrived at mom’s place.’ [AL-DA-146]

There are two exceptions: first, the preposition *bərodəm* ‘inside’ does not have an allomorph such as **bərodəmə*, and that is probably due to the fact that the ending /m/ is part of the lexical item rather than an *m* morpheme. Another possible reason is that the word is trisyllabic (no other prepositions in the category is trisyllabic), and the stress pattern may be involved (which needs further investigation); secondly, the preposition *mət* ‘in (mouth of someone)’ (derived from the word *mət* ‘eat’), though it does not involve the *m* allomorph, is also subjected to the rule in 15a.

- (18) *kori nga-nanət mārek to nging o ngi-vet do, māie*
 NEG 1SG.NPST-swim good SR 2SG TOP 2SG.PST-hold here but
ngi-bet mətə ngang.
 2SG.NPST-hold in.mouth 1SG.
 ‘I don’t swim well because you are holding here, but you (should) hold here in my mouth.’ [LR-DW-036]

This is an allomorphy rule rather than a phonological rule, given that most verbs ending in *m* are not affected by it (prepositions ending in *m* mostly obey the rule, except *bərodəm* ‘inside’, as discussed above):

- (19) *kori ta-təm ngang.*
 NEG 3PL.NPST-know 1SG.
 ‘They don’t know me.’ [AL-SO-061]

2.5.3 Consonant assimilation

Initial /β/ (*v*) in various nominal class markings is commonly affected by progressive assimilation (the phoneme becomes more like the preceding sound). There are

two types of assimilation in this case: complete assimilation (when /β/ becomes identical to the preceding sound) and partial assimilation (when /β/ adopts certain but not all features from the preceding sound) (cf. Abercrombie, 1967).

Complete assimilation happens when /β/ occurs as initial of the index for demonstratives (CL3 to CL10 demonstrative indexes all start with /β/, see Table 2.10, and see Table 10.15 for the full paradigm), in which case the morphemes starting with /β/ have phonologically predictable allomorphs with their initials having the same phoneme as the phoneme before the word (vowel or consonant). Complete assimilation only affects free-standing pronominal demonstratives, and the formally similar class-making enclitics show partial assimilation, to be discussed below.

Table 2.10: Demonstrative indexes (nominal class)

class	SG	DL	PL
CL3: diminutive	<i>von</i>	<i>vəlagəp</i>	<i>vənik</i>
CL4: augmentative	<i>vən</i>	<i>vədabə</i>	<i>vədaʉ</i>
CL5: flat	<i>voi</i>	<i>viokə</i>	<i>viok</i>
CL6: round	<i>vəp</i>	<i>vəbakə</i>	<i>vəbak</i>
CL7: slender	<i>vənə</i>	<i>vətə</i>	<i>vətəng</i>
CL8: segment	<i>vəti</i>	<i>vətakə</i>	<i>vətak</i>
	<i>vət</i>		
CL9: spherical	<i>vələ</i>	<i>vələkə</i>	<i>vələk</i>
CL10: cluster	<i>vəgi</i>	<i>vəgatə</i>	<i>vəgatəng</i>

There are usually two cases when the demonstrative indexes are used: firstly, when the preceding element is a core NP¹⁵ and the demonstrative is adnominal, modifying the core NP inside an NP structure (20); secondly, when the demonstrative is used pronominally. In this case, the preceding elements almost always end in vowels, as being either particles (particles in Tulil mostly end in vowels, such as *me* ‘and’, topicalizer *o*, see §4.11), or the patientive marker (= *a*).

- (20) *bərən = bən* *nə-di* *o* *vən* *idə*
 mountain = SG.CLF:AUG SG.CLF:AUG-PROXS TOP SG.CLF:AUG 3N.POSS.AL
itən = e *Baram.*
 name = SG.CLF:FEM PN
 ‘This mountain’s name is Baram.’ [CM-B2-034]

15. An NP consisting of only nouns and its immediate modifiers such as adjectives and quantifiers, plus the class/number marking, is defined as the core NP. A complex NP, on the other hand, is expanded on the basis of the core NP, including possessive construction, demonstrative phrases and relative clause (§5.1.1)

- (21) a. *titək kələdak = a* *o* *borən = bən*,
 trap small = SG.CLF:MASC TOP bird.trap = SG.CLF:AUG
borən = bən *o* *və-di*.
 bird.trap = SG.CLF:AUG TOP SG.CLF:AUG-PROXS
 ‘The small trap is called *borənbən* (for small birds), *borənbən* is this one’.
 [CM-TP-022]
- b. *nga mume idil* *bem = a* *vo-di* *to dame*
 1SG tell small at =PAT SG.CLF:DIM-PROXS SR IRR.PURP
də-tə *bu* *ba bu = a* *to*
 1PL.NPST-eat(betelnut) betelnut in betelnut = SG.CLF:MASC SR
aingiet o toktok do.
 sorcery TOP end here
 ‘My little story about this, that we wanted to attend the initiation ritual
 (lit. eat betelnut) of sorcery ends here.’
 [AL-DA-158]

Because the preceding core NP always ends in the nominal class marking that is the same as the following demonstrative index (except in plurals, see §10 for a full list of nominal class markings), possible preceding phonemes before /β/ are limited to the following phonemes: /n/, /m/, /ŋ/, /t/, /p/, /k/, /i/, /u/, /ə/ (masculine singular = *a* and feminine singular = *e* are not involved because they do not start with /β/). Among these phonemes, only [+coronal] ([+front]) ones such as /n/, /t/ and /i/ affect the following /β/. For instance, the allomorphs of *von* SG.CLF:DIM, *voi* SG.CLF:FLAT, *vət* SG.CLF:SEG and *vələ* SG.CLF:SPH are:

- (22) a. $von \rightarrow \begin{cases} non / n_{-}^{*} \\ von / \text{other} \end{cases}$
- b. $voi \rightarrow \begin{cases} ioi / i_{-}^{*} \\ voi / \text{other} \end{cases}$
- c. $vət \rightarrow \begin{cases} tət / t_{-}^{*} \\ vət / \text{other} \end{cases}$

- (23) *n*
və-kabet = *a* *kəlkal* = *von* *no-di*
 3SG.M.PST-embrace = PAT plant.sp. = SG.CLF:DIM SG.CLF:DIM-PROXS
nandi.
 like.this
 ‘He wrapped around this *kəlkal* branch like this.’ [LN-TO-039]
- (24) *t*
ngi-mumə, *me* *ngi-n* = *a* *e-Livuan* *i-kəbənət* = *a*
 2SG-DOWN.DIST and 2SG-COM = PAT ART.F-PN 2DL-make = PAT
ibən = bət *tət-bət.*
 ground = SG.CLF:SEG SG.CLF:SEG-PROXH
 ‘You go down there, and you with Livuan you two work on that piece of
 land.’ [JK-GT-011]
- (25) *i*
ik-kərtang, *da* *i-pəp~pətə* *ba* *ioi = voi*
 3DL.M.PST-get.up PURP 3DL.M.PST-collect in water = SG.CLF:FLAT
ioi-bət.
 SG.CLF:FLAT-PROXH
 ‘They (dl.m.) got up, to collect protein in that river.’ [AL-RM-098]
- (26) **not affected**
mata bə = *gəmon* *konəŋ* *da* *bə =* *də-raot* *n* = *a*
 then IAM = close only PURP IAM = 1PL.NPST-drag APPL = PAT
kəgor = vənəm *vənə-vi* *tə = dərətəm.*
 eel = SG.CLF:SLE SG.CLF:SLE-PROXS TO = outside
 ‘Then we almost dragged this eel outside.’ [LN-TO-020]

Partial assimilation changes the initial /β/ of the nominal class markings to other bilabials according to the preceding phoneme (rules shown in 27). This happens in two types of situations: first, when the class marking encliticized to a nominal such as a noun, an adjective, or a numeral inside the core NP (Table 2.4); second, when the class markings are used as pronominals and encliticized to verbs or prepositions (28a).

$$(27) \beta \rightarrow \begin{cases} p / [\text{Stops}(t, k)]_* \\ b / [\text{Nasals}]_* \\ \beta / \text{others} \end{cases}$$

Table 2.11: Class marking *voi* ‘flat’ with nouns and adjectives

	<i>v</i>	<i>p</i>	<i>b</i>
N	‘river’	‘hand’	‘leaf’
SG	<i>ioi = voi</i>	<i>idənok = poi</i>	<i>nang = boi</i>
DL	<i>ioi = viokəm</i>	<i>idənok = piokəm</i>	<i>nang = biokəm</i>
PL	<i>ioi = viok</i>	<i>idənok = piok</i>	<i>nang = biok</i>
ADJ	‘long’	‘big’	‘new’
SG	<i>kabar = voi</i>	<i>laik = poi</i>	<i>lə(m) = boi</i>
DL	<i>kabar = viokəm</i>	<i>laik = piokəm</i>	<i>lə(m) = biokəm</i>
PL	<i>kabar = viok</i>	<i>laik = piok</i>	<i>lə(m) = biok</i>

- (28) a. *iap v-əngar at-e, ‘me da ngi-nəkələ*
 3SG.M 3SG.M.PST-say 3SG.M-QUOT and PURP 2SG.NPST-work
kup nə = von?’
 thoroughly APPL = 3SG.CLF:DIM
 ‘He said, “what are you doing with it? (Just leave it.)” [AL-RD-020]
- b. *və-bakət mat = pon n = a inək bətm*
 3SG.M.PST-change get = SG.CLF:DIM INSTR = PAT money with
 = a *kəvər = a.*
 = PAT white = SG.CLF:MASC
 ‘He bought (lit. change) it with money from a white man.’
 [AL-RD-006]
- c. *bə = bərtəm o ngə-məna~mənan = bon to bə = kori*
 IAM = night TOP 1SG.PST-IPFV~hear = SG.CLF:DIM SR IAM = NEG
go idə-t~təvəng mərek gəvənm = a məl u-bət.
 NSPEC 3N.PST-IPFV~sing good under = PAT cloth 3N-PROXH
 ‘It was night, I heard that the thing [the radio] was not singing well
 under the cloth.’ [AL-RD-027]

There are several things that we can see from the rule shown in 27. Firstly, the manner of stop (of /t/ and /k/) is transferred to /β/ and changes it to /p/. It is a morphophonological rather than a pure phonological rule, given that sequence of [t]/[k] and [β] does exist inside a word: e.g. *mətvən* ‘banana leaf’; *təvakvak* ‘rotten’.

Secondly, the [nasal] + [β] sequence does not exist inside a Tulil word, thus the rule in the second line of (27) may be phonological, as a resolution to this restriction (for instance, /β/ surfaces as [b] after [nasals]). However, there is yet not enough evidence to settle on such an explanation concerning the underlying form of word-internal [b].

We can see from the examples in Table 2.11 that, if the preceding element ends in /m/, the /m/ does not surface in the output form. This is due to a phonological restriction of the occurrence of /nasal/ + /bilabial/ sequence (of the same place), in this case, /m/ and /b/, see §2.1.3.

- (29) *mərim* + =*voi* > *məriboi* ‘feather’
kəlum ‘green.sp.’ + =*vət* > *kəlubət* ‘a piece of land planting greens’

One special instance needs to be mentioned: when a nominal class based pronominal is used after the preposition *be* or *bem* ‘at’. Both prepositions have very similar uses, but *bem* is more often used with certain verbs as a phrase inside a VC (for the use of both prepositions see §6.3.2 and §6.4.1.1). Given that the /m/ in /bem/ is deleted after encliticization, it can only be inferred from the output form of the pronominal (*bon*) which one is /bem/ underlyingly:

- (30) *bem* + *von* > *be bon*
be + *von* > *be von*

- (31) a. *do da nga-nume be =von to tə-kəbənət maməni*
 now PURP 1SG.NPST-tell at =SG.CLF:DIM SR 3PL.PST-make first
n =a bokbok...
 APPL =PAT talk...
 ‘Now I’m going to tell about the time when they first decided about...(lit. they worked on talking)’ [AL-IP-002]
- b. *tə-məngar təgət be =bon tat-e...*
 3PL.PST-talk one at =SG.CLF:DIM 3PL-QUOT
 ‘They talked together about the thing, they said...’ [AL-IP-018]

Lastly, given that /β/ is realized as devoiced [p] word-finally, the surface form of [p]-final words are underlyingly /β/-final, so will not affect the following /β/, and merges with it:

(32) *kəvop* ‘dog’ + *=von* SG.CLF:DIM > *kəvo=von*

2.5.4 Fortition

A common fortition process occurs when an enclitic with an initial vowel follows a final approximant /w/, changing /w/ to /β/. The vowel preceding /w/ can be /i/, /a/ and /o/. Especially, when the preceding vowel is /i/, the /w/ before /β/ is retained (35). /e/ and /ə/ are not found in the current data to be in the position, but it can be inferred that all vowels follow the fortition rule.

(33) $w \rightarrow \begin{cases} w\beta / i_V \\ \beta / V_V \\ w / \text{other} \end{cases}$

(34) a. /taragaw/ ‘eagle’ + *=/a/* SG.CLF:MASC > /taragaβ = a/ ‘an eagle’
 b. /idə-miaw/ ‘dry.out (plants)’ + *=/a/* 3SG.M.PAT > /idə-miaβ = a/ ‘It (masc.) dried out.’
 c. /kiow/ ‘mouth’ + *=/a/* SG.CLF:MASC > /kioβ = a/ ‘a mouth’

(35) a. /viw/ ‘sea’ + *=/e/* SG.CLF:FEM > /viwβ = a/ ‘the sea’
 b. /liw/ ‘return’ + *=/idə/* 3N > /liwβ = idə/ ‘[it] returns it (sends it back).’

2.5.5 Consonant mutation

Consonant mutation is defined by Inkelas (2014:37) as ‘alternations in consonants that are too complex or opaquely conditioned to be treated as simple assimilation, dissimilation, or contextual neutralization’. In Tūlil, consonant mutation occurs at the boundary between various sets of person indexes and the following words, such as verbs and possessor NP. Usually the person indexes are the triggers¹⁶ of initial consonant mutation in these elements, and end in a vowel, an unspecified nasal or stop (represented by N and T).

16. known as the entity responsible for inducing mutation in the consonant Inkelas (2014).

2.5.5.1 Consonant mutation in verbs

The formation of verb forms involves complex interactions between person indexing prefixes, reduplication and verb stems. The surface forms show certain degrees of phonological regularities, but a pure phonological generalization to predict all forms can not be reached.

Initial consonant mutation in verbs is triggered by a mixed morphophonological environment involving both the last consonants in the person indexes (person prefixes whose endings are [+V], *N* and *T*), and tense/aspect in *T*-ending category (PST/NPST and PF/IPFV matrix). The reason for this is that sonorant endings only occur in person indexes of past tense, and nasal endings behave the same in both past and non-past tense. All forms of person indexes can be found in §10.1.2.1. Thus there are six grades¹⁷: sonorants, nasals and stops (PST.PF), stops (PST.IPFV), stops (NPST.PF) and stops (NPST.IPFV). I take the stems under the sonorant grade as corresponding to the underlying forms. The different initial consonants' behavior according to different grades are summarized in Table 2.12. *m*-initial verb stems are special in that they involve three different classes with different morphophonological behavior. Consonant mutation of class II *m*-initial verbs is shown in Table 2.12. Details of initial consonant mutation of verbs and full paradigms will be discussed in §9.3.

Table 2.12: Initial consonant mutation in verbs

Grade												
Sonorant (PST.) (underlying form)	t	d	n	l	r	k	g	ŋ	p	b	v	m
Nasals	t	d	n	l	r	k	g	ŋ	p	b	b	n
Stops (NPST. PF)	t	td	tn	l	r	k	kg	kŋ	p	pb	p	t
Stops (NPST. IPFV)	t	t	t	l	r	k	k	k	p	p	p	t
Stops (PST. PF)	tt	td	tn	tl	rər	kk	gəg	kŋ	pp	pb	pυ	pm
Stops (PST. IPFV)	tt	td	tn	tl	tr	kk	g	kŋ	pp	pb	pp	pm

Table 2.13 and 2.14 show examples of *b*-initial and *v*-initial verbs, concerning their behavior when affixed by person indexes.

The underlying root of the word 'dig' is *vovər*, not *bovər* or *povər*, because there are verbs in Tulil with /b/ as initial (*bunən* 'climb'), which have their own patterns of inflection. Also, there are no native verbs in Tulil with /p/ as initials, and borrowed words such as *par* (Tolai) has its own regular patterns of inflection¹⁸:

17. defined as 'labels referring to constellations of contexts' by Pavel (2010:118).

18. Certain *b*-initial Tolai verbs such as *barat* 'meet' was borrowed into Tulil as *v*-initial verb *vərət* 'meet'.

Table 2.13: Examples of consonant mutation of *b* initial stems: *bunən* ‘climb’

Grade	prefix		stems	output
Sonorant (PST.)	<i>ngə-</i>	1SG.PST	<i>bunən</i>	<i>ngə-bunən</i>
Nasals	<i>ngaN-</i>	1SG.NPST	<i>bunən</i>	<i>nga-bunən</i>
Stops (NPST. PF)	<i>aT-</i>	3SG.M.NPST	<i>bunən</i>	<i>a-pbunən</i>
Stops (NPST. IPFV)	<i>aT-</i>	3SG.M.NPST	<i>bə~bunən</i>	<i>a-pə~bunən</i>
Stops (PST. PF)	<i>iT-</i>	3DL.M.PST	<i>bunən</i>	<i>i-pbunən</i>
Stops (PST. IPFV)	<i>iT-</i>	3DL.M.PST	<i>bəb~bunən</i>	<i>i-pbəb~bunən</i>

Table 2.14: Examples of consonant mutation of *v* initial stems: *vovər* ‘dig’

Grade	prefix		stems	output
Sonorant (PST.)	<i>ngə-</i>	1SG.PST	<i>vovər</i>	<i>ngə-vovər</i>
Nasals	<i>ngaN-</i>	1SG.NPST	<i>vovər</i>	<i>nga-bovər</i>
Stops (NPST. PF)	<i>aT-</i>	3SG.M.NPST	<i>vovər</i>	<i>a-povər</i>
Stops (NPST. IPFV)	<i>aT-</i>	3SG.M.NPST	<i>və~vovər</i>	<i>a-pə~vovər</i>
Stops (PST. PF)	<i>iT-</i>	3DL.M.PST	<i>vovər</i>	<i>i-pvovər</i>
Stops (PST. IPFV)	<i>iT-</i>	3DL.M.PST	<i>(pəp~povər)</i>	<i>(i-ppəp~povər)</i>

(36) Examples of verbs with different initials

	<i>INITIAL ROOT</i>	<i>1SG.NPST.PF</i>	<i>1SG.PST.PF</i>	<i>3SG.M.NPST.PF</i>
<i>b</i>	<i>bunən</i>	<i>nga-bunən</i>	<i>ngə-bunən</i>	<i>ap-bunən</i>
<i>v</i>	<i>vovər</i>	<i>nga-bovər</i>	<i>ngə-vovər</i>	<i>a-povər</i>
<i>p</i>	<i>par</i>	<i>nga-par</i>	<i>ngə-par</i>	<i>a-par</i>

2.5.5.2 Consonant mutation in possessive constructions

In the interaction between possessive indexes and possessee NP, the pattern is usually regular. Only when combining with the 3DL.M.POSS.AL *iT*, the result shows consonant mutation. So there are two grades: sonorant and stops.

- (37) a. *ip* 3DL.M.POSS.AL + *ton* ‘bones’ > *it ton*
 b. *ip* 3DL.M.POSS.AL + *kiou* ‘chins’ > *ik kiou*
 c. *ip* 3DL.M.POSS.AL + *mərək* ‘heart’ > *ip mərək*

One special case shows a similar pattern to the *m*-initial verbs: when *v*-3SG.M.POSS.INAL combines with the inalienably possessed nouns *mativon* ‘brother’:

Table 2.15: Initial consonant mutation in possessive indexes

Grade												
Sonorant (PST.) (underlying form)	t	d	n	l	r	k	g	ŋ	p	b	v	m
Stops	tt	td	tn	tl	tr	kk	kg	kŋ	pp	pb	pv	pm

(38) *v*- 3SG.M.POSS.INAL + *mativon* ‘brother’ > *vativon*

2.5.6 Reduplication

This section concentrates on the structural aspects of reduplication. Systematic reduplication is found mostly with verbs, also with adjectives, and only occasionally with quantifiers, determiners and particles. Derivational and inflectional functions of reduplication are listed in Section §3.2.2. Typically, only the first or the first two syllables of a word are reduplicated. The copied material is then prefixed (verb reduplication encounters initial consonant mutation after being prefixed, e.g. *nga-nu~mume* ‘I am teaching.’ *n* is the result of initial consonant mutation, see §2.5.5.1). The following tables exemplify the structural possibilities of reduplication in verbs, as well as other word classes:

Table 2.16: Types of verb reduplication

	root	base	reduplication	glossing
C-	<i>tərək</i>	<i>tərək</i>	<i>ngə-t~tərek</i>	‘I was laughing.’
Cə-	<i>gup</i>	<i>gup</i>	<i>ngə-gə~gup</i>	‘I am hunting.’
CV-	<i>mume</i>	<i>mume</i>	<i>nga-nu~mume</i>	‘I am teaching.’
NV _R -	<i>tor</i>	<i>mə-tor</i>	<i>ta-tno~mətor</i>	‘They are sitting.’
C ₁ V ₁ C ₂ V ₂ -	<i>tor</i>	<i>mə-tor</i>	<i>ngə-məto~mətor</i>	‘I was sitting.’
CəC-	<i>nan</i>	<i>məna~mənan</i>	<i>i-pməm~mənamənan</i>	‘They (dl.m) were climbing.’

Reduplications of nouns are usually full reduplication, while reduplication of adjectives/numerals are mostly partial reduplication of one or two syllables.

2.6 Loan phonology

Social contact between different language communities is a common phenomenon and is also observed in Tului, since the Tului people has long history of trading and intermarriage with the neighboring Tolai community (Austronesian) and Baining

Table 2.17: Other types of reduplication

	base	glossing	reduplication	glossing
FULL-	<i>mət</i>	v. 'eat'	<i>mət~mət</i>	n. 'food'
	<i>konəŋ</i>	ptcl. 'only'	<i>konəŋ~konəŋ</i>	adj. 'empty' (take clf form noun)
C ₁ VC ₂ -	<i>nalət</i>	s.v. 'tired'	<i>nal~nalət</i>	s.v. 'very tired'
	<i>tikilik</i>	adj. 'little'	<i>tik~tikilik</i>	adj. 'very small'
	<i>təgət</i>	num. 'one'	<i>təŋ~təgət</i>	adv. 'one by one'
C ₁ V ₁ C ₂ V ₂ -	<i>mərek</i>	adj. 'good'	<i>məre~mərek</i>	adj. 'very good, better and better'
	<i>təbətəm</i>	adv. 'afternoon'	<i>təbə~təbətəm</i>	adv. 'becoming afternoon'
	<i>pələp</i>	ideo. 'a strike of lightning'	<i>pələ~pələp</i>	ideo. 'lightning'
	<i>kəruŋ</i>	ideo. 'a thunder'	<i>pələ~pələp</i>	ideo. 'thunder'

communities (Papuan). The source language is mainly Tok Pisin and Tolai in this discussion.

When words of source languages were borrowed into Tulil, they undergo adaptation processes in order to conform to the native phonology. These processes can be restricted by all facets of the native phonological structure such as segmental and phonotactic restrictions.

2.6.1 Consonant change

There are two types of consonant change: the adaption of /s/ in the source language, and the deletion of nasals before voiced stops.

In Tulil, the alveolar fricative /s/ only occurs in loanwords, such as *a-sipet* 'shovel'¹⁹ and *a-sol* 'salt' (English words are usually borrowed into Tulil through Tok Pisin). This suggests /s/ as a loan phoneme. When entering Tulil, the /s/ in the source language is also sometimes adapted to /t/, and the use of both /t/ and /s/ can be observed for some words such as shown in 39a and 39b (mostly interspeaker variation), but not in others (39c).

- (39) a. *sol* 'salt' (Tok Pisin) → *a-tol* ~ *a-sol* 'salt'
- b. *sto* 'store' (Tok Pisin) → *a-sto* ~ *a-tito* 'store'
- c. *Sande* 'Sunday' (Tok Pisin) → *a-tade* [ataⁿde] n. 'Sunday; week; church'²⁰
- tade* v. 'worship'

19. *a-* is a prefix marking borrowings, see §4.2

20. *Sande* only means 'sunday' in Tok Pisin, 'church' is *lotu* or *sios* and 'week' is *wik*

but never **sade*

Another case is the incorporation/deletion of nasals. In Tulil, the nasal series do not cooccur with prenasalized voiced stops of the same place (**/mb/*, **/nd/*, **/ŋg/*) (cf. §2.1.3). Thus when a nasal + voiced stop cluster of the same place in the source language is adapted into Tulil, the nasals are deleted phonemically (e.g. *sande* > *a-tade* ‘sunday; week; church; worship’). Also, nasals before voiceless stops are incorporated into the stop and change it to a voiced one (e.g. *monki* > *a-mogi* ‘monkey’). Even though the surface form usually still has a nasal element due to the prenasalization, these nasals can be inaudible or not pronounced at all according to speakers.

Table 2.18: Examples of consonant change in Tulil

Tok pisin	Tulil	glossing
<i>anis</i>	<i>anit</i>	‘ants’
<i>sande</i>	<i>a-tade</i>	‘sunday; week; church’
<i>monki</i>	<i>a-mogi</i>	‘monkey’

2.6.2 Vowel change

There are several types of vowel change:

1) /a/ changes to /o/ in some cases (rules not clear): e.g. *kaukau* > *a-koukou* ‘sweet potato’; *tapiok* > *a-topiok* ‘tapiok(cassava)’.

2) /i/ changes to /e/ in some cases (rules not clear): e.g. *misinari* > *a-misinare* ‘missionary’; *pamkin* > *a-pamken* ‘pumpkin’.

Table 2.19: Examples of vowel change in Tulil

Tok pisin	Tulil	glossing
<i>kaukau</i>	<i>a-koukou</i>	‘sweet potato’
<i>tapiok</i>	<i>a-topiok</i>	‘tapiok(cassava)’
<i>misinari</i>	<i>a-misinare</i>	‘missionary’
<i>pamkin</i>	<i>a-pamken</i>	‘pumpkin’
<i>sunday</i>	<i>a-tade</i>	‘sunday; week; church’

2.6.3 Vowel insertion

As discussed in §2.3, there are some co-occurrence restrictions in Tulil concerning consonant clusters, which are not permitted inside a syllable (except when the medial is an approximant). Thus a loanword with consonant clusters inside a syllable requires the insertion of a vowel, with the following cases:

1) The inserted vowel is a copy of the next vowel in the sequence, such as:

- (40) *trosel* → *a-torotel/a-torosel* ‘turtle’
glas → *a-galat* ‘glass(es)’

2) The inserted vowel surfaces as a schwa in unstressed syllable (in fast speech):

- (41) *trausis* → *a-tarautet* or *a-tərautet* ‘trousers’

The above example can have two possible output. In the first case, it should also be noted here that only the first vowel is copied even when the original sound is a vowel sequence.

3) An /i/ is inserted between /s/ and /t/ in the source word (/s/ is also adapted to /t/).

- (42) *stoa* → *a-tito* ‘store’.

Table 2.20: Examples of vowel insertion in loanwords

Tok pisin	Tulil	glossing
<i>trosel</i>	<i>a-torotel/a-torosel</i>	‘turtle’
<i>glas</i>	<i>a-galat</i>	‘glass(es)’
<i>trausis</i>	<i>a-tarautet/a-tərautet</i>	‘trousers’
<i>clip</i>	<i>a-kəlip</i>	‘video’
<i>stoa</i>	<i>a-tito</i>	‘store’
<i>plet</i>	<i>a-pelet</i>	‘plate’

Chapter 3

Basic Clause Structure

This chapter presents an overview of the clause structure of Tulil. Following an introduction of clause structure in §3.1, two types of clauses in Tulil are described: verbal clauses (§3.2) and non-verbal clauses (§3.3). Functions of different clauses are discussed briefly in §3.1.2 and extensively in §3.4. Both types of clauses can combine with negator and interrogative words to form negative utterances (§3.6) and questions (§3.7).

3.1 Introduction

3.1.1 Types of clauses

Both verbal and non-verbal clauses can be identified in the Tulil language. The features defining verbal clauses are that verbal clauses 1) have a verb complex as their predicate, representing events; 2) normally either take A/S_A argument person markings on verbs and/or show patientive case on P/S_P arguments (patientive marking on NP or patientive pronoun form), depending on the subcategories of the verbs (§3.2.2). Verbal clauses can be classified in terms of the transitivity of the predicate, as either transitive, intransitive or ditransitive. Intransitive clauses show split-s marking²¹, differentiating between active intransitive and stative intransitive predicates. Impersonal clauses can be identified in the language as a special case. Below are some examples:

(43) Verbal clause

a. Transitive

ngə-vit = *a* *a-taol* *be kəbit = e*
1SG.PST-spread =PAT ART-towel at line =SG.CLF:FEM
'I spread (PST.) the towel on the clothes line.'[PO]

21. Also attested in Mali (Stebbins, 2011:41).

b. **Active intransitive**

kori i-terən, i-liu.
 NEG 2DL.NPST-escape 2DL.NPST-return

‘(You two) don’t escape, come back.’ [AL-DA-139]

c. **Stative intransitive**

lang-m = e da e-təm = a u-vi
 want-APPL = 3SG.F.PAT PURP 3SG.F.NPST-know = PAT 3N-PROXS

tul to d-a~mat idə nagapon.
 bird SR 1PL.NPST-IPFV~get 3N how

‘She wants to know about how we get these birds.’ [DV-BL-004]

d. **Impersonal clause (transitive)**

b = idə-m~mang = a kəguing.
 IAM = 3N.PST-IPFV~burnt = PAT grass.sp.

‘The grass was burnt [by the sun].’ [AL-RM-022]

e. **Ditransitive verbal clause**

tə-lam = a n = a maok do ba
 3PL.PST-show = 3SG.M.PAT INSTR = PAT space here in

məngəd = a.

home = SG.CLF:MASC

‘They showed him land here at home.’ [SV-N1-023]

We can see from the examples that, both the transitive verb *vit* ‘spread’ (43a) and the active-intransitive verbs *merən*²² ‘escape’ and *liu* ‘return’ (43b) are prefixed by person indexes, which encode person/number/gender as well as tense (e.g. *və-* in 43b showing the S_A argument is 3rd person masculine singular, and the tense is past). Also, the P argument in a transitive clause (such as *a-taol* ‘towel’ in 43b) is marked by the patientive clitic *a*, or the patientive pronominal form *a* for 3rd singular masculine in 43e.

The stative intransitive verb *lang-mə* ‘want’ 43c is not prefixed by person marking, and the sole argument *s* in this clause follows the verb, represented by the patientive 3rd person feminine pronominal *e*. Non-verbal clauses, by contrast, do not get any of these markings.

Non-verbal clauses feature a non-verbal predicate (for example, an NP in nominal clause, e.g. example 44), and a topic as well as topicalizer *o*, which is optional.

22. Initial *m* gets mutated after prefixing with the person index.

(44) **Nominal clause**

Piniau a-n = a to-Gila o karkar = ip.

PN 3SG.M-COM = PAT ART.M-PN TOP ringworm.infected = DL.CLF:MASC

‘Piniau and Gila are two *karkar* (people who have ringworm skin).’

[AK-FH-003]

A nominal clause can have its subject either repeated or as the sole subject in the post-PRED/COMP position as a pronominal, only when the entity is a human referent.

(45) a. *nging o Tulil = a nging.*

2SG TOP PN = SG.CLF:MASC 2SG

‘You are Tulil/a Tulil man.’

[WM-LP-049]

b. *io bə = laik = a ngang.*

then IAM = big = SG.CLF:MASC 1SG

‘Then I became a big man.’

[WM-LB-007]

Prepositional phrases (46a) and adverbials (46b) can also be the predicate of a non-verbal clause.

(46) **PP/ADV clause**

a. *Mərima o bə = təpm = a utəki = a, Paulo o*

PN TOP IAM = with = PAT spear = SG.CLF:MASC PN TOP

təpm = a a-pəkət.

with = PAT ART-knife

‘Mərima was with a spear, Paulo was with a knife.’

[JK-TS-070]

b. *tə-kəbənət maməni n = a bokbok o navodi.*

3PL.PST-work first APPL = PAT talk TOP like.this

‘The story they first made was like this (lit: The first time they work on the story is like this.)’

[AL-IP-003]

3.1.2 Overview of the functions of predication

According to the functions of predication²³, the predicates generally fall into four categories: event, property, class and location, and the respective labels ‘verbal’,

23. Predication is defined as the application of a general state of affairs (the predicate) to a particular entity (the argument or subject) in an Aristotelian sense.

‘adjectival’, ‘nominal’ and ‘locational’ are conveniently used for these semantic concepts (Stassen, 1997).

The prototypical encoding strategies used for event and class are verbal and nominal clauses respectively, as exemplified in the previous section. The encoding strategy for location is mainly verbal with demonstrative roots (with a person marking but no tense involved) (47a), less commonly non-verbal clauses with demonstrative adverbs as predicate (48a). Instances of PPs as predicates, as in 47b and 48b, are quite rare.

(47) **Location (verbal)**

- a. *e-Loi o e-mumə be Kimbe.*
 ART.F-PN TOP 3SG.F-DOWN.DIST at PN
 ‘Loi is down there at Kimbe.’ [WM-CM-007]
- b. *ta-vi Mərubət o ta-ba ibən=e to Tulil.*
 3PL-PROXS PN TOP 3PL-in land=SG.CLF:FEM of PN
 ‘They the Bainings are at the land of Tulils.’ [KM-BS-093]

(48) **Location (non-verbal)**

- a. *Muliamə o nə-mumə be Namatanai, nəmumə be*
 PN TOP LOC-DOWN.DIST at PN LOC-DOWN.DIST at
vəret=e iep to vənu=a a-t~ton.
 side=SG.CLF:FEM 3SG.F SR sun=SG.CLF:MASC 3SG.M.NPST-IPFV~look
 ‘Muliamə is down there at Namatanai, down at the east (the side that
 the sun shines).’ [KM-TH-008]
- b. *nang=e e-bət to tat-e tor=e*
 tree=SG.CLF:FEM 3SG.F-PROXH SR 3PL.NPST-QUOT wood=SG.CLF:FEM
o be Palakukur.
 TOP at PN
 ‘That tree that they call ‘tore’ is at Palakukur.’ [JK-CB-010]

Property is mainly expressed by nominal clauses of different structures (49).

(49) **Property (non-verbal)**

a. *lokuvə o avar molimoli laik = ta me kaletuak o avar*
 man TOP also people big = PL.CLF:HUM and woman TOP also
molimoli laik = ta.
 people big = PL.CLF:HUM
 ‘Men are big, and women are also big.’ [AL-BT-021]

b. *nging ar molimoli mærek konəng = a nging.*
 2SG still people good only = SG.CLF:MASC 2SG
 ‘You are still a good man.’ [AL-TN-036]

Stative-intransitive clause usually encode states:

(50) **State (verbal)**

və-muek n = a ioi nə-bət me bə = put = a
 3SG.M.PST-vomit APPL = PAT water LOC-PROXH and IAM = red = PAT
um = ip.
 3SG.M.POSS.INAL.eye = DL.CLF:MASC
 ‘He was vomiting water there, and his eyes were/became red.’
 [AK-FH-019]

Non-predicational clauses such as existential and identificational will also be discussed in §3.4.5.

3.1.3 Form and meaning correlation

In the previous section basic functions of clause types were discussed. Different semantic categories are roughly reflected²⁴ in the basic clause types, and will be discussed in detailed in §3.4. Figure 3.1 shows a mapping between predicate types and the semantic predicate categories. Dotted lines show that the clause type plays a minor role in expressing the relevant semantic types (special cases). Other functions such as existential are not shown on the mapping.

Different types of clauses and their features are summarized in Table 3.1. The table shows clearly the difference between verbal and non-verbal clauses. The various types of clauses are exemplified by the following sentences and will be further elaborated in the following sections.

A more detailed description of form-meaning correlation is given in the form of a feature table. It is often observed that the basic clause types show gradient

24. For instance, when a iamitive marker *b* occurs in a non-verbal clause, the clause expresses a change of state, and could be seen as a type of event. This is not taken into consideration here.

Figure 3.1: Mapping between predicate types and the semantic predicate categories

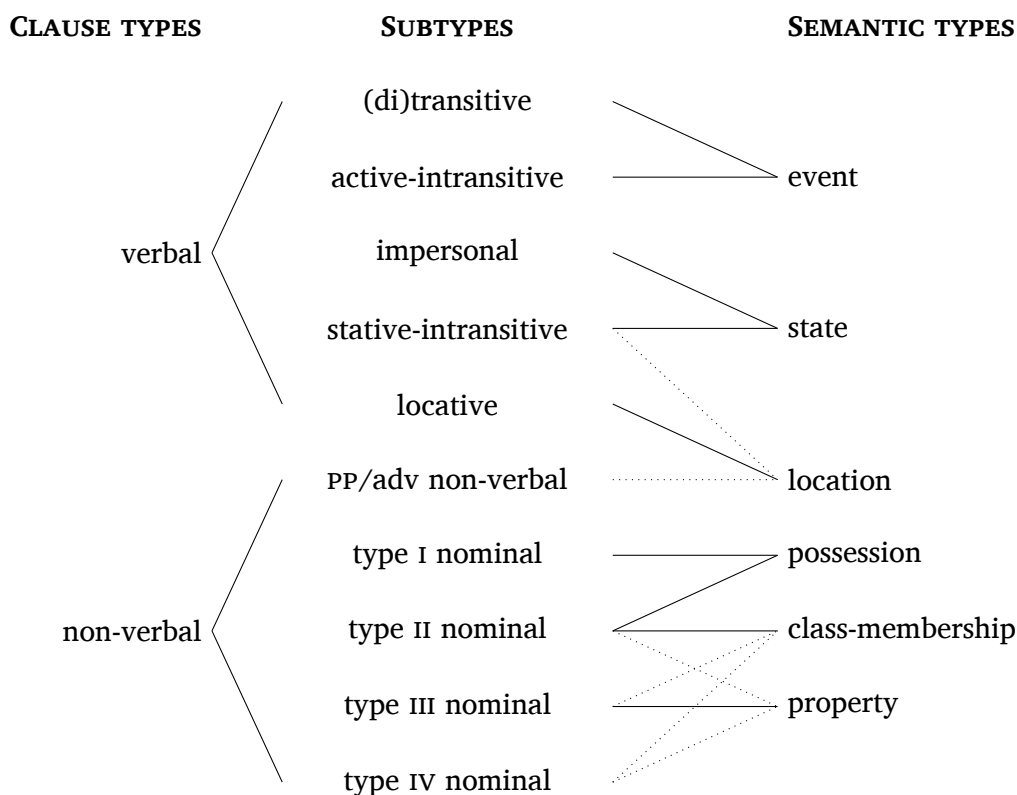


Table 3.1: Features of Tutil clauses

Clause types	Basic (di)trans.	Impers.	Act-intr.	Stat-intr.	locative	non-verbal
Pers. index	✓	3N	✓	×	✓	×
person	✓	✓	✓	×	×	×
tense	IPFV	only IPFV	IPFV	intensity, continuative	×	×
Reduplication	✓	✓	×	✓	×	×
Patientive case	AVP	'A'VP	SV	VS	SV	(S)P(S)
Constituent order	N	N/Y	N	N/Y	N/Y	Y
use of NSPEC <i>go</i> in negation						

variations (cf. Mosel, 1991), from prototypical verb clause (*primary transitive clause*, PTV²⁵ defined by Andrews 2007) to prototypical nominal clause (type II nominal clause in the case of Tutil).

Person marking, patientive case and constituent order are defining features of

25. PTV is a transitive verb taking two arguments, with their semantic roles being an agent and a patient. Accordingly, A, as a grammatical function, is the argument which receives the same grammatical treatment as the agent of PTV, and P the same as the patient. S is defined as the only argument of a one-argument predicate.

verbal clauses, and will be discussed in §3.4. Reduplication and Negation are two diagnostic features concerning the distinction of verbal and non-verbal clause. We can see that the more prototypical verbal clauses such as (di)transitive and active intransitive clauses and prototypical nominal clauses show consistent and unambiguous features on these two aspects, while impersonal clauses, stative-intransitive clause and locative clauses are less verbal-like, yet not fully nominal clauses.

Reduplication is only used in verb clauses (cf. §9 verb morphology), and never occurs in non-verbal clauses. In transitive/active-intransitive clauses, reduplication encodes imperfective aspect (continuative, habitual) in both past (51a) and non-past tenses (51b). Impersonal clauses have no perfective forms but only imperfective forms (52). In stative-intransitive clauses, reduplication encodes intensity (53a) and continuation (53b). Locative clause as a special case of intransitive clause, does not involve reduplication forms.

(51) **Transitive and intransitive clauses**

- a. *da bokbok =a a-bət to kori a-pə~vunə*
 PURP boiling =PAT 3SG.M-PROXH SR NEG 3SG.M.NPST-IPFV~throw
puikət, o a-kə~kəbənət =a pol=a.
 intense TOP 3SG.M.NPST-IPFV~make =PAT grease =SG.CLF:MASC
 ‘So that it will not be boiling vigorously, it forms the grease.’

[AL-TN-007]

- b. *doto voi idə-re nangə navonbət io iap*
 when SG.CLF:FLAT 3N.PST-carry tree like.that then 3SG.M
o və-məto~mətor konəng me və-t~ton be
 TOP 3SG.M.PST-IPFV~sit only and 3SG.M.PST-IPFV~look at
boi da məle bətəpm =a iləm=a.
 SG.CLF:FLAT PURP stop all.over =PAT flood =SG.CLF:MASC
 ‘When the river carried trees like that, he was sitting and looking at the river waiting for the flood to stop.’

[AL-L1-009]

(52) **Impersonal clause**

- bə= kori go tədor ngang, b= idə-p~pau ngang.*
 IAM= NEG NSPEC strong 1SG IAM= 3N.PST-IPFV~hungry 1SG
 ‘I was not strong, I was hungry.’

[DV-HP-076]

(53) **Stative intransitive clause**

- a. *ngi-toti idə o ia~iaor nging.*
 2SG.NPST-see 3N TOP IPFV~afraid 2SG
 ‘You look at it, you will be very terrified.’ [AL-HD-103]
- b. *tipur ava ləl~lət n =a kəvəlok, ava idə-t~tuk.*
 bush also IPFV~arrive APPL =PAT new.shoot also 3N.PST-IPFV~grow
 ‘And the bush, new shoots also occurred one by one, they were grow-
 ing again.’ [AL-RM-094]

Verbal predicates in transitive (excluding impersonal clauses) and ditransitive clauses are negated by the negator *kori*, immediately before the verb complex (54a), while a non-verbal predicate, especially NP predicate, is typically negated by the negator *kori* + non-specific pronoun *go* (54b).

- (54) a. *lok=pənik o kori tə-t~təm =a pern =a*
 man=PL.CLF:DIM TOP NEG 3PL.PST-IPFV~know =PAT climb =PAT
ləmat.
 coconut
 ‘Young men, they didn’t know (how to) climb for coconut.’
 [AL-RM-158]
- b. *tor=e e-bət o kori go tor=e,*
 wood=SG.CLF:FEM 3SG.F-PROXH TOP NEG NSPEC wood=SG.CLF:FEM
tor=e e=bət o vəvat=e
 wood=SG.CLF:FEM 3SG.F-PROXH TOP monster=SG.CLF:FEM
 ‘That piece of wood is not a piece of wood, that piece of wood is a
 monster.’ [AL-DL-012]

Other verbal predicates such as those occurring in impersonal clauses (55), stative-intransitive clauses (56) and locative clauses (57) can be negated with either the NSPEC *go* (55b, 56b, 57b; same as non-verbal predicates) or without it (55a, 56a, 57a; same as predicates in transitive clauses). This suggests that both impersonal transitive and stative intransitive clauses are less typical verbal clauses comparing to clauses with a PTV as the head of the predicate.

(55) **Impersonal transitive clauses**

- a. *kori idə-p~pau ngang*
 NEG 3N.PST-IPFV~hungry 1SG
 ‘I was not hungry.’ [PO]

- b. *kori go idə-t~tu udu.*
 NEG NSPEC 3N.PST-IPFV~fat 1PL
 ‘We were not fat.’ [JK-PP-004]

(56) **Stative intransitive clauses**

- a. *ngan-e, ‘kori iaor iu.’*
 1SG.NPST-QUOT NEG afraid 1DL
 ‘I said, “you (two) don’t be afraid.”’ [JK-TS-078]

- b. *kori go iaor ta.*
 NEG NSPEC afraid 3PL
 ‘They are not afraid.’ [AL-IP-045]

(57) **Locative clauses**

- a. *kori a-to kəletuak.*
 NEG 3SG.M-of woman
 ‘It does not belong to women.’ [AL-HD-074]

- b. *do maok = a a-to ta, me kori go a-to*
 here space = SG.CLF:MASC 3SG.M-of 3PL and NEG NSPEC 3SG.M-of
ngang.
 1SG
 ‘This piece of land belongs to them, and it does not belong to me.’
 [SV-N1-121]

Certain adverbial predicates are also found to be negated without *go* (such as in 58a, and in 58b, the same word *mərek* is negated with *go* because it is an adjective rather than an adverb), suggesting that this clause type has some verbal-like features.

- (58) a. *kəguing o tipur idə to i-t~tuk məgəte kori mərek*
 grass.sp. TOP grass 3N SR 3N.NPST-IPFV~grow like NEG good
da go molimoli = a da a-pi.
 PURP NSPEC people = SG.CLF:MASC PURP 3SG.M.NPST-go
 ‘The grass is growing, like it is not good for a person to walk.’
 [AL-RM-023]

- b. *ngə-toti nandi ngan-e nə-mumə o bətmə*
 1SG.PST-see like.this 1SG.NPST-think LOC-DOWN.DIST TOP with
ta o mərek, me ngang o bətmə ngang o ngə-tton o
 3PL TOP good but 1SG TOP with 1SG TOP 1SG.PST-look TOP
kori go mərek.
 NEG NSPEC good
 ‘I saw like this I think, (the life) down there (at Australia), for them is
 good, but for me, I saw it and it was not good.’ [ER-EA-010]

3.1.4 Full structure of clauses

The structure of clauses in Tulil is shown in Figure 3.2 and 3.3. Pre-predicate elements and adjuncts are similar in verbal and non-verbal clauses, including particles that are commonly verbal operators in other languages. These constituents include irrealis *ka/aka/dame* (§4.11.1), iamitive perfect *bə* (§4.11.2), purposive *da* (§4.11.3) and negation *kori/ko* (§3.6). Most of these particles can occur on most structural levels inside a sentence, and the structures shown in Figure 3.2 and 3.3 only represent these particles when they have a scope over the predicates. Details of these elements can be found in the word class chapter (§4). Several examples of co-occurring possibilities of these elements in verbal and non-verbal clauses are shown in examples 59 to 63.

- (59) *iu o ka bə iu-re venang kurek = a*
 2DL TOP IRR IAM 2DL.PST-carry thing bad = SG.CLF:MASC
a-bət..
 3SG.M-PROXH
 ‘You (two) almost got something bad...’ [AL-DA-151]

- (60) *bə = kurek moli n = a təpm = a va*
 IAM = bad real APPL = PAT with = PAT 3SG.M.POSS.AL
vəni = a dame b = ak-ngəp.
 breathe = SG.CLF:MASC IRR.PURP IAM = 3SG.M.NPST-die
 ‘He was exhausted because he choked (couldn’t breath), almost died.’ [AK-FH-015]

- (61) *kati avar udu du-m~man =e mæte vət*
 IRR.COND also 1PL 1PL.PST-IPFV-remove = 3SG.F.PAT like SG.CLF:SEG
to da d-a~man =e, o e-bo ka kori
 SR PURP 1PL.NPST-IPFV~remove = 3SG.F.PAT TOP 3SG.F-UP IRR NEG
i-matme da vət-bət.
 3SG.F.PST-work on SG.CLF:SEG-PROXH
 ‘If it was us who removed it, like the part when we remove it, it may not
 act like this (lit: work on this).’ [AL-RM-143]

- (62) *Laik=a və-vəki n= udu dame da kori*
 big=SG.CLF:MASC 3SG.M.PST-create APPL= 1PL IRR.PURP PURP NEG
da də-ngəp, mæie ip-pipilək mat =a ngəp me ləm.
 PURP 1PL.NPST-die but 3DL.M.PST-choose get =PAT die and live
 ‘God created us to be immortal, but they (dl.m.) chose to die and live.’
 [LR-TM-101]

- (63) *doto kati udu katum konəng o du-t~tən o məkət*
 when IRR.COND 1PL all only TOP 1PL.PST-IPFV~think TOP like
tang, io ka du məngəd=a a-vi o ka
 REFL/RECP then IRR 1PL home=SG.CLF:MASC 3SG.M-PROXS TOP IRR
mərek moli=a mæte bəvon kia to kəvər=ta
 good real=SG.CLF:MASC like before first SR white=PL.CLF:HUM
tə-t~ton bəm udu.
 3PL.PST-IPFV~look at 1PL
 ‘If all of us could put our minds together, our country would become a
 really good one like before, when the white men were looking after us.’
 [ER-EA-046]

3.2 Verbal clause

This section introduces the coding of arguments in verbal clauses (§3.2.1) and different types of verbal clause.

- (64) **Types of argument structure**
 Transitive clause: A V P (including impersonal)
 Intransitive clause: S_A V or V S_P
 Ditransitive: A V P OBL

Curly brackets mark alternatives, and parentheses stand for optionality. A star marks that there may be multiple instances of a particular word class or phrase type.

Figure 3.2: Structure of a verbal clause

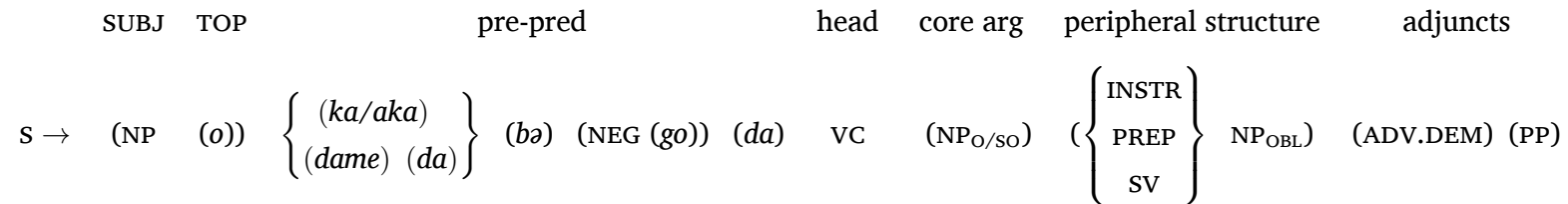
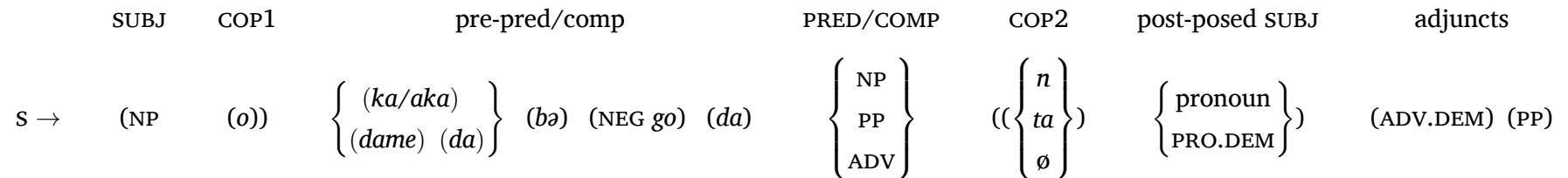


Figure 3.3: Structure of a non-verbal clause



special cases, such as locative structures, §3.2.2.4). There are two sets of prefixes distinguishing past (PST) and non-past (NPST) (see §10.1.2.1 for all the forms).

Person indexes are obligatory on verbs, while NPs as the indexed arguments are optional if they are recoverable from the context. As shown in the following examples, the verb *mume* ‘tell’ is preceded by a full NP as the A argument in 66b, but not in 66a; while in both sentences, person indexes are present:

- (66) a. *və~mume* *ngun at-e...*
 3SG.M.PST-IPFV~tell 1DL 3SG.M-QUOT
 ‘He was telling us (dl.), says...’ [AL-BT-023]
- b. *laik = ta* *tə-mume* *ngang n* = *a* *bokbok = pənik*
 big = PL.CLF:HUM 3PL.PST-teach 1SG APPL = PAT word = PL.CLF:DIM
to da ngə-məkatak.
 SR PURP 1SG.PST-swear
 ‘The elders taught me words for me to swear.’ [WM-LB-008]

Person indexing appears in both transitive and active-intransitive clauses. As shown in the following examples, the verb *manəng* is used both as transitive ‘chase’ (67a) and intransitive ‘run’ (67b), and both are prefixed by person markings.

- (67) a. **Transitive**
kəvop idə-manəng = *a* *bəli = e.*
 dog 3N.PST-chase = PAT pig = SG.CLF:FEM
 ‘The dogs chased the female pig.’ [KM-B1-012]
- b. **Intransitive**
ngang ngə-manəng o ngə-matang *tə = ba nang = a*
 1SG 1SG.PST-run TOP 1SG.PST-jump TO = on tree = SG.CLF:MASC
və = nung.
 3SG.M.POSS.INAL = bottom
 ‘I ran and jumped onto the trunk of the tree.’ [DV-HP-056]

In impersonal clauses, only the third person neuter prefixes *idə-* (PST) and *it-* (NPST) are used, and they do not cross-reference any arguments (dummy arguments). Thus the person indexes in transitive impersonal clauses only represent the tense of the predicate, but not person or gender. In example 68, the transitive impersonal verb *tu* ‘become.fat’ are used with both the PST and NPST forms of the person marking.

- (68) *təre moli du ləm bəvon avar kəmərən, to kori du-tuk*
 true real 1PL.POSS.AL life before also different SR NEG 1PL.PST-grow
vəvat, məte kori go idə-t~tu udu, tove məgət o
 very like NEG NSPEC 3N.PST-IPFV~grow 1PL because today TOP
bə = də-mət = a mətmət mərek me i-t~tu udu,
 IAM = 1PL.NPST-eat = PAT food good and 3N.NPST-IPFV~grow 1PL
bəvon o kori.
 before TOP NEG
 ‘It’s true that our life before is different, that we didn’t grow fat, like we
 didn’t grow fat, because now we eat good food, so we are growing fat,
 before no.’ [JK-PP-004]

On the other hand, locative clauses have defective paradigms of person indexes that do not involve tense, such as the person indexes used for demonstratives and prepositions (paradigms can be found in §10).

- (69) *to-Pat o a-vimə be məngəd = a*
 ART.M-PN TOP 3SG.M-DOWN.PROX at home = SG.CLF:MASC
va varet = e mə = nə-vimə to
 3SG.M.POSS.AL side = SG.CLF:FEM FROM = LOC-DOWN.PROX SR
vənu = a a-tə~mənəvən, me e-Dokas o e-mu
 sun = SG.CLF:MASC 3SG.M.NPST-IPFV~fall and ART.F-PN TOP 3SG.F-DIST
be Vunəpəlading.
 at PN
 ‘Pat is down there at the west side of the village (lit: the side where the
 sun goes down), and Dokas is at Vunəpəlading.’ [WM-CM-007]

3.2.1.2 Constituent order

The constituent order in Tulil is not variable, and functions as an additional encoding device. We can see from early examples, the order of constituents in transitive clauses is A V P, and in intransitive clauses is either S_A V or V S_p.

3.2.1.3 Patientive case

Patientive case appears on NPs as a preposed case marker = *a* that is phonologically detached from the marked arguments and encliticized to the preceding element (for the term ‘detached clitic’, see Bickel & Nichols, 2007:176-178), and personal

pronouns in patientive case need to take the patientive forms (only 3rd person singulars). Patientive case extends its use to mark all non-A/S_A arguments, including: 1) objects (P argument); 2) complement NP of prepositions, when the PP functions as the oblique argument (70); 2) subjects of stative-intransitive clauses (S_P argument) (71).

(70) **Transitive**

vakue e-tuk [=a lok=a] n
 woman.SG.CLF:FEM 3SG.F.NPST-give =PAT man=SG.CLF:MASC with
 [=a marəp]
 =PAT potion

‘The women gives the man the love potion.’ [WM-LP-004]

(71) **Stative intransitive**

toktok [=a nga mume idil] do.
 end =PAT 1SG.POSS.AL tell small here

‘My story ends here.’ [AL-HD-114]

Personal pronouns functioning as non-A arguments take different forms from A/S_A (the agentive forms of pronouns are also used as pronouns in topic positions), but only in 3rd person singulars (72). 3rd person non-singular and 1st/2nd persons use the normal pronominal forms without patientive marking:

(72)

	A argument (agentive)/topic	non-A argument (patientive)
3SG.M	<i>iap</i>	<i>a</i>
3SG.F	<i>iep</i>	<i>e</i>

(73) *ngə-p~pi magem =e me iep i-məkən =a*
 1SG.PST-IPFV~go leave =3SG.F.PAT and 3SG.F 3SG.F.PST-plant =PAT
ngari.
 peanut

‘I went leaving her behind, and she planted peanuts.’ [CK-YE-006]

- (74) *iap* *o* *bə* = *du-mərkət* = **a** *to* *bə* =
 3SG.M TOP IAM = 1PL.PST-leave.behind = 3SG.M.PAT SR IAM =
və-ngəp.
 3SG.M.PST-die
 ‘As for him, we left him behind because he was dead.’ [AL-HD-020]

Other patientive forms of personal pronouns which begin with vowels, regardless of their person, encliticized to the preceding elements.

- (75) *iep* *i-p~pi* *təpm* = *idə* *təda* *vəti* = *von*.
 3SG.F 3SG.F.PST-IPFV~go with = 3N for day = SG.CLF:DIM
 ‘She went with them [bananas] for (selling at) the market.’
 [WM-MG-011]

Personal pronouns used as the head of relative clauses (cf. §12.3) do not take the patientive form, and the patientive case marker needs to precede the whole NP (compare 76 with 74).

- (76) *i-tələbə* *mat* = *a* *kətongtong* = *e* *e-vi* *io*
 3DL.M.PST-catch get = PAT butterfly = SG.CLF:FEM 3SG.F-PROXS then
it-re *tuk* = **a** [*iap* *to* *a-ti~vi* *noğət be*
 3DL.M.PST-carry give = PAT 3SG.M SR 3SG.M.NPST-IPFV~go first at
a-tade]_{NP}.
 ART-church
 ‘They (dl.m.) caught the butterfly and took it to the pastor (lit. he who goes first at church).’ [RN-BT-005]

As we can see, the patientive marking has the same form as SG.CLF:MASC nominal class markings and 3SG.M personal pronoun; compare 77a and 77b).

- (77) a. *tə-p~pən-m* = **a** *Tulil me* *tə-mət* = **a** *Tulil*.
 3PL.PST-IPFV~kill-APPL = PAT PN and 3PL.PST-eat = PAT PN
 ‘They (pl.) killed the Tulils and they ate the Tulils.’ [LR-TF-013]
- b. *kəməron* = *e* *b* = *i-mət* = **a**.
 different = SG.CLF:FEM IAM = 3SG.F.PST-eat = 3SG.M.PAT
 ‘The devil woman (lit: different woman) already ate him.’
 [SM-DW-022]

The coincidence in forms and complementary relation between the patientive marker and the 3SG.M.PAT personal pronoun may suggest a diachronic relation between the two, which is not clear synchronically.

There are cases where no patientive marking is present in the VC. In some cases, it may be that the verb complex incorporates a noun:

- (78) [*ngə-t~ton* *kəbərion*]_{VC} *n* = *a* *kəvov* = *a* *to*
 1SG.PST-IPFV~look dream APPL = PAT dog = SG.CLF:MASC SR
və-muek *n* = *a* *kəbərək*.
 3SG.M.PST-vomit APPL = PAT blood
 ‘I had a dream of a dog who vomited blood.’ [JK-GT-023]

Another situation is phonologically conditioned: when the verb ends in vowels, the patientive marking does not surface due to a morphophonological hiatus avoidance rule (§2.5.1). This rule is specific to the patientive marking, since the patientive pronominal forms such as *a* 3SG.M.PAT or *e* 3SG.F.PAT are not affected. This suggests that the patientive marking = *a* and *a* 3SG.M.PAT are homophones. The verbs include *toti* ‘see’, *mu* ‘put’, *məle* ‘rest; stop’, *mume* ‘tell; teach’, etc.

- (79) a. *udu du-mu* *kəvənav* = *e*.
 1PL 1PL.PST-put rain = SG.CLF:FEM
 ‘We made the rain.’ [AL-RM-125]
- b. *io ngə-mu* = *a* *ba turin*.
 then 1SG.PST-put = 3SG.M.PAT in fire
 ‘Then I put it (the container) on fire.’ [CK-YE-011]

Also, a 3rd person neuter P argument or S_p argument, if recoverable from the context, can usually be omitted. A general impression from looking through the texts suggests that P arguments of other person/gender are never omitted, but more detailed investigation needs to be conducted to confirm this observation.

- (80) a. *a-stori* *u-vi* *o* *toktok idə do*.
 ART-story 3N-PROXS TOP end 3N here
 ‘This story ends here.’ [JK-CB-030]
- b. *nga* *mume idil* *o* *toktok konəng do*
 1SG.POSS.AL tell small TOP end only here
 ‘My little story just ends here.’ [AL-IP-092]

The omission also occurs when following VC-incorporated prepositions *bem* ‘at; about’ and *dəm* ‘on’.

- (81) a. *da tə-bulit bətəpm = a nang = bətəng io*
 PURP 3PL.PST-glye all.over = PAT tree = PL.CLF:SLE then
tə-p~pe u-bət tul u-bət to tə-t~ton
 3PL.PST-IPFV~tie 3N-PROXH bird 3N-PROXH SR 3PL.PST-IPFV~look
bem idə təkə = nə-bo ga avakavakau umi.
 at 3N TO = LOC-UP across tree.sp. 33SG.M.POSS.INAL.eyē
 ‘They (pl.) put the glue around the branch, then they tied the tamed
 birds (lit. the birds they look after) on to the branch of the *avakavakau*
 tree (branches made to hunt birds).’ [DV-BL-016]
- b. “*ngi-nat mat = a nang = a a-vi”, me*
 2SG.PST-get get = PAT tree = SG.CLF:MASC 3SG.M-PROXS and
və-tak be nangə idə itən, me kori nga-tak
 3SG.M.PST-call at tree 3N.POSS.AL name and NEG 1SG.NPST-call
bem.
 at
 “‘You get the herb”, and he called out the names of the herbs, and I
 won’t call them.’ [DV-BL-016]

3.2.2 Types of verbal clauses

Depending on the argument structure and lexical aspect of a verb that constitutes a verb complex, a verbal clause can be classified, mainly in terms of transitivity. Examples are given at the beginning of the chapter for all types of verbal clauses, and in this section special attention will be given to impersonal clauses (§3.2.2.1), stative-intransitive clauses (§3.2.2.2) ditransitive clauses (§3.2.2.3) and locative clauses (§3.2.2.4).

3.2.2.1 Impersonal clause

Impersonal clause²⁶ is a special type of verbal clause in Tulil, with impersonal verbs (mostly psych-verbs such as ‘be hungry’, ‘forget’, ‘shiver’) as head (a full list of impersonal verbs can be found in §4.3.2). Impersonal clauses are either transitive or

26. The term ‘impersonal’, as pointed out by many (cf. Creissels, 2008; Siewierska, 2008; Malchukov & Ogawa, 2011) has been used in the literature to refer to various heterogeneous structures. Here I followed the definition of the term by Siewierska (2008:116), that ‘impersonal’ is “from the structural point of view associated with the lack of a canonical subject, from the functional perspective with agent defocusing.”

intransitive, featuring person markings that do not designate a substantial A or S_A argument, and instead represent a non-referential (dummy) argument. Morphologically, the person indexes of A/S_A arguments used in an impersonal construction are restricted to 3rd person neuter prefixes, with the distinction of tense (*idə-* 3N.PST, *iT-* 3N.NPST) retained. This means that comparing to A/S_A arguments of other transitive verbs, the parameter lost in the grammatical A/S_A argument in this case is the person and number distinction. Also, the impersonal verbs only have imperfective aspect forms, represented by reduplication (details of verb morphology can be found in §9). The morphosyntactic property of P argument is not affected when the clause is transitive, and this P argument becomes the ‘notional subject’.

- (82) a. *bə= kori go tador ngang, b= idə-p~pau ngang.*
 IAM= NEG NSPEC water inside IAM= 3N.PST-IPFV~hungry 1SG
 ‘I was not strong, I was hungry.’ [DV-HP-076]
- b. *kori go idə-t~tu udu, tove məgət o bə=*
 NEG NSPEC 3N.NPST-IPFV~grow 1PL because today TOP IAM=
d-ə~mət = a mətmət mərek me i-t~tu
 1PL.NPST-IPFV~eat = PAT food good and 3SG.M.NPST-IPFV~grow
udu.
 1PL
 ‘We were not fat, because now we are eating good food and getting fat.’ [JK-PP-004]

In the above examples of transitive impersonal clauses, the A arguments being indexed by the 3rd person neuter prefixes *idə-* and *iT-* are all non-referential. For instance, it is quite unlikely that the grammatical A argument in 82a is referential as in ‘something hungry me’. In 82b, even though ‘the food grows us’ (*mətmət* ‘food’ as mass noun can be related to 3rd neuter person) seems to work semantically, the sentence **mətmət ittu udu* with *mətmət* as the NP argument is ungrammatical²⁷. Thus the grammatical P arguments *ngang* ‘1SG’ and *udu* ‘1PL’ are the only referential arguments, and thus the notional S arguments in these examples.

A transitive impersonal construction normally expresses experience, with the experiencer as the object. On the other hand, the agent or causer is usually specified by oblique structure (83).

27. When the meaning ‘grow’ is used, the A argument is the thing that is growing.

- (83) *mətmət o idə-ngəp, b = idə-m~mang [idə]_{EXPERIENCER} bətm*
 food TOP 3N.PST-die IAM = 3N.PST-IPFV~burn 3N with
 = a [*vənu = a*]_{CAUSER}
 = PAT sun = SG.CLF:MASC
 ‘The food (plants) died, they were burnt by/because of the sun.’
 [AL-RM-154]

Impersonal clauses can also be intransitive. There is no ‘notional’ argument in this case, and the construction functionally resembles a non-verbal clause describing property/states.

- (84) *ibən = e e-bət o mægəte lak = e o*
 land = SG.CLF:FEM 3SG.F-PROXH TOP like lake = SG.CLF:FEM TOP
u-bət o ar b = idə-t~təp mərek, ar bə = iavava.
 3N-PROXH TOP also IAM = 3N.PST-IPFV~dry good also IAM = dust
 ‘In that place, like lakes were also dried out well, and full of dust.’
 [AL-RM-180]

Verbs that can be used in intransitive impersonal clauses can always occur in transitive impersonal constructions (a full list of impersonal verbs can be found in §4.3.2).

The restricted use of imperfective aspect in impersonal clauses suggests time stability and the unprototypical status of the impersonal clauses, though a distinction in tense (PST vs. NPST) still remains. However, a tendency to lose this distinction can sometimes be observed as well in the intransitive impersonals. For instance, the word *mang* ‘pungent; burning’, when used in a setting which took place in the past, can sometimes use the NPST grammatical tense (85b and 85c).

- (85) a. *it-nakən lar me idə-m~mang vəvat.*
 3DL.M.PST-drink try and 3N.PST-IPFV~burn very
 ‘They (dl.m.) tasted it and it was very salty.’ [LG-VI-035]

- b. *ip-mənəm mənibərui, ip-mukin mat tang da*
 3DL.M.PST-wake morning 3DL.M.PST-count get REFL/RECP PURP
b= ip-bunən nə-mumə da i-povər pet
 IAM= 3DL.M.PST-climb LOC-DOWN.DIST PURP 3DL.M.PST-dig wide
n =a lak=a təpm =a ioi u-vi to
 APPL =PAT lake=SG.CLF:MASC with =PAT water 3N-PROXS SR
i-ta~mang vəvat.
 3N.NPST-IPFV~burn very

‘They (dl.m.) woke up in the morning, they called each other to go down the valley so they can dig the pool with very salty water wide.’

[LG-VI-043]

- c. *nə-bət ga tipur idə= nung o bə= lət*
 LOC-PROXH across bush 3N.POSS.AL= bottom TOP IAM= arrive
ko n =a go turin o b= i-ta~mang
 only APPL =PAT NSPEC fire TOP IAM= 33N.NPST-IPFV~burn
lau nə-p-bo.
 spread LOC-EP-UP

‘There on the tree, fire just appeared, it was burning and spread to the side.’

[AL-RM-014]

3.2.2.2 Stative-intransitive clause

Tulil shows split intransitivity and has two types of intransitive clauses: active intransitive and stative intransitive clause. The predicate of a stative intransitive clause is a VC commonly taking either stative verbs (86a) or adjectives (86b) as the head (cf. distinction of verb and adjective in §4.4). The stative intransitive verb is not prefixed by A/S_A person marking, and the sole argument s in this clause is placed after the verb, and marked by the patientive case marker *a* or realized by the patientive pronominals.

- (86) a. *iap o kori məle a, iap o du-m~matme*
 3SG.M TOP NEG rest 3SG.M.PAT 3SG.M TOP 1PL.PST-IPFV~work
konəng.
 only

‘He did not stop, we just kept working.’

[SV-N1-132]

- b. *bə = kure~kurek = a du mato~mator*
 IAM = IPFV~bad = PAT 1PL.POSS.AL NMLZ~sit
 ‘Our living place becomes really bad.’ [KM-TH-088]

The stative-intransitive VC can involve an incorporated applicative *n* or serial verb *mat* ‘get’ (see VC structure §8).

Special cases of stative intransitive clauses involve predicates headed by PPs (87) or adverbial demonstratives with directional proclitics *mən* ‘from’, where an applicative *n* is always included in the VC. The structure is verbal because the pronoun following *n* (for instance, = *a* 3SG.M.PAT in 88b) is the patientive pronominal form, and the patientive marking = *a* precedes an NP argument (88a). However, this structure shares properties with non-verbal clauses with PP/adverbial as predicate. A detailed comparison is given in §3.3.3.

- (87) *ngang o ba anguæk nə ngang.*
 1SG TOP in confuse.thing APPL 1SG
 ‘then he said, ‘o, I’m dealing with the things I don’t know.’ (anguæk; the thing I don’t know)’ [KK-RC-011]
- (88) a. *ngang o tre moli avar mə = nə-mə n = a*
 1SG TOP true real also FROM = LOC-DOWN APPL = PAT
a-bət to-Rot.’
 3SG.M-PROXH ART.M-PN
 ‘As of me, it is true that (I saw) Rot was down there (lit. from there).’ [JK-P1-053]
- b. *vənu = a mə = nə-m~mə n = a*
 sun = SG.CLF:MASC FROM = LOC-CON~DOWN APPL = 3SG.M.PAT
nandi...
 like.this
 ‘The sun came from down there like this...’ [DV-BL-028]

The class of stative-intransitive verbs represents a very small portion of the lexicon of the language, and clear cases of members belonging to this class is rare. Also, patientive case marking is not strong enough a key feature to identify a split intransitive pattern, given that all non-A arguments take this case (for instance, the complement of prepositions). However, there are two reasons to acknowledge that the language has a phenomenon of split intransitivity, rather than analyzing the stative-intransitives as predicative adjectives and attributing the contrast in the morphosyntactic encoding of arguments to a split in argument encoding of verbal and non-verbal clauses (cf. Danielsen & Granadillo 2008).

First of all, morphosyntactic criteria to build a stative-intransitive verb class are clear, especially 1) the applicative suffix *mə* that is unlikely to occur in adjectives; 2) the serial verbs *mat* that is unlikely to follow adjectives. These two criteria lead one to believe that there is at least two undoubtful members of the stative-intransitive class: *lang-m(ə)* ‘want’ (though most of the time *m* is separable from the stem, and only one example shows the *m* is reanalyzed as part of the verb, see §9.1.4 for the analysis of this morpheme) and *məle* ‘rest’ (which can cooccur with *mat* and form a serial verb construction, see §8.4.3.1).

Secondly, a diachronically possible connection between split intransitivity and a ‘transimpersonal’ construction is discussed by various papers included in Donohue & Wichmann (2008) (such as Holton, 2008; Malchukov, 2008; Mithun, 2008). In these studies, it is suggested that split intransitivity may develop as the result of the reanalysis of transimpersonal constructions, which include a dummy subject, and a referential argument encoded like the P argument.

In Tulil, transitive impersonal constructions differ from full transitive clauses in the limitation of person / aspect (the former only use the imperfective aspect and 3rd neuter person). Functionally, transitive impersonals differ from stative-intransitive constructions in showing the tense distinction of past and non-past, though impersonals may have a tendency of losing this distinction (see §3.2.2.1).

There is no evidence that any of the stative-intransitives in the current usage of Tulil actually derived from the impersonal verbs, but it reveals the fact that the morpho-syntactic alignment in Tulil could be semantically based; namely, the sole-argument following the stative-intransitive verb and marked with patientive case in many instances a less agentive/involved roles, but more affected/volatile than a ‘property possessor’, when the latter is more likely to be expressed by an NP. For instance, in the following examples, the possessor of ‘brain’ and ‘legs’ take the semantic roles of ‘experiencers’.

- (89) a. *ngi gən = a o bə = ko go*
 2SG.POSS.AL brain = SG.CLF:MASC TOP IAM = NEG NSPEC
mərek = a.
 good = SG.CLF:MASC
 ‘Your brain will not be good.’ [AL-TN-035]
- b. *kori go mərek = a ngə = katə da nga-nanəng.*
 NEG NSPEC good =PAT 1SG.POSS.INAL = leg PURP 1SG.NPST-run
 ‘My legs are not good for running.’ [JK-P1-022]

3.2.2.3 Ditransitive clauses

The prototypical ditransitive construction involves ditransitive verb such as ‘give’. In Tuli, the recipient of the ditransitive verb is coded like the P argument of a monotransitive verb, and the oblique argument (the theme) is marked differently with double marking (90a). It is primarily marked by the instrumental preposition *n* (it has the same form as the applicative and the comitative). Also, like P arguments, the oblique arguments take patientive case, either marked by the patientive marker, or has a patientive form of a personal pronoun.

- (90) a. *a-tuk ta n =a nangə.*
 3SG.M.NPST-give 3PL APPL =PAT herb
 ‘He gives them herbs.’ [AL-DA-039]
- b. *da a-tuk n =a bokbok tuk =a ta...*
 PURP 3SG.M.NPST-give APPL =PAT talk give =PAT 3PL
 ‘For him to give a talk to them.’ [AL-HD-011]
- c. *tə-tuk n =a ta varvar u-bət nuvəde*
 3PL.PST-give APPL =PAT 3PL.POSS.AL happy 3N-PROXH LOC.here
tuk udu du-n =a Mərubət.
 to 1PL 1PL-COM =PAT PN
 ‘They gave their happiness to here, to us we and the Bainings.’ [PP-PH-040]

There is another type of ditransitive construction, shown in 90b and 90c. In this type of construction, the recipient of ‘give’ can occur after the theme (90b), or after an adjunct (90c) and marked by the prepositional use of *tuk* ‘RECIP’.

3.2.2.4 Locative clauses

In a locative clause, demonstratives, prepositions and some locational adverbs function as the predicate and can take a person index, and express locational, possessive and existential meaning. The person indexes used with demonstratives/prepositions are ‘defective paradigms’ with no tense distinction²⁸ (paradigms can be found in §4.7.6 and §4.7.7). Clauses with some particles (such as quotative *e*, directionals *mən* ‘from’ and *tə(kə)* ‘to’) preceded by special non-tensed person indexes are also classified into this type.

28. Baining language may have a similar strategy: in the description of Mali-Baining, Stebbins differentiates between ‘active’ verbless clause and ‘stative’ verbless clause, where demonstratives are considered to be ‘active’ because it requires indexing pattern similar to active intransitive verbal clause, with a different paradigm, expressing existence, possession and location (Stebbins, 2011:48-49).

- (91) a. *e-Susan e-mumə be New.Ireland.*
 ART.F-PN 3SG.F-DOWN.DIST at PN
 ‘Susan is down there at New Ireland.’ [SV-N1-157]
- b. *nga mængəd = a o a-mu.*
 1SG.POSS.AL home = SG.CLF:MASC TOP 3SG.M-INSIDE
 ‘My home is there (inland).’ [LN-SL-016]

The structure of locative clauses can be either transitive or intransitive, depending on whether a post-PRED argument is present. Table 3.2 shows the transitivity of locative clauses with different types of predicates. Similar to the structure of transitive or active intransitive verbal clauses, either a subject (no topicalizer *o*, 91a) or a topic (with topicalizer *o*, 91b) can be present in the clause (when the clause expresses existential meaning, no *o* is present).

Table 3.2: Transitivity of locative clauses

transitive	intransitive
prepositions	demonstrative root
directional + prepositions	directional + adverbial locational demonstrative
<i>nogət</i> ‘before’ and <i>pədəm</i> ‘after’ (both tr. and intr.)	
QUOT	<i>vəde</i> ‘this way’

Locative clauses can also have PPs as predicates. Only one preposition (*to* ‘belong to’) always occurs in a verbal clause and requires the person index preceding the preposition, expressing possession:

- (92) *ror = a a-vi o a-to nga*
 headdress = SG.CLF:MASC 3SG.M-PROXS TOP 3SG.M-of 1SG.POSS.AL
laik = ta.
 big = PL.CLF:HUM
 ‘This headdress belongs to my ancestors.’ [AL-HD-109]

For other prepositions, the person index is optional. When a person index is present, the clause is verbal; when there is no person index, it is non-verbal. Both cases where a PP occurs as the predicate are rare (especially verbal, which occurs in elicitation but seldom in texts). A more common case to express location is a clause with a demonstrative as the predicate (either verbal or non-verbal), with PP as a modifier.

- (93) a. *ta-vi m̄arub̄at o ta-ba ib̄an=e to Tulil.*
 3PL-PROXS PN TOP 3PL-in land = SG.CLF:FEM of PN
 ‘They Bainings are in the land of Tulils.’ [KM-BS-093]
- b. *nang=e e-b̄at to tat-e tor=e*
 tree = SG.CLF:FEM 3SG.F-PROXH SR 3PL.NPST-QUOT wood = SG.CLF:FEM
o be Palakukur.
 TOP at PN
 ‘That tree that they call ‘tore’ is at Palakukur.’ [JK-CB-010]

Locative clauses with demonstratives as predicate can not only be used for stating the position of the referent, but also for expressing the action of moving in a certain direction. The form *m~bo* in 95 is a type of reduplicative form of *bo* meaning ‘(continuing) moving up’ (cf. §7.1.1.2).

- (94) *ngunu-m̄at katum, ava nga-mum̄a, nḡa-mor̄an mat =a*
 1DL.PST-eat finish again 1SG-DOWN.DIST 1SG.PST-cover get =PAT
ragum = ip.
 green = DL.CLF:MASC
 ‘We (dl.) finished eating, again I went down, I wrapped and got the two kinds of greens.’ [ML-YE-018]
- (95) *go v̄ati=von o du-m~bo, t̄ak̄a=n̄a-bo d-an̄əng*
 NSPEC day = SG.CLF:DIM TOP 1PL-CON~UP TO = LOC-UP 1PL.NPST-run
mat ta nu-v̄ade.
 get 3PL LOC-this.way
 ‘One day we will go up, up to there, we take them here.’ [CM-B2-005]

Words formed by procliticizing the directional clitics *m̄an* ‘from’ SOURCE and *t̄o* ‘to’ GOAL to prepositions and demonstratives can occur in locative clauses as well:

- (96) a. *da ava ip katum i-t̄a=ba tipur, ik-gup.*
 PURP again 3DL.M all 3DL.M-TO = in bush 3DL.M.NPST-hunt
 ‘The two of them want to go to the bush together, (so) they will hunt.’ [SV-ES-008]
- b. *e-vi o b̄a= e-t̄a=ba m̄ənḡəd=a to*
 3SG.F-PROXS TOP IAM = 3SG.F-TO = in home = SG.CLF:MASC of
voin.
 ghost
 ‘As of her, she went to the home of the ghosts.’ [JK-PP-032]

- (97) a. *ngi-təkə = nə-bi?*
 2SG-TO = LOC-where
 ‘Where are you going?’ [DV-HP-034]
- b. *Piupiu, avar nga-mə = nə-mumə bərodəm = a.*
 PN also 1SG-FROM = LOC-DOWN.DIST inside = 3SG.M.PAT
 ‘Piupiu [monster name], I was also there (at the place where he lives).’
 [JK-PP-059]

Locational adverbs such as *nogət* ‘before; in front’ and *pədəm* ‘after; at the back’ can also be used with person indexes²⁹ either in transitive locative clauses (98a) or intransitive locative clauses (98b):

- (98) a. *doto da bə = ngi-di~vi tapm = a,*
 when PURP IAM = 2SG.NPST-IPFV~go with = 3SG.M.PAT
a-bət o a-nogət nging, ava a-pədəm nging.
 3SG.M-PROXH TOP 3SG.M-front 2SG again 3SG.M-after 2SG
 ‘When you go with it (the devil), he walks in front of you, then he walks after you.’ [AL-SO-049]
- b. *iap to a-pədəm ava a-nogət, me ngang to nga-nogət*
 3SG.M SR 3SG.M-after again 3SG.M-front and 1SG SR 1SG-front
o bə = nga-pədəm.
 TOP IAM = 1SG-after
 ‘The one who was at the back was then ahead, and I who was ahead, became the one at the back.’ [JK-PP-092]

Quotatives can also be found to be used in a locative structure (cf. quotative §4.10.5):

- (99) *ngunu-lam = a ip-vi idil = ip ngunun-e, ‘ava*
 1DL.PST-show = PAT 3DL.M-PROXS small = DL.CLF:MASC 1DL-QUOT just
iap o a-vi konəng.’
 3SG.M TOP 3SG.M-PROXS only
 ‘We (dl.) showed the two kids we said, “He is just here.”’ [LN-TO-031]

A special subclass of this structure is **existential**, when the subject is interpreted as indefinite. In this case the topicalizer *o* is never present. Another way of expressing existential meaning is the nominal clause, usually as a simple NP without topic (see §3.3.2).

29. Evidence suggests reanalysis of these person indexes into tensed structure, cf. §4.7.7.

- (100) *nə-bo ba mənɡəd = a a-bo, Gaepka a-to Mərubət,*
 LOC-UP in home = SG.CLF:MASC 3SG.M-UP PN 3SG.M-of PN
ləmat mukəm ip-bo.
 coconut two 3DL.M-UP
 ‘up there at the village up in Gaepka belonging to Bainings, two coconut
 trees are up there.’ [JK-PP-046]

The substantive demonstrative forms [person index - demonstrative root] in Tulil are grammatically ambiguous: in addition to the function of a predicate in a verbal clause, they also function as pronominals (e.g. *avi* ‘this one here; he’), or nominal modifiers (e.g. *molimolia avi* ‘this man’). Thus structures with a substantive demonstrative form are usually syntactically ambiguous (Table 3.3). A locative clause (verbal demonstrative) can have alternative analysis as equative (pronominal demonstrative). For instance, 91b can also be ‘My home is that one (inland)’, and the example in 101 can also mean ‘her kids are here...’. In both cases, the contexts disambiguate the meaning.

- (101) *i = vil = vənik o ta-vi,*
 3SG.F.POSS.INAL = son/daughter = PL.CLF:DIM TOP 3PL-PROXS
to-Piau, Longor, Titil...
 ART.M-PN, PN PN
 ‘Her kids are these people: Piau, Longor, Titil...’ [KM-BS-068]

Because there are uses such as in 94 and 95 for expressing motions, it is not possible to think of the two analyses as two readings of the same structure; another reason is verbal demonstratives are different from (pro)nominal ones in that they can be preceded by first/second person indexes (cf. §7.2.2):

- (102) *nga-vi konəng to nga-no~mətor konəng.*
 1SG-PROXS only SR 1PL.NPST-IPFV~sit only
 ‘I’m just here because I’m just sitting.’ [LR-MK-012]

In the same sense, when the subject is indefinite, the demonstrative predicate can have either an existential (verbal demonstrative) or identificational (pronominal demonstrative) reading. For instance, example 100 can be understood as ‘those two up there are two coconut trees’. Because the topicalizer *o* is never present in a locative clause when the subject is indefinite, the nominal modifier analysis of the demonstrative is also possible, thus a sentence like 103 can have various analysis, as shown in Table 3.3:

(103) *io tat-e ləvək = a a-vi.*
 then 3PL.NPST-QUOT banana = SG.CLF:MASC 3SG.M-PROXS [ER-EA-023]

- (104) a. ‘They think the banana is here.’
 b. ‘They think there is a banana.’
 c. ‘They think the banana is this one.’
 d. ‘They think this is a banana.’
 e. ‘They think [it] is this banana (not another one).’

104a / 104b are verbal clauses with verbal (prefixed) demonstratives as predicates, while in 104c / 104d, the clauses are nominal clauses with NPs formed by pronominal demonstratives as predicates. In 104e, the demonstrative is a modifier and forms a whole NP with the core NP *ləvək = a*. A special case is that in 104d, the pronominal demonstrative is a postposed subject (emphatic), and the NP ‘banana’ is the predicate. We can notice that when the first NP (subject in a/b/c, predicate in d) is indefinite, the topicalizer *o* cannot be placed between the NP and the demonstrative.

Table 3.3: Use of demonstrative in the clause structure

syntactic structure	demonstrative	subject	topicalizer <i>o</i>	function	translation
verbal clause	verbal	definite	optional	locational	a.
verbal clause	verbal	indefinite	no	existential	b.
nominal clause	pronominal	definite	optional	equative	c.
nominal clause (emphatic)	pronominal	definite	no	identificational	d.
NP	nominal				e.

3.3 Non-verbal clauses

3.3.1 Structure of non-verbal clauses

A non-verbal predicate is usually an NP, and can also be a PP or adverb. According to the type of the predicate, non-verbal clauses can be broadly classified into two types: nominal clause, and PP/adverb clause, and they are structurally different, as shown by the schemes in Figure 3.5 and Figure 3.6.

The strategy for expressing non-verbal predication involves a topic-comment structure³⁰. The topic-positioned subject can be omitted if its identity is implied in the context, or stated in the postposed slot. Non-verbal clauses have no person markings/patientive case for either pre-PRED or post-PRED arguments. The difference between a nominal clause and a PP/adverb clause is that the former has an optional emphatic pronominal in post-PRED position (the same referent repeated both as the topic and as an emphatic pronoun following the NP predicate, and only when the entity is a human referent), and two copula-like elements (instead of only one in the latter type of clause).

Figure 3.5: Structure of nominal clause

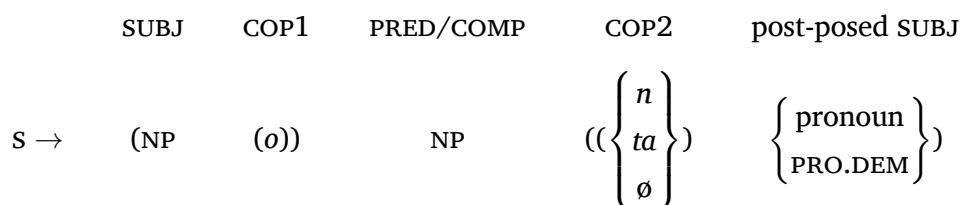
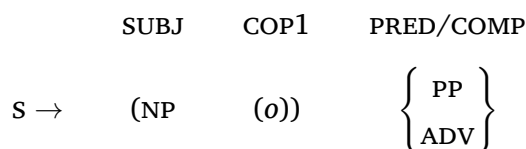


Figure 3.6: Structure of PP/ADV clauses



The minimal structure of a nonverbal clause consists of only the predicate, such as a simple NP (105).

- (105) *io du-mət, bə = vul = a, du-mengəp.*
 then 1PL.PST-eat IAM = night = SG.CLF:MASC 1PL.PST-sleep
 ‘Then we ate, it was already night, we slept.’ [CM-B2-047]

30. We are only discussing the ‘Topic’ here as a slot holding the subject of a non-verbal clause, rather than other parts of the clause that can also be raised to the topic position. For instance, in the following two examples, we only consider the subject in example i.a as taking up the ‘Topic’ slot in the clause structure.

- (i) a. *ngang nga itən = e (o) Augustine.Rickie.*
 1SG 1SG.POSS.AL name = SG.CLF:FEM TOP PN
 ‘My name is Augustine Rickie.’ [AL-HD-001]
- b. *ngang o nga itən = e moli Augustine Rickie.*
 1SG TOP 1SG.POSS.AL name = SG.CLF:MASC again PN
 ‘Again my name is Augustine Rickie.’ [AL-BT-001]

When marking the topic of a clause, the topicalizers are omissible; however, in the setting of a nominal clause marking subjects, they usually cannot be left out. This suggests the status of the topicalizers as copulars in the non-verbal clauses. There are two exceptional cases for this rule, both of which occur when the clause is not an ordinary predicational clauses, but identificational:

- (107) a. *nə-bət* *vak* *konəng=e* *e-bət* *to*
 3SG.F-PROXH woman only = SG.CLF:FEM 3SG.F-PROXH SR
e-pə~vən.
 3SG.F-IPFV~fight
 ‘That was just a woman who fights.’ [AL-BT-025]
- b. *a-bo* *Bior=a* *a-bət,* *ba nə-bət*
 3SG.M-UP PN = SG.CLF:MASC 3SG.M-PROXH or LOC-PROXH
o *Tulil=a* *a-bət,* *ba a-bət*
 TOP PN = SG.CLF:MASC 3SG.M-PROXH or 3SG.M-PROXH
a-vok=a *a-bət.*
 ART-work = SG.CLF:MASC 3SG.M-PROXH
 ‘That one (I just mentioned) is a Tolai man, or a Tulil man, or a city man (working man).’ [WM-LP-047]
- (108) a. *nga* *itən=e* *o* *Gior.Kovu.*
 1SG.POSS.AL name = SG.CLF:FEM TOP PN
 ‘My name is Gior Kovu.’
- b. *voi* *idə* *itən=e* *Voi* *Bəli.*
 SG.CLF:FLAT 3N.POSS.AL name = SG.CLF:FEM SG.CLF:FLAT pig
 ‘The name of the river is ‘pig river’.’ [PP-RA-006]

In the first case, when the subject NP is an NP containing a demonstrative, and has another demonstrative in the postposed subject position, COP1 is optional (107). The other case is the clause identifying names of people or things, with a subject NP explicitly stating ‘someone/thing’s name’ (108). In this case, COP1 can also be - and usually is - left out.

COP2 is present between the predicate NP and the emphatic pronominal. When the post-PRED pronominal is a demonstrative, COP2 is never used. The form of COP2 depends on the nominal class of the predicate NP. When the NP is plural, *ta* (3 person plural pronoun) is inserted between the predicate and the pronoun (109). When the NP belongs to class 1 (masculine) and class 2 (feminine) and

is non-plural, there is no linking element (106c, 113a). When the NP belongs to other classes (such as the diminutive class in 110a, thin class in 110b) and is non-plural, *nə* (same form as applicative/instrumentative) is used as a linking element. Note that all the NPs occurring in this structure are animate/human referents, and there are only few cases of human referents assigned to shape/size-based classes (cf. §10.2.2). The presence of this linking element suggest a reassignment of NPs from the nominal class system to the gender system (cf. §10.1.3), and cases where mismatches occur have to be marked. A summary of forms can be seen in Table 3.4.

Table 3.4: Linking elements in postposed-pronoun clause

class of predicate NP	SG	DL	PL.HUM
CL1: masculine	∅		<i>ta</i>
CL2: feminine			
other classes	<i>nə</i>		

- (109) *doto ngən o bə = laik = ta ta ngən n = a go*
 when 2PL TOP IAM = big = PL.CLF:HUM 3PL 2PL APPL = PAT NSPEC
vənu = a to bə = molimoli = ta ta ngən, o
 sun = SG.CLF:MASC SR IAM = people = PL.CLF:HUM 3PL 2PL TOP
da i-kəbənət mərek n = a inə t~təm.
 PURP 2PL.NPST-make good APPL = PAT 2PL.POSS.AL NMLZ~know
 ‘When you (pl.) grow up some day, that you become adults, you will
 make your thinking/view good.’ [AL-IP-010]

- (110) a. *ngun o kori ngunu-təm to ngun o ar lok = pələgəp*
 1DL TOP NEG 1DL.PST-know SR 1DL TOP still man = DL.CLF:DIM
nə ngun, [lok ləm = ip]_{PRED} ngun me ta-vi
 APPL 1DL man young = DL.CLF:MASC 1DL and 3PL-PROXS
o bə = molimoli laik = ta
 TOP IAM = people big = PL.CLF:HUM
 ‘We (dl.) didn’t know because we were two young men, two young
 man, and they were already adults.’ [AL-DA-107]
- b. *ngang ar idil = vənəm nə ngang*
 1SG still small = SG.CLF:SLE APPL 1SG
 ‘I was still a small kid.’ [JK-TM-016]

Table 3.5: Structural possibilities of nominal clauses

	(topic	COP1)	PRED/COMP	(COP2	pronominal)	functions
type I			NP			existential, property
type II	(NP	(COP1))	NP			class, property, equative
type III	(NP	(COP1))	NP	COP2	pronoun	class, property
type IV	(NP	(COP1))	NP		pronominal dem.	class, property

Nominal clauses can be roughly classified into four types according to the structural possibilities, as shown in Table 3.5. Below are some examples:

(111) **Type I**

ar bəvon kup [a-moli mərubət = e to
 still before thorough ART-person Baining = SG.CLF:FEM SR
ve itən = e e-Namugi]_{PRED}.
 3SG.F.POSS.AL name = SG.CLF:FEM ART.F-PN
 ‘Long time ago there was a Baining woman whose name is Namugi.’
 [LG-VI-003]

(112) **Type II**

a. *və = nok = pəlagəp o [kənoi = vitəm*
 3SG.M.POSS.INAL = hand = DL.CLF:DIM TOP snake = DL.CLF:FEM
]_{PRED}.
 ‘His two arms are two snakes.’ [LN-TO-036]

b. *tat-e [məngəd = a]_{PRED}.*
 3PL-QUOT village = SG.CLF:MASC
 ‘They thought [it is a] village.’ [AL-L1-030]

(113) **Type III**

a. *ngang o [voin = a]_{PRED} ngang.*
 1SG TOP devil = SG.CLF:MASC 1SG
 ‘I am a devil man.’ [TV-DM-014]

- b. *v-əngar at-e, doto [lok moli = a*
 3SG.M.PST-talk 3SG.M.NPST-QUOT if man real = SG.CLF:MASC
]_{PRED} *nging, o ngi-n = a.*
 2SG TOP 2SG.NPST-COM = 3SG.M
 ‘He said, if you are a real man [if you are brave], you [walk] with
 him [the devil].’

(114) **Type IV**

- a. *a-vi o udu du mativon konəng = a*
 3SG.M-PROXS TOP 1PL 1PL.POSS.AL brother only = SG.CLF:MASC
a-vi.
 3SG.M-PROXS
 ‘He is just our brother.’ [SV-N1-194]
- b. *kəbərion kurek = e e-bət.*
 dream bad = SG.CLF:FEM 3SG.M-PROXH
 ‘That was a bad dream.’ [JK-GT-060]

Structurally, a type III clause can only have animate (most commonly human) subjects, and take core NPS³¹ as predicates, thus an NP which has a PP as modifier is not possible in this structure:

- (115) [*ve dərng = a*]_{TOPIC} *o [molimoli = a*
 3SG.F.POSS.AL old = SG.CLF:MASC TOP human = SG.CLF:MASC
*be gup]_{PRED} **(iap).*
 at hunt 3SG.M
 ‘Her husband is a hunter (lit: a man of hunting).’ [SV-ES-003]*

The identity of masculine/feminine singular nominal class markings and the patientive pronominal of third person singular (= *a* and = *e*) leads to ambiguity between type III nominal clauses and stative intransitive clauses with certain adjectives (e.g. 118)³².

(116) **Non-verbal**

- io bə = laik = a ngang.*
 then IAM = big = SG.CLF:MASC 1SG
 ‘Then I became a big man.’ [WM-LB-007]

31. An NP consisting of only nouns and its immediate modifiers such as adjectives and quantifiers, plus the class/number marking, is defined as the core NP. A complex NP, on the other hand, is expanded on the basis of the core NP, including possessive construction, demonstrative phrases and relative clause (§5.1.1)

32. The same phenomenon can be observed in Mali -Baining (Stebbins, 2011:50-51)

(117) Verbal

- a. *io laik ngang nanbət.*
 then big 1SG like.that
 ‘Then I was/became big like that.’ [JK-PP-005]
- b. *bə = laik = a idil = a.*
 IAM = big = PAT child = SG.CLF:MASC
 ‘Then the boy became big.’ [WM-ML-022]

- (118) *doto ak-ngəp, me v-uil = a o*
 when 3SG.M.NPST-die and 3SG.M.POSS.INAL-kid = SG.CLF:MASC TOP
bə = laik = a, o v-uil = a
 IAM = big = SG.CLF:MASC TOP 3SG.M.POSS.INAL-kid = SG.CLF:MASC
a-tat = a ror = a.
 3SG.M.NPST-get = PAT headdress = SG.CLF:MASC
 ‘When he dies, and his son is a big man/become big, his son gets the
 headdress.’ [AL-HD-023]

For instance, the structure in 116 is a type III nominal clause and in 117a is stative-intransitive, given that verbal clauses with 1SG pronoun *ngang* as subject do not require the patientive marking =*a*, so the form =*a* in 116 has to be analysed as a nominal class marker, and thus the predicate is nominal. In the same sense, the bare adjective *laik* in 117a is the verbal predicate with 1SG pronoun (no patientive marking). On the contrary, in 117b, the NP argument requires a patientive marking preceding it, so the predicate is verbal. However, in 118, this distinction cannot be made, and it can be analyzed as either structure. When the adjective is modified by degree adverbs (cf. §4.10.3), the ambiguity gets resolved because stative-intransitive clause needs an applicative *n* between the modifier and the argument:

- (119) a. *du-toti = a dun-e molimoli = a*
 1PL.PST-see = 3SG.M.PAT 1PL-QUOT people = SG.CLF:MASC
a-vi o kabar vəvat moli = a, me
 3SG.M-PROXS TOP long very real = SG.CLF:MASC and
vərai = a to da du-vovər bətəpm = a
 pit = SG.CLF:MASC SR PURP 1PL.PST-dig with = 3SG.M.PAT
o avar kabar moli = a.
 TOP also long real = SG.CLF:MASC
 ‘We saw him we thought, this man is really tall, and the pit we dug
 him out was also really long.’ [AL-BT-009]
- b. *kabar vəvat moli n = a molimoli = a a-bət*
 long very real APPL = PAT people = SG.CLF:MASC 3SG.M-PROXH
bem udu.
 at 1PL
 ‘That man is much taller than us.’ [AL-BT-014]

The adjectives that can be involved in this type of ambiguity include *laik* ‘big’, *kabar* ‘long’, *kurek* ‘bad’ and *mərek* ‘good’.

3.3.3 Non-verbal clause with PP/ADV as predicate

Non-verbal clauses with PP/ADV as predicates have the structure as shown in Figure 3.6, involving a subject and a PP/adverb PRED. They differ from nominal clauses in that they do not have a post-PRED subject.

- (120) a. *ta-te~man loktang, me ta katə o gəvənmə*
 3PL.NPST-IPFV~dance around and 3PL.POSS.AL leg TOP under
ta.
 3PL
 ‘They dance around, and their feet are under themselves.’
 [JK-CB-025]

- b. *Muliama o nə-mumə be Namatanai, nə-mumə be*
 PN TOP LOC-DOWN.DIST at PN LOC-DOWN.DIST at
vəret=e iep to vənu=a
 side = SG.CLF:FEM 3SG.F SR sun = SG.CLF:MASC
a-t~ton.
 3SG.M.NPST-IPFV~look.at
 ‘Muliama is down there at Namatanai, down at the east (the side that
 the sun shines).’ [KM-TH-008]

A clause with a PP as predicate can either be verbal or non-verbal, depending on whether it has a person index or not. Verbal PP clauses with non-tensed person indexes are grammatically acceptable but rarely used in speech, and examples can be found in §3.2.2.4.

Another complexity is encountered when analyzing sentences with adverbial predicates that can utilize both verbal and non-verbal strategies, such as in 122, a, b and c are verbal (which fits into the stative verbal clause pattern, with a patientive pronoun or patientive marked NP as the argument, cf. §3.2.2.4), and d is non-verbal. However, the structure in a/b/c is always marked by applicative *n*, which is also used as the second copula in the emphatic nominal clause (§3.3.2), and this shows the borderline characteristics of these structures in the verbal - non-verbal continuum.

(121) **Non-verbal**

- a. *ngang o mən=do dova Tulil.*
 1SG TOP FROM=here at.place.of PN
 ‘I’m from here at the place of the Tulil people.’ [DV-HP-002]
- b. *nging o mə=nə-bi?*
 2SG TOP FROM=LOC-where
 ‘Where do you come from?/where did you come from?’ [DV-HP-085]

(122) **Verbal (stative-intransitive)**

- a. *nging o mə=nə-bi nə nging?*
 2SG TOP FROM=LOC-where APPL 2SG
 ‘Where do you come from?’ [LN-SL-015]

- b. *sister o i-p~par mǝ = nǝ-p-bo o nǝ-mumǝ*
 sister TOP 3SG.F-IPFV~finish FROM = LOC-EP-UP TOP LOC-DOWN.DIST
ko tǝ = be Vunapope, io mǝ = nǝ-p-bo n = e.
 only TO = at PN then FROM = LOC-EP-UP APPL = 3SG.F.PAT
 ‘Sister finished from up there. and just went down to Vunapope, so
 she has been up there.’ [SV-N1-174]
- c. *iap o mǝ = nǝ-bǝt ko n = a to*
 3SG.M TOP FROM = LOC-PROXH only APPL = 3SG.M.PAT SR
vǝ-taup mat = a kǝbitǝ io v-ǝgarǝ ba
 3SG.M.PST-grab get = PAT rope then 3SG.M.PST-cover in
umi.
 3SG.M.POSS.AL.ey
 ‘He (the possum) was just there, because he held onto the ropes and
 covered his face.’ [CM-B1-015]
- d. *mǝ = nǝ-bo n = a ilǝm = a.*
 FROM = LOC-UP APPL = PAT flood = SG.CLF:MASC
 ‘The flood came from up there.’ [JK-PP-097]

The structure shown in 122a is different from the emphatic nominal clause which has a post-posed subject repeating the pre-posed subject, sometimes having an *n* as the copula (COP2) (cf. §3.3.2), because the pronoun following *n* (for instance, *= e* 3SG.F.PAT in 122b) is the patientive pronominal form (compare postposed *iap* in 106c and *= a* 3SG.M.PAT in 122c, which indicates that the clause is verbal.

Thus *= a* can either be analyzed as a patientive argument (when the adverbial forms a VC with the applicative *n*, and *vǝnuǝ* as a topic without topicalizer *o*), or an adjunct led by the instrumental *n*, with a pragmatic function of emphasizing the argument. The latter analysis is abandoned due to the existence of cases like 122d, where the sole argument is introduced only after the predicate.

3.4 Functions of verbal and non-verbal clauses

In Tulil, the event predicates are exclusively verbal, thus will not be discussed in further details. This section will focus on functions of clauses related to class membership, property, state, location, possession, as well as non-predicational functions such as existential and identificational.

3.4.1 Class membership and property

Class membership and property predicates in Tulil are encoded by nominal clauses. Type I nominal clause (existential) with adjectives as modifiers inside the predicates can have attributive readings:

- (123) a. *lət n = udu nə-mumə də latu, me [vənu*
 arrive APPL 1PL LOC-DOWN.DIST on garden, and sun
laik = a]_{PRED}.
 big = SG.CLF:MASC
 ‘We arrived down there at the garden, and the sun was big (lit: there was a big sun). [CM-B2-055]
- b. *[vənu = a]_{TOPIC} o [laik = a]_{PRED}.*
 sun = SG.CLF:MASC TOP big = SG.CLF:MASC
 ‘The sun is big/is a big one. [E]

The elicited type II nominal clause in (123b) shows another way to express the attributive reading ‘the sun was big’. The attributive interpretation of the existential clause can be seen clearly from example (124), where the noun root is more abstract.

- (124) *[bərbər laik = e]_{PRED} to imalavau laik nə-bo.*
 cold big = SG.CLF:FEM SR fog big LOC-UP
 ‘It was very cold (lit: there was big coldness) because the fog was big up there.’ [CM-B2-074]

It is clearly shown that the phrase *bərbər laike* ‘big coldness’ is an NP, given that class/number marking is marked at the end of the NP (cf. §5). A similar example is shown by a noun of property used in a possessive NP:

- (125) *tivən = e e-vi ve təməng laik = a.*
 rock = SG.CLF:FEM 3SG.M-PROXS 3SG.F.POSS.AL heavy big = SG.CLF:MASC
 ‘This rock is very heavy (lit. this rock’s heaviness).’ [E]

A type II nominal clause is the most common way to express class membership and property. When the subject is human, type III clauses can also fulfil these functions, given its restrictive use for human subjects (cf. §3.3.2). When a property word is involved in the predicative NP, both types of clauses can express property meaning. The structural difference between the two clauses is discussed in §3.3.2. The functional difference is that type II nominal clauses tend to sit closer to the

‘class membership’ end and type III nominal clauses to the ‘property’ end of the continuum.

There are two types of closely-related functions expressed by type III clauses, related to its tendency to express property: firstly, it assigns a single property to the entity (usually involves an adjective in the NP, such as *ləm* ‘young’ in 126), rather than categorizing the entity. The adjective *ləm* ‘young’ here designates a specific property rather than defines a category ‘young man’, because it can be modified by degree modifiers such as *moli* ‘really’ in this case.

- (126) a. [*lok ləm = ip*]_{PREP} *ngun me ta-vi* *o bə =*
 man young = DL.CLF:MASC 1DL and 3PL-PROXS TOP IAM =
molimoli laik = ta
 people big = PL.CLF:HUM
 ‘We were two young men but they were already adults (lit. big people). [AL-DA-107]
- b. *lok ləm moli = (i)p*
 man young really = DL.CLF:MASC
 ‘two really young men’ [E]

Secondly, when expressing class membership, it designates the prototypical set of properties related to the members of a certain class (‘feature bundles’ as in Wierzbicka 1986, e.g. possessing property of ‘devil’ or ‘Tulil people’ in 127) and emphasizes its relevance to the contexts. For instance, the difference between 128a and 128b is that the latter tend to (but not necessarily) assert and emphasize that “I” possess the property of prototypical ‘males’ such as braveness in the context of 128b, while type II nominal clauses usually do not have this interpretation. In the context of example 128c, the speaker was emphasizing the fact that because ‘I’ was a boy (possess the sexuality of ‘male’) in contrast with being a girl, so ‘my’ mum wanted to kill ‘me’ when ‘I’ was born.

- (127) a. [*ngang*]_{TOPIC} *o voin = a* *ngang.*
 1SG TOP devil = SG.CLF:MASC 1SG
 ‘I am a devil man.’ [TV-DM-014]
- b. *nging o Tulil = a* *nging.*
 2SG TOP PN = SG.CLF:MASC 2SG
 ‘You are Tulil/a Tulil man.’ [WM-LP-049]

- (128) a. *ngang o lok = a.*
 1SG TOP man = SG.CLF:MASC
 ‘I am a man.’ [E]
- b. *v-əngar at-e, doto [lok moli = a*
 3SG.M.PST-talk 3SG.M.NPST-QUOT if man real = SG.CLF:MASC
]_{PRED} *nging, o ngi-n = a.*
 2SG TOP 2SG.NPST-COM = 3SG.M
 ‘He said, if you are a real man [if you are brave], you [walk] with
 him [the devil]. [KV-SO-013]
- c. *doto nane i-mat ngang o dame i-pən mə*
 when mom 3SG.F.PST-get 1SG TOP want.fail 3SG.F.PST-hit APPL
ngang, tove ngang o lok = a ngang
 1SG, because 1SG TOP man = SG.CLF:MASC 1SG
 ‘When mom gave birth to me she wanted to kill me [but failed],
 because I was a boy (but not a girl).’ [LR-TH-004]

This certain property of the class membership is usually emphasized, due to a specific reason that is indicated in other parts of the sentence. In the same sense of what has been shown for the contrast in 128, 129 shows a case where an emphasis of ‘family relationship’ is crucial for ‘you’ not ‘to be killed’.

- (129) a. *To-Kalulu o məte nga makut = a.*
 ART.M-PN TOP like 1SG.POSS.AL brother.in.law = SG.CLF:MASC
 ‘Kalulu is like my brother in law.’ [JK-GT-004]
- b. *nging o aka ngə-mət nging, məie nging o nga*
 2SG TOP IRR 1SG.PST-eat 2SG but 2SG TOP 1SG.POSS.AL
makut = a nging.
 brother.in.law 2SG
 ‘I would have killed you, but you are my brother in law.’
 [PP-RA-007]

This difference can be seen in a more extreme example, with a predicative NP that assigns the noun root *lok* ‘man’ into the feminine nominal class. The first sentence is strange because it is not culturally salient to acknowledge a category of ‘manly woman’. The same predicate is acceptable in the structure of 130b, where the use of the predicate is to assign the prototypical man property to a female:

- (130) a. ? *nging o lok=e.*
 2SG TOP man = SG.CLF:FEM
- b. *nging o lok=e nging.*
 2SG TOP man = SG.CLF:FEM 2SG
 ‘You are a man-like girl.’ [E]

Another example is shown in 131, where the predication does not assign the subject into the class of ‘white men’ in the sense that he can actually belong to the ethnic group, which would be contradicting reality, but emphasizing the stereotypical properties of this group perceived from the local people’s view, such as ‘wearing trousers instead of laplap’, or ‘not working (in the gardens)’.

- (131) *məgət o tar=ta tat-e, da iap o*
 today TOP many = PL.CLF:HUM 3PL.NPST-QUOT PURP 3SG.M TOP
bə= kəvər=a iap. da kəvər=a iap
 IAM = white = SG.CLF:MASC 3SG.M. PURP white = SG.CLF:MASC 3SG.M
tove da a-tu~mu a-tarautet kabar=a...
 because PURP 3SG.M.NPST-wear ART-trousers long = SG.CLF:MASC
 ‘Today, many people they think, he [they] wants to be a white man, he
 wants to be a white man because he wants to wear long trousers, he
 doesn’t want to work... ’ [ER-EA-016]

The functional difference between type II and type III nominal classes when denoting properties echos the observation on difference of class predicates and property predicates such as ‘Irishman’ and ‘Irish’ in English, where the former refers to kinds by denoting a complex of properties, while the latter denotes one specific feature (ethnicity) (Wierzbicka, 1986; Frawley, 1992).

3.4.2 State

Stative-intransitive clauses and impersonal clauses are mostly used to encode states. Adjectives can be used in both stative-intransitive clauses and nominal clauses denoting properties. A difference in time stability can be seen from the following examples, where in 132a the color word *put* ‘red’ is an intrinsic characteristic of the subject referent, while in 132b it is a temporary state that is subject to change:

- (132) a. *e-vi a-vuimilət o ve vətə o put.*
 3SG.F-PROXH ART-pitpit.sp. TOP 3SG.F.POSS.AL skin TOP red
 ‘This *avuimilət* (pitpit.sp.) its skin is red.’ [BM-PP-009]

- b. *və-muek n =a ioi nə-bət me bə= put*
 3SG.M.PST-vomit APPL =PAT water LOC-PROXH and IAM= red
 =a *um=ip.*
 =PAT 3SG.M.POSS.AL.eye =DL.CLF:MASC
 ‘He was vomiting water there, and his eyes were/became red.’
 [AK-FH-019]

However, the difference between the two clauses is not a sharp one, but a tendency, given that cases when stative-intransitive predicates encode more stable property can sometimes be found. For instance in 133, 133a shows that the adjective *mədən* ‘straight; smooth’ can be used to modify nouns in an NP, and in 133b, it is used as a state-intransitive predicate, and denoting a property that is not subject to change. Likewise, the adjective *mərek* ‘good’ is being used in two different constructions (134).

- (133) a. *nang mədən = bənəm.*
 tree straight = SG.CLF:SLE
 ‘a straight stick’ [E]
- b. *mədən =a ibən =e.*
 straight =PAT land = SG.CLF:FEM
 ‘The land is flat.’ [KM-TH-047]
- (134) a. *a-tiriv =a a-bo o mərek =a,*
 ART-kulau = SG.CLF:MASC 3SG.M-UP TOP good = SG.CLF:MASC
ngi-da.
 2SG.PST-eat
 ‘That kulau is a good one, you can have it.’ [AL-RM-171]
- b. *du-mu ko be imi, da ar mərek*
 1PL.PST-put only at 3SG.F.POSS.AL.eye PURP still good
 =a *imi =a, to a-vi to*
 =PAT 3SG.F.POSS.AL.eye = SG.CLF:MASC SR 3SG.M-PROXS SR
idə-m~mang.
 3N.PST-IPFV~burn
 ‘We just put (the herbs) on her eyes, for her eye to become well, the one that was burnt.’ [SV-BE-057]

On the other hand, there are nouns that can indicate states, and be used as predicates in a nominal clause. In this case, the sentence structure differs from the

structure of a prototypical nominal clause so that the two NPs are simply related as a topic-comment construction. For instance, in 135a, the literal translation would look like ‘You, anger?’ Unlike adjectives, the noun *kədikən=e* ‘anger’ is a noun with its intrinsic nominal class (feminine) that is not affected by the class of the referent (135b and 135c show the noun being used as head of the NP arguments).

- (135) a. *nging o bə = kədikən = e?*
 2SG TOP IAM = anger = SG.CLF:FEM
 ‘Are you angry?’ [LR-MK-026]
- b. *ba maok = a a-bət o kədikən = e*
 in time = SG.CLF:MASC 3SG.M-PROXH TOP anger = SG.CLF:FEM
i-kər tang mədərəp n = a molimoli mukəm,
 3SG.F.PST-arise REFL/RECP middle APPL = PAT people two
kəvər = a a-n = a vər n = a.
 white = SG.CLF:MASC 3SG.M-COM = PAT black = SG.CLF:MASC
 ‘At that time disagreement occurs between two people, a white man
 and a black man.’ [AL-IP-035]
- c. *b = idə-n~nən = e təpm = a ve*
 IAM = 3N.PST-IPFV~shiver = 3SG.F.PAT with = PAT 3SG.F.POSS.AL
kədikən = e.
 anger = SG.CLF:FEM
 ‘She was trembling with her anger.’ [SV-ES-020]

3.4.3 Location

Predicates involving PPs and demonstratives are usually used to encode locational predicates. The locational strategy can be verbal (locative clause) and non-verbal. In both cases, demonstrative predicates are most commonly used, while PP predicates are quite rare. Within demonstrative predicates, the verbal strategy is more natural than the non-verbal strategy. A difference in function is that the verbal strategy usually locates an entity (136a), while the non-verbal clause indicate the location of a place (136b).

- (136) a. *to-Petro a-mumə konəng.*
 ART.M-PN 3SG.M-DOWN.DIST only
 ‘Petro is just down there.’ [JK-P1-202]

- b. *Takait o nə-mumə ba Epelik me Takait do, Malira*
 PN TOP LOC-DOWN.DIST in PN and PN here PN
nə-mumə me Malira do.
 LOC-DOWN.DIST and PN here
 ‘Takait down there at Epelik and Takait here, Malira down there and
 Malira here (Same place names).’ [KM-TH-050]

Also, locative clauses are quite often used to denote the event of movement / direction.

3.4.4 Possession

Predicative possession can be classified into two types depending on the topicality of the possessor and possessed NPs: indefinite predicative possession (when the possessor NP is the topic, with a meaning such as ‘someone has something’) and definite predicative possession (when the possessed NP is the topic, with a meaning such as ‘something belongs to someone’) (Stassen, 2009:28).

In Tulil, indefinite predicative possession is encoded by verbal or non-verbal strategies in two types of construction:

1) verbal (locative clause). The subject NP is an adnominal possessive construction, with the possessive pronoun and the non-specific pronoun *go* ‘some’. The predicate is a demonstrative with person index, indicating existence.

- (137) *bə = du go vətə laik = a a-bət,*
 IAM = 1PL.POSS.AL NSPEC meat big = SG.CLF:MASC 3SG.M-PROXH
go kəgor laik = a a-bət.
 NSPEC eel big = SG.CLF:MASC 3SG.M-PROXH
 ‘We will have big meat, a big eel.’ [AK-FH-012]

2) Non-verbal: type I nominal clause, using an NP of adnominal possessive construction as an existential predicate.

- (138) *da ta go venang mə = nə-bət.*
 PURP 3PL.POSS.AL NSPEC something FROM = LOC-PROXH
 ‘They want something from there.’ [JK-PP-065]

3) a topic-comment construction with the possessor as the topic and the possessee as the comment, usually accompanied by locational adjuncts.

- (139) *lok = a o varvar = a tove bə =*
 man = SG.CLF:MASC TOP happy = 3SG.M.PAT because IAM =
v = uil = a.
 3SG.M.POSS.AL = son/daughter = SG.CLF:MASC
 ‘The man is happy because he has a son.’ [WM-ML-023]

- (140) *iap o tukər = e be və = katə.*
 3SG.M TOP sore = SG.CLF:FEM at 3SG.M.POSS.INAL = leg
 ‘He has a sore on his legs.’ [AL-RM-037]

Negation for all three types of constructions can be found, though the first one is rare, with the third one being the most common one.

- (141) *ta-vi Mərubət, ta-bət o kori go mængədə.*
 3PL-PROXS PN 3PL-PROXH TOP NEG NSPEC home
 ‘They Bainings they do not have homes.’ [KM-BS-050]

- (142) a. *bə = kori du go ioi.*
 IAM = NEG 1PL.POSS.AL NSPEC water
 ‘We didn’t have water.’ [AL-RM-128]

- b. *ngang o kori nga go kəvop.*
 1SG TOP NEG 1SG.POSS.AL NSPEC dog
 ‘I do not have any dogs.’ [DV-HP-007]

In Tulil, definite predicative possession is realized by the locative clause (verbal) with the preposition *to* ‘belong to’.

- (143) *inək u-vi o i-to ngən.*
 money 3N-PROXS TOP 3N-of 2PL
 ‘This money belongs to you.’ [PP-PH-034]

Non-verbal strategies can encode definite predicative possession as well, when the topic NP is the possessed NP:

(144) **Type II nominal clause**

- a. *bə = [iap va var = a]*_{PRED.}
 IAM = 3SG.M 3SG.M.POSS.AL friend = SG.CLF:MASC
 ‘He is/becomes his friend (lit: his friend).’ [AL-DA-064]
- b. *Atven o nga makut = a.*
 PN TOP 1SG.POSS.AL brother.in.law = SG.CLF:MASC
 ‘Atven is my brother-in-law.’ [JK-PP-062]

(145) **Type III nominal clause**

- nging o bə = ngang nga var = e nging.*
 2SG TOP IAM = 1SG 1SG.POSS.AL friend = SG.CLF:FEM 2SG
 ‘You will become my friend.’ [LN-SL-011]

(146) **Type IV nominal clause**

- a. *nə-bət o ngang nga kəngəl = a*
 LOC-PROXH TOP 1SG 1SG.POSS.AL headdress = SG.CLF:MASC
a-bət.
 3SG.M-PROXH
 ‘That one is my headdress.’ [AL-HD-071]
- b. *va bərivu = a a-vi.*
 3SG.M.POSS.AL wind = SG.CLF:MASC 3SG.M-PROXS
 ‘This is his (the devil’s) wind (lit: his wind is this).’ [TV-DM-011]

3.4.5 Other functions of non-verbal clauses

Non-verbal clauses can encode other functions such as existential and identificational. Most of these functions are expressed by various types of nominal clauses.

3.4.5.1 Existential

Type I nominal clause consisting of a bare NP is usually existential, stating existence of something. The predicate can be a core NP, or pronominal, such as a pronominal demonstrative:

- (147) *ar bəvon kup* [*a-moli Mərubət=e*]_{PREP} *to*
 still before thorough ART-person Baining = SG.CLF:FEM SR
ve itən=e e-Namugi.
 3SG.F.POSS.AL name = SG.CLF:FEM ART.F-PN
 ‘Long time ago there was a Baining woman whose name is Namugi.’
 [LG-VI-003]

Another way of expressing existential meaning is through locative clauses (verbal), when the subject NP is interpreted as indefinite. The clauses shown have alternative readings as locational, when the subjects NP have definite interpretation (e.g. ‘That man is around here’ in 148b). This type of existential expression differs from the nominal type in that it usually encode locational information.

- (148) a. *a-kar a-bət!*
 ART-car 3SG.M-PROXH
 ‘There is a car!’ [PO]
- b. *məte kotkot=ip var i-nə~nakun me məte*
 like crow = DL.CLF:MASC also 3DL.M.PST-IPFV~cry and like
viuv=a, io i-tən kup io b=
 bird.sp. = SG.CLF:MASC then 3SG.F-think all then IAM =
i-tən et-e, do məte molimoli=a
 3SG.F.PST-think 3SG.F.PST-QUOT here like people = SG.CLF:MASC
a-vi kup.
 3SG.M-PROXS all
 ‘Like two crows were crying and *viuva* bird then she was thinking,
 there is someone in the bush.’ [JK-P1-008]

3.4.5.2 Identificational

Identificational meaning differ from predicational meaning in that the former intends to provide exhaustive and holistic information about the subject, while the latter modifies the content an already existing mental file (Stassen, 1997:103-104).

- (149) *ngang konəng Levator.*
 1SG only PN
 ‘I am just Levator (name of monster).’ [AL-L1-024]

3.5 Adjuncts

The term ‘adjunct’ is used here to cover modifiers in clause structure that are loosely attached to the clause, in contrast with ‘complement’, which is considered to be obligatory in a clause structure. Adjuncts are distinguished mainly on a semantic basis. They include semantic categories as spatial-temporal, manner purpose, reason, condition.

The common structures used as adjuncts are PPs, adverbials including adverbs, adverbial demonstratives, and adverbial clauses. Adjuncts tend to occur towards the end of the clause, or in the topic position, and it is possible to stack multiple adjuncts. Manner adverbs differ from other adjuncts in that they directly follows the verb inside a verb complex.

3.5.1 Adverbs

When adverbs are used as adjuncts, they usually express temporal, spatial and manner informations.

(150) Temporal adverb

ta-vi o ta-təup katum mægət.
3PL-PROXS TOP 3PL.NPST-die all today

‘These people, all of them are dead today (now).’ [JN-KL-039]

(151) Spatial adverb

və-tərut n = a nə-p~mə təkera.
3SG.M.PST-hide APPL = 3SG.M.PAT LOC-EP~DOWN aside

‘He hid it (the head) down there aside (the water).’ [TV-CC-014]

(152) Spatio-temporal adverbs

a. *a-pə~ve ror = a do be*
3SG.M.NPST-IPFV~tie headdress = SG.CLF:MASC here on

və = lat = a.
3SG.M.POSS.AL = head = SG.CLF:MASC

‘He ties the headdress here at his head.’ [AL-HD-060]

b. *do ava nga-nume moli me i-tən vəkai.*
now again 1SG.NPST-tell again and 2PL.NPST-remember firmly

‘Now again I will teach again, and you remember firmly.’

[AL-DI-001]

In the above example, *do* ‘here’ can express either spatial meaning ‘here’, or temporal meaning ‘now’³³. Depends on the context, the distinction can be either clear or ambiguous. Similar words also exist in other categories, such as demonstratives *nəbət* ‘there, that time’.

Manner adverbs modify verbs and directly follow a verb inside a verb complex, before the post-verbal arguments. Also, the valency of the verb complex is decreased when a manner adverb is present, and an applicative particle *n(ə)* needs to precede the argument.

(153) **Manner adverbs**

i-raot ***pikət*** *ko* *n* = *e* *mən = ba*
 3SG.F.PST-pull strong only APPL = 3SG.F.PAT FROM = in
məlang = a *və =* *nok.*
 lizard = SG.CLF:MASC 3SG.M.POSS.INAL = hand
 ‘She dragged her strongly from lizard’s hand.’ [LN-SL-038]

3.5.2 Prepositional phrases

When indicating location, PPs are quite often accompanied by demonstratives:

(154) **Preposition with spatial NP**

tə-p~pi *me* *tə-re* *mətmət* *təkə = nə-mumə*
 3PL.PST-IPFV~go and 3PL.PST-carry food to = LOC-DOWN.DIST
təkər-m = *a* ***ioi = voi***
 beside-APPL = PAT water = SG.CLF:FLAT
 ‘They went and they carried food down next to the river.’ [JN-KL-021]

PPs can also express temporal and other meanings:

(155) **Preposition with temporal Np**

doto *lət* *n* = *a* ***be vətī = von*** ***von-bət***
 when arrive APPL = 3SG.M.PAT at day = SG.CLF:DIM SG.CLF:DIM-PROXH
nə-mumə...
 LOC-DOWN.DIST
 ‘When he arrived at that day down there...’ [AL-IP-008]

33. Meaning of *do* is deictic, pertaining to the spatial/temporal features of the context

(156) **Preposition with NP indicating purpose**

ngi-te *vari ngang da li* *u-bət.*
 2SG.NPST-scrape help 1SG for taro 3N-PROXH

‘You help me scrape those taros.’

[LR-MK-009]

3.5.3 Adverbial demonstratives

Both locational adverbial demonstratives and manner adverbial demonstratives can be used as adjuncts of a clause. The former can be used in indicating spatial relations, and the latter indicating manner.

(157) *io* *bə=* *ngunu-mu* *idə nə-mu* *ba ro=vənəm*
 then IAM= 1DL.PST-put 3N LOC-INSIDE in bamboo=SG.CLF:SLE

‘Then the two of us put them into the bamboo.’

[AL-RM-050]

The use of some adverbial demonstratives can also be extended to temporal relations.

(158) *bə=* *və-ngəp* *ar* *nə-p~mə*
 IAM= 3SG.M.PST-die still LOC-EP~DOWN

‘He was already dead long time ago.’

[JK-TS-087]

(159) **Manner demonstratives**

və-təvat *n* = *e* *nə-mu* *ba vərαι=a*
 3SG.M.PST-drop APPL = 3SG.F.PAT LOC-INSIDE in pit=SG.CLF:MASC

nandi.

like.this

‘He threw her (torch) into the pit like this.’

[AL-TC-034]

3.5.4 Complex forms of adjuncts: directional clitics

Two directional clitics can procliticized to most of the adjunct constituents and form complex forms, indicating the source (*mən* ‘from’) and goal (*tə/təkə* ‘to’) of a change of location/situation. The form *təkə* is used with deictic words such as *do* ‘here, now’ and demonstratives (162 shows possible combinations and forms). Adverbs can be classified into demonstrative-like adverbs and PP-like adverbs: the former takes the allomorph *təkə=* of the directional clitic ‘to’, and the latter takes *tə=* as PPs (certain words such as *təkərə* ‘beside’ and *təbətəm* ‘afternoon’ do not

take directional clitics). The following example shows the simple preposition *be* ‘at’ combining with both of the directional clitics:

- (160) *idə-m~mang* *təvi* *mə(n) = nə-m~mə,* *nə-m~bo,*
 3N.PST-IPFV~burn along FROM=LOC-CON~DOWN LOC-CON~UP
nə-m~bo, *mən = be* *Tropicana* *tə = be* *Central.Mart,* *tə = be* *Ling’s,*
 LOC-CON~UP FROM = at PN TO = at PN TO = at PN
io *tə = be* *Big.Rooster.*
 then TO = at PN
 ‘It was burning along from down there, up and up, from Tropicana to Central Mart, to Ling’s, to Big Rooster (all shop names).’ [GV-TF-014]

(161) **directional clitics with temporal adverbs**

- ngi-nət* *o* *dəp* *nging* *məte* *məgət* *ar* *tə = bərui* *me* *dəp*
 2SG.NPST-eat TOP full 2SG like today still TO = tomorrow and full
nging.
 2SG
 ‘You eat, you are full like today, still until tomorrow you are full.’
 [WM-LB-025]

- | | | | | | |
|-------|---------|-----------------------|---------------|--------------------|----------------------|
| (162) | | <i>ROOT</i> | <i>LOC</i> | ‘from’ | ‘to’ |
| | PREP | <i>be</i> ‘at’ | | <i>mən = be</i> | <i>tə = be</i> |
| | ADV | <i>məgət</i> ‘today’ | | <i>mən = məgət</i> | <i>tə = məgət</i> |
| | | <i>do</i> ‘here; now’ | | <i>mən = do</i> | <i>təkə = do</i> |
| | LOC DEM | <i>bo</i> ‘UP’ | <i>nə-bo</i> | <i>mə = nə-bo</i> | <i>təkə = nə-bo</i> |
| | | <i>bət</i> ‘PROXH’ | <i>nə-bət</i> | <i>mə = nə-bət</i> | <i>təkə = nə-bət</i> |

Prepositions differs in their ability to combine with the directional clitics (more examples will be given in chapter 6).

3.6 Question formation

Two functional types of question can be distinguished: constituent questions and polar questions. The formation of questions requires the placement of an interrogative proforms in the position of the requested information, and/or a change of the intonation pattern (acoustic analyses can be found in §2.4.2.2).

3.6.1 Polar questions

Polar questions, sometimes referred to in the literature as ‘yes-no questions’, can be formed from basic verbal and non-verbal clauses by changing the intonation. The distinguishing criterion is a pitch change located on the last two syllables, with penultimate syllable rise in pitch, and a slight rise in pitch and elongation of the last syllable (see §2.4.2.2).

- (163) *ngə-tir kup ngan-e, “me ta-ti~vi ko*
 1SG.PST-ask thorough 1PL.NPST-QUOT, ‘and 1PL.NPST-IPFV~walk only
təkə = nə-bo?’
 TO = LOC-UP’

‘[They told us everything about the mountain, ...we looked up to the mountain like that, the name of the mountain is Baram.] Then I asked (about everything) I said, “and people just go up there?”’

[CM-B2-035]

The positive answer of a polar question is formed by either repeating the sentence in an affirmative intonation, or the exclamation ‘mm’, or simply inhaling with a gesture of lifting one’s head and raising the eyebrows.

The negative answer is usually the negator *kori*. In the case of answering a question of asking if one has anything, the negative answer is either *kori go* and/or a gesture of twisting one’s hand and shrugging.

3.6.2 Constituent questions

Constituent questions use one of the interrogative proforms as listed in Table 3.6. All interrogative proforms can be used in situ to replace the requested information in the corresponding declarative sentence, as in 164. Certain interrogative proforms can also be used at the beginning of the sentence (165).

- (164) *doto bə = vul = a io ngi-n~da gəri?*
 when IAM = night = SG.CLF:MASC then 2SG.PST-IPFV~eat what
 ‘When night comes what do you eat?’ [ER-EA-017]

- (165) *me gəri u-bət to ngi-nə~mət?*
 me what 3N-PROXH SR 2SG.PST-IPFV~eat
 ‘and what is this that you are eating?’ [SV-ES-030]

The interrogative proform *gəri* ‘what’ is a noun that does not inflect for nominal class, and belongs to the 3rd neuter class, as shown by the examples above. *go* ‘who’

Table 3.6: Tulil interrogative proforms

Interrogatives	Gloss	Word class
<i>gəri</i>	‘what’	noun
<i>go</i>	‘who’	noun
<i>gu</i>	‘which’	specificity particle
<i>bi</i>	‘where’	demonstrative (nominal/adverbial)
<i>gumevun</i>	‘how many’	numeral
<i>bagapon</i>	‘when’	adverb
<i>nagapon</i>	‘how’	adverb
<i>məkələ</i>	‘do what’	verb

is also a noun³⁴. It inflects for three genders (MASC, FEM, unspecified gender) and three numbers (SG, DL, PL), as shown in Table 3.7.

Table 3.7: Interrogative proform *go*

Class	Singular	Dual	Plural
Masculine	<i>guri-a</i>	<i>gur-ip</i>	<i>guri-ta</i>
Feminine	<i>guri-e</i>	<i>gur-vitəm</i>	
Unspecified gender	<i>go</i>	(<i>gur-ip</i>)	

(166) a. *go idə-məngar tuk =a e-bət da et-i~miau?*
 who 3N.PST-say give = PAT 3SG.F-PROXH PURP 3SG.F.NPST-IPFV~fly
 ‘Who told her to fly?’ [ER-TD-027]

b. *ngə-tir ta ngan-e, ‘guri-a və-bərət = ip*
 1SG.PST-ask 3PL 1SG-QUOT who-SG.M 3SG.M.PST-meet = 3DL.M
me və-taup mat = ip da ip-vi?
 and 3SG.M.PST-grab get = 3DL.M PURP 3DL.M-PROXS
 ‘I asked them, ’who met them and got them here?’ [JK-TS-082]

(167) *guri-a a-vi to tə-tak bem =a nə-vimə?*
 who-SG.M 3SG.M SR 3PL.PST-call at = 3SG.M.PAT LOC-DOWN.PROX
 ‘who is this man that they called down there?’ [JK-P1-040]

34. It is the homonym of *go* ‘some’.

Interrogative *gu* ‘which’ bears the same syntactic function as the non-specific particle *go*.

- (168) *gu molimoli = ta mən = ba tipur?*
 which people = PL.CLF:HUM FROM = in bush
 ‘which (kind of) people from the bush?’ [AL-GN-010]

The interrogative demonstrative root *bi* ‘where’ takes the same set of person index as other demonstratives (cf. §4.7.6, §10.1.4), asking for location of things/people:

- (169) a. *io ava i-tir moli, et-e, ‘māie*
 then again 3SG.F.PST-ask again 3SG.F.NPST-QUOT but
ngunu uil = a b = a-bi?’
 1DL.POSS.AL child = SG.CLF:MASC IAM = 3SG.M-where
 ‘[She asked, ‘where’s our son’, he did not reply.] she asked again,
 she said, “but where’s our son?”’ [SV-ES-029]
- b. *nging o ngi-bi?*
 2SG TOP 2SG-where
 ‘Where are you? (on the phone)’ [PO]

bi ‘where’ can also be used adverbially when taking the locative prefix *nə-*, when the questioned information is an adjunct:

- (170) *nging o ngi-ne~mengap nə-bi?*
 2SG TOP 2SG.PST-IPFV~sleep LOC-where
 ‘Where do you sleep?’ [LN-SL-008]

The interrogative numeral *gumevun* ‘how many’ can be used to ask about quantity (including price):

- (171) *da də-təm tərvi ba vəti gumevun = bənik to da*
 PURP 1PL.NPST-know fail in day how.many = PL.CLF:DIM SR PURP
də-vi mat = pənik.’
 1PL.NPST-go get = PL.CLF:DIM
 ‘We wanted to know (but failed) exactly how many days it would take
 us to get there.’ [CM-B1-003]

The interrogative adverb *bagapon* ‘when’ is used to ask for a time point.

- (172) a. *nging o ngi-ngəp bagapon?*
 2SG TOP 2SG.NPST-die when
 ‘When will you die?’ [AL-TC-031]
- b. *bagapon da ngi-vəde?*
 when PURP 2SG-come
 ‘When will you come?’ [PO]

The interrogative adverb *nagapon* ‘how’ is used to ask for manner. It takes the syntactic position of manner adverbs. When *nagapon* is used on its own as a question, it means ‘what are we going to do about it (now)?’

- (173) *ngang o bə = nga-liu nə-m~bo nagapon?*
 1SG TOP IAM = 1SG.NPST-back LOC-CON~UP how
 ‘How will I return up there?’ [AL-TC-015]

The interrogative verb *məkələ* ‘do what’ has the same inflection pattern as an /m/-initial word (class IV.i, cf. §9.1.1)

- (174) a. *nging o ngi-məkələ? to ngi-təvək kup be ibən.*
 2SG TOP 2SG.PST-do SR 2SG.PST-struggle thorough at ground
 ‘What did you do? that you struggled on the ground.’ [MP-GW-017]
- b. *a-tə~məkələ nə-bo?*
 3SG.M.NPST-IPFV~do LOC-UP
 ‘What is he doing up there?’ [JK-P1-038]

məkələ is an intransitive verb. For transitive use it needs to take an applicative *n(ə)*:

- (175) *doto go təreuk i-pən-m = a ba doto bə =*
 when NSPEC thing 3N.PST-hit-APPL = 3SG.M.PAT in when IAM =
a-tirgup o bə = d-əkələ n = a?
 3SG.M.NPST-lost TOP IAM = 1PL.NPST-do APPL = 3SG.M.PAT
 ‘If something killed him or if he lost in the bush, what should we do about him?’ [DV-HP-082]

Constituent questions generally can be answered by providing the requested information with constituents from the corresponding word class:

- (176) a. *at-e, Tulil o ta-bi?*
 3SG.M-QUOT PN TOP 3PL-where
 ‘He said, where are the Tulils?’ [LR-TH-063]
- b. *ta-te ta o ta-mə ba lokəm laik.*
 3PL-QUOT 3PL TOP 3PL-DOWN in valley big
 ‘They said they were down there in the big valley.’ [LR-TH-064]

3.7 Negation

There is a negator *kori* in Tulil, which can be used for clausal negation, usually verbal clauses. Another negative strategy consists of *kori* NEG and the general non-specific pronoun *go* ‘some’, used to negate non-verbal clauses/sub-clausal constituents. *kori* can also be used with other non-specific pronouns such as *gəta* ‘someone.SG.CLF:MASC’, *gətəm* ‘someone.PL.CLF:HUM’ and *gəvət* ‘somewhere.SG.CLF:SEG’, meaning ‘no one (SG)’, ‘no one (PL)’ and ‘nowhere’.

A general rule is that *kori* is mostly used for negation of verbal clause/subclausal constituents, and *kori go* for negation of non-verbal clause/subclausal constituents, though atypical cases exist in categorical boundaries. In this section, both clausal and subclausal negation will be discussed.

The short form *ko* is also used in fast speech³⁵.

Table 3.8: Negator types

		<i>kori</i>	<i>kori go</i>
Verbal	trans.	Y	N
	active intr.	Y	N
	stative intr.	Y	Y
	impers. trans.	Y	Y
Non-verbal	verbal dem.	Y	N
	NP	N	Y
	adj.	Y	Y
	PP	Y	Y

3.7.1 Negation with *kori* only

Prototypical verbal clauses such as (di-)transitive and active intransitive clauses can be negated by inserting *kori* before the verb.

35. *ko* NEG has a homophone *ko* ‘only’, which is a short form for *konəŋg* ‘only’

- (177) a. *lok = pənik o kori tə-t~təm = a pern*
 man = PL.CLF:DIM TOP NEG 3PL.PST-IPFV~know = PAT climb
= a ləmat.
 = PAT coconut
 ‘Young men, they didn’t know (how to) climb for coconut.’
 [AL-RM-158]
- b. *bə = kori də-p~pi tə = be Rabaul.*
 IAM = NEG 1PL.NPST-IPFV~go TO = at PN
 ‘We are not going to Rabaul.’ [PO]

Verbal demonstratives are also negated by *kori*.

- (178) *nga makut = a v-əngar at-e,*
 1SG.POSS.AL brother.in.law = SG.CLF:MASC 3SG.M.PST-say 3SG.M-QUOT
 ‘*kori ngi-mumə, nging o ngi-toti u-bət o kurek.*
 NEG 2SG-DOWN.DIST 2SG TOP 2SG.PST-see 3N-PROXH TOP bad
 ‘Then, my brother in-law said, you don’t go down there, you saw those
 (dreams) was not good.’ [JK-GT-023]

3.7.2 Negation with *kori go* only

Non-verbal clauses and NPs can be negated by negator *kori* + non-specific pronoun *go*, has a meaning of non-equational (179a) or non-existential (179b).

- (179) a. *tor = e e-bət o kori go tor = e,*
 wood = SG.CLF:FEM 3SG.F-PROXH TOP NEG NSPEC wood = SG.CLF:FEM
tor = e e-bət o vəvat = e.
 wood = SG.CLF:FEM 3SG.F-PROXH TOP monster = SG.CLF:FEM
 ‘That piece of wood is not a piece of wood, that piece of wood is a
 monster.’ [AL-DL-012]
- b. *kori go məngədə nə-bət me kori go kalak, məte*
 NEG NSPEC village LOC-PROXH and NEG NSPEC house like
a-kakau konəng me ləmat.
 ART.M-cocoa only and coconut
 ‘There is no village there and there is no house, like there is only
 cocoa and coconut trees.’ [ER-EA-011]

In a verbal clause, an NP argument is negated by *kori go*.

- (180) *kori go tæreuk idə-t~tərut.*
 NEG NSPEC thing 3N.PST-IPFV~hide
 ‘There was nothing that was hiding (lit: no thing was hiding).’
 [AL-GN-004]

One special case is when a nominalized verb used as an argument is also negated by *kori go*:

- (181) **Nominalized verb**
udu o avar molimoli=ta təpm =a kori go
 1PL TOP also people=PL.CLF:HUM with =PAT NEG NSPEC
məna~mənan =a bokbok.
 NMLZ~listen =PAT talk
 ‘We are people who do not listen [lit. people without listening].’
 [WM-CM-004]

In the negation of non-verbal clauses with a possessive construction as predicate, the possessive pronoun occurs in between *kori* and *go*.

- (182) *kori du go Pater, təbutə ta udu*
 NEG 1PL.POSS.AL NSPEC Father poor 3PL 1PL
 ‘We don’t have any Fathers, poor us.’
 [LR-TH-181]

Most PPs are negated by *kori go* (a special case is *to* ‘belong to’, discussed in the following section).

- (183) **PPs**
kori go ba maok katum konəng.
 NEG NSPEC in space/time all only
 ‘Not in all time (that this can grow)’
 [DV-BL-024]

3.7.3 Negation with either strategy

Clauses/constituents that are atypical cases of verbal/non-verbal distinction can usually use either negation strategy, i.e., they can either be negated by *kori*, or *kori* + non-specific pronoun *go*. The elements belonging to this category include impersonal transitive clause, stative intransitive clause, predicative adjectives, purpose clause (no instance found with negation of negative purpose clause *ti-*) and the prepositions *to* ‘belong to’.

(184) Impersonal transitive clauses

- a. *kori idə-p~pau ngang*
 NEG 3N.PST-IPFV~hungry 1SG
 ‘I was not hungry.’ [PO]
- b. *kori go idə-t~tu udu.*
 NEG NSPEC Ntp-IPFV~fat 1PL
 ‘We were not fat.’ [JK-PP-004]

(185) Stative intransitive clauses

- a. *ngan-e, ‘kori iaor iu.’*
 1SG-QUOT NEG afraid 1DL
 ‘I said, “You (dl.) don’t be afraid.”’ [JK-TS-078]
- b. *kori go iaor ta.*
 NEG NSPEC afraid 3PL
 ‘They are not afraid.’ [AL-IP-045]

(186) Predicative adjectives

- a. *kəguing o tipur idə to i-t~tuk məgəte kori mərek da*
 grass.sp. TOP grass 3N SR 3N.NPST- IPFV~grow like NEG good
go molimoli = a da a-pi.
 PURP NSPEC people = SG.CLF:MASC PURP
 ‘The grass is growing, like it is not good for a person to walk (there).’
 [AL-RM-023]
- b. *ngə-toti nandi ngan-e nə-mumə o bətmə*
 1SG.PST-see like.this 1SG.NPST-QUOT LOC-DOWN.DIST TOP with
ta o mərek, me ngang o bətmə ngang o ngə-t~ton
 3PL TOP good but 1SG TOP with 1SG TOP 1SG.PST-IPFV~look
o kori go mərek.
 TOP NEG NSPEC good
 ‘I saw like this I think, (the life) down there [at Australia], for them
 is good, but for me, I saw it and it was not good.’ [ER-EA-010]

(187) PP led by *to* ‘belong to’)

- a. *kori go a-to ngang*
 NEG NSPEC 3SG.M-of 1SG
 ‘It does not belong to me.’ [SV-N1-121]
- b. *lām u-vi o kori i-to ngun*
 life 3N-PROXS TOP NEG 3N-of 2PL
 ‘This life does not belong to you (dl.).’ [ER-EA-019]

(188) Purpose clause³⁶

- a. *kori da iep i-mət kia be mət-mət u-bət to*
 NEG PURP 3SG.F 3SG.F.PST-eat first at food 3N-PROXH SR
i-tangədə mevə ta.
 3SG.F.PST-cook for 3PL
 ‘She doesn’t eat first from the food she cooked for them.’ [LG-VI-010]
- b. *kori go da a-terən təpm =e ba*
 NEG NSPEC PURP 3SG.M.NPST-escape with =3SG.F or
i-terən.
 3DL.M.NPST-escape
 ‘No man would run away with a woman (before).’ [NK-MA-010]

3.7.4 Negation with *kori* + other non-specific pronouns

kori can be used with other non-specific pronouns such as: *gəta* ‘someone.SG.CLF:MASC’ (can inflect for other nominal class as well), *gətəm* ‘someone.PL.CLF:HUM’ and *gəvət* ‘somewhere.SG.CLF:SEG’, meaning ‘no one (SG)’, ‘no one (PL)’ and ‘nowhere’.

- (189) a. *ar toktok do və-ngəp me kori gət-a*
 still end now 3SG.M.PST-die and NEG NSPEC-SG.M
və-lok tuk =a n =a ...
 3SG.M.PST-divulge give =3SG.M.PAT APPL =PAT
 ‘Still until today he died and no one has told the secret to him that...’ [RR-AD-048]

36. negated by *kori* is more common.

- b. *at-e nə-mu ba Nebaun o ar kori gət-əm?*
 3SG.M-QUOT LOC-DIST in PN TOP still NEG NSPEC-PL.CLF:HUM
 ‘He said inside at Nebaun still no one (is occupying there)?’
 [SV-NB1-035]
- c. *bə= kori go inap da a-terən, tove bə=*
 IAM= NEG NSPEC able PURP 3SG.M.NPST-escape because IAM=
korī gə-vət da a-terən.’
 NEG NSPEC-SG.CLF:SEG PURP 3SG.M.NPST-escape
 ‘Then we wanted to leave, my uncle said, ‘you two, (he saw him) he
 is here, and he was crying, because there’s no place for him to run
 away.’’
 [CM-B1-016]

Chapter 4

Word classes

In this chapter, I attempt to formulate adequate definitions of word classes in Tulil. The criteria for differentiation mostly consist of morphosyntactic characteristics, with some concerns of semantics. There are two open classes - nouns and verbs - to which new items can be added, and several closed classes: adjectives, pronominals, numerals, quantifiers, demonstratives and adverbs. While some classes will be discussed in more detail in other chapters (§6 prepositions, §7 demonstratives, §9 verb morphology), the other word classes will be discussed in more detail in this chapter.

4.1 Introduction

Tulil is a language displaying a certain degree of flexibility in word classes (cf. Rijkhoff & van Lier, 2013). For example in (190), the root *tador* can function as the heads of the NP, verb complex, and modifier of NP or VC head. This flexibility is not uncommon across the lexicon.

(190) a. **Head of NP: ‘power, strength’**

voin = *a* *va* *tador* *o* *bə* *kori*
devil = SG.CLF:MASC 3SG.M.POSS.AL power TOP IAM NEG
i-ta~matme *vəvat*.
3N.NPST-IPFV~work very

‘The devil’s power is not strong (lit: work very much).’

[AL-SO-122]

b. **Head of VP: ‘strive’**

təŋ~təgət = a *ŋgi-tədor* *da* *ŋgi-taro*
 RED~one = SG.CLF:MASC 2SG.NPST-strive PURP 2SG.NPST-hurry.up
da *ŋgi-p~par* *n* = *a* *ŋgi* *pau.*
 PURP 2SG.NPST-IPFV~finish APPL = PAT 2SG.POSS ritual.article
 ‘Each one of you will strive to finish your ritual articles (betelnuts)
 quickly.’ [AL-DA-018]

c. **Modifier of NP head: ‘strong’**

nang = a *a-vi* *o* *nang tədor = a*
 tree = SG.CLF:MASC 3SG.M-PROXS TOP tree strong = SG.CLF:MASC
məkəte aiban.
 like tree.sp.
 ‘This tree is a strong tree (hard wood) such as ‘Aiban’ tree.’
 [KM-BS-015]

d. **Modifier of VP head: ‘strongly’**

do *vənu = a* *a-vi* *o* *v-atər*
 now;here sun = SG.CLF:MASC 3SG.M-PROXS TOP 3SG.M.PST-stand
tədor.
 strong
 ‘Now this sun is strong (lit: stood strongly).’ [AL-RM-028]

It is also common for a borrowed root to take different functions across verbal and nominal domains.

(191) a. *tə-p~poto* *mat ta.*
 3PL.PST-IPFV~photo take 3PL
 ‘They took photos of them.’ [PP-PH-018]

b. *bə =* *tə-mat* = *a* *a-poto.*
 IAM = 3PL.PST-take = PAT ART-photo
 ‘They took the photo.’ [PP-PH-019]

On word level, there is no difference in morphological marking among non-verbs such as nouns, adjectives and adverbs (except that borrowed nouns are marked by the prefixal article *a-*). One characteristic of the language is that many grammatical features are marked on phrasal level rather than on a morphological level. For instance, the nominal class marker is on the NP level rather than on the noun root (§5.7). Verbs differ from non-verbs in that they can be marked by inflectional verb morphology such as person indexes (§9).

On root level, one productive derivational process can be identified, which is nominalization, by means of reduplication. The reduplicative form used in nominalization is the same form as non-finite verb forms such as infinitives, gerunds and coverbs (cf. §9.2).

- (192) *bə = məle nging be t~tir_N da maok = a, ... bə = kori*
 IAM = stop 2SG at GEN~ask for space = SG.CLF:MASC IAM = NEG
ngi-tir_v.
 2SG.NPST-ask
 ‘you stop (at) asking for space, don’t ask.’ [SV-N1-020]

The degree of flexibility in word classes in Tulil requires more specialized investigation, and certain observations clearly support the idea of assuming conversion across word classes. For instance, prototypical nouns referring to people or entities are never found to be used as head of a verb complex and processes involving nouns such as ‘become a man’ are expressed by non-verbal clauses §3.3.

Thus, the purpose of this chapter is to identify the features that are associated with various classes of words, rather than drawing categorial distinctions between classes. However, I will make some arbitrary choices on top of the criteria provided, but at the same time bear in mind the possibility of finding more items flexibly used in different functions, if provided with more data.

Table 4.1: Features of nouns, verbs and adjectives

	Nouns	Adjectives	Verbs
Forms reduplication	never	only in stat-intrans clause	various types
person prefix	no	no	yes (except stat-intrans v.)
Syntax attributive	in very few cases	yes	used with <i>to</i> as subordination
head of NP	yes	elliptical or lexicalized	used with <i>to</i> as subordination
possessed	yes	no (except lexicalized cases)	used with <i>to</i> as subordination
nominal class	derivational	agreement	pronominal as argument
negation	<i>kori go</i>	<i>kori go/kori</i>	<i>kori</i>
used as adv.	<i>pəka</i> ‘brightness’	yes	coverbs

4.2 Nouns

Nouns are the second-largest word class (after verbs). It is an open class to which new items such as loanwords can be added.

The defining properties of nouns are the following:

- i. Morphology: borrowed nouns and person names can be prefixed by articles.
- ii. Syntax: nouns take a specific position in the noun phrase structure, and occur as the leftmost (the head position) element in a core NP (cf. §5.1.1), or as modifier (property noun). Nouns can be possessed and the possessor occurs left of the head noun. Nouns have intrinsic gender that manifests itself as nominal class marking at the end of the core NP, or they may be reassigned to other nominal classes that are size/shape-based.

There is a prefixal article slot for both proper and common nouns, that is only filled for special types of nouns. A person's name is optionally marked by gender-related articles: *e-* for female and *to-* for male (e.g. *e-Luisa*, *to-Rikie*)³⁷. As for common nouns, all borrowed words take the article *a-* at the beginning of noun roots, as well as few native words such as *a-moli* 'one person'. The following examples show borrowed words from Tok Pisin / Tolai:

(193)	'post'	<i>a-pos</i>	Tok Pisin:	<i>pos</i>
	'rice'	<i>a-raik</i>	Tok Pisin:	<i>rais</i>
	'flower'	<i>a-purpur</i>	Tolai:	<i>purpur</i>
	'ceremony'	<i>a-varvakai</i>	Tolai:	<i>varvakai</i>

(194)	<i>udu o</i>	<i>bə=</i>	<i>mərek təm</i>	<i>= a</i>	<i>d=</i>	<i>umi to du-toti</i>
	1PL TOP	IAM=	good in.front	=PAT	1PL.POSS=	eye SR 1PL.PST-see
	<i>a-kəlip</i>	<i>nə-mu</i>	<i>ba a-TV.</i>			
	ART-clip	LOC-INSIDE	in ART-TV			
	'we were attracted that we saw a clip on TV.'					[RR-AD-013]

Kinship terms (both addressing terms and referent terms) borrowed from other languages do not take the prefixal article, for example: *ngali* 'in-law' (Tolai), *kakak* 'nephew / niece / uncle' (Uramat-Baining).

The prefixal article *a-* in Tulil seems to have a peculiar function in marking borrowings. Similar forms with different functions can be found in the neighbouring languages. In Tolai, common nouns (except kinship terms) are obligatorily preceded by either an indefinite article *a*, or definite article *ta* (Mosel, 1984:17-19). In Mali Baining, *a-* is a specifier article encoding a range of meanings associated with the discourse status of NP (Stebbins, 2011:171-174).

Nominal class manifests itself on the level of the whole NP rather than of the head nouns themselves (§10). That is to say, all class markings are theoretically

37. In Tolai, names of men are preceded by *to* and women by *la* (Mosel, 1984:17-19).

compatible with all nominals. On the other hand, most noun roots have intrinsic gender of either masculine, feminine or neuter. These are associated with a set of semantically related meanings, if attached to different class markings related to size and shape. Property nouns, when functioning as heads, can be associated with all classes, in agreement with the class of the referent it modifies semantically. The unmarked noun stem itself is usually associated with plural number or unspecified gender/number/class, such as:

(195)	<i>nok = a</i>	‘a finger’	CLF:MASC
	<i>nok = e</i>	‘a thumb’	CLF:FEM
	<i>nok = poi</i>	‘a wing’	CLF:FLAT
	<i>nok = pəti</i>	‘a hand; an arm’	CLF:SEG
	<i>nok</i>	‘hands; arms; fingers’	

However, the semantic class of the head noun restricts the class marking available to the whole NP, even though the latter is compatible with all nouns, and the reading of the NP will be a composition of the semantics of the noun and the class marker. This is considered to be a criterion for differentiating nouns from other nominals.

Nouns can be **subclassified** according to various semantic and reference-related criteria, among which the following are discussed:

- i. Mass noun vs count noun (cf. §4.2.1);
- ii. Proper noun vs common noun (cf. §4.2.2);
- iii. Kinship nouns (cf. §4.2.3);
- iv. Nominal class marked by class/number marking (cf. §4.2.4)
- v. Alienably vs. inalienably possessed noun (cf. §4.2.5)

4.2.1 Mass nouns

An NP with a mass noun as its head is not countable, and cannot be marked by nominal class markings as a derivational process (with the meaning retained). However, NPs with mass nouns as head can become countable/individuated when combined with respective class marking, and the meaning of the NP may be different from the original meaning of the mass noun root:

(196)	a.	<i>ngi-nakən</i>	= <i>a</i> ,	<i>məie bə</i>	=	<i>kori go</i>	<i>ioi</i>	<i>laik</i> .
		2SG.NPST-drink	=	3SG.M.PAT	but	IAM=	NEG NSPEC	water big
		‘You drink it, like there is not a lot of water.’						[AL-RM-172]

- b. *tə-p~pi mədərəp n = a ioi = viokəm ...*
 3PL.PST-IPFV~go between APPL = PAT water = DL.CLF:FLAT
Karvat me Tivənakot.
 PN and PN
 ‘They were travelling between the two **rivers** ... *Karvat* and *Tivana-*
kot.’ [KM-TH-033]

The property noun *laik* ‘big’ is usually used to modify mass nouns, indicating large quantity, as opposed to *tarə* ‘many’ for the modification of count nouns.

- (197) *tə-vok be mətəmət laik.*
 1PL.PST-work at food big
 ‘They worked on big feast (a lot of food).’ [PP-PH-030]

- (198) *a-vi ba viuv=e o ava və-re moli*
 3SG.M-PROXS in sea = SG.CLF:FEM TOP again 3SG.M.PST-carry again
ko n = a aen tarə.
 only APPL = PAT fish many
 ‘The one in the sea got many fish again.’ [TV-CC-006]

Though most mass nouns are semantically mass/substance, such as *umək* ‘milk’, not all nouns indicating mass/substance are mass nouns (for instance *kəmur = a* ‘smoke’). The most commonly occurring mass nouns are listed in Table 4.2.

Table 4.2: Mass nouns in Tutil

mass noun		countable NPs			
<i>itəvok</i>	‘hair’	<i>itəvok = pən</i>	‘pubic hair’	<i>itəvok = pət</i>	‘straight hair’
<i>ioi</i>	‘water’	<i>ioi = voi</i>	‘river’	<i>ioi = vəp</i>	‘puddle; pool’
<i>umək</i>	‘milk’	<i>umək = a</i>	‘breast’	<i>umək = pon</i>	‘small breast’
<i>komək</i>	‘semen’				
<i>mətəmət</i>	‘food’				
<i>imalavau</i>	‘frost; cold’				
<i>asol/atol</i>	‘salt’ (Tok Pisin <i>sol</i>)				

4.2.2 Proper noun

The main use of proper nouns is as head of an NP that serves as a proper name, used for names of person, place etc. NPs with proper nouns as heads generally do

not take class/number markings, except when referring to a group of people, such as *Mərubət* ‘Baining’, *Bior* ‘Tolai’, etc.

- (199) *a-Sulka = ip ip-vi it = ti = e*
 ART-PN = DL.CLF:MASC 3DL.M-PROXS 3DL.M.POSS = parent = SG.CLF:FEM
i-nor mən = ip da i-pun = a a-uk
 3SG.F.PST-send off = 3DL.M PURP 3DL.M.NPST-throw = PAT ART-hook
 ‘Two sulka men’s mother sent them to fish (lit: throw hooks)’
 [GK-CC-002]

However, nouns denoting groups of people, hence a multitude of individuals, do not get the regular plural marking for human = *ta*, but appear as bare nouns:

- (200) *p~pən to Mərubət me p~pən to Bior idə-p~pən-mə*
 NMLZ~fight of PN and NMLZ~fight of PN 3N.PST-IPFV~fight-APPL
tang nə-mumə ba Epelik.
 REFL/RECP LOC-DOWN.DIST in PN
 ‘The Bainings and the Tolais were fighting each other down there at Epelik.’
 [LR-TH-021]

When referring to a language spoken by a group of people, diminutive class markings are usually used:

- (201) *vəvat = a va itən = e o*
 masalai = SG.CLF:MASC 3SG.M.POSS.AL name = SG.CLF:FEM TOP
Tomomeragap, do o bokbok Bior = von, me Tulil = von
 PN here TOP talk Tolai = SG.CLF:DIM and Tulil = SG.CLF:DIM
o “a-tə~nakən = a kəbərək”.
 TOP 3SG.M.NPST-IPFV~drink = PAT blood
 ‘The masalai’s name is *Tomomeragap*, this is a Tolai word, and Tulil word is ‘he drinks blood’.’
 [LN-TO-051]

As discussed earlier in this section, person names are optionally marked by gender-related articles: *e-* for female and *to-* for male (e.g. *e-Luisa*, *to-Rikie*).

- (202) *to-Bobo o e-Vadok ve iaia, me to-Gila o*
 ART.M-PN TOP ART.F-PN 3SG.F.POSS.AL grandpa and ART.M-PN TOP
e-Papu i = vil = a.
 ART.F-PN 3SG.F.POSS.INAL = kid = SG.CLF:MASC
 ‘ToBobo is EVadok’s grandpa, and ToGila is EPapu’s son.’
 [PP-PH-009]

4.2.2.1 Place names

Place name is a subtype of proper noun, and the members of this category differ from other nouns in their morpho-syntactic features. Firstly, place names may be the complements of topological prepositions such as *ba* ‘in’, *be* ‘at’, *ga* ‘across’ and *da* ‘on’. When used as citation forms, the place names sometimes include these prepositions as part of the names as well. Place names grammatically behave both like an NP and PP: on the one hand, they are used in listing of names as shown in 203, on the other hand, a place name such as *ba Malira* cannot follow another preposition.

- (203) *ta mængədə* [*Nolvon*]_{NP}, *me* [*Təvələura*]_{NP}, *me* [*ba Malira*]_{PP},
 3PL village PN and PN and in PN
me [*ba Utəma*]_{PP}, *nə-mumə* *term* = *a* *viuv* = *e*.
 and in PN LOC-DOWN.DIST beside = PAT sea = SG.CLF:FEM
 ‘Their villages are Nolvon, Təvələura, and ‘at Malira’, and ‘at Utəma’,
 down there next to the sea.’ [LR-TH-018]

Place names quite commonly include a possessive construction with the possessee referred to by words like *do* ‘head’ or *katə* ‘feet’ that specify the exact position of the place relative to some other landmark.

- (204) *mængəd* = *a* *a-bət* *to ta-t~tak* *tat-e*,
 village = SG.CLF:MASC 3SG.M-PROXH SR 3PL.NPST-IPFV~call 3PL-QUOT
ba Toupir *və* = *do*.
 in PN 3SG.M.POSS.INAL = head
 ‘The village they called, ‘at the head of *Toupir*’.’ [LR-TH-165]

- (205) *Pater Iosep Balai me Təpəl o tə-vi do da tə = ba*
 Father PN PN and PN TOP 3PL.PST-walk here PURP TO = in
Nekerker tə = ga Ele i = Katə tə = ba Nekerker
 PN TO = across PN 3SG.F.POSS.INAL = foot TO = in PN
tə = ba Təkəma io lət nə ta ba Bərevuni...
 TO = in PN then arrive APPL 3PL in PN
 ‘Father Joseph Balai and Tapal they were travelling here, to Nekerker,
 to ‘Ele i katə’ (under the ele tree), to Nekerker, to Təkəma, then they
 arrived at Bərevuni...’ [LR-TH-090]

- (206) *du-tərut* *ba bek = a*, *term = a* *Vurvəgi*, *nə-bət*
 1PL.PST-hide in cave = SG.CLF:MASC beside = PAT PN LOC-PROXH
o tə-t~tak *be vət-bət*, *to tat-e*, *ga*
 TOP 3PL.PST-IPFV~call at SG.CLF:SEG-PROXH SR 3PL-QUOT across
kor = a *və =* *katə*.
 mango = SG.CLF:MASC 3SG.M.POSS.AL = leg
 ‘then we hid in a cave, next to Vurvəgi river, they call that place Gakora
 Vəkatə (under the mango tree)’ [JK-PP-008]

Place names also have inherent nominal classification distinction. They are never manifested as nominal class marking inside the NP, but only as agreement:

- (207) *ioi = viok* *o b = idə-t~tə(p)* *= viok*
 water = PL.CLF:FLAT TOP IAM = 3N.PST-IPFV~dry = PL.CLF:FLAT
məgəte mən = do *ba Mətəvut*, *məgəte ar* *bə = toktok nə-mə*
 like FROM = here in PN like still IAM = end LOC-DOWN
to to-Vue *a-te~mengəp* *nə-mə* *təm = a*
 SR ART.M-PN 3SG.M.NPST-IPFV~sleep LOC-DOWN at.entrance = PAT
Dava *və = do*.
 PN 3SG.M.POSS.INAL = head
 ‘Creeks were all dried out like from here in Mətəvut, like ends down there
 where Vue sleeps down there at the entrance of Dava.’ [AL-RM-016]

- (208) *bə = mə(n) = nə-mə* *n = e* *io b =*
 IAM = FROM = LOC-DOWN APPL = 3SG.F.PAT then IAM =
e-liu *tə = da* *Vərgoi* *təkə = nə-mə* *ga* ***Vərgoi***
 3SG.F.NPST-return TO = on PN TO = LOC-DOWN across PN
idə-n *= a* *viuv = e*.
 3N-COM = PAT sea = SG.CLF:FEM
 ‘From there she comes back to Vərgoi to where Vərgoi and the sea meet.’
 [AL-L1-033]

4.2.3 Kinship nouns

Kinship nouns are a special type of common noun and show a certain degree of irregularity compared to other common nouns in two respects. Firstly, certain kinship nouns show irregular nominal class markings when forming an NP directly with the class marker. The kinship noun and their inflected forms are listed in Table

4.3. Details of the irregularity are discussed in §10.1.5. Secondly, some kinship nouns can be inalienably possessed and take different possessive indexes from the alienability possessed nouns (see §5.8 and the following section). For discussion of kinship systems in Tulil, see §1.3.2.

Table 4.3: Kinship nouns in Tulil

glossing	SG	DL	PL
‘father (Fa)’	<i>mama</i>	<i>mama = ip</i>	<i>mama = nəvənik</i>
‘mother (Mo)’	<i>nane</i>	<i>nane = vitəm</i>	<i>nane = nəvənik</i>
‘son (So)’	<i>vil = a</i>	<i>vil = ip</i>	<i>vil = vənik</i>
‘daughter (Da)’	<i>vil = e</i>	<i>vil = vitəm</i>	
‘brother (Br)’ ‘brother-in-law (CoHu)’	<i>mativon</i>	<i>mativon = nip</i>	<i>mativon = nəvənik</i>
‘sister (Z)’ ‘sister-in-law (CoWi)’	<i>bon</i>	<i>bon = nəvitəm</i>	<i>bon = nəvənik</i>
‘uncle (Un)’	<i>laik = a</i>	<i>laik = ip</i> or <i>laik = nip</i>	<i>laik = ta</i> or <i>laik = nəvənik</i>
‘nephew (Ne)’	<i>kəvon = a</i>	<i>kəvon = ip</i>	(missing)
‘niece (Ni)’	<i>kəvon = e</i>	<i>kəvo = vitəm</i>	
‘grandfather (GrFa)’ ‘grandchild’ (GrSo, GrDa)’	<i>iaia</i>	<i>iaia = nip</i>	<i>iaia = nəvənik</i>
‘grandmother (GrMo)’ ‘aunt (Au)’	<i>vove</i>	<i>vove = nəvitəm</i>	<i>vove = noak</i>
‘(women’s) grandson’	<i>kəl = a</i>	<i>kəl = nip</i>	<i>kəl = nəvənik</i>
‘(women’s) granddaughter’	<i>kəl = e</i>	<i>kəl = nəvitəm</i>	
‘daughter-in-law’	<i>bani = e</i>	<i>bani = nəvitəm</i>	<i>bani = nəvənik</i>
‘cousin (M)’	<i>məlɲ = a</i>	<i>məlɲ = (n)ip</i>	<i>məlɲ = (n)əvənik</i>
‘cousin (F)’	<i>məlɲ = e</i>	<i>məlɲ = (n)əvitəm</i>	
‘brother-in-law (SiHu)’	<i>vara</i>	<i>var = ip</i>	<i>var = ta</i>
‘sister-in-law (BrWi)’	<i>təvat</i>	<i>təvat = vitəm</i>	<i>təvat = ta</i>
‘son-in-law (DaHu)’	<i>makut = a</i>	<i>makut = ip</i>	<i>makut = ta</i>
‘daughter-in-law (SoWi)’	<i>bani = e</i>	<i>bani = nəvitəm</i>	<i>bani = nəvənik</i>

4.2.4 Alienability

Nouns can be divided into two categories: inalienably possessed nouns (INAL-Ns) and alienably possessed nouns (AL-Ns). INAL-Ns are defined by their obligatory co-occurrence with the possessive pronoun denoting the noun’s possessor. 20 noun

roots (30 different noun root + noun class forms) belong to the POSS.INAL-N category, mostly body parts and kinship nouns (there is mismatch between the semantic alienability and the syntactic categories, see later in this section for details). Note that nouns in different noun classes associated with the same POSS.INAL noun roots are always inalienably possessed. Table 4.4 shows the POSS.INAL nouns.

Table 4.4: Inalienably possessed nouns

noun roots	NP (SG)	gloss	NP (SG)	gloss
<i>lat(ə)</i>	<i>lat = a</i>	‘head’		
<i>do</i>	<i>do</i>	‘(top of) head’		
<i>kiou</i>	<i>kiou = a</i>	‘mouth’	<i>kiou = e</i>	‘chin’
	<i>kio = vələ</i>	‘lip’		
<i>kudəm</i>	<i>kudəm = a</i>	‘tongue’		
<i>ratən</i>	<i>ratən = a</i>	‘tooth’		
<i>nok</i>	<i>nok = a</i>	‘finger’	<i>nok = pəti</i>	‘arm; hand’
	<i>nok = e</i>	‘thumb’	<i>nok = poi</i>	‘wing’
<i>kən</i>	<i>kən = bənəm</i>	‘neck’	<i>kən</i>	‘throat; voice’
<i>kat(ə)</i>	<i>kat = a</i>	‘leg; (tree’s) root’	<i>katə = vəti</i>	‘foot’
<i>tukəm</i>	<i>tukəm = e</i>	‘knee’		
<i>təmək</i>	<i>təmək = a</i>	‘ear’		
<i>(u)mi</i>	<i>(u)mi = e</i>	‘eye’		
<i>lati</i>	<i>lati = a</i>	‘navel’		
<i>kəlom</i>	<i>kəlom = a</i>	‘nose’		
<i>teləbi</i>	<i>teləbi</i>	‘armpit’		
<i>ronəng</i>	<i>ronəng</i>	‘stomach’		
<i>uil</i>	<i>uil = e</i>	‘Da’	<i>uil = a</i>	‘So’
<i>mativon</i>	<i>mativon</i>	‘Br’		
<i>bon</i>	<i>bon</i>	‘Z’		
<i>kəl</i>	<i>kəl = a</i>	‘women’s DaSo; women’s HuZSo’	<i>kəl = e</i>	‘women’s DaDa; women’s HuZDa’
<i>bani</i>	<i>bani = e</i>	‘SoWi’		
<i>təvət</i>	<i>təvət</i>	‘BrWi’		

INAL-NS and AL-NS differ in the following respects (detailed discussion of adnominal possessive constructions can be found in §5.8): firstly, INAL-NS and AL-NS

have two sets of possessive pronouns, differ in 1SG and 3SG pronouns; second, INAL-Ns often belong to a semantically specified class of relational nouns, mostly related to body parts and kinship terms; also, INAL-N usually needs to be obligatorily possessed by a possessor. When occurring without a possessor, INAL-Ns are often preceded by indefinite possessive pronoun *idə*, indicating ‘someone/something’s’; indefinite possessive pronoun *idə* is also obligatory in the citation forms of INAL-N, when the INAL-N is a body part noun.

4.2.5 Ideophones

Ideophones can be analyzed as a special subtype of noun in Tulil. Ideophones always show reduplicative forms - some of them have a non-reduplicative base, such as *pələp* ‘one strike of lightning’ with *pələpələp* ‘lightning’, *kəruŋ* ‘one clap of thunder’ with *kərukəruŋ* ‘thunder’.

Mostly, NPs consisting of ideophones do not have modifiers, or nominal class marking, and can only function as predicate in a predicate-only non-verbal clause, depicting an event:

Table 4.5: List of ideophones

form	gloss
<i>kapukapuk</i>	‘sound of shaking coconut when half-empty’
<i>kələkələŋər</i>	‘glittering’
<i>kərukəruŋ</i>	‘thunder’
<i>kətəkətəŋ</i>	‘new shoot (mushroom)’
<i>kəvakəvau</i>	‘die/withered (mushroom)’
<i>miləmiləŋ</i>	‘drizzling’
<i>pələpələp</i>	‘lightning’
<i>pərəpərət</i>	‘sparkling’
<i>tagətəgər</i>	‘dry/hard (mushroom)’
<i>tiritirit</i>	‘drizzling’
<i>vokvok</i>	‘open like an umbrella (mushroom)’

- (209) a. *b= itə-vi mənʉ vo-di to Kəmatar=e*
 IAM= 3DL.F.PST-go after SG.CLF:DIM-PROXS SR PN=SG.CLF:FEM
i-məŋgar da vitəm o da məte itə=
 3SG.F.PST-say PURP 3DL.F TOP PURP like 3DL.F.POSS=
vil=vənik o məte dau to kətəkətəŋ me vokvok
 child=PL.CLF:DIM TOP like mushroom SR new.shoot and open
me təgətəgər me kəvakəvau.
 and dry/hard and die

‘They followed what *Kəmatarə* [name of a moon] said that the children of them two would be like mushrooms, which shoot, open (umbrella), dry/hard and die.’ [LR-TM-006]

- b. *doto bə= təp n =e nanbət, o bə= kori*
 when IAM= stop APPL =3SG.F.PAT like.that TOP IAM= NEG
i-m~mənəvən vəvat me bə= miləmiləŋ konəŋ, tiritirit
 3SG.F.PST-IPFV~fall very and IAM= drizzling only drizzling
konəŋ.
 only

‘When it [the rain] stopped like that, it wasn’t falling a lot and it was just drizzling,’ [AL-RM-090]

However, some ideophones can be used in NPs in other functions (such as topic in 210b). This may suggest these ideophones are more lexicalized than the other ones.

- (210) a. *kədikən=e to iep, o itnav=e*
 anger=SG.CLF:FEM of 3SG.F TOP storm=SG.CLF:FEM
i-p~pən, ianem idə-t~tam, me pələpələp
 3SG.F.PST-IPFV~hit lightning 33N.PST-IPFV~strike and lightning
me kərukəruŋ.
 and thunder
 ‘The anger of it [the rain potion], the storm hits, the lightning struck, and lightning and thunder.’ [AL-RM-118]
- b. *pələpələp u-vi ar idə-manəŋ mənʉ =a.*
 lightning 3N-PROXS still 33N.PST-chase after =3SG.M.PAT
 ‘Lightning chased after him.’ [PP-RA-006]

4.3 Verbs

As with nouns, verbs in Tulil form an open word class to which borrowed items can be added. Verbs can be defined by the following criteria:

- (A) Morphology: verbs are able to go through verb morphology such as taking person indexes that mark person/number/gender/tense of the A/S_A argument, or applicative suffix (special case), as well as going through reduplicative process that denote aspect;
- (B) Syntax: verbs take specific positions (left edge of the VC as the head position) in the verb complex (see structure of verb complex);

Verbs can be transitive and intransitive. Among these types, two special types - stative intransitive (as a type of intransitive verb) and impersonal verbs (can be both intransitive and transitive) - are discussed in details here.

Some examples of borrowed verbs (native Tulil word is *tangədə*):

(211)	Original words	Tulil words	Original language	
	'to cook'	<i>cook</i>	<i>kuk</i>	Tok Pisin/English
	'to take picture'	<i>photo</i>	<i>poto</i>	Tok Pisin/English
	'to buy'	<i>kul</i>	<i>kul</i>	Tolai
	'to finish'	<i>par</i>	<i>par</i>	Tolai

Borrowed verbs in Tulil usually do not go through any form of initial mutation, but have a similar regular pattern of reduplication as the Tulil native words, except for *p*-initial words³⁸ (For details in phonological specifications see §2.1.1, §2.5.5).

(212)		1SG.PST	1SG.NPST	1SG.PST.IPFV
	native word	<i>ngə-von</i>	<i>nga-bon</i>	<i>ngə-p~pon</i>
	borrowed word	<i>ngə-par</i>	<i>nga-par</i>	<i>ngə-p~par</i>

4.3.1 Stative-intransitive verbs

Stative-intransitive verbs prototypically function as the VC head of stative-intransitive clauses (cf. §3.2.2.2). The defining criterion is that stative-intransitive verbs are the ones that occur in stative-intransitive clauses, but are not adjectives (§4.4).

38. It seems that Tulil have very few native words that are *p*-initial.

Many stative-intransitive verbs get reduplicated indicating an ongoing action (*lāl~lāt* ‘keeps coming’) or an intensity of states/property (*vare~vareot* ‘a really long time’). Certain members of the class cannot be reduplicated, and they are separated into two types: 1) the form is already reduplicated, such as *varvar* ‘to be happy’ and *lāklāk* ‘to be naked’; 2) exceptional cases such as *kotāk* ‘to be absent’ that lack a reduplicated form.

However, the availability of reduplication is a matter of construction type rather than the word in question. For instance, reduplication can occur with different word classes (stative-intransitive verbs and adjectives), when occurring in stative-intransitive clauses; on the other hand, when adjectives are used in NPs as modifiers, they are never reduplicated³⁹.

- (213) a. *idulānga bə = nal~nalət n = a p~pi nə-m~mə*
 small.PL IAM = IPFV~tired APPL = PAT GER~walk LOC-CON~DOWN
tə = ba Təkəma.
 TO = in PN
 ‘The children were tired of going down to *Təkəma*.’ [SV-N1-184]

- b. *mərəm ga tipur idə nung, ga nangə idə nung*
 flower across bush 3N.POSS bottom across tree 3N.POSS bottom
u-bo o bə kərə~kərerət idə.
 3N-UP TOP IAM IPFV~dry 3N
 ‘Flower on top of the bush, on top of the trees, they were also dried out.’ [AL-RM-012]

- (214) *ngang o mərə~mārek ko nə ngang me iu?*
 1SG TOP IPFV~good only APPL 1SG and 2DL
 ‘I’m alright, and you two?’ [ER-TD-010]

4.3.2 Impersonal verbs

Impersonal verbs function as the VC head of impersonal clauses (cf. §3.2.2.1). They are mostly psych-verbs such as ‘hungry’, ‘forget’, ‘shiver’, ‘startled’, or state/property words such as ‘pretty’, ‘withered’, ‘dry’, ‘hungry’, ‘burnt; pungent’, ‘fat’ (a list of

39. In one special case, reduplication occurs with nouns too.

(i) *kədi~kədikən = e vad = a māliar = e ar toktok məgət.*
 IPFV~anger = SG.CLF:FEM for = PAT bird.sp. = SG.CLF:FEM still end today
 ‘His anger with malip bird continues until today.’ [LR-MK-035]

Table 4.6: List of stative intransitive verbs

form	gloss	redup form	used in NP
<i>lang(-m)</i>	‘to want’	<i>lang~lang(-m)</i>	
<i>ləm</i>	‘to live; to be/become new/fresh’	<i>ləm~ləm</i>	✓
<i>lāt (n)</i>	‘to arrive’	<i>lāl~lāt (n)</i>	
<i>lokmət</i>	‘to be/become wet’	N/A	
<i>məle</i>	‘to rest’	<i>məle~məle</i>	
<i>iaor</i>	‘to be/become afraid’	<i>ia~iaor</i>	
<i>nalāt</i>	‘to be/become tired’	<i>nal~nalāt</i>	
<i>tək</i>	‘to be/become full’	<i>tək~tək</i>	✓
<i>tikilik</i>	‘to be/become small/little’	<i>tik~tikilik</i>	
<i>vareot</i>	‘to be (occupied) for a long time’	<i>vare~vareot</i>	✓
<i>toktok</i>	‘to end’	N/A	✓
<i>varvar</i>	‘to be/become happy’	N/A	
<i>ləklək</i>	‘to be/become naked’	N/A	
<i>məlməl</i>	‘to be smooth’	N/A	
<i>kotək</i>	‘to be absent’	N/A	
<i>kərvuk</i>	‘to be drown’	N/A	

the impersonal verbs in Tulil is shown in Table 4.7). Morphologically, the person indexes of A/S_A argument is restricted to 3rd person neuter prefixes, with the distinction of tense (*idə-* 3N.PST, *iT-* 3N.NPST). Also, impersonal verbs always occur in IPFV (reduplicative) forms. The root of the impersonal verbs can belong to other classes of verb, and impersonal verbs and transitive verbs of the same form are semantically different (e.g. *mume* ‘tell’ when used as transitive verbs, and ‘pretty’ when used as impersonal verbs, 216), or the root is not identifiable (e.g. *nən* ‘shiver’ is only used as a impersonal verb, 215).

- (215) *bə = t~təp konəŋ n = e me b =*
 IAM = IPFV~stop only APPL = 3SG.F.PAT and IAM =
idə-n~nən = e təpm = a ve
 3N.PST-IPFV~shiver = 3SG.F.PAT with = 3SG.M.PAT 3SG.F.POSS.AL
kədikən = e.
 anger = SG.CLF:FEM

‘She stopped talking (kept quiet), and no one talked, and she was just quiet and shivering with her anger.’ [SV-ES-033]

- (216) a. *bə= ngə-mat =a go tæreuk to idə-m~mume*
 IAM= 1SG.PST-get =PAT NSPEC thing SR 3N.PST-IPFV~tell
təm =a ngumi da məgəte ngə-kəvaon.
 at.entrance =PAT 1SG.POSS.INAL.eyE PURP like 1SG.PST-steal
 ‘I got some thing that is pretty (in front of my eyes), like I will steal.’
 [AL-SO-098]
- b. *doto bə= ngunu-təvat n =a nə-mu ba gəri*
 when IAM= 1DL.PST-drop APPL =3SG.M.PAT LOC-INSIDE in what
idə to da iap o i-tu~mume =a bətm
 3N SR PURP 3SG.M TOP 3N.NPST-IPFV~tell =3SG.M.PST with
=idə, o iap o va varvar o kəməron.
 =3N TOP 3SG.M TOP 3SG.M.POSS.AL happy TOP different
 ‘If we put it [the ghost] into something that will make him pretty
 with them, he will be very happy (lit. his happiness is different).’
 [AL-SO-076]
- (217) *idə-məti~məti təvi da i= kiov=a*
 3N.PST-IPFV~open gradually on 3SG.F.POSS.INAL= mouth=SG.CLF:MASC
nandi to ipə-r~ratmi n =e.
 like.this SR 3DL.M.PST-IPFV~scramble APPL =3SG.F.PAT
 ‘Her mouth was gradually opening like this because they were scrambling for her.’
 [LN-SL-036]

A semantic relation can sometimes be assumed between personal and impersonal construction with the same verb, though the relationship differs in terms of transparency. For instance, there is a correlation between the meaning of *tər* ‘meet’ and the impersonal ‘startled’, given the former use sometimes encompasses a connotation of ‘casualness’ and ‘unexpectedness’.

- (218) a. *io i-t~tər ngang nə-mu ba Gaulim.*
 then 3DL.M.PST-IPFV~meet 1SG at-INSIDE in PN
 ‘Then they (two) visited me at Gaulim.’ [SV-N1-044]
- b. *nə-umu o kəvop idə-t~tər =a*
 LOC-DIST.INVS TOP dog 3N.PST-IPFV~meet =PAT
bəli=a
 pig=SG.CLF:MASC
 ‘Down there, the dogs met a male pig.’ [PP-RA-003]

Table 4.7: Impersonal verbs

PST	NPST	gloss	possible root	gloss
<i>idə-m~mume</i>	<i>i-tu~mume</i>	‘pretty’	<i>mume</i>	v. ‘talk’
<i>idə-p~palət</i>	<i>i-p~palət</i>	‘split.open’	<i>palət</i>	v. ‘split’
<i>idə-t~tər</i>	<i>i-t~tər</i>	‘startled, surprised’	<i>tər</i>	v. ‘meet’
<i>idə-m~miau</i>	<i>i-ti~miau</i>	‘withered’	<i>miau</i>	v. ‘fly’
<i>idə-məti~məti</i>	<i>it-ni~məti</i>	‘open’	<i>məti</i>	v. ‘join; untangle’
<i>idə-t~təp</i>	<i>i-t~təp</i>	‘dry’	<i>təp</i>	adj. ‘enough’
<i>idə-p~pau</i>	<i>i-pə~vau</i>	‘hungry’	<i>pau</i>	v. ‘cook’ (rare)
<i>idə-m~mang</i>	<i>i-ta~mang</i>	‘burnt; pungent’	N/A	
<i>idə-n~nən</i>	<i>it-nə~nən</i>	‘shiver’	N/A	
<i>idə-t~tu</i>	<i>i-t~tu</i>	‘fat’	N/A	
<i>idə-r~rəm</i>	N/A	‘forget’	N/A	

- c. ***idə-t~tər*** *ngang vədəm = a kəvov = a to*
 3N.PST-IPFV~meet 1SG for = PAT dog = SG.CLF:MASC SR
v-anəng mən-ga ngumi nandi nə-m~bo.
 3SG.M.PST-run FROM = on 1SG.POSS.eye like.this LOC-CON~UP
 ‘I was startled by the male dog which ran from in front of my eyes
 like this, going up.’ [DV-HP-051]

In both 218a and 218b, the verb *tər* ‘meet’ is used in a transitive construction, while 218c is an transitive impersonal construction. In 218a, the two of ‘them’ visited me while ‘I’ may or may not expect that (commonly interpreted as the latter). In 218b, the encounter is unexpected for both ‘the dogs’ and ‘the pig’. In 218c the impersonal verb has the same form as 218b, but no subject can be identified, and the Stimulus of the Experience (‘a dog which suddenly running out’) is expressed by an oblique construction led by the preposition *vədəm*. We can see that a semantic connection can be built between ‘being affected by something coming unexpectedly’ (as in 218a and 218b) and ‘startled’ (as in 218c).

However, the same connection might be hard to build for a verb root such as *miau* ‘fly’ and the impersonal meaning ‘withered’ (in example 219b, the /u/ becomes a /β/).

- (219) a. *a-vi* *Gəna o* *doto* *a-ti~miau*
 3SG.M-PROXS PN TOP when 3SG.M.NPST-IPFV~fly
to-vul=a *o* *at-təke* *məgəte*
 at-night = SG.CLF:MASC TOP 3SG.M.NPST-shine like
vənu=a.
 sun = SG.CLF:MASC
 ‘This ‘Gəna’ when it is flying at night it shines like the sun.’
 [AL-GN-032]
- b. *u-bət* *bu* *avar bə* *idə-m~miav* = *idə*
 3N-PROXH betelnut also IAM 3N.PST-IPFV~withered = 3N
 ‘Those betelnut trees, they were also withered.’ [AL-RM-011]

Also, words like *pau* ‘cook’ are rarely used nowadays and become archaic (*tangəda* ‘cook’ is used in current speech). For many impersonal verbs (such as *idə-nən* ‘shiver’), no possible root can be identified (there is no such word as **nən*). Semantic intransparency of the impersonal construction may suggest a development of new lexemes or homophony.

4.4 Adjectives

The status of adjectives as a universal category has attracted a great deal of typological interest (Dixon, 1982, 2004). When a class of adjectives can be identified in a language, they can be attributively (as modifiers in the NP) and sometimes predicatively used (as predicates of clauses) (Stassen, 1997). In Tulil, adjectives can be used as modifiers inside the NP, head of NP, and as predicates in stative-intransitive clauses.

- (220) a. *du-kər* *tə=be* *bərən* *kəmərən=a*.
 1PL.PST-climb TO = at mountain different = SG.CLF:MASC
 ‘We climbed onto a different mountain.’ [CM-B2-043]
- b. *tul* *idil=a* *və-nakun*.
 bird small = SG.CLF:MASC 3SG.M.PST-cry
 ‘A small bird cried.’ [LN-TO-021]

- c. *nə-bət* *o* ***norang*** = *e* *to* *kəvər* = *ta*
 LOC-PROXH TOP sword = SG.CLF:FEM SR white = PL.CLF:HUM
bəvon *doto* *məgəte* *da* *tə-p~pən-mə* *tang*
 before when like PURP 3PL.PST-IPFV~hit-APPL REFL/RECP
o *tə-tar* = *a* *e-bət* *bem* *tang*..
 TOP 3PL.PST-stick = PAT 3SG.F-PROXH at REFL/RECP
dərm = *e* *e-vi* *o* *kəra* *molimoli* = *a*
 dirty = SG.CLF:FEM 3SG.F-PROXS TOP just people = SG.CLF:MASC
a-vi *və-tar* = *e* *bem* = *a*
 3SG.M-PROXS 3SG.M.PST-stick = 3SG.F.PAT at = PAT
kəvər = *a* *a-bət*.
 white = SG.CLF:MASC 3SG.M-PROXH
 ‘That is the sword that before when the white men wanted to fight
 with each other, they stuck it at each other. This dirty one (sword),
 this man pierced it on that white man.’ [AL-IP-079/081]
- d. *vənu* = *a* *və-t~ton*, ***kərerət*** = *a*
 sun = SG.CLF:MASC 3SG.M.PST-IPFV~look dry = PAT
nga *kamor* = *e*, *ngə-tit* *bem*
 1SG.POSS.AL clearance = SG.CLF:FEM 1SG.PST-set.fire at
 = *e*.
 = 3SG.F.PAT
 ‘The sun was shining, dried my new clearance, I set (pst.) fire to the
 bushes.’ [WM-MG-003]

In Tulil, the adjective class is fairly small, and the boundaries between adjective/noun and adjective/stative-intransitive verb are difficult to draw. One defining criterion to distinguish adjectives from nouns is that adjectives, when used attributively, can be modified by degree modifiers (cf. Bhat & Pustet 2004), such as *moli* ‘really’ (221a) and modifier phrase *vəvat moli* ‘really very’ (221b).

- (221) a. *du-toti = a dun-e molimoli = a*
 1PL.PST-see = 3SG.M.PAT 1PL-QUOT people = SG.CLF:MASC
a-vi o kabar vavat moli = a, me
 3SG.M-PROXS TOP long very really = SG.CLF:MASC and
vərai = a to da du-vovər bətəpm = a o
 pit = SG.CLF:MASC SR PURP 1PL.PST-dig with = 3SG.M.PAT TOP
avar kabar moli = a.
 also long really = SG.CLF:MASC
 ‘We saw him we thought, this man is really tall, and the pit we dug
 him out was also really long.’ [AL-BT-009]
- b. *kabar vavat moli n = a molimoli = a*
 long very really APPL = PAT people = SG.CLF:MASC
a-bət bem udu.
 3SG.M-PROXH at 1PL
 ‘That man is much taller than us.’ [AL-BT-014]
- (222) *nangə laik moli = vənik to mægəte vənik u-vi do*
 tree big really = SG.CLF:DIM SR like SG.CLF:DIM 3N-PROXS here
batm = a mængəd = a, u-bət ar bə = kərə~kərerət
 around = PAT home = SG.CLF:MASC 3N-PROXH still IAM = IPFV~dry
idə.
 3N
 ‘The really big trees like these trees here around home, they were also
 dried.’ [AL-RM-015]

When modifying verbs, *moli* usually has a different meaning ‘again’. And when modifying nouns as an adjective, it means ‘real’, in the sense of ‘genuine’ (examples see 4.10.3).

The degree modifier *vavat* ‘very’ itself cannot modify an adjective inside an NP, but only the whole NP. When used in an NP by itself, it modifies nouns meaning ‘big, huge’, and can be the root of the NP *vavat = a* (or other classes like feminine *vavat = e*) meaning ‘monster’ (examples can be found in 4.10.3).

Another property of adjectives is that they do not have inherent nominal class as nouns do, but agree with nominal class with the NP head (cf. Jespersen 1924:72). This is shown by the examples above. For instance, in an NP like in 222, the nominal class always manifests itself on phrase level (at the end of a core NP). And in 220c, though there is no noun head, the NP is marked by feminine class marking that agrees with *norang = e* ‘sword’ mentioned earlier in the text.

Table 4.8: List of adjectives

form	gloss	redup form	stat-intrans clause
<i>kurek</i>	‘to be/become bad’	<i>kure~kurek</i>	✓
<i>laik</i>	‘to be/become big’	N/A	✓
<i>dərəm</i>	‘dirty’	N/A	
<i>kabar</i>	‘long’	N/A	
<i>idil</i>	‘small’	N/A	
<i>kəmərən</i>	‘different’	N/A	
<i>ulang</i>	‘yellow’	N/A	
<i>put</i>	‘red’	N/A	✓
<i>kəvər</i>	‘white’	N/A	
<i>vərən</i>	‘black’	N/A	
<i>lok</i>	‘hot’	N/A	
<i>kərerət</i>	‘to be/become dry’	<i>kəre~kərerət</i>	✓
<i>tədor</i>	‘to be/become strong’	<i>tədo~tədor</i>	✓
<i>mərek</i>	‘to be/become good’	<i>məre~mərek</i>	✓

We can see that when adjectives are used in non-verbal clauses, they form an NP predicate, as shown in 221a.

4.5 Nominalization

Nominalization takes the form of reduplication of verb bases. The reduplicative form used in nominalization is the same form (STEM₃) as non-finite verb forms such as infinitives, gerunds and coverbs (cf. §9.2).

- (223) *bə = məle nging be t~tir_N da maok = a, ... bə =*
 IAM = stop 2SG at NMLZ~ask for space = SG.CLF:MASC IAM =
kori ngi-tir_V.
 NEG 2SG.NPST-ask
 ‘you stop (at) asking for space, don’t ask.’ [SV-N1-020]

- (224) a. *io tə-mənan_v bətmə ngang io təp nə ta.*
 then 3PL.PST-listen with 1SG then stop APPL 3PL
 ‘Then they listened to me and stopped.’ [JK-P1-091]
- b. *kəvər = ta bə = tə-tuk n = a mənə~mənan_N.*
 white = PL.CLF:HUM IAM = 3PL.PST-give INSTR = PAT NMLZ~listen
 ‘White men started to listen.’ [AL-IP-084]

Gerunds can be considered a special type of nominalization, in which the nominalized verb can take an argument after it.

- (225) *ngə-matər mat = a m~məkən = a li.*
 1SG.PST-stand take = PAT GER~plant = PAT taro
 ‘I started with planting taros.’ [WM-MG-005]

Though most of the time the verb is nominalized into an abstract noun, which lacks class marking, the nominalized verb can sometimes take class marking:

- (226) *be t~tak = e_N to kəvər = ta o*
 in NMLZ~say = SG.CLF:FEM of white = PL.CLF:HUM TOP
ta-t~tak_v tat-e...
 3PL.NPST-IPFV~call 3PL-QUOT
 ‘In white people’s words they say...’ [AL-IP-089]

Also, the verb complex can be nominalized as well:

- (227) *tə-p~pe mat tang n = a*
 3PL.PST-IPFV~tie take REFL/RECP INSTR = PAT
p~petang = e to a-mənə ‘head.hunters’.
 NMLZ~tie.oneself = SG.CLF:FEM SR ART-people head.hunters
 ‘They were dressing with the type of dressing of ‘head hunters’.’
 [AL-IP-048]

4.6 Quantifiers and numerals

In addition to attributive adjectives, quantifiers and cardinal numerals can also commonly be used attributively inside an NP, as well as being their heads. Quantifiers/numerals differ from adjectives in the way that, 1) the former always follow the latter in a noun phrase (cf. §5); 2) Though quantifiers mostly conform

to the paradigm of class marking, certain numerals have irregular inflections (cf. §10.1.1.1), while adjectives do not.

4.6.1 Numerals

Numerals follow nouns (after adjectives) and denote the number of entities, and used for counting. Numerals can also be the head of NP (5.1.1).

- (228) a. *ar bəvon kup nə-mumə da ibən laik = pət*
 still before all.over LOC-DOWN.DIST on land big = SG.CLF:SEG
be Rəbəul, o molimoli mukəm, molimoli təgəta
 at PN TOP people two.CLF:MASC people one.CLF:MASC
a-n = a va laik = a.
 3SG.M-COM = PAT 3SG.M.POSS.AL big = SG.CLF:MASC
 ‘Long time ago down there in town in Rabaul, there were two men,
 one with his uncle.’ [AL-TC-005]
- b. *məlaməlai = a a-vi o ngi-kup mat = a*
 potion = SG.CLF:MASC 3SG.M-PROXS TOP 2SG.PST-tear take = PAT
kəvəlok = a ba tipur təpm = a mətə iap
 new.shoot = SG.CLF:MASC in bush with = PAT like 3SG.M
to u = viok o mətə miokəm magəviok, balakətəria
 SR leave = PL.CLF:FLAT TOP like three.CLF:FLAT four
viok.
 CLF:FLAT
 ‘This potion, you tear and get new shoot from the tree with leaves
 like three leaves or four leaves.’ [WM-LP-039]

The native number system of Tulil consists of seven terms from 1 to 6, and 10. Numerals are also inflected according to different noun classes if they occur in the last slot in the core NP. Table 4.9 lists the numerals from 1 to 6 in masculine nominal class (also the common citation forms/counting forms). The full paradigm and a discussion can be found in §10.

Table 4.9: Basic numerals

Number	1	2	3	4	5	6
cl1: Masculine	<i>təgəta</i>	<i>mukəm</i>	<i>mukəm magərum</i>	<i>balakətəria</i>	<i>libəti</i>	<i>nereita</i>

The number ‘10’ is literally ‘two hands’ in Tulil *idə nok = pətakəm*. Other numbers may be indicated by addition operations of 6 plus other numbers traditionally, e.g.: ‘8’ *nereita ko mukəm* ‘lit. six plus two’.

- (229) *tuk = a* *a-vi* *o* *ta-t~tak* *tat-e*,
road = SG.CLF:MASC 3SG.M-PROXS TOP 3PL.NPST-IPFV~call 3PL-QUOT
ta-təvək = *a* *Laikpoi n* = *a* *nereita vənik* *ko*
3PL.NPST-CROSS =PAT PN APPL =PAT six PL.CLF:DIM plus
təgə = von.
one = SG.CLF:DIM
‘We walked down, down and down, the track they say, they (the people)
crossed the Kerevat river for seven times.’ [CM-B2-054]

However in current usage of Tulil, many speakers are not familiar with the inflection patterns for these numbers, and usually resort to borrowing words from Tolai for number 7 to 10 :

- (230) **Tolai numbers**
‘7’ *alevuru*
‘8’ *alevutu*
‘9’ *alevuvat*
‘10’ *avinun*

Ordinal numbers in Tulil are expressed by a construction formed by numerals (inflected according to nominal classes), applicative *n* and a pronominal, except for the word ‘first’, which is a special form differs from the corresponding numeral *təgət*:

- (231) **Ordinal numbers**
maməni (= *a/e*) ‘the first(.MASC/FEM) one’
mukəm n = *a* ‘second.MASC’
muitəm n = *e* ‘second.FEM’
mukəm magərung n = *a* ‘third.MASC’
muitəm magət n = *e* ‘third.FEM’
...

- (232) *udu o bəvon o udu təgət, Tulil, Mərubət, me Mərubət*
 1PL TOP before TOP 1PL one PN PN and PN
balakətəria, Mərubət maməni = a, Mərubət = a iap
 four.CLF:MASC PN first = SG.CLF:MASC PN = SG.CLF:MASC 3SG.M
to mukəm n = a, Mərubət = a iap
 SR two.CLF:MASC APPL = 3SG.M.PAT PN = SG.CLF:MASC 3SG.M
to mukəm_magərunğ n = a, balakətəria n
 SR three.CLF:MASC APPL = 3SG.M.PAT four.CLF:MASC APPL
 = a...
 = 3SG.M.PAT

‘In the past we were together, Tulils and Baining. Baining are four groups. Baining 1 (first), Baining 2 (second), Baining 3 (third) and Baining 4 (fourth)...’ [LR-TF-014]

- (233) *ava muləğəp nə von ava i-raot moli ko*
 again two.CLF:DIM APPL SG.CLF:DIM again 3SG.F.PST-pull again only
n = a ratənəm...
 APPL = PAT basket
 ‘The second time she just pulled the basket again...’ [LN-BU-033]

4.6.2 Quantifiers

Quantifiers have the same inflection pattern as nouns/adjectives, but they are limited to plural number (no singular / dual forms), and make a distinction between human/non-human in masculine and feminine class. For instance, *nangə vanəm* ‘a few trees/herbs’, *molimoli tar = ta* ‘many people’, *vəti katum = bənik* ‘all the days’. The whole paradigm can be found in 10.1.1.1 (Table 10.7).

- (234) Quantifiers

<i>tarə</i>	‘many’
<i>katum</i>	‘all (noun/adj/adv)’
<i>vanəm</i>	‘a few’

The distribution of quantifiers is different from that of numerals: numerals can be modified by degree modifiers, while quantifiers cannot (§5).

4.7 Pronominals

Pronominals in Tulil can be categorized into two big groups: free forms and bound forms. Free forms of pronominals include free personal pronouns (§4.7.1), non-specific pronouns (§4.7.2), reciprocal/reflexive pronoun *tang* (§4.7.3). Bound forms are several sets of affixed person indexes, and many of them go through consonant mutations when attaching to the roots (§2.5.5.1). They can be used to form verbs (A/S_A argument), possessive constructions and nominal demonstratives, as well as attach to certain prepositions.

All forms of pronominals mark person, number and gender/nominal class. Person indexes for A/S_A on verbs further reflect the distinction between past and non-past. Except for person indexes for non-past verbal clauses, all other pronominal sets have the same categories, only differing in forms. The full paradigms of all inflected pronominals are listed in Chapter §10, with the nominal class/gender explained. These pronominals will be briefly introduced here with some examples.

Table 4.10: Subcategories of pronominals

categories		inflection
free (pronouns)	free personal	nominal class
		gender
	non-specific	nominal class
	reflexive/reciprocal	N/A
bound (indexes)	verbal	PST
		NPST
	possessive	inalienable
		alienable
	demonstrative	nominal class
		gender
	prepositional	comitative <i>n(ə)</i>
		<i>to</i> 'belong to'
	quotative	<i>(m)e</i>
		gender

4.7.1 Free personal pronouns

Tulil has a paradigm of free personal pronouns as well as bound person indexes prefixed to verb stems. The free personal pronouns can be heads of NPs (§5.5), which function as A/S_A arguments, topics, O/S_O arguments or oblique arguments.

When functioning as A/S_A arguments, the personal pronouns are optional while verbal indexes are obligatory, as shown in example (235a), where *von* is a 3rd person diminutive pronoun. In the first clause, it functions as the S_A argument and the topic, while in the second clause, no personal pronoun is present. On the other hand, in both clauses, the verbal index *idə-* (third person neuter; PST) is compulsory. *udu* 1PL and *ngən* 2PL are also personal pronouns in 235b.

- (235) a. *von o ar von idə-m~bokbok konəng me*
 SG.CLF:DIM TOP still SG.CLF:DIM 3N.PST-IPFV~talk only and
idə-t~təvəng vəvat konəng.
 3N.PST-IPFV~sing very only
 ‘It [the radio] was just talking and singing loudly.’ [AL-RD-013]

- b. *udu avar du-mətor ko do, me ngən o ar i-ngəp*
 1PL just 1PL.PST-sit only here and 2PL TOP still 2PL.NPST-die
nə-bət da m~mət.
 LOC-PROXH on INF~eat
 ‘We just sit here, and you will die there for (lacking) of food.’
 [AL-IP-038]

All non-A/S_A arguments such as O/S_O arguments or objects of prepositions use the patientive pronominal forms, they differ from A/S_A pronominals in 3rd person singular forms: =*a* 3SG.M and =*e* 3SG.F vs. *iap* 3SG.M and *iep* 3SG.F. Phonologically, the former forms are clitics. The proforms in non-A/S_A positions do not take the patientive marker =*a*. Also, given that there are no bound pronouns (affixes) co-referencing O/S_O, personal pronouns in this position carry the main function of denoting speech roles, and are not optional.

- (236) a. *iap verən, me iep o avar i-merən.*
 3SG.M 3SG.M.PST.run and 3SG.F TOP also 3SG.F.PST-run
 ‘He ran away and she also ran away.’ [LR-MK-031]
- b. *du-tak bem =a e-Kin da du-lam =e*
 1PL.PST-call at =PAT ART.F-PN PURP 1PL.PST-show =3SG.F.PAT
n =a molimoli=a a-vi to du-ter
 INSTR =PAT person=SG.CLF:MASC 3SG.M-PROXS SR 1PL.PST-dig
bətəpm =a.
 over =3SG.M.PAT
 ‘Then we called Kin to show her this man whom we dug out.’
 [AL-BT-010]

Free personal proforms can belong to either gender or nominal class system, detailed discussion can be found in §10.1.4.

4.7.2 Non-specific pronouns

The non-specific *go* ‘some’, apart from being a pre-nominal modifier in the NP, can also function as a pronoun, often found in negative and non-specific contexts. NPS headed by non-specific pronouns are discussed in §5.4, and when functioning in non-A/S_A positions, the NPS headed by non-specific pronouns have to be marked by patientive marker = *a*.

- (237) *ngi-lur mən =a go tuk ngang.*
 2SG.NPST-shake off =PAT NSPEC give 1SG
 ‘You shake off some (fruits) to give me.’ [LR-HC-006]

When functioning as a pronoun, *go* is inflected according to the nominal class (eg. full paradigm see §10.1.1.2). The same form *go* as interrogative proform ‘who’ inflects only for gender and has a different inflectional pattern (for instance *gət-a* for non-specific pronoun and *guria* for interrogative proform in masculine class, §3.6.2). Examples show some inflected non-specific pronouns in different classes, and the used of non-specific pronouns with negator *kori*:

- (238) a. *doto ta-pən-m =a gət-a be p~pən*
 when 3PL.NPST-hit-APPL =PAT NSPEC-SG.CLF:MASC at NMLZ~fight
be gə-vət...
 at NSPEC-SG.CLF:SEG
 ‘When they kill some man at the war at some place...’ [AL-HD-017]
- b. *nə-mu ar kori gət-əm me nə-mu o*
 LOC-INSIDE still NEG NSPEC-PL.CLF:HUM and LOC-INSIDE TOP
latu konəng.
 garden only
 ‘There is still no one in there and it is just garden.’ [SV-N1-036]

4.7.3 Reciprocal/reflexive pronoun *tang*

The reciprocal/reflexive pronoun *tang* is used to express reciprocity and reflexivity, and can be used as O/S_O argument (239) or complement of preposition (240). It cannot be modified by anything, and is not preceded by patientive marker = *a*.

- (239) *kori də-t~toti* **tang** *me kori də-t~təm*
 NEG 1PL.NPST-IPFV~see REFL/RECP and NEG 1PL.NPST-IPFV~know
tang *du-n* = *a ta-mu* *kəməron = ta...*
 REFL/RECP 1PL-COM =PAT 3PL-INSIDE different = PL.CLF:HUM
 ‘We don’t see each other and we don’t know each other, we and the
 spirits in the bush (lit: different people).’ [AL-DA-069]

- (240) *kədat = pon* *von-bət* *konəng to vu*
 ferule = SG.CLF:DIM SG.CLF:DIM-PROXH only SR 3SG.M.PST.put
von *təkermə tang.*
 SG.CLF:DIM beside REFL/RECP
 ‘The ferule was just there, that he put it beside himself.’ [RR-AD-034]

tang ‘REFL/RECP’ expresses both reciprocal and reflexive meanings, as shown by examples above (239 reciprocal, 240 reflexive). Even though the reciprocal and reflexive meanings are clearly different (‘each other’ vs. ‘oneself’), the contexts are usually able to resolve the ambiguity. For instance, in 239, if the comitative construction ‘we and the spirits’ is not present, the clauses can have ambiguous meaning: ‘we don’t see each other/ourselves, and we don’t know each other/ourselves’. However, with the comitative construction, it is clear that ‘we’ and ‘the spirits’ are reciprocals.

tang tends to form idiomatic expressions with certain verbs, such as in :

- | (241) | VERB | | + <i>tang</i> |
|-------|---------------|----------------|--|
| | <i>kər</i> | ‘go up’ | <i>kər tang</i> ‘get up, arise’ |
| | <i>tek</i> | ‘get sth. out’ | <i>tek tang</i> ‘get (oneself) out’ |
| | <i>pe</i> | ‘tie’ | <i>pe tang</i> ‘wear (clothes)’ |
| | <i>rup</i> | ‘gather’ | <i>rup tang</i> ‘stick together,
close to each other’ |
| | <i>mugati</i> | ‘share’ | <i>mugati tang</i> ‘share among’ |

However, *tang* ‘REFL/RECP’ is not incorporated into the verb with certain nouns (for instance, the noun *gati* ‘share’ forms the verb *mugati* ‘share’ with the verb *mu* ‘put’, see §9.1.5), given that manner adverbials (such as *mərek* ‘good’, *kup* ‘all’) can still occur in between.

- (242) *bə= tə-kutəŋ kərot n =a, da tə-mugati*
 IAM= 3PL.PST-cut in.pieces APPL = 3SG.M.PAT PURP 3PL.PST-share
kup nə tang n =a.
 all APPL REFL/RECP INSTR = 3SG.M.PAT
 They cut (PST.) it into pieces, for them to share it among themselves.
 [JN-KL-030]

- (243) a. *və-rup tang a-n =a va*
 3SG.M.PST-gather REFL/RECP 3SG.M-COM =PAT 3SG.M.POSS.AL
var = ta.
 friend = PL.CLF:HUM
 ‘He was close with his friends.’ [KV-SO-003]
- b. *ta-vi muitəm_magət o tə-rup mərek nə*
 3PL-PROXS three.CLF:FEM TOP 3PL.PST-gather good APPL
tang.
 REFL/RECP
 ‘The three of them are really good friends (lit: stick together well.)’
 [ER-TD-006]

However, the V + *tang* formation is idiomatic in three senses. First, the use of *tang* as an object of the verb does not always conform to the argument structure of the verb. For instance, the verb *mugati* ‘share’ usually takes the ‘shared things’ as the object 244a, while in the expression *mugati tang*, the ‘shared thing’ becomes the oblique argument, and *tang* REFL/RECP is the direct object, as shown in example 244b.

- (244) a. *lət n =a i= kəlŋ = ip,*
 ‘arrive APPL =PAT 3SG.F.POSS.INAL = face = DL.CLF:MASC
e-Namugi b= i-mugati ta mətmət da bə=
 ART.F-PN IAM= 3SG.F.PST-share 3PL food PURP IAM=
ta-tət.
 3PL.NPST-eat
 ‘Her two sons arrived, Namugi already shared their food for them to eat.’
 [LG-VI-013]

- b. *tə-mugati* *tang* *n* = *a* *ibən = e*
 3PL.PST-share REFL/RECP INSTR =PAT land = SG.CLF:FEM
e-bət.
 3SG.F-PROXH
 ‘They shared the land among themselves.’ [JK-GT-009]

Secondly, the meaning of the new expression differs to some extent from its components. For instance, the meaning of *pe* extends from ‘tie’ to ‘wear’ when accompanied by *tang*. Thirdly, the V + *tang* expression may form a unit that serves as base for derivation, such as the derived noun *petang = e* formed by *pe* + *tang* and a nominal class marking, meaning ‘clothes; dressing’:

- (245) *tə-p~pe* *mat tang* *n* = *a*
 3PL.PST-IPFV~tie take REFL/RECP with =PAT
p~petang = e to *a-mənə* ‘head_hunters’.
 NMLZ~dressing = SG.CLF:FEM SR ART-people head.hunters
 ‘They were dressing with the type of dressing of ‘head hunters’.’
 [AL-IP-048]

4.7.4 Verbal indexes

Verbal indexes are two sets of pronominal prefixes that index the A/S_A arguments, reflecting the number, person and gender of A/S_A argument, and also intertwined with the tense system (two sets as of indexes for PST and NPST). Examples are shown in 3.2.1.1 and full paradigms of forms with discussions can be found in 10.1.2.1.

In contrast to personal pronouns, verbal indexes are always obligatory as long as there is A/S_A arguments in the verbal clause.

4.7.5 Possessive indexes

Possessive indexes are phonological clitics (clitics for inalienable but not for alienable) that precede the possessives, indicating the person, number and noun class of the possessor nouns. Possessive indexes are compulsory in an NP-internal possessive construction. The possessor can also be denoted by an optional NP. The full set of forms of possessive indexes can be found in §10.1.2.2, while the use of them in possessive construction can be found in §5.8. There are two sets of possessive indexes: inalienable possessive indexes, and alienable possessive indexes. The nouns associated with each group are discussed in §4.2.4.

- (246) *(nga = mən = a) va itən = e*
 1SG.POSS.AL = cousin = SG.CLF:MASC 3SG.M.POSS.AL name = SG.CLF:FEM
Fidelis. Vəninər
 PN
 ‘My cousin’s name is Fedelis Vaninar.’ [AL-RM-004]

4.7.6 Demonstrative indexes

Demonstrative indexes can occur in locative clauses preceding demonstrative roots, as well as forming nominal demonstratives with demonstrative roots. Like free personal pronouns, demonstrative indexes also encode both gender and nominal class systems (forms and discussions can be found in §10.1.4).

- (247) a. *du-t~ton tə = bətəpmə vən nandi, to*
 1PL.PST-IPFV~look TO = on SG.CLF:AUG like.this SR
bərən = bən və-di o vən
 mountain = SG.CLF:AUG SG.CLF:AUG-PROXS TOP SG.CLF:AUG
idə itən = e Baram.
 3N.POSS name = SG.CLF:FEM PN
 ‘We looked up to it (the mountain) like that, the name of the mountain is Baram.’ [CM-B2-034]
- b. *lomən = a a-vi o kori i-t~təm*
 creek = SG.CLF:MASC 3SG.M-PROXS TOP NEG 3DL.M.PST-IPFV~know
it-e, akul = vitəm itə-vibo ba və =
 3DL.M-QUOT witch = DL.CLF:FEM 3DL.M-UP.PROX in 3SG.M.POSS.AL =
do ba bek = a.
 head in cave = SG.CLF:MASC
 ‘The small creek, they (dl.m.) didn’t know that, two witches lived at the head of the creek in a cave.’ [TV-MA-003]

4.7.7 Prepositional indexes

There are two different sets of prepositional indexes: one is used for the preposition *to* ‘of’, and one for the other prepositions (including the comitative *n*) (forms of both can be found in §10.1.2.3). The person indexes of *to* ‘of’ index the possessee NP before *to*, and the possessee NP is optional if it can be retrieved from the context. The person index is compulsory when *to* is used as the predicate of locative clauses

(3.2.2.4). When used as complement of NPs, person indexes are compulsory except when the possessee is 3rd person neuter (unspecified).

- (248) *do maok = a a-to ta, me kori go a-to*
 here space = SG.CLF:MASC 3SG.M-of 3PL and NEG NSPEC 3SG.M-of
ngang.
 1SG
 ‘This land belongs to them, but does not belong to me.’ [SV-N1-121]

- (249) a. *du mativon o bə = və-tən tə = bem = a*
 1PL.POSS brother TOP IAM = 3SG.M.PST-think TO = at = PAT
bokbok to mama.
 talk of dad
 ‘Our brother thought about what dad said.’ [RR-AD-012]

- b. *bokbok i-to iap avar tære moli.*
 talk 3N-of 3SG.M also true real
 ‘His words are also true.’ [SV-N1-128]

- (250) a. *i-pəp~pi, i-tau it-n = a nga*
 3DL.M.PST-IPFV~go 3DL.M.PST-meet 3DL.M-COM = PAT 1SG.POSS
laik = a nə-mə.
 big = SG.CLF:MASC LOC-DOWN
 ‘They (dl.m.) went, they met my uncle down there.’ [JK-PP-028]

- b. *ngə-kutəng mat = a ləvək = pənik da nga-tə = d*
 1SG.PST-cut get = PAT banana = PL.CLF:DIM PURP 1SG.NPST-TO = on
 = a vəti = von təpmə vənik.
 = PAT day = SG.CLF:DIM with PL.CLF:DIM
 ‘I finish planting then I went, I cut a lot of bananas for I will go to market with them.’ [ML-YE-009]

Positional adverbs *nogət* ‘ahead, in front of’ and *pədəm* ‘after, behind’ use the same set of person indexes as general prepositions in locative clauses:

- (251) *doto da bə= ŋgi-di~vi təpm =a, a-bət*
 when PURP IAM= 2SG.NPST-IPFV~go with = 3SG.M.PAT 3SG.M-PROXH
o a-nogət ŋging, ava a-pədəm ŋging.
 TOP 3SG.M-front 2SG again 3SG.M-after 2SG
 ‘When you go with it [the devil], he walks in front of you, then he walks
 after you.’ [AL-SO-049]

However, these two words show a tendency to be reanalyzed as verbs and get the verbal indexes (tensed) in current use of the language. The following excerpt is taken from a narrative recorded from one of the elders in the village, explaining the ‘mistakes’ in the current use of language by the young people.

- (252) a. *təgə=von to ngən, ngən to inə-bət to*
 one=SG.CLF:DIM of 2PL 2PL SR 2PL-PROXH SR
i-ta~matər, to bokbok inən-e, “eva b=
 2PL.NPST-IPFV~stand SR talk 2PL-QUOT just IAM=
it-nogət”, “b= it-nogət” tə=ba gəri? ŋgin-e
 2DL.NPST-front IAM= 2DL.NPST-front TO=in what 2SG-QUOT
’bə= iu-nogət’.
 IAM= 2DL-front
 ‘Another mistake of you people, you people standing in front, the
 way you talk, you say “*eva bitnogət*”, “*bitnogət*” to where? you say ‘*bə*
iunogət’.’ [JN-BL-010]

- b. *kori go* “*b = it-nogət*”, “*b = it-nogət*” *o doto*,
 NEG NSPEC IAM = 3DL.M-front IAM = 3DL.M-front TOP when
ngang nga-tir = *a e-Paraide vada to-Wili a-n*
 1SG 1SG.NPST-ask = PAT ART.F-PN for ART.M-PN 3SG.M-COM
 = *a to-Mogor, e-Paraide et-e,* “*ip o b =*
 = PAT ART.M-PN ART.F-PN 3SG.F-QUOT 3DL.M TOP IAM =
it-nogət nu-vade”, “*b = it-nogət*” *io ngan-e* “*ar*
 3DL.M-front LOC-this.way IAM = 3DL.M-front then 1SG-QUOT still
kotək = ip do”, *me doto nging, to i-tərkata nging*
 absent = 3DL.M here and when 2SG SR 3DL.M.PST-leave 2SG
io ngin-e, “*b = ipə-p~pi*” *b = it-nogət ar*
 then 2SG-QUOT IAM = 3DL.M.PST-PST~go IAM = 3DL.M-front still
məgət”, *navondi*.
 today like.this

‘Not “*bitnogət*”, “*bitnogət*” is when I ask Paraide for toWili and toMogor, she said, ‘they went first this way’, then I said, ‘they are not here’, and when they left you, you say, ‘they are already gone today’, like this.’ [JN-BL-011]

The examples show that in the current use of the language, when some young people want to say ‘you two go first’, they use *it-nogət* with the person index *it* rather than *iu-nogət* with the person index *iu*. The reason is that the person indexes for *nogət* is not tensed and *iu* for either past or non-past event, and it has a tendency to be used as real verb, where the 2nd person plural prefix for future tense is *it*. But even in the ‘correct’ usage, *it-nogət* still makes sense because the same form *it* is used as the 3rd person dual index.

4.7.8 Quotative indexes

Person indexes on quotative *e* use the gender(2) (cf. 10.1.2) system in 3rd person. In both cases, *-e* has a defective inflectional pattern that resembles an *m*-initial verb (cf. §9) in NPST tense, but does not have a corresponding PST tense inflection. Thus, when *-e* is used as the predicate, it does distinguish between past and non-past. More discussion can be found in §10.1.2.4.

(253)		<i>1SG.NPST</i>	<i>3SG.M.NPST</i>	<i>3PL.H.NPST</i>	<i>1SG.PST</i>
	verb (<i>m</i>)-ət	<i>nga-nət</i>	<i>a-tət</i>	<i>ta-tət</i>	<i>ngə-mət</i>
	quotative -e	<i>nga-ne</i>	<i>a-te</i>	<i>ta-te</i>	N/A

Table 4.11: Person indexes for quotative *e*

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngan-</i>	<i>ngunun-</i>	<i>dun-</i>	
2	<i>ngin-</i>	<i>iun-</i>	<i>inən-</i>	
3.MASC	<i>at-</i>	<i>it-</i>	<i>it-</i>	<i>tat-</i>
3.FEM	<i>et-</i>			
3.NEUT	<i>it-</i>			

4.8 Demonstratives

In Tulil, demonstratives function as predicates, NP heads or appositional pronominals in the NP, and adjuncts of the verb complex. I will call them identificational demonstrative, nominal demonstrative and local adverbial demonstrative respectively, following Diessel (1999). Example (254) gives examples of demonstratives taking up different syntactic functions. Details of the formal and functional properties of demonstratives can be found in §7).

- (254) *kəletuak nə-mu ba kəlak=a a-bət to*
 woman.PL LOC-INSIDE in house=SG.CLF:MASC 3SG.M-PROXH SR
tə-mengəp, o ta-bət o bə= tə-mengəp me bə=
 3PL.PST-sleep TOP 3PL-PROXH TOP IAM= 3PL.PST-sleep and IAM=
kori tə-vəgar tang me bə= kori tə-p~pe
 NEG 3PL.PST-cover REFL/RECP and IAM= NEG 3PL.PST-IPFV~tie
tang.
 REFL/RECP

‘The women inside the house that they were sleeping in, they slept and they didn’t cover themselves or the didn’t wear clothes.’ [AL-SO-092]

4.9 Prepositions

A preposition is the head of a prepositional phrase (PP), taking one complement (usually an NP). PPs commonly combine with demonstratives to specify spatial relations. PPs can also occur by themselves as adjuncts within NP or verbal predicates, as well as complements of verbless clauses. Discussion of prepositions can be found in §6.

PPs usually take the following form:

PP → [PREP =PAT + (NP)]

A preposition takes an NP as complement, with a patientive marker in between (except *mənu* ‘back.of’). Examples of a PP can be seen in the following example:

- (255) *və-p~pi* *təkə = nə-bo* *o* *və-tor* [*gəvənm = a*
 3SG.M.PAT-IPFV~go TO=LOC-UP TOP 3SG.M.PAT-sit **under** =PAT
ngari laik = a]_{PP}
galip big = SG.CLF:MASC
 ‘He went up there, he sat under the big galip tree.’ [AL-RM-046]

4.10 Adverbs

Cross-linguistically, the morphosyntactic characteristics of adverbs as a part of speech are heterogeneous, and always taken as a miscellaneous or residual category (Pittner et al., 2015). A commonly consulted definition is from Huddleston & Pullum (2002:563): “Adverbs characteristically modify verbs and other categories except nouns, especially adjectives and adverbs.”

Five broad subclasses of adverbs are often distinguished, categorized according to semantics (Haspelmath, 2001): setting adverbs (locative and temporal), manner adverbs, degree adverbs, linking adverbs, and sentence adverbs. Tulil has the first four types.

4.10.1 Locative and temporal adverbs

Both locative and temporal adverbs can be used as event adjuncts following the verb complex, event predicates in non-verbal clause, or as frame-setting topics, in the sense that they specify ‘a domain of (possible) reality to which the proposition expressed is restricted.’ (Jacobs, 2006:656).

- (256) *ip-mu* *ip* *vuag = e* *nə-bət* *təkəṛə,*
 3DL.M.PST-put 3DL.M.POSS canoe = SG.CLF:FEM LOC-PROXH beside
me məle mat = ip *mənibəru.*
 and rest take = 3DL.M morning
 ‘They put their canoe there beside, and they rest in the morning.’
[GK-CC-007]

- (257) a. *nə-mumə* *o* *kori* *ngi-toti* *go* *latu*
 LOC-DOWN.DIST TOP NEG 2SG.NPST-see NSPEC garden
laik = e *nə-bət* *tərm = a* *go* *kalak = a*,
 big = SG.CLF:FEM LOC-PROXH near = PAT NSPEC house = SG.CLF:MASC
me nə-mumə *kalak* *katum* *konəng*.
 and LOC-DOWN.DIST house all only
 ‘Down there you don’t see big garden near the house, and down there
 are only houses.’ [ER-EA-003]
- b. *bəvon* *o* *tə-mume* *ko* *nə* *ngang*, *tat-e*, *bəvon* *o*
 before TOP 3PL.PST-tell only APPL 1SG 3PL-QUOT before TOP
laik = ta *o* *kori* *tə-p~pe* *tang*.
 big = PL.CLF:HUM TOP NEG 3PL.PST-IPFV~tie REFL/RECP
 ‘before they told me, they said, before the ancestors were not wearing
 clothes.’ [JK-CB-002]

Morphologically, locative/temporal adverbs can be roughly classified into two categories: demonstrative-like adverbs and PP-like adverbs. A general criterion is that the former takes the allomorph *təkə =* of the directional clitic ‘to’, and the latter takes *tə =* as PPs (certain words such as *təkərə* ‘beside’ and *təbətəm* ‘afternoon’ do not take directional clitics).

Demonstrative-like locative adverbs consist of 1) a large group of demonstrative adverbs formed by attaching the locative morpheme *nə* to the demonstrative roots (for instance, *nə-bo* ‘up there’, *nə-mu* ‘in there’, cf. §7.1); 2) *do* ‘here’ which behaves like the demonstrative adverbs.

- (258) *doto* *ngu-kər* *tang* *mə = nə-mə* *magem*
 when 1DL.NPST-rise REFL/RECP FROM = LOC-DOWN leave.behind
 = *a* *to* *ngu-tu* *təvat n* = *a* *da* *bə =*
 = 3SG.M.PAT SR 1DL.NPST-put drop APPL = 3SG.M.PAT PURP IAM =
ngu-ti~vi *təkə = do* *kavar* *təkə = nə-bo* *ngi-taup* *bem*
 1DL.NPST-IPFV~go TO = here just TO = LOC-UP 2SG.NPST-grab at
 = *a* *letəm = e* *nandi* *o* *letəm = e* *e-bo*
 = PAT door = SG.CLF:FEM like.this TOP door = SG.CLF:FEM 3SG.F-UP
o *b =* *i-m~man*.
 TOP IAM = 3SG.F.PST-IPFV~open
 ‘When we get up from down there, leaving him behind, we put him so
 we come here, just then you go up and grab the door like this, the door
 will open.’ [AL-SO-089]

- (259) *ta-təkātə* *mat idə tə=ga* *ro=e,* *ba*
 3PL.NPST-fetch.water take 3N TO = across bamboo = SG.CLF:FEM in
ro=vitəm *kilov=ip* *təkə=nə-bo ta-ti~vi*
 bamboo = DL.CLF:FEM lid = DL.CLF:MASC TO = LOC-UP 3PL.NPST-IPFV~go
tə=bəro.
 TO = at.creek
 ‘They fetch these water into the bamboo and put the lid on, they take
 down to the creek.’ [WM-JJ-014]

PP-like locative adverbs include locative expressions such as *davə* ‘above’, *bəro* ‘at the creek’, *dəratəm* ‘outside’. It is possible that these three words are derived from prepositions, see analysis and examples in §6.7).

Another type of PP-like locative adverbs can combine with applicative *n*, applicative-like morpheme *m*, or zero-derivation to form prepositional phrases or prepositions. *mədərəp* ‘in the middle’, *noɡət* ‘ahead, in front’, and *pədəm* ‘behind, at the back’ can combine with applicative *n* to form a preposition-like expression (260b, composite prepositional expressions, see §6.2); *təkəra* ‘at the side’ and *gəvənəm* ‘under’ can derive into prepositions *təkermə* and *gəvənmə* by attaching an applicative-like morpheme *m* (261, see analysis in §6.2); and *bərodəm* ‘inside’ derives to preposition without overt morphological change⁴⁰, as in 262.

- (260) a. *u-vi* *to nga-no~bokbok* *bem o* ***mədərəp n*** *konəŋg.*
 3N-PROXS SR 1SG.NPST-IPFV~talk at TOP middle only
 ‘this I’m talking about is in the middle (of the two tracks).’
 [JK-PP-078]
- b. *doi* *laik=a* *v-ətor* ***mədərəp n*** *=udu*
 boundary big=SG.CLF:MASC 3SG.M.PST-sit middle APPL =1PL
du-n *=a* *Mərubət.*
 1PL-COM =PAT PN
 ‘The big boundary sits between us and the Bainings, this boundary is
 big.’ [KM-TH-079]

- (261) a. *ngang o* *nga-t~tek* *nə* *tang nə-mumə* ***təkəra.***
 1SG TOP 1SG.NPST-IPFV~arise APPL IPFV LOC-DOWN.DIST beside
 ‘I show off [with my dance] beside [him].’ [AL-HD-069]

40. Another possible analysis is to treat words such as *bərodəm* ‘inside’ with zero-derivation as prepositions with unspecified complements. And for other words, there is also a tendency for 3rd neuter complement to not be present in the text and use the adverb form. Further investigation of the text is needed for confirming this hypothesis. More examples can be found in preposition chapter.

- b. *tə-re mət̪mət̪ təkə = nə-mumə təkerm = a*
 3PL.PST-carry food TO = LOC-DOWN.DIST beside = PAT
ioi = voi.
 water = SG.CLF:FLAT
 ‘They carried food down to the river bank.’ [JN-KL-021]

- (262) a. *ta-tu idə da bulit i-tanəŋ bərodəm.*
 3PL.NPST-put 3N PURP glue 3N.NPST-run inside
 ‘They will put them so that the drops of the sticky milk will come out
 [of the bananas].’ [WM-JJ-005]

- b. *bə = pol = a a-bət o ava də-tur*
 IAM = grease = SG.CLF:MASC 3SG.M-PROXH TOP again 1PL.NPST-wash
bərodəm = a n = a ioi.
 inside = 3SG.M.PAT INSTR = PAT water
 ‘That grease, we will put water into it.’ [AL-TN-010]

Temporal adverbs (demonstrative adverbs can semantically extend into the time domain §7.4.1) are also PP-like adverbs in that they combine with the directional clitic *tə = ‘to’* rather than the allomorph *təkə =*.

- (263) *ngi-nət o dəp nging mətə məgət ar tə = bərui me*
 2SG.NPST-eat TOP satisfied 2SG like today still TO = tomorrow and
dəp nging.
 satisfied 2SG
 ‘You eat and you are satisfied today until tomorrow.’ [WM-LB-025]

There are eight temporal adverbs, providing information about the temporal setting (Table 4.12).

Among these forms, *bavonbə* ‘days not far before yesterday or after tomorrow’ probably derives from preposition *ba* + *vonbə* ‘diminutive non-specific demonstrative’, and *təbərtəm* may consist of *tə = ‘to’* and *bərtəm* ‘night’ (lit. towards night).

vənu = a ‘at noon’ and *vul = a* ‘at night’ are two nouns rather than adverbs.

4.10.2 Manner adverbs

There are two types of manner adverbs: manner demonstrative adverbs and manner adverbs as verbal adjuncts. There are two manner demonstrative adverbs:

Table 4.12: List of temporal adverbs

form	gloss
<i>bəvon</i>	‘before’
<i>məgət</i>	‘today’
<i>mior</i>	‘yesterday’
<i>bərui</i>	‘tomorrow’
<i>bəvonbə</i>	‘days not far before yesterday or after tomorrow’
<i>mənibərui</i>	‘morning’
<i>təbətəm</i>	‘afternoon’
<i>bətəm</i>	‘night’

navonbət (*nanbət*) ‘like that’ and *navondi* (*nandi*) ‘like this’, derived from the diminutive nominal demonstrative (*vodi* and *vonbət*) (detailed description and examples can be found in §7.2.4).

Manner adverbs modifying the verb head as verbal adjuncts inside the verb complex restrict their use inside the VC and cannot be used as adjuncts outside VC (a list of words and examples can be found in §8.3.1.3).

4.10.3 Degree modifier

Degree modifiers are a closed group of adverbs that modify an adjective, a quantifier or another adverb. It includes three members: *vəvat* ‘very’ (264), *moli* ‘really’ (265), *tənin* ‘fully’ (266).

Table 4.13: Degree modifiers

adv.	gloss	other uses	modifying
<i>vəvat</i>	‘very’	adj. ‘huge’	adj.
<i>moli</i>	‘really’	adj. ‘real’; manner adv. ‘again’	adj./adv.
<i>tənin</i>	‘fully’	manner adv. ‘all over’; stat.v. ‘non-stoppingly’	adj.

- (264) *iap o bə= varvar vəvat n =a o*
 3SG.M TOP IAM= happy very APPL = 3SG.M.PAT TOP
v-ə~mat katum kup ko n =a təre=vənik,
 3SG.M.PST-IPFV~take all all.over only APPL = PAT thing = PL.CLF:DIM
v-at =a mətmət tuk udu, li to və-kukuirəm.
 3SG.M.PST-take =PAT food give 1PL taro SR 3SG.M.PST-mumu
 ‘He was very happy and he got everything, he got food to give to us, taro
 that he dry-mumued.’ [CM-B2-029]

- (265) a. *molimoli =a a-umu o molimoli mərot*
 people = SG.CLF:MASC 3SG.M-DIST.INVS TOP people huge
moli = a.
 really = SG.CLF:MASC
 ‘The man inside is a really huge man.’ [AL-BT-015]
- b. *ngang ngə-ton tuk =a arum = a, arum laik*
 1SG 1SG.PST-see give =PAT possum = SG.CLF:MASC possum big
moli = a.
 really = SG.CLF:MASC
 ‘I saw a possum, a really big possum.’ [CM-B1-008]

- (266) *viuv = e o a-bulu me məlməl tənin.*
 sea = SG.CLF:FEM TOP ART-blue and clear all.over
 ‘Because the sea was very clear and blue.’ [KM-TH-025]

moli can modify a time/space adverb indicating ‘right at the point’:

- (267) *nging o ngi-nitəng nə-bət, me ngun o ngu-titəng do,*
 2SG TOP 2SG.PST-bite LOC-PROXH and 1DL TOP 1DL.NPST-bite here
təgət = a do me təgət = a nə-p~bo, me
 one = SG.CLF:MASC here and one = SG.CLF:MASC LOC-END~UP and
nging o nə-bət mədərəp moli o nging ngi-nitəng.
 2SG TOP LOC-PROXH middle real TOP 1SG 2SG.NPST-bite
 ‘You bite there, and we bite here, one (*təgətə*) here and one (*təgətə*) at the
 other end, and you bite right in the middle.’ [ER-TD-018]

vəvat and *moli* are also adjectives, meaning ‘big’ (268) and ‘real’ (269) respectively.

- (268) *doto ip-valət =pənəm, o təron=a to*
 when 3DL.M.PST-split =SG.CLF:SLE TOP smell=SG.CLF:MASC SR
kəlon, vəvat moli, təron vəvat=a.
 decay big really smell big=SG.CLF:MASC
 ‘When they split the bamboo cut, the smell of decay was really strong,
 very strong smell.’ [AL-RM-104]

- (269) *latə moli=a to p~pən*
 head real=SG.CLF:MASC SR NMLZ~fight
 ‘the real leader of the war’ [AL-HD-013]

moli, tənin can also be used as manner adverb as verbal adjuncts, meaning ‘again’ (270) and ‘(go) non-stoppingly’ respectively (§8.3).

- (270) *i-mat moli n =a va məl təgət*
 3SG.F.PAT-take again APPL =PAT 3SG.M.POSS.AL clothes one
ava i-vəgar von, me von ar von
 again 3SG.F.PST-cover SG.CLF:DIM and SG.CLF:DIM still SG.CLF:DIM
idə-t~təvəng konəng.
 3N.PST-IPFV~sing only
 ‘She got another pile of clothes again and covered it again, and it was
 still singing.’ [AL-RD-014]

The degree modifier *văvat* ‘very’ by itself cannot modify an adjective inside an NP, but only the whole NP. When used in an NP by itself, it modifies nouns meaning ‘big, huge’, and can be the root of the NP *văvat=a* meaning ‘monster’.

- (271) a. *da ngi-nu~mu ba du mətmət da doto*
 PURP 2SG.NPST-IPFV~put in 1PL.POSS food PURP when
viuv=a vəvat to d-ə~mət.
 taste=SG.CLF:MASC very SR 1PL.NPST-IPFV~eat
 ‘You put in our food that makes the food very tasty.’ [LG-VI-038]
- b. *Tuaina o viu mərek moli=a.*
 dish.name TOP taste good really=SG.CLF:MASC
 ‘*Tuaina* is really tasty.’ [E]

4.10.4 Non-specific *go*

The morpheme *go* marks NP as [-SPEC], and has similar functions to the English word ‘some’. The main function of *go* is to express existential quantification, and can collocate with singular as well as plural core NPs.

(272) *go* + SG.

go molimoli = a a-pi nə-bət.

NSPEC human = SG.CLF:MASC 3SG.M.NPST-*go* TO-PROXH

‘Some/A man will go there.’

[WM-LK-020]

(273) *go* + PL.

ak-gup vəd = a go bəli kuobər.

3SG.M.NPST-hunt for = PAT NSPEC pig wild

‘He will hunt for some wild pigs.’

[SV-BE-035]

(274) *go* + specific number

a. *a-perən ko n = a go ləmat mukəm.magərung,*

3SG.M.NPST-climb only APPL = PAT NSPEC coconut three.CLF:MASC

balakətəria, libəti..

four five

‘He only climbs (to get) two, three, or four coconuts.’

[AL-RM-160]

b. *go vəti = von o nga-bən-m = a go*

NSPEC day = SG.CLF:DIM TOP 1SG.NPST-kill-APPL = PAT NSPEC

balakətəria, go vəti = von o nga-bən-m = a

four NSPEC day = SG.CLF:DIM TOP 1SG.NPST-kill-APPL = PAT

go mukəm.magərung, go mukəm

NSPEC three.CLF:MASC NSPEC two.CLF:MASC

‘Some day I kill four, some day I kill three, two...’

[DV-HP-025]

go can also be used on its own as a proform⁴¹, of unspecified/unmarked nominal class, which is either neuter/non-human entity, or human with unspecified gender.

(275) *do kori i-tatme moli da go.*

now NEG 2DL.NPST-work again for NSPEC

‘Now you (dl.) will not do these (sorcery) again.’

[JK-TS-084]

41. *go* has a homonym as an interrogative, meaning ‘who’. *go* ‘who’ has different inflectional pattern (cf. §3.6.2) from *go* NSPEC.

When used as a proform, *go* has a set of inflected forms, corresponding to different nominal classes. The use of *go* (and the inflected forms) as non-specific pronouns in NP is discussed in §5.4, and details of forms can be found in §10.1.1.2, Table 10.6.

go is compulsory in a negated NP (negation on clausal level), expressing negative existential.

- (276) a. *kori go moli idə-mume ngang*
 NEG NSPEC person 3N.PST-tell 1SG
 ‘Nobody told me...’ [LR-TM-002]
- b. *bə = moi ko be vanəm = ta, kori go*
 IAM = remaining only at few = PL.CLF:HUM NEG NSPEC
tar = ta.
 many = PL.CLF:HUM
 ‘The remaining was only a few people, not a lot of people.’ [LR-TF-018]

4.10.5 Quotative *e*

The quotative *e* can be used either as a complementizer (example 277a, §12.2), or as a quotative predicator (example 277b).

- (277) a. *nga laik = a o v-əngar at-e,*
 1SG.POSS.AL uncle = SG.CLF:MASC TOP 3SG.M.PST-say 3SG.M-QUOT
 “*bər udu*”, *at-e*, “*do o ko go maik.*”
 leave 1PL 3SG.M.PST-say now/here TOP NEG NSPEC far
 ‘My uncle said , “let’s go”, he said, “now it’s not far.”’ [CM-B2-023]
- b. *io it-e, “o bə = tə-bi?” ngan-e, “bə =*
 then 2DL-QUOT TOP IAM = 3PL.PST-~go 1SG-say IAM =
tə-p~pi! *to ngə-tuar mənə ta me ngə-təvəkup,*
 3PL.PST-IPFV~go SR 1SG.PST-shout off 3PL and 1SG.PST-struggle
io tə-p~pi.”
 then 3PL.PST-IPFV~go
 Then they said, ‘where are they?’ I said, ‘they already went, because I shouted at them and I struggled, so they went.’ [MP-GW-019]

When used as a complementizer, quotative *e* usually combines with utterance and thought verbs such as *məŋgar* ‘say’, *bokbok* ‘talk’ and *tən* ‘think’. It can also be used as a predicate itself, implying a real speech or thoughts. For instance, in 277a, the first *e* follows the speech verb *məŋgar* ‘say’; while in 277b, it constitutes the predicate. In both cases, *e* has a defective inflectional pattern (quotative indexes) that does not reflect tense (§10.1.2.4).

In the production of narrative in Tulil, speakers make extensive use of direct speech. Direct quotes have the internal syntactic structure of typical clauses and even multiple sentences. The speaker can not only quote the speech of a person, but can also mimic with interjections, onomatopoeic expressions, or non-verbal events.

- (278) a. *və-t~tit* *at-e*, *kss*, *kss*, *kss*.
 3SG.M.PST-IPFV~hiss 3SG.M-QUOT, IDEO IDEO IDEO
 ‘He was hissing, (making the sound) kss, kss, kss.’ [LN-SO-021]
- b. *ava pələp*, *ava it-e* *iərunɡ*.
 again lightning again 3N-QUOT thunder
 ‘The lightning struck again, and thunder.’ [JK-PP-091]
- c. *itə-langət* *navodi n =a itə=* *nok*, *io*
 3DL.F.PST-wave like.this APPL =PAT 3DL.F.POSS= hand then
it-e [gesture].
 3DL.F-QUOT
 ‘They (dl.f.) were waving like this with their hands, then they signed [gesture].’ [JK-TM-013]

Indirect speech also occurs when the matrix clause is a negated clause, with the complement clause indicating facts, or a speech event that didn’t happen (usually purposive clause):

- (279) a. *ip o kori it-təm* *it-e*, *kəvənav=e*
 3DL.M TOP NEG 3DL.M.NPST-know 3DL.M-QUOT rain=SG.CLF:FEM
e-bo.
 3SG.F-UP
 They (dl.m.) didn’t know that it was raining up there.
 [AL-RM-099]
- b. *kori v-əŋgar* *at-e* *da a-vəde*.
 NEG 3SG.M.PST-say 3SG.M-QUOT PURP 3SG.M-this.way
 He didn’t say he would come. [PO]

4.11 Particles

The following sections provide an overview of the common particles. Particles in Tulil are those words that can occur in multiple syntactic positions (such as iamitive *bə*, emphatic *konəng*). However, this section also includes elements that are difficult to define within the scope of current study.

4.11.1 Conjunctions

Conjunctions include coordinators and subordinators. Both types can be the first elements of the following clause, or of an independent clause. Coordinators are discussed in detail in §11.1.2, and subordinators in §12.1.2. *da* and *ti* is discussed in further details in §4.11.3

Table 4.14: Conjunctions in Tulil

types	adv.	gloss
CO	<i>io</i>	‘and then’
	<i>me</i>	‘and’
	<i>ba</i>	‘or’
	<i>məie</i>	‘but’
SUB	<i>to</i>	general subordinator
	<i>e</i>	quotative
	<i>da</i>	purposive
	<i>ti</i>	‘lest’
	<i>tove</i>	‘because’
	<i>doto</i>	‘when/if’
	<i>dame</i>	irrealis purposive ‘wanted to, supposed to (but failed)’
	<i>kati</i>	irrealis condition
<i>ka</i>	irrealis result	

The morphology of conjunctions can be complex or simplex. For instance, *doto*, *tove*, *kati*, *dame* seem to be historically related to simplex forms of particles (e.g. *doto* = *do* ‘here/now’ + *to* SR), though the meaning is semantically opaque.

4.11.2 *bə* iamitive perfect

The iamitive perfect proclitic *bə* occur before most types of elements to add aspectual connotations. It can have scope over clauses (examples in 281), and phrase-

level constituents (such as NPs, adjectives, demonstratives and frame-setting adverbials, examples in 282). When preceding elements starting with vowels, the allomorph *b* is used, such as *idə* 3N.PST (281a) (but not semi-vowels /j/ (i) or /w/ (u), e.g. *b* before *i*- 3SG.F.PST but not *iu*-/ju/ 2DL.NPST). However, *bə* can be occasionally found to be used instead of *b* (such as in 281b, compare with 283), this may relate to the scope of the particle, or pragmatic functions, and further investigation needs to be carried out on this issue.

$$(280) \quad bə \rightarrow \begin{cases} b / v_ * \\ bə / \text{other} \end{cases}$$

(281) a. **verbal clause**

ləvək vanəm o b = idə-vunə, ragum o bə =
 banana few TOP IAM = 3N.PST-bear.fruit greens TOP IAM =
du-mət idə.
 1PL.PST-eat 3N

‘Some bananas are already bearing fruits, some of the greens we have already ate them.’ [WM-MG-006]

b. **nominal clause**

vakue bə = idur = a təpm = a
 woman.SG.CLF:FEM IAM = belly = SG.CLF:MASC with = PAT
idil = a.
 child = SG.CLF:MASC

‘The woman was pregnant with the son.’ [WM-ML-017]

c. **locative clause**

ip-vi o b = ip-bət konəng gəvənəm.
 3DL.M-PROXS TOP IAM = 3SG.M-PROXH only below

‘The two (brother) were just there under (the tree).’ [TV-MA-033]

(282) a. **NP**

nging o kavar bə = ngi-mətor nə-bət be ibən,
 2SG TOP just.then IAM = 2SG.NPST-sit LOC-PROXH at ground
me do bə = kom = a a-t~tor do.
 and now IAM = hornbill = SG.CLF:MASC 3SG.M.NPST-IPFV~sit here
 ‘You’ll be living on the ground, and hornbill is sitting here.’

[LR-HC-019]

b. **PP**

kori tare go tul, to i-mərop bə = be
 NEG thing NSPEC bird SR 3SG.F.PST-bury IAM = at
nang = a və = katə, mənə ta.
 tree = SG.CLF:MASC 3SG.M.POSS.AL = leg off 3PL

‘They didn’t bring back any birds, because she waited at the foot of the tree, try to scare them away.’ [LM-WT-011]

c. **Serial verb**

ar nə-m~mə kup tə = be vət to da avar
 still LOC-CON~DOWN all TO = at SG.CLF:SEG SR PURP still
məlang = a o bə = kori a-taup bə = mat
 lizard = SG.CLF:MASC TOP IAM = NEG 3SG.M.NPST-grab IAM = take
 = e, ar bə = maik moli, ba kəvukəvuk.
 = 3SG.F.PAT still IAM = far real in deep.dark

‘Still far down there to the place so that the lizard can’t get hold of her, still really far, far into the deep sea.’ [LN-SL-046]

d. **Adverbials**

io nəvon o go vəti = vələgəp o ava
 then like.this TOP NSPEC day = DL.CLF:DIM TOP still
vənu = a, ava go vəti = von o ava
 sun = SG.CLF:MASC still NSPEC day = SG.CLF:DIM TOP still
e-təvən bə = təbətəm konəng.
 3SG.F.NPST-fall IAM = afternoon just

‘Then like this, after some two days, it was sunny, after one day it (the rain) will fall just in the afternoon.’ [AL-RM-097]

- (283) *komək idə-vok bem tang nə-mu ba vakue*
 semen 3N.PST-work at REFL/RECP LOC-INSIDE in woman.SG.CLF:FEM
i = ronəng, da b = idur = a.
 3SG.F.POSS.INAL = belly PURP IAM = belly = SG.CLF:MASC
 ‘The semen functioned/formed (lit. work on itself) in the woman’s belly, so that she gets pregnant.’ [WM-ML-015]

There can be multiple *bə* occurring in one clause:

(286) a. **PST.PF**

imə-mun *bem* = *a* *o* *iap* *o*
 3DL.M.PST-pierce at = 3SG.M.PAT TOP 3SG.M IAM =

bə = *və-ngəp*.
 3SG.M.PST-die

‘They (dl.m.) pierced at him, he [the crocodile] was already dead.’
 [GK-CC-031]

b. **PST.IPFV**

bərivu = *a* *bə* = *və-m~mip* *mə* = *nə-vimə*
 wind = SG.CLF:MASC IAM = 3SG.M-IPFV~swirl FROM = LOC-DOWN.PROX

to *vənu* = *a* *a-kə~ngəp*.
 SR sun = SG.CLF:MASC 3SG.M.NPST-IPFV~die

‘The wind was already swirling from the west side (lit. where the sun dies).’
 [AL-RM-076]

c. **NPST.PF**

do *bə* = *nga-nəngar* *be a-tade* *to* *lət* *n*
 now/here IAM = 1SG.PST-say at ART-church SR arrive APPL
 = *e* *do* *dova* *Tulil*.
 = 3SG.M.PAT here at.place.of PN

‘Now (here) I will tell about the church when it arrived here in Tulil.’
 [LR-TH-053]

d. **NPST.IPFV**

doto *bə* = *ngi-di~vi* *təpm* = *a* *ba*
 when IAM = 2SG.NPST-IPFV~go with = 3SG.M.PAT in
tuk = *a*, *me* *iap* *o* *bə* = *və-təm*
 road = SG.CLF:MASC and 3SG.M TOP IAM = 3SG.M.PST-know
at-e...
 3SG.M-QUOT

‘When you are (already) going with him [the devil], and he knows that...’
 [AL-SO-053]

When *bə* precedes a nonverbal clause, it expresses perfect connotation or a change of state ‘become’:

- (287) *ngun o kori ngunu-təm to ngun o ar lok = pələgəp*
 1DL TOP NEG 1DL.PST-know SR 1DL TOP still young = DL.CLF:DIM
nə ngun, lok ləm = ip ngun me ta-vi o
 1DL APPL 1DL man young = DL.CLF:MASC and 3PL-PROXS TOP
bə = molimoli laik = ta.
 IAM = person big = PL.CLF:HUM
 ‘We (dl.) didn’t know because we were two young men, they are already
 adults.’ [AL-DA-107]

When preceding phrasal-level elements, *bə* has an emphatic, foregrounding function:

- (288) *kəməron = a o bə = iap a-tu mu.*
 different = SG.CLF:MASC TOP IAM = 3SG.M 3SG.M.NPST-IPFV~put
 ‘The devil, it was him who teaches these.’ [AL-DA-056]

4.11.3 Desiderative *da* and apprehensional *ti*

The particles *da* and *ti* can be used on different levels of the grammar, expressing desiderative (‘want (to)’) / purposive (‘in order to’), and apprehension (avoid or fear, ‘lest’) / uncertainty. The syntactic use of these two morphemes are very similar: they can be used as prepositions (usually inside a VC), modality morphemes in independent clauses, subordinate morphemes in complement clauses (only *da*) or adverbial clauses, and marking hypothetical possibilities in questions (only *ti*).

Table 4.16: Functions of *da* and *ti*

position	function	<i>da</i>	<i>ti</i>
before NP	prepositional	want sth.	afraid of sth.
independent clause	modality	desiderative	apprehensional
subordinate clause	complementation	<i>langmə</i> want (sb.) to do	
	adverbial clause	‘in order to’	avertive in-case
question			uncertainty

da and *ti* can be used as prepositions and form PPs with NPs. The PPs in this case are projected by certain verbs (stative intransitive verbs *langmə* ‘want’ and *iaor* ‘be afraid’) as the complements.

- (289) a. *maok u-vi to e-bət da doto lang-mə nging*
 space 3N-PROXS SR 3SG.F-PROXH PURP when want-APPL 2SG
da go maok=a io da ngi-n~dor
 PURP NSPEC space=SG.CLF:MASC then PURP 2SG.NPST-IPFV~sit
nə-bət təpmə ta.
 LOC-PROXH with 3PL

‘This piece of land belongs to her, it is for the sake of when you want land, you stay there with them.’ [SV-N1-027]

- b. *ngə-toti =a nandi o ngang o ava iaor*
 1SG.PST-see =3SG.M.PAT like.this TOP 1SG TOP also afraid
ngang ti iap.
 1SG LEST 3SG.M

‘I saw him like this, I was also afraid of him.’ [AL-DA-128]

da and *ti* can be used in independent sentences with desiderative and apprehensional-epistemic functions. The latter is defined in Lichtenberk (1995) as related to the LEST element, expressing modality that is both epistemic (the speaker’s uncertainty about the factual status of a proposition) and attitudinal (the apprehensional attitude concerning the situation encoded in the sentence). According to him, this is a case of mixed modality rather than polysemy.

- (290) a. *ngang o da nga-bitəmut, ta-bət o kəmak*
 1SG TOP PURP 1SG.NPST-believe 3PL-PROXH TOP lie
kəl=ta ta-bət, ngang o da nga-bitəmut.
 face=PL.CLF:HUM 3PL-PROXH 1SG TOP PURP 1SG.NPST-believe
 ‘I want to believe, (but) those are a bunch of liars, I want to believe.’
 [AL-IP-040]

- b. *ti i-leir n =a lak=a təpm*
 LEST 3DL.M.PST-damage APPL =PAT pool=SG.CLF:MASC with
 =a *ioi u-vi to i-ta~mang.*
 =PAT water 3N-PROXS SR 3N.NPST-IPFV~burn
 ‘Lest you (dl.) destroy the pool with water that are salty.’
 [LG-VI-040]

In a sentence like 290b, the speaker shows apprehension towards a potential undesirable situation that is likely to happen. *ti* can also be used mainly for expressing epistemic uncertainty, usually in a question, with slight attitude of apprehension. For instance, in 291a, the alternative indicated by the clause following *ti* is ‘she (the

torch) dies' (the battery runs out), and in 291b is 'he (the crocodile) is still alive' (it is still dangerous). In both cases, it is the undesired alternative that follows *ti*.

- (291) a. *e-mu o ti b = i-ngəp ba e-tuli*
 3SG.F-in TOP LEST IAM = 3SG.F.PST-die or 3SG.F.NPST-light
konəŋ?
 only
 'That one is dead or just torching?' [AL-TC-027]
- b. *it-e a-vi ti ar ləm ko n = a*
 3SG.F-QUOT 3SG.M-PROXS LEST still alive just APPL = 3SG.M.PAT
ba bə = və-ngəp.
 or IAM = 3SG.M.PST-die
 'She thought, this one [the torch] is still shining (lit: alive) or it's off
 (lit: dead)?' [GK-CC-030]
- c. *a-vi ti a-bi?*
 3SG.M-PROXS LEST 3SG.M-where
 'Where is he?' [JK-TS-048]

When *da* follows *langmə* 'want', it can lead a complement clause:

- (292) *bə = lang-m = ip da vaku = e b =*
 IAM = want-APPL = 3DL.M PURP woman = SG.CLF:FEM IAM =
e-tat = a go idil = von.
 3SG.F.NPST-take = PAT NSPEC small = SG.CLF:DIM
 'They want the woman to have children.' [WM-ML-002]

In a subordinate clause, *da* can express purpose 'in order for, so that' (293) and *ti* can express negative purpose 'lest'.

- (293) *ngi-bəlok pəka tuk = ip da ta-təm.*
 2SG.PST-divulge bright give = 3DL.M PURP 3PL.NPST-know
 'You divulge clearly to them, in order for them to know.' [AL-RM-122]

Lichtenberk further subdivides the precautioning function of *lest* into avertive and in-case functions. The two differ in that there is a direct causal link between the two propositions in the avertive function, but not in the in-case function. So we can see in contrast, for example, in 294a, hiding in the bush prevents the two to be found by *Namugi*, while in 294b, the fact that young men and women go to sleep is not a consequence of our 'not going'.

(294) a. **avertive**

it-tərut ba tipur ti e-Namugi e-tot(i) = ip.
 3DL.M.PST-hide in bush LEST ART.F-PN 3SG.F.NPST-see = 3DL.M
 ‘They hid in bush so that Namugi cannot see them.’ [LG-VI-027]

b. **in-case**

bə = də-p~pi, ti lok ləm = ta
 IAM = 1PL.NPST-IPFV~go LEST man young = PL.CLF:HUM
me vak ləm = ta ta-tengəp, me da
 and woman young = PL.CLF:HUM 3PL.NPST-sleep and PURP
ta-toti udu du tədor to diau təpm = a
 3PL.NPST-see 1PL 1PL.POSS strength SR 1PL.NPST.fly with = PAT
du tədor nə-bo bəranmə ta.
 1PL.POSS strength LOC-UP over 3PL
 ‘let’s go, in case young men and women they sleep, for them to see our
 strength that we fly with our strength over them.’ [AL-GN-022]

4.11.4 Emphatic particles

Emphatic particles include *konəng*, *ava*, *eva*, *ar*. *avar* is a complex morpheme formed by *ava* + *ar*, and *kavar* means ‘just at that time’. All these morphemes can express ‘only, just’ according to context they are used in, and the determination of semantic/pragmatic differences among these forms requires further studies. *ava/eva* can also mean ‘again’, as well as indicating an explanation of reasons in the following clause (‘it is just (because) that...’); *ar* can express *still*; and *avar* is a mixture of both.

konəng can follow an element and modify it. It can have a scope over a single constituent, or a phrase. *konəng* has a short form *ko*. The use of *konəng* inside an NP is discussed in §5.1.1.

(295) a. *nə-bət o kəvənav konəng = e e-vi to da*
 LOC-PROXH TOP rain only = SG.CLF:FEM 3SG.F-PROXS SR PURP
e-tə~mənəvən.
 3SG.F.NPST-IPFV~fall
 ‘That was just the rain falling.’ [AL-RM-124]

b. *idə-t~təvəng vəvat konəng.*

3N.PST-sing very only
 ‘It (the radio) was just singing a lot.’ [AL-DA-135]

- c. *a-vi* *ba viuv=e* *o* *ava* *və-re* *moli*
 3SG.M-PROXS in sea=SG.CLF:FEM TOP again 3SG.M.PAT again
ko *n* =*a* *aen tarə*.
 only APPL =PAT fish many
 ‘The one went to the sea brought a lot of fish again.’ [TV-CC-006]

The forms of *ava* and *eva* are possibly related to gender in old times (*a* and *e* are similar to gender related morphemes for masculine and feminine), but now they are neutralized and *ava* is more frequently used than *eva*.

- (296) a. *kori ava nga-toti* *go* *təreuk* *to mərek nəmu*,
 NEG again 1SG.NPST-see NSPEC thing.PL SR good LOC-INSIDE
o *nga-tuk* *n* =*a* *ngə=* *nok* *da*
 TOP 1SG.NPST-give INSTR =PAT 1SG.POSS.AL= hand PURP
nga-nat *idə*.
 1SG.NPST-take 3N
 ‘I don’t (shouldn’t) see something good there inside again, and I reach my hand to get them.’ [AL-SO-096]
- b. *eva ngang o mən=do*, *ngang nga* *ti-nəvənik*
 just 1SG TOP FROM=here 1SG 1SG.POSS.AL parent-PL
ta-vi *to mən=do* *to tə-re* *ngən mə=nə-mu*,
 3SG-PROXS SR FROM=here SR 3PL.PST-carry 2PL FROM=LOC-DIST
təkə=do.
 TO=here
 ‘I’m just from here, my parents (and their brothers and sisters) are from here and they took you (pl.) from inland (to) here.’ [SV-N1-100]

- (297) *udu avar du-mətor* *ko* *do*, *me ngən o* *ar* *i-ngəp*
 1PL just 1PL.PST-sit only here and 2PL TOP still 2PL.NPST-die
nə-bət *da* *m~mət*.
 LOC-PROXH PURP INF~eat
 ‘We just sit here, and you will die for (lacking of) food.’ [AL-IP-038]

Chapter 5

Noun phrase structure

This chapter deals with Tuli NP structure. The major characteristics of NP structure in Tuli includes the following:

- (A) NPs are typically headed by nouns, nominal/adverbial demonstratives, as well as non-specific pronoun and personal pronouns;
- (B) NPs are inflected for number and nominal classes, manifested by
 - (a) class marking encliticized to the end of the core elements of NP; a default zero-class marking (*idə* in indexing) is given to NPs without a specified class, such as NPs headed by nominalized verbs or mass nouns, non-specific pronouns, etc.
 - (b) pronominal indexes reflecting the class/number of NPs, on verbs, possessive pronouns, prepositions etc.
- (C) NPs functioning as O/S_o arguments and complements of prepositions (cf. §6) are marked by patientive marking = *a*, attached to the component immediately before the NP.

Prototypically, nouns function as **NP heads**. A **minimal NP** can typically be a head noun encliticized by a class marker:

- (298) [*vaku = e*]_{NP} *e-təngar* *tuk = a*
woman = SG.CLF:FEM 3SG.F.NPST-say give = PAT
- [*lok = a*]_{NP} ...
man = SG.CLF:MASC
- ‘The woman tells the man ...’ [WM-ML-006]

When there is no head noun in an NP, core modifiers such as adjectives and numerals/quantifiers can also be the heads and constitute an NP together with

Structure of an NP headed by a noun. Curly brackets mark alternatives, and parentheses stand for optionality. A star marks that there may be multiple instances of a particular word class or phrase type.

Figure 5.1: Core noun phrase structure

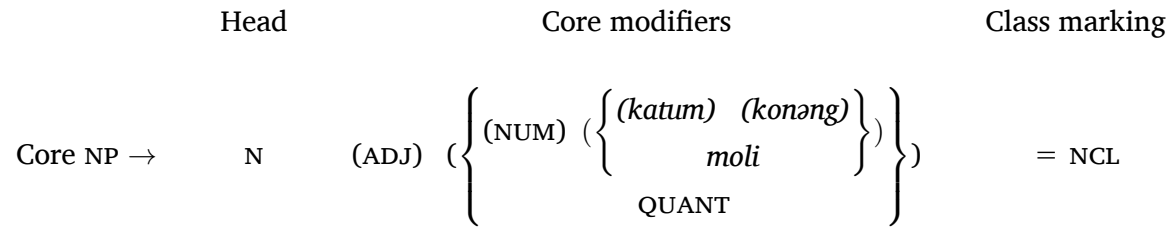
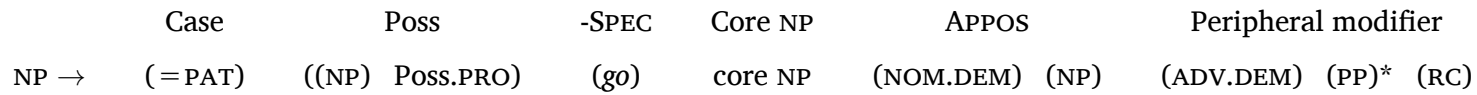


Figure 5.2: Complex NP with nouns or core modifiers as heads



class markings. In that case, the leftmost constituent in the core NP is always the functional head (will be discussed further in §5.1.1). Other elements that can be an NP head, including nominal demonstratives, adverbial demonstratives, the non-specific pronoun *go* and its inflected forms, and personal pronouns.

5.1 NPs headed by nouns and core modifiers

The structure of NP with nominal heads can be conceived of having two levels for the ease of description: ‘core NP’ and the complex NP. The core NP includes the head noun, core modifiers such as adjectives and quantifiers, as well as class marking, while the complex NP include pre-core determiners (possessor/possessive indexes, non-specific particle *go*) and post-core peripheral adjuncts (relative clause, prepositional phrase and relative clause). The template of Tulil NP structure (with nouns or core modifiers as heads) is shown in Figure 5.1 and Figure 5.2.

5.1.1 Structure of the core NP

A core NP consists of the head noun, core modifiers, adverbial particles, and NP class marking. The modifier slots are immediately after the noun, and can take one or more adjectives and a numeral/quantifier, in the indicated order⁴². NP class marking is encliticized at the end of a core NP⁴³. Some elicited examples of core NPs are listed in Table 5.2.

Adverbial particles include *katum* ‘all’, *konəŋ* ‘only’ and *moli* ‘really, precisely’. Nouns can be modified by *konəŋ* ‘only’ as an adverbial. Nouns can also be modified by *katum* ‘all’ or *moli* ‘real’, but in this case, both words are quantifiers/adjectives (as shown in 300 and 301) rather than adverbs (shown in 302 and 303).

- (299) *go tare = a a-bət o tor konəŋ_{PTCL} = bələ*
 NSPEC thing = SG.CLF:MASC 3SG.M-PROXH TOP wood only = SG.CLF:SPH
vələ-bət to vələ i-ti~miau.
 SG.CLF:SPH-PROXH SR SG.CLF:SPH 3N.NPST-IPFV~fly
 ‘That thing is just a piece of wood that flies.’ [AL-GN-016]

42. In the texts, no instances of adjectives together with numerals/quantifiers as modifiers of nouns have been found, but elicitation shows that this is a possible structure, see examples in Table 5.1

43. When the initial consonant of the class marking is *v*, it goes through morphophonological assimilation processes, changing to other bilabials according to the preceding phoneme, as shown in the examples in Table 5.1, details can be found in §2.5.3

Table 5.1: Examples of core NP with noun and other constituents as head

head	modifiers			class marking	free translation
n.	adj.	quant.	ptcl.	ncl.	
‘man’	‘good’	‘five’	‘only’	CLF:DIM (sg./pl.)	
<i>lok</i>				= <i>pon</i>	‘a young man’
<i>lok</i>	<i>mārek</i>			= <i>pon</i>	‘a good young man’
<i>lok</i>		<i>libāti</i>		= <i>vānik</i>	‘five young man’
<i>lok</i>			<i>konāng</i>	= <i>bon</i>	‘only a young man’
<i>lok</i>	<i>mārek</i>	<i>libāti</i>	<i>konāng</i>	= <i>bānik</i>	‘only five good young man’
heads other than noun					
	<i>mārek</i>			= <i>pon</i>	‘a good one (CL3)’
		<i>libāti</i>		= <i>vānik</i>	‘five ones (CL3)’
	<i>mārek</i>	<i>libāti</i>	<i>konāng</i>	= <i>bānik</i>	‘only five good ones (CLF:DIM)’

- (300) *be vāti katum_{ADJ} kon = bānik e-Namugi i =*
 at day all only = PL.CLF:DIM ART.F-PN 3SG.F.POSS.AL =
kəl = nip ipə-p~pi tə = də latu da
 grandson = DL.CLF:MASC 3DL.M.PST-IPFV~go TO = on garden PURP
ip-mə~matme.
 3DL.M.PST-IPFV~work
 ‘Everyday Namugi’s grandsons went to garden to work.’ [LG-VI-005]

- (301) *nə-bət o kori go utāki moli_{ADJ}.*
 LOC-PROXH TOP NEG NSPEC spear real
 ‘That was not real spears.’ [AL-HD-036]

Quantifiers are not found to be modified by adverbial modifiers inside a core NP. Adjectives and numerals can be modified by all three adverbs:

- (302) a. *do ba va idur = e o nə-bo voki*
 here in 3SG.M.POSS.AL belly = SG.CLF:FEM TOP LOC-UP hole
tānin konāng = e.
 through only = SG.CLF:FEM
 ‘Here in his belly there was just a hole (through to the back).’
 [AL-DA-130]

- b. *nangə laik moli_{ADV} = vənik to məgəte vənik u-vi*
 tree big real = PL.CLF:DIM SR like 3PL.CLF:DIM 3N-PROXS
do batm = a məngəd = a, u-bət ar bə =
 here around = PAT home = SG.CLF:MASC 3N-PROXH also IAM =
kəre~kərerət idə.
 RED~dry 3N

‘The really big trees like these ones here around home, those also dried out.’ [AL-RM-015]

- (303) a. *doto iap o avar kori lang-m = a da*
 when 3SG.M TOP also NEG want-APPL = 3SG.M.PAT PURP
a-ruv = idə, iap o avar a-ti~vi o
 3SG.M.NPST-tie = 3N 3SG.M TOP also 3SG.M.NPST-IPFV~go TOP
avar be varet təgət konəng = e, me kori a-ruv
 just at side one only = SG.CLF:FEM and NEG 3SG.M.NPST-tie
 = a varet = pitəm.
 = PAT side = DL.CLF:FEM

‘When he didn’t want to do them together (lit: tie them), he just goes at only one side, he doesn’t do two sides (both black magic and white magic).’ [AL-DA-100]

- b. *tə-kutəng = a maok tuk udu, maok nereit = a katum*
 3PL.PST-cut = PAT space give 1PL space six = SG.CLF:MASC all
konəng.
 only

‘They cut land give us, in all just six pieces of lands’ [LN-BU-052]

And *katum* ‘all’ as an adverb can be modified by *konəng* ‘only’, as shown in 303b. *moli* as an adverb can only be modified by *konəng* ‘only’ on the clause level (cf. §4.11.4), but not inside the NP (*moli* as an adjective meaning ‘real’ can be modified by *konəng* ‘only’ inside the NP). Even though we see that these modifiers can operate on different levels, the same modifier cannot occur more than once inside the NP, and always tends to be the last component before nominal class marker inside a core NP. The three adverbial modifiers have more uses on a clause level, and modifying heads other than nouns, such as pronouns (see §4.10.3).

In a core NP, the left-most constituent among the noun and core modifiers (N, ADJ and NUM/QUANT) can function as the head. Examples of minimal NPs with different constituents as heads are shown in 304.

- (304) a. NP → ADJ = CL
udu [*kəvər = ta*]_{NP} *də-t~ton* *bemə ngən.*
 1PL white = PL.CLF:HUM 1PL.NPST-IPFV~look on 2PL
 ‘We white people are looking after you (PL).’ [AL-IP-009]
- b. NP → NUM = CL
 [*təgət = a*]_{NP} *və-t~tangədə.*
 one = SG.CLF:MASC 3SG.M.PST-IPFV~cook
 ‘One man was cooking.’ [LM-WT-003]
- c. NP → QUANT = CL
 [*tar = ta*]_{NP} *tə-m~bokbok da udu nə-m~bo*
 many = PL.CLF:HUM 3PL-IPFV~talk PURP 1PL LOC-CON~UP
də-tulai ta.
 1PL.NPST-send.off 3PL
 ‘Many people were talking that we want to go up and send them
 (home).’ [CM-B2-066]

We can see that the semantically specifying/modifying elements such as adjectives always occur to the right of the head in a core NP. There is one exception: when *molimoli* ‘right’ and *kait* ‘left’ are used to semantically modify *vəret = e* ‘side’, they occur in the head position. We can see from 305b that the class marking = *e* is associated with *vəret* rather than either of the modifiers.

- (305) a. *təgət = a* *və-povər* *tə = be kait vəret = e*
 one = SG.CLF:MASC 3SG.M.PST-dig TO = at left side = SG.CLF:FEM
me təgət = a *tə = be molimoli vəret = e.*
 and one = SG.CLF:MASC TO = at right side = SG.CLF:FEM
 ‘One was digging towards leftside and the other to right side.’
 [LG-VI-047]
- b. *ngut-nanət, ngut-nanət, da ngu-təvək tə = be*
 1DL.NPST-swim 1DL.NPST-swim PURP 1DL.NPST-cross TO
vəret = e e-mu.
 side = SG.CLF:FEM 3SG.F-DIST
 ‘let’s swim, let’s swim, so we will cross to the other side.’
 [LR-DW-020]

I analyze nominal demonstratives following core NPs as intrinsically pronominal and as adjoined to the right of the co-referential NP in apposition, rather than determiners, due to the following reasons (cf. Diessel, 1999:69-70):

- 1) Nominal demonstratives are composed of a noun class/gender prefix and a demonstrative base (e.g. *molimoli* = a **a-vi** person = SG.CLF:MASC 3SG.M-PROXS ‘this man’). The same forms are themselves pronominal as well (e.g. **a-vi** 3SG.M-PROXS ‘this one (MASC)’).
- 2) The post-core position can have an NP as a restrictive appositive as well. The appositive demonstrative as well as the appositive NP both function as modifiers, and have the same referent as the modified NP.

- (309) a. *lɔvək o mətə u-vi [a-iavə]_{NP}, [a-kina]_{NP},*
 banana TOP like 3N-PROXS ART-banana.sp. ART-banana.sp.
[lɔvək a-kina]_{NP}...
 banana ART-banana.sp.

‘The bananas [I talked about] is like these *iavə*, *akina*, banana *akina*...’
 [WM-JJ-004]

- b. *ŋunu-vən kup mat [=a lɔvək u-vi]_{NP}.*
 1DL.PST-hit thorough take =PAT banana 3N-PROXS

‘We (dl.) harvested (lit: hit) all of these bananas.’ [WM-MG-011]

- 3) Nominal demonstratives can also occur before the NP. In this case, the nominal demonstrative is the head of the NP, and the following NP is the appositive (cf. §7.2.1). In this case the meaning is different from when the demonstrative follows the core NP, because of the nature of the appositive structure (latter component is specifying).
- 4) Nominal demonstratives can cooccur with possessive (310a) or non-specific *go* (310b).

- (310) a. *ngə-pupunuk katum ga kəlum o [nga*
 1SG.PST-weed all across aibika TOP 1SG.POSS.AL
dərng = a a-vi]_{NP} və-povər ava nəgot
 old = SG.CLF:MASC 3SG.M-PROXS 3SG.M.PST-dig also for
 = *a ngari kəloləng idə to moi mior bem da*
 = PAT peanut seed 3N SR remainder yesterday at PURP
ava ngunu-məkən.
 again 1DL.PST-plant

‘I finished cleaning the aibika field, my husband dug for the peanut seeds that were left yesterday for us to plant.’ [ML-YE-003]

- b. [*go tæreuk tikilik u-bət]_{NP} o nga-nat idil bem*
 NSPEC thing little 3N-PROXH TOP 1SG.NPST-get little at
 = *a, nga var = von a-mu to*
 = 3SG.M.PAT 1SG.POSS.AL friend = SG.CLF:DIM 3SG.M-INSIDE SR
v-əngəp...
 3SG.M.PST-die

‘A bit of that thing, (is the thing) you get a bit from him, my friend in there [the grave] who died.’ [AL-SO-039]

However, when there are two appositives, the nominal demonstrative is always closest to the core NP. As shown in 311, when both the demonstrative *avi* ‘this (man)’ and an NP *lok ləm = a* ‘a young man’ are modifying the core NP *molimoli = a* ‘a man’, the demonstrative occurs before the appositive NP. This may suggest that, even though currently the nominal demonstratives are just appositional pronominals, a tendency for the appositive nominal demonstrative to gain a tighter connection with the modified core NP and be reanalyzed as a determiner (cf. Himmelmann 1997).

- (311) *vəti təgə = von o [molimoli = a a-vi*
 day one = SG.CLF:DIM TOP people = SG.CLF:MASC 3SG.M-PROXS
lok ləm = a]_{NP} və-bakət mat = a
 man young = SG.CLF:MASC 3SG.M.PST-change get = PAT
kəl = e e-və to kəvər = ta.
 torch = SG.CLF:FEM 3SG.F-NSPEC of white = PL.CLF:HUM

‘One day this young man bought an electric torch (lit: torch belong to the white people).’ [AL-TC-007]

Locational adjuncts such as locational adverbs (312), PPs and/or adverbial demonstratives (313) can occur in the peripheral modifier slot. Usually the PPs follow the adverbial demonstratives (313c) (when an adverbial demonstrative follow a PP, the former behaves like a modifier of the complement NP).

- (312) *tove ba maok = a a-vi mægət, o tədor*
 because in space/time = SG.CLF:MASC 3SG.M-PROXS today TOP strong
i-to Laik = a a-bo davə ba utəm = e o
 3N-of God = SG.CLF:MASC 3SG.M-UP up in sky = SG.CLF:FEM TOP
avar bə = laik.
 also IAM = big

‘Because this time now, power of God up there in the sky is also strong.’
 [AL-SO-120]

- (313) a. *nga-nəngar bem = a bokbok tuk = a molimoli = e*
 3SG.M.NPST-say at = PAT story to = PAT person = SG.CLF:FEM
e-vi mən = be China.
 3SG.F-PROXS FROM = at PN

‘I will tell a story to this woman from China.’ [DV-BL-003]

- b. *lok = pənik nə-mumə o kori tə-təm mærek*
 man = PL.CLF:DIM LOC-DOWN.DIST TOP NEG 3PL.PST-know good
n = a pərn = a ləmat.
 APPL = PAT climb = PAT coconut

‘Young men down there, they didn’t know (how to) climb for coconut well.’ [AL-RM-157]

- c. *kəletuak nə-mu ba kəlak = a a-bət to*
 woman.PL LOC-INSIDE in house = SG.CLF:MASC 3SG.M-PROXH SR
tə-məngəp, o ta-bət o bə = tə-məngəp me bə =
 3PL.PST-sleep TOP 3PL-PROXH TOP IAM = 3PL.PST-sleep and IAM =
kori tə-vəgar tang me bə = kori tə-p~pe
 NEG 3PL.PST-cover REFL/RECP and IAM = NEG 3PL.PST-IPFV~tie
tang.
 REFL/RECP

‘The women inside the house that they were sleeping in, they slept and they didn’t cover themselves or the didn’t wear clothes.’

[AL-SO-092]

Nominal demonstratives and adverbial demonstratives can cooccur in an NP:

- (314) *ngang o nga mængəd = a a-mu, ba*
 1SG TOP 1SG.POSS.AL home = SG.CLF:MASC 3SG.M-INSIDE in
voki = e e-mu nə-mu ba tivən.
 hole = SG.CLF:FEM 3SG.F-INSIDE LOC-INSIDE in rock
 ‘As for me, my home is just in there, in the hole inside the stone.’
 [LN-SL-006]

Relative clauses usually occur at the end of a complex NP. The relative clause is usually introduced by the subordinator *to*, and the structure of relative clauses mirrors that of main clauses. A detailed analysis of relative clauses is given in §12.3).

- (315) *do da nga-nume nging be go täre = a*
 now PURP 1SG.NPST-tell 2SG at NSPEC thing = SG.CLF:MASC
a-bət to [ngi-tir dəm = a]_{RC}
 3SG.M-PROXH SR 2SG.PST-ask for = 3SG.M.PAT
 ‘Now I’m going to tell you about the thing you asked.’ [AL-GN-015]

5.2 NPs headed by nominal demonstratives

NPs can be headed by nominal demonstratives which are used pronominally (cf. §7.2.1). Nominal demonstratives can be modified by post-core modifiers such as PP/ADV DEM, RC and appositive NPs, but cannot be modified by pre-core constituents such as possessive or non-specific *go* (possible to cooccur with negation: *kori go*).

(316) NPs with nominal demonstratives as heads

	Case	Head	Appos	Peripheral modifier
NP →	(=PAT)	NOM.DEM	(NP)	(ADV.DEM) (PP)* (RC)

Examples of minimal NP with nominal demonstratives:

- (317) [*a-vi*]_{NP} *və-tor do.*
 3SG.M-PROXS 3SG.M.PST-sit here
 ‘He sat here.’ [JK-TS-080]

- (318) *kori və-kiat* [=a e-vi]_{NP}
 NEG 3SG.M.PST-answer =PAT 3SG.F-PROXS
 ‘He didn’t answer her.’ [SV-ES-028]

Nominal demonstratives can be modified by appositive NPs, which provide more specific information to identify the referent. The functions are different between this appositive structure and the structure when a nominal demonstrative is modifying a core NP by apposition, details can be found in §7.3.1.

- (319) [e-vi]_{NP} [va dərng=e]_{NP} b=
 3SG.F-PROXS 3SG.M.POSS.AL old = SG.CLF:FEM IAM =
i-məti da gati=voi voi-vi..
 3SG.F.PST-open on share = SG.CLF:FLAT SG.CLF:FLAT-PROXS
 ‘This one - his wife untied this food parcel... ’ [SV-ES-023]

Nominal demonstratives can also be modified by adverbial demonstratives and/or PPS.

- (320) *pədəm p~pən laik nə-mə be Butəm da muləgəp_magəvon,*
 later IPFV~fight big LOC-DOWN at PN on three.CLF:DIM
Tomanairik, Vivirən me ta-mə mə(n)=nə-m~mə be
 PN PN and 3PL-DOWN FROM=LOC-CON~DOWN at
Vəiriki me ta mən=be Ralubəng o ta tə-t~tuk
 PN and 3PL FROM=at PN TOP 3PL 3PL.PST-IPFV~give
tə=be Butəm da muləgəp_magəvon.
 TO=at PN on three.CLF.DIM
 ‘Later big fight down there at Butam for three times, Tomənairik, Vivirən and those people from down there at Vəiriki and those from Ralubəng, they fought the Butam people for three times.’ [LR-TH-038]

- (321) *a-vi mən=ba tipur ava kori və-re go təreuk,*
 3SG.M-PROXS FROM=in forest also NEG 3SG.M.PST-carry NSPEC thing
me a-vi ba viuv=e o ava və-re
 and 3SG.M-PROXS in sea = SG.CLF:FEM TOP also 3SG.M.PST-carry
moli kon =a aen tarə.
 again only =PAT fish many
 ‘The one who went to the bush got nothing, and the one who went to the sea brought a lot of fish again.’ [TV-CC-006]

Nominal demonstratives can be modified by relative clauses.

- (322) *b = a-bo to [kori a-to~bokbok]_{RC}, iap*
 IAM = 3SG.F-UP SR NEG 3SG.M.NPST-IPFV~talk 3SG.M
v-atme n = e.
 3SG.M.PST-work APPL = 3SG.F.PAT

That one up there who does not talk, he works with her [the buffalo].
 [LN-BU-049]

5.3 NPs headed by locational adverbials

Locational adverbials can be heads of NPs, but only a few clear cases are found. The diagnostic feature is the presence of a patientive marking = *a*. The first one is when the adverbial demonstrative *nə-mu* ‘inside’ functions as the NP head, modified by PPs specifying location, forming an idiomatic expression indicating the inside of something (mostly body parts).

- (323) a. *b = idə-leir n [=a nə-mu ba ta*
 IAM = 3N.PST-harm APPL = PAT LOC-INSIDE in 3PL.POSS.AL
latə]_{NP}
 head
 ‘That thing [the betelnuts] ruins the inside in their heads.’
 [AL-DA-039]
- b. *ngi-kəmak konəŋ n [=a nə-mu be ngi = kən*
 2SG.NPST-lie only APPL = PAT LOC-INSIDE at 2SG.POSS throat
]_{NP}.
 ‘You just lie to the inside at your throat [when you drink but do not swallow].’
 [AL-DA-022]
- c. *nging o ngan-e bə = kəlon [=a nə-mu ba*
 2SG TOP 1SG-QUOT IAM = rotten = PAT LOC-INSIDE in
ngi = ronəŋ]_{NP}
 1SG.POSS stomach
 ‘As of you, I think your inside in your stomach is rotten.’
 [TV-DM-028]
- d. *ioi o bə = kori go tək [=a nə-mu ba*
 water TOP IAM = NEG NSPEC full = PAT LOC-INSIDE in
tiriv = a]_{NP}.
 green.coconut = SG.CLF:MASC
 ‘water is not full inside in the green coconut’
 [AL-RM-168]

Another example is when the locational adverb *do* is used as the head.

- (324) *idə-p~palət* [= *a do* *i=* *kioy=a*
 3N.PST-IPFV~split = PAT here 3SG.F.POSS.AL = mouth = SG.CLF:MASC
]_{NP}.
 ‘Here at her mouth is split (pst).’ [LN-SL-035]

In both cases the locational adverbials is a participant rather than an adjunct indicating locations.

Adverbial demonstratives are never found to be used as A/S_A arguments, but only as O/S_O arguments. The presence of the patientive marking = *a* indicate the NP status. However, the patientive marking = *a* needs to be differentiated from other morphemes of the same form, such as = *a* as a pronoun (3SG.M.PAT) (325), and = *a* as an NP class marking (SG.CLF:MASC) (326).

- (325) *doto nga-kəbənət ləm n =idə, me nga-nu*
 when 1SG.NPST-make fresh APPL = 3N and 1SG.NPST-put
 = *a nə-mu bərodəm, o a-bət o*
 = 3SG.M.PAT LOC-INSIDE inside TOP 3SG.M-PROXH TOP
va varvar o vəvat.
 3SG.M.POSS.AL happy TOP very
 ‘When I make this fresh, and I put it (the ghost) inside, it will be very happy.’ [AL-SO-046]

- (326) *da du-p~povər da du-p~pən pet da*
 PURP 1PL.PST-IPFV~dig PURP 1PL.PST-IPFV~hit wide PURP
pək = a nə-mə bətəpm = a nang = bən
 bright = SG.CLF:MASC LOC-DOWN with = PAT tree = SG.CLF:AUG
nə-mə ba ibən = e.
 LOC-DOWN in earth = SG.CLF:FEM
 ‘Then we wanted to dig and open widely for down inside the hole around the trunk to be bright.’ [LN-TO-019]

Note the difference between *pək* in 326 and *tək / kəlon* in 323d is that the former is a noun root that is always associated with the masculine noun class (= *a*) and the latter is an adjective that is used in a (for criteria to differentiate nouns and adjectives, see §4.4).

5.4 NPs headed by non-specific pronouns

NP headed by non-specific pronouns can take a possessor and peripheral modifiers like PPs and relative clauses.

(327) NPs with nominal demonstratives as heads

	Case	Possessor	Head	Peripheral modifier
NP →	(=PAT)	((NP) Poss.PRO)	NSPEC pron.	(PP) (RC)

Examples of minimal NP with non-specific pronouns:

(328) Minimal NP with non-specific pronouns

- a. *nging avar ngi-təm* [=a **go**]_{NPS} *navodi?*
 2SG also 2SG.PST-know =PAT NSPEC like.this
 ‘You also know something like this?’ [JK-P1-063]
- b. *kori go lang-mə ngang da nga-nəngar tuk* [=a
 NEG NSPEC want-APPL 1SG PURP 1SG.NPST-say give =PAT
gət-a]_{NP}.
 NSPEC-SG.CLF:MASC
 ‘I don’t want to tell this to someone who is a male.’ [JK-TS-063]

The number/class feature of non-specific pronouns are reflected in their forms: non-specific pronouns are the inflected forms of *go*, and the full list of forms can be found in §10.1.1.2⁴⁴. *go* is the class of non-specified number/gender, and is associated with pronominal form *idə* when necessary (330).

It is uncommon for non-specific pronouns to be modified by peripheral modifiers such as PPs and relative clauses. Few examples can be found:

(329) Non-specified pronoun modified by PP

- da du-n* =a **gət-a** [*bem ta*]_{PP}
 PURP 1PL-COM =PAT NSPEC-SG.CLF:MASC at 3PL
nə-m~mə tə=ba məngəd=a.
 LOC-RED~DOWN TO=in home=SG.CLF:MASC
 ‘We want to go down to home with one of them.’ [CM-B2-048]

44. *go* has a homonym as an interrogative, meaning ‘who’. *go* ‘who’ has different inflectional pattern (cf. §3.6.2) from *go* NSPEC.

(330) **Non-specified pronoun modified by RC**

at-nəvən *tə=ba məngəd=a* *a-vi* *Ravup to*
 3SG.M.NPST-fall TO=in home=SG.CLF:MASC 3SG.M-PROXS PN SR
məte go [*to idə-ngəp*]_{RC}.
 like NSPEC SR 3N.PST-die

‘It falls into the place, Ravup, when like someone died.’ [JK-PP-020]

Non-specific pronouns can be modified by possessive pronouns:

(331) *ngi-tuk* *ngang n* [*=a nga go*]_{NP}.
 2SG.PST-give 1SG INSTR =PAT 1SG.POSS.AL NSPEC

‘You give me some.’ [E]

5.5 NPs headed by personal pronouns

Personal pronouns are considered to be a special type of NP in the analysis, given that they do not take patientive marking = *a* as the other NPs do when used as O/S_O arguments (333a), but adopt patientive forms for 3rd person MASC/FEM pronouns (333b). Compare 331 and 333a, where the non-specific pronoun *go* is preceded by a patientive marking = *a*, but the personal pronoun *ngang* is not.

(332) **NPs headed by personal pronoun**

Case	Head	Adverbial modifier	APPOS	Peri. mod.
NP →	(=PAT)	Pron.	$\left\{ \begin{array}{l} (katum) \quad (konəng) \\ \quad \quad \quad moli \end{array} \right\}$	(NP) (RC)

(333) a. *ta o kori ta-təm* *ngang.*

3PL TOP NEG 3PL.NPST-know 1SG

‘As of them, they don’t know me.’

[AL-SO-061]

b. *avar iap konəng at-na~mənan* = *a.*

only 3SG.M only 3SG.M.NPST-IPFV~hear = 3SG.M.PAT

‘Only he can hear him.’

[KV-SO-015]

A personal pronoun can be modified by adverbial modifiers *katum* ‘all’, *konəŋ* ‘only’, and *moli* ‘really; exactly’, as shown by the examples:

- (334) [*iap moli*]_{NP} *to lat=a* *to p~pən, o*
 3SG.M really SR head=SG.CLF:MASC of IPFV~fight TOP
iap o avar kori a-tu~mu kəŋgəl=a
 3SG.M TOP also NEG 3SG.M.NPST-IPFV~put headdress=SG.CLF:MASC
a-vi ror=a.
 3SG.M-PROXS headdress=SG.CLF:MASC
 ‘The one that is the leader of the fight, he doesn’t put on this type of
 headdress called *rora*.’ [AL-HD-009]

- (335) a. *ta to ta-tu~mume mat ta, avar [ta konəŋ]_{NP}
 3PL SR 3PL.NPST-IPFV~tell get 3PL just 3PL only
tə-təm idə.
 3PL.PST-know 3N
 ‘They who teach them, only they knew this.’ [AL-DA-092]*
- b. [*ip katum*]_{NP} *it-toti ioi ba lak=a.*
 3DL.M all 3DL.M.PST-see water in lake=SG.CLF:MASC
 ‘They all (dl.m.) saw water in the pool.’ [LG-VI-034]
- c. *və-t~ton bem [udu katum konəŋ]_{NP} *do be Tulil.*
 3SG.M.PST-IPFV~look at 1PL all only here at PN
 ‘He was looking after all of us here at Tulil.’ [KM-BS-074]*

Personal pronouns can also be modified by appositive NPs.

- (336) *doto lət n =a be vətī=von non-bət*
 when arrive APPL = 3SG.M.PAT at day=SG.CLF:DIM SG.CLF:DIM-PROXH
nə-mumə, o v-atme da a-tade laik=e
 LOC-DOWN.DIST TOP 3SG.M.PST-work PURP ART-church big=SG.CLF:FEM
*bətmə [ta iduləŋga]_{NP}.
 with 3PL child.PL
 ‘When he arrived on that day down there, he worked on a big church
 ceremony with them the children.’ [AL-IP-008]*

However, when personal pronouns are modified by relative clauses, the whole NP takes the patientive marking, and use the agentive form of personal pronoun

as the head (for 3rd person MASC/FEM). This only happens when the modifier is a relative clause, but not an adverbial or an NP (compare the following examples with 335c and 336, also see §3.2.1.3).

- (337) a. *ngi-nunman o ngi-kət mən [=a iep to*
 2SG.PST-enter/exit TOP 2SG.PST-lift remove =PAT 3SG.F SR
[avar nging lang mə nging vədəm =e]_{RC}]_{NP} o
 just 2SG want APPL 2SG for =3SG.F.PAT TOP
ngi-re (=e) tə=dəratəm.
 2SG.NPST-carry =3SG.F.PAT TO=outside
 ‘You go into the room and you lift up the woman that you want, you carry her outside.’ [AL-SO-094]

- b. *ngang nga ttia, mama o təgət=a bem*
 1SG 1SG.POSS.AL father dad TOP one=SG.CLF:MASC at
[=a ta to [tə-r~raot n =a u-vi,
 =PAT 3PL SR 3PL.PST-IPFV~pull APPL =PAT 3N-PROXS
tədar]_{RC}]_{NP}.
 [mysterious.creature]
 ‘My father, dad is one of them who summon these things, *tədar*.’ [WM-TD-011]

In example 338, *to* introduces a subordinate clause, and the pronoun before *to* does not preceded by the patientive marking =*a*.

- (338) *v-enang mat ta to ta o tə-m~məngəp*
 3SG.M.PST-do.something get 3PL SR 3PL TOP 3PL.PST-IPFV~sleep
do kup bətm =udu, da tə-t~tel =a matme
 here all.over with =1PL PURP 3PL.PST-IPFV~search =PAT work
da tə-m~matme mat =a a-mani.
 PURP 3PL.PST-IPFV~work get =PAT ART-money(English)
 ‘He got those people (and settle them here), so that they were sleeping here with us, for them to search for work to get money.’ [SV-N1-066]

5.6 Functions of NPs

The prototypical function of an NP is as complements (arguments) in clause structure. When being used as A/S_A arguments (the subject of a transitive verb and agent-like subject of an intransitive verb, see Chapter 3), NPs are not compulsory,

given that the main function of identifying A/S_A argument is carried out by person indexing prefixes in predicates (339a, 339b).

- (339) a. [*molimoli = ta*]_{NP} *ta-toti* = *ip* *ba*
 person = PL.CLF:HUM 3PL.NPST-see = 3DL.M in
məngəd = a.
 village = SG.CLF:MASC
 ‘People will see them (dl.m.) in the village.’ [GK-CC-035]
- b. *doto ta-toti* = *e* *mə = nə-mu* *be New.Ireland*
 when 3PL.NPST-see = 3SG.F.PAT FROM = LOC-INSIDE at PN
ba viuv = e.
 in sea = SG.CLF:FEM
 ‘When they see her (coming) from New Ireland in the sea.’
 [AL-L1-029]

When an NP occurs as O/S_O argument (subject of stative intransitive verb and object of transitive verb), as well as oblique argument, it is marked by the patientive clitic = *a*:

- (340) *mət* = *ip* *ip-mənan* = *a* *viuv = a.*
 in.mouth = 3DL.M 3DL.M.PST-feel = PAT taste = SG.CLF:MASC
 ‘They feel the taste in their mouth.’ [LG-VI-016]

NPs may appear with a number of other functions, including the following:

- (341) a. **Complement of prep**
du-p~pi *ko nə-m~bo, nə-m~bo, nə-m~bo,*
 1PL.PST-IPFV~walk only LOC-CON~UP LOC-CON~UP LOC-CON~UP
ba
 in
 [*tuk laik = a* *to tə-raot* *n* = *a* *nəngə*]_{NP}.
 road big = SG.CLF:MASC SR 3PL.PST-pull APPL = PAT tree
 ‘We just walked up, up, up, to the big road, where they cut down trees (logging).’ [CM-B2-009]
- b. **Possessor inside another NP**

Arti və-tak bem =a [molimoli =a
 PN 3SG.M.PST-call at =PAT people = SG.CLF:MASC
a-bət be ibən]_{NP} va itən = e.
 3SG.M-PROXH at ground 3SG.M.POSS.AL name = SG.CLF:MASC
 ‘Arti called the name of the man on the ground.’ [AL-DA-135]

5.7 Nominal class and gender

There are two related noun classification systems: a nominal class system, and a gender system. Nominal classes include contrasts based on sex (masculine and feminine), size (diminutive, augmentative), and shape (flat, long, segment, piece, cluster). The gender system distinguishes only masculine, feminine and neuter. Both systems interact with the number system and show a distinction on human vs. non-human in plurals. The syntactic properties of the two systems is briefly mentioned here, and will be discussed in detail in chapter §10.

NPs in Tulil inflect for both number (SG, DL and PL) and nominal class, both of which are realized together as a cumulative morpheme (“NOMINAL CLASS MARKER”) at the end of a core NP (Figure 5.1). Nominal class markers encliticizes to the rightmost element in a core NP, which can be a noun (342a), an adjective (342b), a numeral (342c), a quantifier (342d) or a particle (342e) (see Table 5.2)⁴⁵.

(342) a. *lət n =a livət =pitəm ga və =*
 arrive APPL =PAT tusk = DL.CLF:FEM across 3SG.M.POSS.INAL =
kiou.
 mouth
 ‘Two tusks appeared at his [a wild boar] mouth.’ [DV-HP-053]

b. *nga var mærek =peləgəp iu...*
 1SG.POSS.AL friend good = DL.CLF:FEM 2DL
 ‘My two good friends you two...’ [JN-KL-035]

45. A semantically similar set of class markings can be found in Baining languages such as Mali (Stebbins (2005, 2011:136-155) and Qaqet (Hellwig, pers.comm.). However in these languages, the nominal class is usually marked for multiple times on the noun and all modifiers.

- c. *ngi-kup mat = a kəvəlok = a ba tɪpʊr təpm = a*
 2SG.PST-pull.off get = PAT seed = SG.CLF:MASC in bush with = PAT
məte iap to u = viok o məte miokəm magəviok,
 like 3SG.M SR leave = PL.CLF:FLAT TOP like three.CLF:FLAT
balakətəria = viok.
 four = CLF:FLAT
 ‘You pull off the seed in the bush, on the kind of tree whose leaves
 are like three leaves or four leaves.’ [WM-LP-039]
- d. *vəti tar = vənɪk, vəgam me lələŋ tarə to məte ip*
 day many = PL.CLF:DIM month and year many SR like 3DL.M
to i-ti~vi nogət n = udu məte e-Luit me
 SR 3DL.M.NPST-IPFV~go first APPL = 1PL like ART.F-PN and
to-Midəl, i-to~bokbok tuk udu da...
 ART.M-PN 3DL.M-IPFV~talk give 1PL PURP
 ‘For many days, months and years, those two leaders like Louise and
 Midəl, they are saying to us for us to...’ [WM-CM-005]
- e. [*təre katum konəŋ = bənɪk*]_{NP} *o idə-mang katum*
 thing all only = PL.CLF:DIM TOP 3N.NPST-burnt all
nə vənɪk.
 APPL PL.CLF:DIM
 ‘Everything was burnt down.’ [GV-TB-022]

Nominal class marking (when attached to nouns, adjectives and quantifiers) has sets of allomorphs that are phonologically conditioned. They undergo assimilation processes that change the first phoneme *v* (/β/) that occurs in most of the class markings⁴⁶ to bilabials *b* (/b/) or *p* (/p/)⁴⁷. For numerals, class markings can be more tightly fused into the roots, for full forms see Table 10.9 in §10.1.1.1.

Nominal class markings can also be used as proforms, constituting NPs on their own (cf. §10.1.4). Also, the non-specific pronoun *go* inflects for nominal class, and uses the number/nominal class marking as endings (cf. §10.1.1.2).

In addition to the complex categorization system with 10 nominal classes, Tulil also has a gender system, including 3 genders in singular and dual number: masculine, feminine and neuter; while for the plural number, different forms are used

46. This may suggest the existence of a morpheme diachronically.

47.

$$/\beta/ \rightarrow \begin{cases} [p] / [\text{Stops}](/t/, /k/)_* \\ [b] / [\text{Nasals}]_* \\ [\beta] / \text{elsewhere} \end{cases}$$

Table 5.2: Nominal class marking in Tulil

Class	Singular	Dual	Plural
CL1: Masculine	<i>a</i>	<i>ip</i>	<i>ta</i> (human)
CL2: Feminine	<i>e</i>	<i>vitəm</i>	∅ (non-human)
CL3: Diminutive	<i>von</i>	<i>vəlagəp</i>	<i>vənik</i>
CL4: Augmentative	<i>vən</i>	<i>vədabəm</i>	<i>vədu</i>
CL5: Flat	<i>voi</i>	<i>viokəm</i>	<i>viok</i>
CL6: Round?	<i>vəp</i>	<i>vəbakəm</i>	<i>vəbak</i>
CL7: Long	<i>vənəm</i>	<i>vətəm</i>	<i>vətəng</i>
CL8: Segment	<i>vəti</i>	<i>vətəkəm</i>	<i>vətək</i>
	<i>vət</i>		
CL9: Piece	<i>vələ</i>	<i>vələkəm</i>	<i>vələk</i>
CL10: Cluster	<i>vəgi</i>	<i>vəgatəm</i>	<i>vəgatəng</i>

for human vs. non-human entities. The gender system in Tulil is realized in verb indexes, possessive indexes and adpositional indexes⁴⁸.

In Tulil, all **person indexes** differentiate the 3 genders in a similar way. Within predicate, gender interacts with person, number and tense, being realized as a pronominal prefix attaching to the verb stem (**A/S_A indexes**).

- (343) *doto E-Kin i-toti molimoli = a a-bət to*
 when ART.F-PN 3SG.F.PST-see man = SG.CLF:MASC 3SG.M-PROXH SR
du-ter bətəpm = a, o iep o i-nakun.
 1PL.PST-dig on = 3SG.M TOP 3SG.F TOP 3SG.F.PST-cry
 ‘When EKin saw that man we dug out, she cried.’ [AL-BT-011]

Other indexes that involve gender are: interrogative *go* ‘who’ and quotative *-e*. All forms of these types of indexes including (PST and NPST A/S_A indexes, inalienable/alienable possessive indexes and adpositional indexes can be found in §10.1.

One specific noun usually relates to the nominal class and the gender system in a systematic way. Tulil utilizes certain mapping rules to assign one NP into different systems (this will be discussed in details in §10.1.3).

48. The term “(person) indexes” refers to **bound person forms**, and “indexing” as “the process of provide verbs, nouns and adpositions with person indexes”, following Haspelmath (2013).

Table 5.3: A/S_A indexes(a) PST A/S_A INDEXES

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngə-</i>	<i>ngunu-</i>	<i>du-</i>	
2	<i>ngi-</i>	<i>iu-</i>	<i>inə-</i>	
3.MASC	<i>və-</i>	<i>ip-</i>	<i>idə-</i>	<i>tə-</i>
3.FEM	<i>i-</i>	<i>itə-</i>		
3.NEUT	<i>idə-</i>			

(b) NPST A/S_A INDEXES

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngan-</i>	<i>ngut-</i>	<i>də-</i>	
2	<i>ngin-</i>	<i>it-</i>	<i>it-</i>	
3MASC	<i>at-</i>	<i>it-</i>	<i>it-</i>	<i>tat-</i>
3FEM	<i>et-</i>			
3NEUT	<i>it-</i>			

- (344) *kəmur = vən idə-məkən mat tang nə-bət, o*
 smoke = SG.CLF:AUG 3N.PST-plant get REFL/RECP LOC-PROXH TOP
bərivu = a və-bənakən tang.
 wind = SG.CLF:MASC 3SG.M.PST-turn.over REFL/RECP
 ‘The cloud were changing its form there/then, and the wind was changing its direction.’ [AL-RM-075]

In example (344), we can see the correspondence between augmentative class *vən* on the noun, with neuter indexes on the verb. Likewise, masculine noun class corresponds to masculine gender.

Free pronouns and demonstrative phrases differ from person indexes that they can partake in both the gender and nominal class systems. For example, pronouns can be from both systems (details and more examples can be found in §10.1.3):

- (345) a. *təre = vən_i o b = idə-mang idə_i*
 thing = PL.CLF:DIM TOP IAM = 3N.PST-burn 3N
 ‘Things were burnt (dried out).’ [AL-RM-011]

- b. *ngə-kutəŋ mat = a ləvək = pənik_i da nga-təd*
 1SG.PST-cut get =PAT banana=PL.CLF:DIM PURP 1SG.NPST-go.to
= a vət_i = von təpmə vənik_i.
 =PAT day=SG.CLF:DIM with PL.CLF:DIM
 ‘I cut (pst.) a lot of bananas for me to go to market with them.’
 [ML-YE-009]

5.8 Possession

Tulil employs two types of NPs to express a relationship between two entities, e.g. ownership of an item by a person: one involves possessive indexes (346a; example in 347), and the other utilizes a prepositional phrase led by *to* ‘belong to’ (346b; example in 348). Possession expressed on the clausal level is discussed in §3.4.4.

- (346) a. (Possessor) POSS.index Possessum;
 b. Possessum (prep.index-)to Possessor.

- (347) *voin = a va tədor o bə = kori*
 devil = SG.CLF:MASC 3SG.M.POSS.AL strong TOP IAM = NEG
i-ta~matme vəvat.
 3N.NPST-IPFV~work very
 ‘The devil’s strength is not working very much.’ [AL-SO-122]

- (348) *tədor i-to laik = a a-bo davə ba utəm = e*
 strong 3N-of God = SG.CLF:MASC 3SG.M-UP up in sky = SG.CLF:FEM
o avar bə = laik.
 TOP also IAM = big
 ‘Strength of God up there in the sky, is also big.’ [AL-SO-120]

In the first case, the possessed noun, as the head of the possessive NP, is preceded by possessive indexes (full forms can be found in §10.1.2.2). Possessive indexes specify the number, person and gender of the **possessor**. The possessor as an NP can either be present or omitted.

- (349) a. *itə-vi* *o* *a-kul = vitəm* *itə =*
 3DL.F-PROXS TOP ART-witch = DL.CLF:FEM 3DL.F.POSS =
itən = bitəm *o* *e-Kokopagol e-n* = *a* *e-Kot.*
 name = DL.CLF:FEM TOP ART.F-PN 3SG.F-COM = PAT ART.F-PN
 ‘These two, the two witches’ names are Kokopagol and Kot.’
 [JN-TW-010]
- b. *itə =* *məngəd = a* *o* *nə-bo* *ba Makol.*
 3DL.F.POSS = home = SG.CLF:MASC TOP LOC-UP in PN
 ‘Their home is up in Makol.’
 [JN-TW-011]
- (350) *ta-ta~mat* = *a* *nangə vanəm idə* *u = viok.*
 3PL.NPST-IPFV~get = PAT tree few 3N.POSS leaf = PL.CLF:FLAT
 ‘They get leaves of certain trees.’
 [AL-TN-026]

Tulil allows recursive possession. Two stacked possessors can be found in the data:

- (351) *nga* *məln = a* *va* *itən = e*
 1SG.POSS.AL cousin = SG.CLF:MASC 3SG.M.POSS.AL name = SG.CLF:FEM
Fidelis. Vəninər
 PN
 ‘My cousin’s name is Fedelis Vaninar.’
 [AL-RM-004]

The possessor is an NP, and could be a personal pronoun, such as the first *ta* ‘3PL’ in :

- (352) *du-mətor* *nə-bət* *ba ta* *ta* *məngəd = a.*
 1PL.PST-sit LOC-PROXH in 3PL 3PL.POSS.AL home = SG.CLF:MASC
 ‘we stayed there at their home.’
 [AL-RM-008]

Though rare, the possessum can be a pronominal as well. In example 353, the pronominal *a* as the possessum is in its patientive form, the possessor is *nging*, and the possessive index being *ngi*⁴⁹:

49. Though only one case is found in the data, the speaker confirmed that this is acceptable in the language.

- (353) *nging to nging ngi a, ngi a-karabau o*
 2SG SR 2SG 2SG.POSS 3SG.M 1SG.POSS.AL ART-buffalo TOP
ngi-tauk tagət ba və = kəlom.
 2SG.PST-grab together in 3SG.M.POSS.INAL = nose
 ‘your him, your buffalo, you keep holding his nose.’ [LN-BU-029]

Tulil makes a distinction between alienable and inalienable possession. Main differences between the two are that 1) inalienable possessive indexes differ from alienable possessive indexes in 1SG and 3SG; 2) phonologically, inalienable possessive indexes *ngə*, *və* and *i* tend to cliticized to the possessum (see §10.1.2.2 for details and full set of forms of possessive indexes):

(354) **Difference between inalienable and alienable possessive indexes**

	INAL	ALN
1SG	<i>ngə</i>	<i>nga</i>
3SG.M	<i>və</i>	<i>va</i>
3SG.F	<i>i</i>	<i>ve</i>

The items that conform to the syntactic pattern of inalienable possession are mostly body parts and kinships, but not all semantically inalienable items. For instance, the body part noun *vət = a* ‘belly’ is alienably possessed (355a), and *ronəng* ‘stomach’ is inalienably possessed (355b) (for the full list of semantically inalienable items and their syntactic category, see §4.2.4).

- (355) a. *bə = laik = a ve vət = a*
 IAM = big = SG.CLF:MASC/PAT 3SG.F.POSS.AL belly = SG.CLF:MASC
mata vəgam a-ləvəvat.
 for month ART-nine(Tolai)
 ‘Her belly became big in nine months time.’ [WM-ML-018]
- b. *iep o lovakəti ba i = ronəng.*
 3SG.F TOP hot in 3SG.F.POSS.INAL = stomach
 ‘She was angry (lit. hot in her stomach)’ [ER-TD-029]

Also, INAL-N usually need to be obligatorily possessed by a possessor (note exceptions⁵⁰). When occurring without an obvious possessor, INAL-NS are often preceded by indefinite possessive pronoun *idə*, indicating ‘someone/something’s’. INAL-N requires possessive pronoun *idə* even in a *to*-type possessive structure:

50. Exceptions: inalienably possessed nouns *lat = a* ‘head’ can occur on its own; and *mativon* ‘brother’ when used as address term.

- (356) a. *ngə* = *kioɣ* = *a*
 1SG.POSS.INAL = mouth = SG.CLF:MASC
 ‘my mouth’ [E]
- b. *idə* *kioɣ* = *a* *to* *ngang*
 3N.POSS mouth = SG.CLF:MASC belong.to 1SG
 ‘my mouth’ [E]

The second case 356b is relatively rare when the possessor is a human being, but more common when the possessor is an animal or inanimate object. Another example can be seen in 357.

- (357) *vanəm* = *bənik* *o* *ta-tu* *idə* *mədərəp* *n* = *a*
 few = PL.CLF:DIM TOP 3PL.NPST-put 3N middle APPL = PAT
idə *katə* *to* *iaong* = *a*, *da* *iaong* = *a*
 3N.POSS foot of tree.sp. = SG.CLF:MASC PURP tree.sp. = SG.CLF:MASC
a-tuk *Tə* = *bətəpm* = *idə*.
 3SG.M.NPST-grow TO = with = 3N
 ‘Sometimes they put them (the potion) between *iaonga*’s roots, for the tree to grow with them. [AL-SO-111]

Also, in the *to*-type structure, the possessum is never found to be a human being.

Lastly, the indefinite possessive pronoun *idə* is also obligatory in the citation forms of INAL-N, when the INAL-N is a body part noun. e.g. *idə kioɣ* = *e* ‘chin’; *idə nok* = *e* ‘thumb’. Citation forms of inalienably possessed kinship terms usually do not include *idə*.

5.9 Appositives

An appositive is an NP that immediately follows another NP as a modifier, and has the same referent as the modified NP. What is concerned here is ‘integrated appositives’, which is part of the complex NP (cf. Huddleston & Pullum 2002:447 for English), and forms an intonation unit with the head NP (358). On the contrary, ‘supplementary appositives’ are in different intonation units with the head NP, as shown in 359.

- (358) *a-komiti* *təgət = a* *to-Midəl* *və-tir* *ngang*
 ART-committee one = SG.CLF:MASC ART.M-PN 3SG.M.PST-ask 1SG
at-e...
 3SG.M-QUOT
 ‘A committee member Midal asked me, he said...’ [JK-P1-057]

- (359) *da* *nga-nume* *nging* *bem* = *a* *molimol = ip*,
 PURP 1SG.NPST-tell 2SG at = PAT people = DL.CLF:MASC
vaku = e *e-n* = *a* *lok = a*.
 woman = SG.CLF:FEM 3SG.F-COM = PAT man = SG.CLF:MASC
 ‘I will tell you about two people, man and woman.’ [WM-ML-001]

An appositive can either be a nominal demonstrative, or an NP:

- (360) *it-nə~nakun* *nandi* *io* ***a-kul = vitəm***
 3DL.M.PST-IPFV-cry like.this then ART-devil.woman = DL.CLF:FEM
itə-vi *ava* *itə-liu* *nandi*.
 3DL.F.PST-PROXS again 3DL.F.PST-return like.this
 ‘They were crying and these two witches went back.’ [TV-MA-026]

- (361) *nə-bət* *o* *nga* *mume be molimoli = ta* ***Butəm***
 LOC-PROXH TOP 1SG.POSS.AL tell at people = PL.CLF:HUM PN
bəvon doto tə-p~pən-mə *tang*.
 before when 3PL.PST-IPFV~hit-APPL REFL/RECP
 ‘That is my story about Butam people before when they fight with each other.’ [AL-BT-041]

In 361, the appositional structure *molimoli = ta Butəm* has two independent NPs - this differs from the cases when a noun follows the NP head as the modifier inside an NP. The latter case is shown in 362, where the class marking marks the boundary of the core NP:

- (362) *ar* *bəvon* *kup* ***a-moli*** ***Mərubət = e*** *to* *ve*
 still before through ART-person PN = SG.CLF:FEM SR 3SG.F.POSS.AL
itən = e *e-Namugi*.
 name = SG.CLF:FEM ART.F-PN
 ‘Long time ago (there is) a Baining lady named Namugi.’ [LG-VI-003]

The modified NP can also be pronominal - such as pronouns (363) or nominal demonstratives (364).

- (363) *doto və-m~bokbok mat ta idulānga o bokbok*
 when 3SG.M.PST-IPFV~talk get 3PL children.PL TOP talk
təgə=von o v-əngar tuk ta n =a
 one=SG.CLF:DIM TOP 3SG.M.PST-say give 3PL APPL =PAT
vo-di at-e, “...”
 SG.CLF:DIM-PROXS 3SG.M-QUOT
 ‘When he was talking to the children, one saying that he told them (this)
 he said, “...” ’ [AL-IP-009]

- (364) *ta-vi muitəm magət o tə-rup mərek nə tang.*
 3PL-PROXS three.CLF:FEM TOP 3PL.PST-gather good APPL REFL/RECP
 ‘The three of them were always together (very good friends).’
 [ER-TD-006]

A common appositional structure is an NP with a common noun as head followed by an NP with a proper noun as head, such as the name of a group of people. The proper noun can also be the name of a person, following a kinship term.

- (365) *doto du-povər nəgot =a kitəng o ngang nga-n*
 when 1PL.PST-IPFV.dig for =PAT pole TOP 1SG 1SG-COM
=a ngə= mativon to-Ule me ngunu
 =PAT 1SG.POSS.INAL= brother ART.M-PN and 1DL.POSS
makut=a to-Vakak du-vovər tə=bem =a
 brother-in-law = SG.CLF:MASC ART.M-PN 1PL.PST-dig TO=at =PAT
ton to molimoli=a.
 bone of people = SG.CLF:MASC
 ‘when we were digging for (putting in) the poles like that, I with my
 brother Ule and our brother-in-law, Vakak, we dug out (found) a man’s
 bones.’ [AL-BT-007]

- (366) *tə-p~pi təkə=nə-mu io tə-matme kup*
 3PL.PST-IPFV~go TO=LOC-INSIDE then 3PL.PST-work thoroughly
da kurek=pənik bem =a Mərubət kəletuak.
 PURP bad=PL.CLF:DIM at =PAT PN woman.PL
 ‘They went inland then they did all sort of bad things on Baining women.’
 [KM-BS-091]

Appositives can be either semantically restrictive or non-restrictive. When an appositive is restrictive, it contains essential information for identifying the NP referent that it follows. Restrictive appositives were shown in the above examples such as 363 to 366. An appositive is semantically non-restrictive if the modified NP already contains essential information for identifying the referent:

- (367) *ngə-pupunuk katum ga kəlum o nga dərng = a*
 1SG.PST-clean finish across green TOP 1SG.POSS.AL old = SG.CLF:MASC
a-vi və-p~povər ava nəgot = a ngari kələləng.
 3SG.M-PROXS 3SG.M.PST-IPFV~dig again for =PAT peanut seed
 ‘I finish cleaning the aibika, my husband dug for the peanut seeds.’
 [ML-YE-003]

Chapter 6

Prepositions

A preposition functions as the head of a prepositional phrase (PP), requiring one complement (usually an NP). The complement NP is commonly marked by the patientive marker =*a*, with a few exceptions that will be discussed throughout the chapter. Person markings can be used on prepositions, but only in certain cases where the person markings are obligatory (for instance, in a verbal clause, or with comitative *n*).

PPs commonly combine with demonstratives to specify spatial relations. PPs can also be used as adjuncts within an NP (§5.1.2) or in a clause (§3.5), as well as predicates for verbal clauses (§3.2.2.4) and predicates of non-verbal clauses (§3.3.3).

Other elements in the grammar may also show similar formal and functional attributes of a preposition, such as serial verbs (cf. §8.4.3). They are treated as categorically ambiguous, and will be discussed in this chapter (cf. §6.5).

6.1 Prepositional phrases

6.1.1 Structure of PPs

PPs usually take the following form:

$$(368) \quad \text{PP} \rightarrow [\text{PREP} + (\text{particle} + \text{APPL } n) + (= \text{PAT}) + \text{NP}]$$

A preposition takes an NP as complement, with a patientive marker in between when the complement is not a personal pronoun (exceptions exist concerning different types of prepositions, see §6.2). Examples of a typical PP can be seen in the following example:

- (369) *və-p~pi* *təkə = nə-bo* *o* *və-tor* [*gəvənm_{PREP}*
 3SG.M.PST-IPFV~go TO=LOC-UP TOP 3SG.M.PST-sit under
 = *a* *ngari laik = a*]_{PP}
 = PAT galip big = SG.CLF:MASC
 He went up there, he sat under the big galip tree. [AL-RM-046]

As seen from the scheme in 368, particles such as *konəng* ‘only’ can be inserted between a preposition and its complement NP. In this case, an applicative *n* also has to be inserted before the NP. This is a special type of PP that 1) only functions as predicates (either verbal or non-verbal), but not as adjuncts (so it is a property of the predicate rather than the PP itself); 2) can only include Type II prepositions (cf. §6.2).

- (370) a. *iap* *to a-tat* = *a* *u-bət* *təda p~pən-mə*
 3SG.M SR 3SG.M.NPST-take = PAT 3N-PROXH for GEN~hit-APPL
tang, o u-bət o udu o kori du-təm
 REFL/RECP TOP 3N-PROXH TOP 1PL TOP NEG 1PL.PST-know
 = *a* *tove* *iap* *avar a-tat* = *idə o*
 = 3SG.M.PAT because 3SG.M also 3SG.M.NPST-take 3N TOP
kori a-lam n = idə, me avar i-to konəng n
 NEG 3SG.M.NPST-show APPL = 3N and still 3N-of only APPL
 = *a*.
 = 3SG.M.PAT
 ‘He who get these [knowledge for sorcery] for killing each other, we don’t know him, because he gets these, he doesn’t show it, and it just belongs to him.’ [AL-DA-084]
- b. *nga-di~vi* *o* *avar* [*vədəm_{PREP}* ***konəng n*** = *a*
 1SG.NPST-IPFV~go TOP still for only APPL = PAT
vakue]_{PP}.
 woman.SG.CLF:FEM
 ‘I go, (it is) still just for the woman.’ [AL-SO-095]

6.1.2 Function of PPs

PPs are commonly in apposition with demonstratives, with both of the constituents functioning as adjuncts in NPs or verbal clauses. In this case PPs always follow the demonstratives.

- (371) *doto du-p~pi* [*təkə = nə-mə_{DEM}* [*ba mængəd = a*
 when 1PL.PST-IPFV~go TO = LOC-DOWN in village = SG.CLF:MASC
 [*nə-mə_{DEM}* [*dova Butəm*]_{PP}]]_{PP}] *o kori du-mator*
 LOC-DOWN at PN TOP NEG 1PL.PST-stay
 [*be Valirua*]_{PP}
 at PN
 ‘When we went down there in the village, down there at the Butam
 people’s home, we didn’t stay at Valirua.’ [AL-BT-004]

In (371) there are three PPs. The PP *dova Butəm* ‘at the place of Butam people’ is an adjunct within an NP, modifying the noun *mængəd = a* ‘village’. The PP consisting of this NP and the preposition *ba* ‘in’ is an adjunct of the verbal predicate led by the verb *pi* ‘go’. Both of these two PPs are accompanied by adverbial demonstratives, while the third PP *be Valirua* ‘at Valirua’ is an adjunct by itself.

In addition to functioning as adjuncts in verbal clauses and NPs, PPs can also be non-verbal predicates:

- (372) *nang = e e-bət to tat-e tor = e*
 tree = SG.CLF:FEM 3SG.F-PROXH SR 3PL.NPST-say wood = SG.CLF:FEM
o [be Palakukur]_{PP}.
 TOP at PN
 ‘That tree they called ‘the wood’ is at Palakukur.’ [JK-CB-010]

In atypical but not uncommon cases, a preposition can be used as a verb-like predicate and take person indexes. In this case, the NP complement functions as the argument. The person indexes that attach to prepositions differ from those with verbs: there is no tense distinction in preposition person indexes (see §4.7.7), while for verbs there are two sets (NPST vs PST). Thus when prepositions function as verb-like predicate, the clause does not differentiate tense.

- (373) *du-p~pi du-ba a-rot io du-vən-m = a*
 1PL.PST-IPFV~go 1PL-INSIDE ART-road then 1PL.PST-hit-APPL = PAT
bəli = a.
 pig = SG.CLF:MASC
 ‘We were walking, we were on the road, then we killed a pig.’
 [JK-PP-038]

We can see from the structure and function of PPs that a preposition behaves in many ways like a verb: 1) both can be encliticized by a patientive marking = *a* when necessary; 2) both need an applicative marking *nə* before the argument if

there is another element comes in between; 3) both can function as a predicate, and take a person index. However, prepositions differ in the degree to which they resemble verbs, and can be classified into different types accordingly.

6.2 Classification of prepositions

Prepositions in Tulil can be roughly categorized into four groups according to their morphosyntactic characteristics: type I (§6.3), type II (§6.4), composite prepositional (phrases) (this section) and prepositions of shared categories (§6.5).

The two main classes of prepositions – **type I and type II prepositions** are differentiated according to the type of complements they take, summarized in Table 6.1. We can see that type II prepositions can take all kinds of complements, while type I cannot take personal pronouns and REFL/RECP pronouns as complements. This is illustrated by type I preposition *be* ‘at; about’ and type II preposition *bem* ‘about’ in the following examples (detailed discussion of the two prepositions can be found in §6.3.2 and §6.4.1.1):

Table 6.1: Distribution of Type I and II prepositions

head of complements (NPS)	Type I	Type II
personal pronouns (eg. <i>nging</i> 2SG)	×	✓
NP-class-based pronouns (eg. <i>von</i> SG.CLF:DIM)	✓	✓
REFL/RECP pronouns <i>tang</i>	×	✓
NPS	✓	✓
complement can be omitted when it is 3N	×	✓
occur with particle like <i>konəng</i> ‘only’	×	✓

Morphologically, type I prepositions include many unanalyzable forms that are associated with basic topological relationships, such as *ba* ‘in’, *be* ‘at’, *da* ‘on’, *ga* ‘at a crossing’, etc; while type II prepositions are mostly (but not all) derivatives by suffixation of the morpheme *m* (or rarely, *n*), with an allomorph *mə*(or *nə*) in front of *ng* (if the ending phoneme of the root is a vowel), or in front of all consonants (this only works for *m*, when the ending phoneme of the root is a consonant). Details can be found in §2.5.2).

$$(374) \text{ a. } m \rightarrow \begin{cases} mə / \text{v_ng, C_all C} \\ m / \text{other} \end{cases}$$

$$\text{b. } n \rightarrow \begin{cases} n\partial / *_C \\ n / \text{other} \end{cases}$$

Bases of type II prepositions can be type I prepositions (for instance, as shown in the above examples *bem* and *be* ‘about’, also, *vada* and *vadəm* ‘for’. Type II prepositions sometimes but not necessarily have semantic uses similar to the type I they correspond to. Also, type II prepositions can be derived from member from other word classes, such as adverbs, nouns, verbs or unrecognizable elements (that may be a lexical item historically) (Table 6.2).

Table 6.2: Distribution of Type I and II prepositions

	ROOT	TYPE II PREP
PREP	<i>vada</i> ‘for’	<i>vadə-m</i> ‘for’
ADV	<i>taker(ə)</i> ‘beside’	<i>taker-m</i> ‘beside’
N	<i>bərən</i> ‘mountain’	<i>bərən-m</i> ‘above’
V	<i>bat</i> ‘dodge’	<i>bat-m</i> ‘around’
?	<i>təp</i> ‘?’	<i>təp-m</i> ‘around’

(375) **NP complement**

do ava ngə-mətor da nga-nume be a-pir bem = a
 here again 1SG.PST-sit PURP 1SG.NPST-tell at ART-story at =PAT
kəletuak me lokuvə Butəm be p~pən ba kəmar bəvon kia.
 woman.PL and man.PL PN at NMLZ~fight in war before first
 ‘Now I’m sitting again to tell a story about Butam women and men when
 they were fighting at war long time ago.’ [AL-BT-002]

(376) **Nominal class based pronouns**

tə-məŋgar təgət bem =bon tat-e, doto
 3PL.PST-talk one about = SG.CLF:DIM 3PL-QUOT when
d-unman mən=do, o da ar də-vi
 1PL.NPST-enter/exit FROM=here TOP PURP still 1PL.NPST-go
mənu bokbok=pon non-mumu to du molimoli
 follow word = SG.CLF:DIM SG.CLF:DIM-DIST SR 1PL.POSS person
laik = a a-umu v-əŋgar be von.
 big = SG.CLF:MASC 3SG.M-DIST.INVS 3SG.M.PST-say about SG.CLF:DIM
 ‘They talked together about this they said, when we enter from here,
 we need to follow the thing/way our elder there told us about (this).’
 [AL-IP-018]

(377) **Type II preposition**

- a. *vəvat = a a-umu vətak bema*
 monster = SG.CLF:MASC 3SG.M-DIST.INVS 3SG.M.PST-call at
nging.
 2SG
 ‘The monster in there called your name.’ [PP-RA-011]
- b. *ta-tu~mu bem tang n = a ibən = biok*
 3PL.NPST-IPFV~put at REFL/RECP APPL = PAT earth = PL.CLF:FLAT
nanbət.
 like.that
 ‘They put earth (colored clay) on themselves like that.’
 [AL-HD-016]

In the idiomatic uses meaning ‘about’, *bem* and *be* can generally be used interchangeably with complement preceding NPs (375) and pronouns based on NP class, such as *von* SG.CLF:DIM (376). However, *bem* can be complemented by personal pronouns and the reflexive/reciprocal pronoun *tang* (377), while *be* cannot. *be* can precede personal pronouns inside NPs, when the personal pronoun is modified by a relative clause:

- (378) *və-m~ume ŋang be ta to [ta-ti~vi bərtəm*
 3SG.M.PST-IPFV~tell 1SG about 3PL SR 3PL.NPST-IPFV~go night
]_{RC}.
 ‘He always told me about those people who walk at night (sorcerers).’
 [KV-SO-004]

In 377a, we can see that the form *bemə* with a schwa precedes the 2SG pronoun *nging*. The form *bemə* is used before all personal pronouns starting with the phoneme /ng/. Also in 376, the first *be* is in fact *bem*, where /m/ assimilates to the following pronoun and change /β/ to /b/ (details of the relevant morphological rules can be found in §2.5.2).

Because type I prepositions do not take personal pronouns as complement, we cannot see an alternation between a type I preposition cliticized with a patientive marking =*a* and without, as the type II prepositions. Interestingly, most type I prepositions end with the phoneme /a/ (*ba* ‘in’, *da* ‘on’, *ga* ‘at a crossing’, etc). The form of their corresponding type II prepositions may suggest their original forms: for instance, *da* has the derivative form *dəm* rather than *dam*, and *vəda* has the derivative *vədəm*. Also, spatial adverbial expressions derived from prepositions show the same fact. For instance, *tədə latu* ‘TO = on garden’ meaning ‘work on garden’ (§6.7). adverbs However, because the forms without the patientive marking =*a* is never used for type I prepositions, they will be glossed only as one lexeme in this grammar (eg. as *vəda* rather than *vəd* = PAT).

Complements in 3rd person neuter can be dropped with some type II prepositions, leaving the preposition stranded. For instance in 379, *u-vi* 3N-PROXS ‘this thing’ is the implied complement for the preposition *bem*, and is omitted after the preposition.

- (379) *u-vi* *o* *nga-nəngar* ***bem*** *pədəm*.
 3N-PROXS TOP 1SG.NPST-talk about later
 ‘As for this, I will talk about it later.’ [KM-TH-081]

Also, *bem* can occur by itself without a complement (*be* cannot). This happens when the complement is mentioned elsewhere (380a) or indicated in the main clause as related to a complement clause where *bem* occurs (380b). In both cases, the implied complement has to belong to the 3rd person neutral gender (such as *matme* in 380b).

- (380) a. *kori* *nga-nəngar* ***bem***.
 NEG 1SG.NPST-say at
 ‘I am not going to say about (it).’ [AL-SO-083]
- b. *io* *tə-p~pi* *o* *tə-mat* =*a* *matme*, *matme laik*
 then 3PL.PST-IPFV~go TOP 3PL.PST-take =PAT work work big
to *tə-taup* ***bem***.
 SR 3PL.PST-hold at
 ‘then they went, they got jobs, big jobs that they held onto.’ [AL-IP-016]

The following two examples with *dəm* ‘on’ show that the omission is optional, and the choice may associate with pragmatics concerns that need to be investigated further:

- (381) a. *məgət o malir vanəm o bə= kori d-a~matme*
 today TOP potion few TOP IAM= NEG 1PL.NPST-IPFV~work
dəm.
 on
 ‘Today, as for some of these potions, we don’t work on (them).’
 [WM-LP-032]

- b. *doto da molimoli=a a-təm =a*
 when PURP person=SG.CLF:MASC 3SG.M.NPST-know =PAT
mu bətəpm =a men, me a-təm =a
 put all.over =PAT dance and 3SG.M.NPST-know =PAT
raot n =a təvəng i-to men, o kori a-tatme
 pull APPL =PAT song 3N-of dance TOP NEG 3SG.M.NPST-work
moli konəng dəm idə.
 real only on 3N
 ‘When a man want to know about dancing, and he (wants to) know songs belong to dance, he doesn’t just work on them.’
 [AL-DA-004]

In other cases, it may seem at times that these type II prepositions are used adverbially, when no apparent candidate of a complement is inside the clause, such as the use of *bərodəm* ‘inside’ in the following example:

- (382) *bə= kori go ioi nə-mu bərodəm. b= idə-təv*
 IAM= NEG NSPEC water LOC-INSIDE inside IAM= 3N.PST-dry
 =a ioi *bərodəm.*
 =PAT water inside
 ‘There’s no water inside. The water inside had dried.’ [AL-RM-176]

Composite prepositional expressions: forms belonging to this category is maximally analyzable, and intrinsically phrases rather than words. Strictly speaking, they do not fall into the word class of “prepositions” but behave similar to prepositions, and may shed some light on the grammaticalization of type II prepositions.

Composite prepositional expressions are usually combinations of certain adjectives/adverbs and an applicative marker *n*. These words include *noğət* ‘first; at the

front of', *pədəm* 'behind; at the back of' and *mədərəp* 'middle', exemplified in the following sentences⁵¹.

- (383) *ngang o ngə-p~pi pədəm_{ADV} me nga*
 1SG TOP 1SG.PST-IPFV~go behind and 1SG.POSS.AL
laik = a və-p~pi nogət_{ADV} me Kovu o və-p~pi
 big = SG.CLF:MASC 3SG.M.PST-go front and PN TOP 3SG.M.PST-go
mədərəp_{ADV}
 middle
 'I, I was walking at the back, and my uncle was walking in front, and
 Kovu he was walking in between.' [KM-MB-007]

- (384) a. *nə-bət avar tə-p~pi mədərəp n = a*
 LOC-PROXH also 3PL.PST-IPFV~go middle APPL = PAT
ioi = viokəm.
 water = DL.CLF:FLAT
 'There they were also walking between the two rivers.'
 [KM-TH-033]

- b. *ngunu var təgət = a o və-p~pi ar*
 1DL.POSS friend one = SG.CLF:MASC TOP 3SG.M.PST~go still
nə-mə pədəm nə ngun
 LOC-DOWN behind APPL 1DL
 'One of our friends, he was walking behind us.' [AL-DA-123]

- c. *doto məgəte molimoli = a to a-ti~vi*
 when like people = SG.CLF:MASC SR 3SG.M.NPST-IPFV~go
nogət n = a p~pən me iap va
 first APPL = PAT NMLZ~fight and 3SG.M 3SG.M.POSS.AL
ror = a a-vi.
 headdress = SG.CLF:MASC 3SG.M-PROXS
 'When it's like the man who leads the fight, and his headdress is this
 one (specifically to him).' [AL-HD-022]

Different from other two types of prepositions, when used as verb-like predicate, these phrases do not need to take applicative marker to accommodate an argument.

51. This complex PP has to be differentiated from the case when an adverbial element is used to modify the verb, the applicative marker *n* will be added between this adverb and the following argument, see §6.4.3.1

In this sense, they behave more like verbs compared to type I/II prepositions. However, they are not true verbs, given that they only take person indexes that are used with prepositions (one set instead of two sets as with verbs, PST vs NPST, cf. §8.3).

(385) a. *b = a-nogət ngun nga-n = a Langer.*
 IAM = 3SG.M-before 1DL 1SG-COM = PAT PN
 ‘He was before us, me and Langer.’ [AL-RM-071]

b. *bə = du-pədəm = a du var = ta*
 IAM = 1PL-behind = PAT 1PL.POSS friend = PL.CLF:HUM
nu-vəde
 LOC-this.way
 ‘We were behind our friends coming this way.’ [CM-B2-076]

Prepositions of shared categories: This category contains either forms that cause problems for analysis in terms of which word class they belong to; 2) forms that can be used in different word classes.

6.3 Type I prepositions

6.3.1 *ba* ‘in’

The form *ba* is the basic form for expressing a relationship of interiority. The containment can be either complete (386a) or partial (386b).

(386) a. *nga-təduk = a ve vəne = a*
 1SG.NPST-tighten = PAT 3SG.F.POSS.AL breath = SG.CLF:MASC
təkə = nə-mu ba kəlak = a to i-məngəp.
 TO = LOC-INSIDE in house = SG.CLF:MASC SR 3SG.F.PST-sleep
 ‘I tighten her breath inside there inside the house, where she slept.’
 [AL-SO-064]

b. *ngang o təpm = a a-pəkət ba ngə = nok.*
 1SG TOP with = PAT ART-knife in 1SG.POSS.INAL = hand
 ‘I (was) with the knife in my hands.’ [DV-HP-057]

When extending through temporal metaphor, *ba* can assign an event or a time point into a longer period of time:

- (387) *u-vi bulit avar maok = a nə-mu ba laləŋg.*
 3N-PROXS birdlime also time = SG.CLF:MASC LOC-INSIDE in year
kori go ba maok katum konəŋ, laləŋg katum konəŋ.
 NEG NSPEC in time all only year all only
 ‘And this bird trapping event (with birdlime) also has its season in the
 years, not all time, not all years.(The word *maok* can mean either ‘time’
 or ‘space’)’ [DV-BL-024]

6.3.2 *be* ‘at; about’

The form *be* ‘at’ describes the coincidental relations between two locations of the located object and the reference:

- (388) *doto b = i-mup nə-mu be varet = e*
 when IAM = 3SG.M.PST-hook LOC-INSIDE at side = SG.CLF:FEM
e-mu...
 3SG.F-INSIDE
 ‘When she (the log) already hooked on the other side in there...’
 [AL-DL-016]

be extends metaphorically into the temporal domain, describing exact time points:

- (389) *doto lət n = a be vati = von non-bat*
 when arrive APPL = 3SG.M.PAT at day = SG.CLF:DIM SG.CLF:DIM-PROXH
nə-mumə o v-atme da a-tade laik = e
 LOC-DOWN.DIST TOP 3SG.M.PST-work PURP ART-church big = SG.CLF:FEM
bətmə ta iduləŋga.
 with 3PL child.PL
 ‘When he arrived on that day down there, he worked on big church
 service with them, the children.’ [AL-IP-008]

be has a small set of idiomatic uses, with the most common one being ‘about; regarding’ when used together with verbs such as *mume*, *məŋgar* or *bokbok* meaning ‘talk; say’ (390a), as well as nouns such as *a-pir*⁵² ‘story’ (390b). In this sense, *be* is similar to the use of type II preposition *bem* (§6.4.1.1), but has limited distribution.

52. Tolai loanword

- (390) a. *nga-nume ngən be vəgam = e.*
 1SG.NPST-tell 2PL at moon = SG.CLF:FEM
 ‘I will tell you about the moon.’ [LR-MO-001]
- b. *nə-bət o a-pir be tudək = a a-n*
 LOC-PROXH TOP ART-story at wallaby = SG.CLF:MASC 3SG.M-COM
 = a *kəvon = a.*
 = PAT dog = SG.CLF:MASC
 ‘That is the story about the wallaby and the dog.’ [LR-DW-047]

6.3.3 *da* ‘on’

da encodes a type of coincidental relationship that requires the located object to be physically supported by the referenced object, similar to the English preposition *on* (eg. first *da* in 391). It has a homonym as the purposive particle (second *da* in 391).

- (391) *ava e-bət o ngə-pəgar = e n = a*
 just 3SG.F-PROXH TOP 1SG.PST-cover = 3SG.F.PAT INSTR = PAT
məl nə-mu da log = a da ek-ngəp me
 clothes LOC-INSIDE on bench = SG.CLF:MASC PURP 3SG.F.NPST-die but
kori.
 NEG
 ‘That one (torch), I covered it with laplap there on the bench for it to die
 but didn’t succeed.’ [AL-TC-041]

One common use of *da* is to indicate a location that is marked by a river, meaning “at the X river area” (*be* ‘at’ can be used in a similar sense):

- (392) *vəti təgə = von o tə-rup tang nə-mu da*
 day one = SG.CLF:DIM TOP 3PL.PST-tie REFL/RECP LOC-INSIDE on
ioi = voi to voi idə itən = e Ilu.
 water = SG.CLF:FLAT SR SG.CLF:FLAT 3N.POSS name = SG.CLF:FEM PN
 ‘One day they gathered in there at the river whose name is Ilu.’
 [AL-IP-023]

A common idiomatic use of *da* is when it follows the verb *matme* ‘work’, meaning ‘work on something; make something’.

- (393) *tə-matme da kədikən=e vədəm =a ip-vi*
 3PL.PST-work on angry = SG.CLF:FEM for = PAT 3DL.M-PROXS
a-n =a va dərng=e.
 3SG.M-COM = PAT 3SG.M.POSS.AL old = SG.CLF:FEM
 ‘They got angry with the two people, he and his wife (lit.: they worked on anger..).’ [AL-RM-136]

6.3.4 *dova* ‘at place of (people)’

dova indicates a place that belongs to a certain group of people. Complements of *dova* is restricted to the name of people, and can’t be used for name of a place.

- (394) *tə-təng do dova Tulil, tə=dova Mərubət.*
 3PL.PST-pass.through here at.place.of PN TO = at.place.of PN
 ‘They passed here at Tulil people’s place, to the place belong to the Baining people.’ [LR-TH-117]

6.3.5 *ga* ‘at (a crossing point)’

ga indicates a ‘crossing point’, which can be a landmark, such as at the cross/joint point of two roads/places (395); or a crossing shape, such as the joint point of two hands, or the fork of a tree branch (396).

- (395) *io təkə=nə-mə, ava məgət tang konəng, vənu=a*
 then TO = LOC-DOWN also like REFL/RECP only sun = SG.CLF:MASC
və-tor, kori go kəvənav=e, nə-mə ga
 3SG.M.PST-sit NEG NSPEC rain = SG.CLF:FEM LOC-DOWN across
Laik=poi idə-n =a Piupiu, ava du-mətor.
 big = SG.CLF:FLAT 3N-COM = PAT PN again 1PL.PST-sit
 ‘Then we went down, it’s still the same, the sun was there, no rain, there at the joint of Kervat (lit. the big river) and Piupiu, we sat down again.’ [JK-PP-096]

- (396) *ngə-p~pe ga bəli=a və= katə,*
 1SG.PST-IPFV~tie across pig = SG.CLF:MASC 3SG.M.POSS.INAL = leg
me ga bəli=a və= nok.
 and across pig = SG.CLF:MASC 3SG.M.POSS.INAL = hand
 ‘I tied at the pig’s legs, and at his hands.’ [DV-HP-063]

The shape of “crossing” also commonly applies to the back of one’s neck:

- (397) *iap o təpm = a kəlun = a ga*
 3SG.M TOP with = PAT green.sp = SG.CLF:MASC at.cross
və = kən.
 3SG.M.POSS.INAL = neck
 ‘He is with aibika on his neck.’ [JK-PP-029]

ga is used in an idiomatic expression *ga poss.pron-mi* ‘in front of someone(’s eyes)’ (398). The same expression is used to express ‘on the tree’ when the possessor is a tree (399).

- (398) *nə-bət o du-mu = a o bə = du-mu*
 LOC.PROXH TOP 1PL.PST-draw = 3SG.M.PAT TOP IAM = 1PL.PST-draw
 = a ***ga*** *mama umi a-n = a*
 = 3SG.M.PAT at.cross dad 3SG.M.POSS.INAL.eye 3SG.M-COM = PAT
to-Vaire.
 ART.M-PN
 ‘There we drew him, we drew him in front of dad, he with Vaire.’ [LN-TO-049]

- (399) *maməni ar kuvakup o du laik = ta tə-mat*
 first still past TOP 1PL.POSS big = PL.CLF:HUM 3PL.PST-take
 = a *tul o tə-mu iadap ga nangə idu-mi.*
 = PAT bird TOP 3PL.PST-put trap at.cross tree 3N.POSS-eye
 ‘In the beginning (in the past), our ancestors got birds by putting a trap on the tree.’ [DV-BL-005]

One semantic extension of *ga* meaning ‘occupied, engage in’, usually takes a nominalized verb as the complement. For example, the complement *teltel* in 400 is originally a verb meaning ‘wander.around’.

- (400) *udu o ko go tar=ta n= udu, me*
 1PL TOP NEG NSPEC many=PL.CLF:HUM APPL= 1PL and
təgət=a bəm udu o ar kotək =a
 one=SG.CLF:MASC at 1PL TOP still absent =SG.CLF:MASC
a-vimə tan ga t~teltel kup konəŋ,
 3SG.M-DOWN.DIST other.side across GEN~wander thorough only
to-Virka.
 ART.M-PN
 ‘We are not many of us, and one of us is still absent, he is just down there
 busy wandering around, Virka.’ [WM-CM-008]

6.3.6 *məge* ‘leave.behind’

məge means ‘leave something behind’ or ‘from’, indicating the source (ablative). It has a corresponding type II preposition *məgem*, and the latter word seems to be used more frequently (example 402, also see §6.4.1.3).

- (401) *Pater v-əngar at-e, ‘oh bə= məle ngən məge*
 Father 3SG.M.PST-talk 3SG.M-QUOT INTJ IAM= rest 2PL leave.behind
p~pən-mə tang me bə= kori iə-mət =a
 GEN~fight-APPL REFL/RECP and IAM= NEG 1PL.NPST-eat =PAT
kəmmək.’
 enemy
 ‘Father said, “You have to stop from fighting each other and don’t eat
 your enemy.’ [LR-TH-098]

- (402) *kori ngə-mat idil məgem tang məie məge*
 NEG 1SG.PST-take small leave.behind REFL/RECP but leave.behind
nga vove, e-Met.
 1SG.POSS grandma, ART.F-PN
 ‘I did not get this small one (story) myself, but from my grandma, Met.’
 [LR-TM-013]

6.3.7 *vəda* ‘for’

vəda means ‘for the purpose of, for the sake of’. It has a corresponding type II preposition *vədam* (cf. §6.4.1.2), and the latter word seems to be used more frequently.

- (403) *ngang nga-tir* = *a e-Paraide vada to-Wili a-n*
 1SG 1SG.NPST-ask = PAT ART.F-PN for ART.M-PN 3SG.M-COM
 = *a to-Mogor*
 = PAT ART.M-PN
 ‘As of me, I asked Paraide for Wili and Mogor.’ [JN-BL-011]

6.4 Type II prepositions

Type II prepositions differ in how they behave grammatically from type I prepositions in that the former can take all types of complements, while the latter are restricted in the range of permitted complements. Many of them are derivative prepositions with either identifiable base such as type I prepositions (eg. *be* ‘at; about’ and *bem* ‘about’), or without identifiable bases.

6.4.1 Derived from type I prepositions

Prepositions derived from type I prepositions usually have uses that are semantically similar (but usually not completely identical) to those of their bases, but their syntactic distributions are clearly distinguished. The morphosyntactic differences between type II prepositions and their corresponding type I prepositions are demonstrated in details by *be* and *bem* (§6.4.1.1) and the other pairs basically behave the same.

6.4.1.1 *bem* ‘about’

bem is derived from the type I preposition *be*. It is most commonly used as in the idiomatic expressions meaning ‘about’, similar to *be*. In this case, they can be used interchangeably, but only differs in the types of complement they can take (associated with the syntactic difference between type I and type II prepositions, see §6.2 for details and examples).

- (404) *a-pir idil u-vi o bem* = *a kavənav=e to*
 ART-story small 3N-PROXS TOP about = PAT rain = SG.CLF:FEM SR
ngə-matme da kavənav=e nga-n = a nga
 1SG.PST-work PURP rain = SG.CLF:FEM 1SG-COM = PAT 1SG.POSS.AL
məln = a.
 cousin = SG.CLF:MASC

‘This little story is about rain that I made rain with my cousin.’

[AL-RM-016]

bem also has two meanings that is not shared with *be*, when it means ‘one of/in (many)’ (405), or used in the comparative (406):

- (405) *nə-bət o ngan-e gət-a bem = a*
 LOC-PROXH TOP 1SG.NPST-think one-SG.CLF:MASC at = PAT
nga laik = ta.
 1SG.POSS.AL big = PL.CLF:HUM
 ‘There I think (he) is one of my ancestors.’ [AL-BT-012]

- (406) *kabar vəvat moli n = a molimoli = a a-bət*
 long very real APPL = PAT people = SG.CLF:MASC 3SG.M-PROXH
bem udu.
 at 1PL
 ‘That man is really tall comparing to us.’ [AL-BT-014]

6.4.1.2 *vədəm* ‘for the sake of’

vədəm derived from the preposition *vəda*, and has the same meaning. Similar to the distribution of *bem*, only *vədəm* can be complemented by personal pronouns (as in 407), in other cases both prepositions are used interchangeably (408 shows NP complement). *vədəm* seems to be more commonly used in present-day speech.

- (407) *me iep o ko go lang-m = e vədəmə ngang*
 and 3SG.F TOP NEG NSPEC want-APPL = 3SG.F.PAT for 1SG
 ‘But as for her, she doesn’t want for me (she doesn’t want to be with me).’ [KM-TH-S98]

- (408) *ik-kə~kədəp təvi ba ioi = voi vədəm*
 2DL.NPST-IPFV~search along in water = SG.CLF:FLAT for
 = a nang = a to va itən = e
 = PAT tree = SG.CLF:MASC SR 3SG.M.POSS.AL name = SG.CLF:FEM
a-kidəkidam.
 ART-plant.sp.
 ‘You search along in the river for a plant whose name is *kidəkidam*.’ [AL-RM-052]

6.4.1.3 *magem* ‘leave behind’

magem is associated with the type I preposition *mage*, having the same meaning: ‘leave behind’ or ‘from’ (ablative) and is more commonly used in present-day languages.

- (409) *doto və-p~pi magem = a va*
 when 3SG.M.PST-IPFV~go leave.behind = PAT 3SG.M.POSS.AL
titi = e nanbat...
 mother = SG.CLF:FEM like.that
 ‘When he went leaving his mother like that...’ [AL-RD-009]

6.4.1.4 *dəm* ‘on’

dəm is specifically related to the idiomatic use of *da* when following the verb *matme* ‘work’.

- (410) *idə-matme dəm tang.*
 3N.PST-work on REFL/RECP
 ‘It works on itself (reaction).’ [WM-ML-016]

dəm has one meaning that is not shared with *da*, when it follows *məngar* ‘talk’ meaning ‘talk angrily, got angry with someone’:

- (411) *nga var = ta, tə-mənga~məngar dəmə ngang*
 1SG.POSS.AL friend = PL.CLF:HUM 3PL.PST-IPFV~talk on 1SG
bem = a e-vi du var = e to bə =
 about = PAT 3SG.F-PROXS 1PL.POSS friend = SG.CLF:FEM SR IAM =
ngə-tuməng be imi.
 1SG.PST-light at 3SG.F.POSS.INAL.eyes
 ‘My friends, they got angry with me about our friend, because I burnt her eyes.’ [SV-BE-020]

6.4.1.5 *gəm* ‘between legs’

gəm corresponds to the type I preposition *ga* ‘at a crossing point’, and has a more specific meaning: ‘between the legs of someone, at the private part of someone’.

- (412) *i-vətuk* *nə-mə* *gəm* = *a*.
 3SG.F.PST-tread LOC-DOWN between.legs = 3SG.M.PAT
 ‘She trod down there between his legs.’ [SV-ES-049]

6.4.2 Derived from other word classes

6.4.2.1 *bərənəm* ‘over’

bərənəm encodes spatial relationship of superiority but generally without contact. It is derived from the noun *bərən* ‘mountain’ (414).

- (413) *doto d-iau* *bərənəm* = *a* *go* *məgədə nə-p~bo*
 when 1PL.NPST-fly over = PAT NSPEC village LOC-EP~up
 ‘When we will fly above some villages up there.’ [ER-TD-020]

- (414) *iova* *du-kər* *tə=be* *bərən* *kəməron* = *a*.
 then.again 1PL.PST-climb TO=at mountain different = SG.CLF:MASC
 ‘Then again we climbed onto a different mountain.’ [CM-B2-043]

6.4.2.2 *təkerm/term* ‘beside’

təkerm means ‘beside, next to’ (415), and it derives from the adverb *təkərə* ‘beside’ (420). The short version of *təkerm* is *term* (421).

- (415) a. *du-p~pi* *təvi* *təkerm* = *a* *Laikpoi nə-m~bo*
 1PL.PST-IPFV~go along beside = PAT PN LOC-CON~up
 ‘We went (stop now and then along the way) next to ‘the big river’
 (Vargoi river) up and up.’ [CM-B2-008]
- b. *kədat=pon* *non-bət* *konəng to vu*
 ferule = SG.CLF:DIM SG.CLF:DIM-PROXH only SR 3SG.M.PST.put
von *təkermə tang*.
 SG.CLF:DIM beside REFL/RECP
 ‘The ferule was just there that he put it beside himself.’
 [RR-AD-034]

- (416) *io ip-mu ip vuag=e nə-bət*
 then 3DL.M.PST-put 3DL.M.POSS canoe = SG.CLF:FEM LOC-PROXH
*təkera*_{ADV}.
 beside
 ‘Then they two put (pst.) their canoe there on the side.’ [GK-CC-007]

- (417) *du-tərut ba bek=a term =a Vurvəgi.*
 1PL.PST-hide in cave = SG.CLF:MASC beside = PAT PN
 ‘We hid in the cave next to Vurvəgi river.’ [JK-PP-008]

6.4.2.3 *batm* ‘around’

The form *batm* means ‘around’ (spatially with or without contact)(422). It may associate with the verb *bat* ‘dodge; diverge onto small road’ (423).

- (418) *doto ta-taup mat ta, o do avar kəletuak*
 when 3PL.NPST-hold get 3PL TOP now also woman.PL
ta-pə~ve ta, avar ta ta-ten batmə ta.
 3PL.NPST-IPFV~tie 3PL also 3PL 3PL.NPST-dance around 3PL
 ‘When they catch them (the enemies), now the women also tie them,
 they also dance around them.’ [AL-BT-034]

- (419) a. *da a-bo b= a-pə~bat mærek moli ti*
 PURP 3SG.M-UP IAM = 3SG.M.NPST-IPFV~dodge good real LEST
ta-mu ta norang=e to bətm =a.
 3PL-INSIDE 3PL weapon = SG.CLF:FEM SR with = 3SG.M.PAT
 ‘For him to dodge really well afraid that their weapon be used onto
 him (hit him with weapon).’ [AL-HD-040]

- b. *doto iap ap-bat, me nging o kori*
 when 3SG.M 3SG.M.NPST-diverge and 2SG TOP NEG
ngi-bat, o nging o molimoli = ta
 2SG.PST-diverge TOP 2SG TOP person = PL.CLF:HUM
mə = nə-m~bo nə ta, o ta-tau nging
 FROM = LOC-CON~UP APPL 3PL TOP 3PL.NPST-meet 2SG
nə-bət ba tuk = a.
 LOC-PROXH in road = SG.CLF:MASC
 ‘When he diverges onto small road, but you don’t diverge, people
 coming from up there, they will meet you on the road.’
 [AL-SO-055]

batm usually combines with the lexeme *loktang* ‘circle’, which can be used either as a full verb (420a), or a manner adverb (420b). *batm* is a preposition in both cases:

- (420) a. *a-loktang batm = a mængəd = a da vədəm*
 3SG.NPST-circle around = PAT home = SG.CLF:MASC PURP for
 = a a-vi
 = PAT 3SG.M-PROXS
 ‘He circles around the home for the purpose of him.’ [AL-SO-064]
- b. *du-mətor loktang batm = a turin u-vi*
 1PL.PST-sit circle around = PAT fire 3N-PROXS
 ‘We sat around the fire.’ [SV-BE-009]

6.4.2.4 *təvənm* ‘after’

təvənm means ‘after (something is finished; someone has finished their job)’ (421), or ‘after (a period of time)’ (422).

- (421) *iep to da ava i-bakət təvənm = a nane.*
 3SG.F SR PURP again 3SG.F.PST-change after = PAT mum
 ‘The woman who would change for mum’s position (after mon died.)’
 [JK-PP-019]

- (422) *təvənm = a a-tade muitəm o bə = təp n = a*
 after =PAT ART-week two.CLF:FEM TOP IAM= stop APPL =PAT
kəvənav = e
 rain = SG.CLF:FEM
 ‘After two weeks the rain stopped.’ [AL-RM-095]

təvənm possibly derives from the verb *pən-(m)* ‘hit; kill’, given that the verb has one meaning ‘finish’ (uncommon) as shown in 423. The form *təvənm* may come from the third plural past tense index *tə-* combining with the verb base.

- (423) *doto bə = du-vən-m = a nanbət, io də-tor*
 when IAM= 1PL.PST-hit-APPL = 3SG.M.PAT like.that then 1PL.NPST-sit
me də-rut mat = a molimoli = a.
 and 1PL.NPST-wait get =PAT people = SG.CLF:MASC
 ‘when we finished this like that, we sit and we wait for the man.’
 [AL-DA-014]

6.4.3 Other

There are some prepositions that conform to the grammatical behavior of type II prepositions, but are either not derived (such as the applicative *n*, which can be considered as a core type II preposition; and forms like *nəgot* ‘for the sake of’), or without identifiable bases. These prepositions will be introduced in this section.

6.4.3.1 *n*₁ ‘INSTR; APPL’

n can be used either inside or outside the verb complex, being an applicative or an instrumental. When a verb is modified by verbal adjuncts, the valency of the verb complex decreases by one, and requires *n* to precede the argument (applicative use in 425). The use of *n* inside a VC is discussed extensively in §8.4.2.

- (424) *ip-valət = a ro = vənəm n = a a-pəkət.*
 3DL.M.PST-break =PAT bamboo = SG.CLF:SLE INSTR =PAT ART-knife
 ‘The two of them broke the bamboo with a knife.’ [AL-RM-141]

- (425) a. *də-kul =a məl təda p~pe-tang.*
 1PL.NPST-buy =PAT clothes for GEN~tie-REFL/RECP
 ‘We buy clothes for the purpose of wearing.’ [WM-MG-014]
- b. *io molimoli=ta tə-kul kup n =a*
 then person=PL.CLF:HUM 3PL.PST-buy all APPL =PAT
təre = vənik
 thing = PL.CLF:DIM
 ‘Then the people bought everything.’ [KM-B2-064]

Similar to its applicative use inside the VC, *n* can also link a non-argument-taking element with an argument in a non-verbal clause:

- (426) *doto molimoli=a iap to a-ti~vi nogət*
 when people = SG.CLF:MASC 3SG.M SR 3SG.M.NPST-IPFV~go first
n =a p~pən, iap moli to lat=a to
 APPL =PAT NMLZ~hit 3SG.M real SR head = SG.CLF:MASC SR
p~pən...
 NMLZ~hit
 ‘When the man who leads the war (lit: he walks first at war), he who is the head of the war...’ [AL-HD-009]
- (427) *io bə= kəvər katum konəng n =a təpm =a*
 then IAM= white all only APPL =3SG.M.PAT with =PAT
kəvəru = a.
 ash = SG.CLF:MASC
 ‘then, he was white all over with the ashes.’ [LR-MK-029]
- (428) *ngang ngə-lar me kori mərek nə ngang.*
 1SG 1SG.PST-try and NEG good APPL 1SG
 ‘I tried but couldn’t.’ [JK-P1-019]

- (429) *du-mu ko be imi, da ar mærek = a*
 1PL.PST-put only at 3SG.F.POSS.INAL.eye PURP still good = SG.CLF:MASC
imi = a, to a-vi to
 3SG.F.POSS.INAL.eye = SG.CLF:MASC SR 3SG.M-PROXS SR
idə-m~mang.
 3N.PST-IPFV~burn
 ‘We just put(pst.) (that) at her eyes, for her eye to get better, the one
 which was burnt.’ [SV-BE-057]

6.4.3.2 *n*₂ ‘COMITATIVE’

Comitative *n* differs from INSTR *n* that the former is usually prefixed by person markings (for full set of person markings used on prepositions, see §10.1.2.3).

- (430) *təgət = a o a-ti~vi a-n = a*
 one = SG.CLF:MASC TOP 3SG.M.NPST-IPFV~go 3SG.M-COM = PAT
va kəvop tə = ba tipur.
 3SG.M.POSS.AL dog TO = in bush
 ‘One of them (two man) usually goes with his dog to the bush.’
 [TV-CC-003]

The comitative *n* is also commonly used for coordinating two NPs:

- (431) *do da nga-nəngar be [a-moli = a]_{NP}*
 now;here PURP 1SG.NPST-say at ART-person = SG.CLF:MASC
a-n [= a va dərng = e]_{NP}.
 3SG.M-COM = PAT 3SG.M.POSS.AL old = SG.CLF:FEM
 ‘Now I’m going to talk about a man and his wife.’ [SV-ES-001]

In this case, person markings index the NP before the PP. Similar to verbal and possessive constructions, the indexed NP can be omitted, such as in 432b.

- (432) a. *ngang nga-n = a nga laik = a me*
 1SG 1SG-COM = PAT 1SG.POSS.AL big = SG.CLF:MASC and
ngə = mativon təgət = a o du-pədəm.
 1SG.POSS.INAL = brother one = SG.CLF:MASC TOP 1PL-after
 ‘I and my uncle and my one brother, we were behind.’
 [CM-B2-075]

- b. *nga-n* = *a* *Kovu ngunu-nau mən* = *a nang* = *a*
 1SG-COM = PAT PN 1DL.PST-cut off = PAT tree = SG.CLF:MASC
təpm = *a*, *Aikabong*.
 with = 3SG.M.PAT tree.sp.
 ‘I with Kovu we cut (pst.) the tree that the possum was on, *Aikabong*.’
 [CM-B1-012]

Similar morphemes in other languages are sometimes described as conjunction ‘and’ with agreement to the first conjunct (cf. Lamaholot, Nishiyama 2011; Walman, Brown & Dryer 2008)⁵³. The reasons for analyzing *n* as a preposition in Tulil is that it behaves grammatically more similar to preposition (a list of criteria can be found in Haspelmath 2004). First of all, comitative *n* requires the complement to be in patientive case (patientive marking for NP or patientive form of pronoun); while coordinators do not (cf. §11). Secondly, certain verbs require *n* to form a predicate, which is also a common use for prepositions. For instance, in 433, the verb *tau* is never found to be used intransitively, but either takes an argument directly, or take a comitative before the argument.

- (433) *du-tau du-n* = *a təgət* = *a to avar bə* =
 1PL.PST-meet 1PL-COM = PAT one = SG.CLF:MASC SR also IAM =
və-p~pi təpm = *a va kəvop...*
 3SG.M.PST-IPFV~go with = PAT 3SG.M.POSS.AL dog
 ‘We met with one man who was also walking with his dogs.’
 [SV-BE-035]

Also, *n* can be used predicatively, as other prepositions.

- (434) *io, ta-n* = *a molimoli mukəm, to-Gila a-n*
 then 3PL-COM = PAT people two.CLF:MASC ART.M-PN 3SG.M-COM
 = *a to-Bobo*.
 = PAT ART.M-PN
 ‘They were with two men, Gila and Bobo.’ [PP-PH-008]

Lastly, coordinators are less restricted in the components they can link, but *n* can only take NPs or pronouns as complements, and the referents have to be animate.

53. A morpheme of similar function/form (*nə*) is found in Mali Baining, described by Stebbins as ‘associative particle’ (Stebbins, 2011:74). *nə* in Mali also has a set of indexes, termed ‘associative pronouns’

- (435) *doto* [*v-ətuk* *mənu* = *e*] *me* [*tiktik*],
 when 3SG.M.PST-step back.of = 3SG.F.PAT and strong,
io bə = *v-atang* *tə* = *mənu* = *e* *da bə* =
 so IAM = 3SG.M.PST-jump TO = back.of = 3SG.F.PAT PURP IAM =
və-təvək = *a* *iləm* = *a* *a-n* = *a* *kəvop*.
 3SG.M.PST-cross = PAT flood = SG.CLF:MASC 3SG.M-COM = PAT dog
 ‘When he stepped on its [a log’s] back, and [he felt that] it was strong, so
 he hopped on its back to cross the flood with the dogs.’ [AL-DL-017]

6.4.3.3 *təpm* ‘with’

Apart from comitative *n*, there are three other prepositions in Tulil that encode various kind of co-presence or involvement that is usually expressed by the English translation ‘with’. These prepositions including *təpm*, *bətəpm*, and *bətm*.

The four prepositions differ mainly in two semantic parameters: animacy of modified object (such as NP before the preposition) and reference object (complement of preposition), as well as the dependency of the two objects (when referring to physical relationship, A depends on B means A is physically attached to B).

Table 6.3: Semantic difference among *n*, *bətm*, *təpm*, *bətəpm*

prepositions	animacy	dependency
<i>n(ə)</i>	both NPs animate	
<i>bətm(ə)</i>	complement NP animate	
<i>təpm(ə)</i>	modified NP ≥ complement NP	complement NP dependent on modified NP
<i>bətəpm(ə)</i>	modified NP inanimate	modified NP dependent on complement NP

təpm ‘with’ usually expresses property (436), or belongings with the connotation of ‘carry with’ (437).

- (436) *it-toti* *kon* = *a* *e-Namugi* *to* *i-vərom*
 3DL.M.PST-see only = PAT ART.F-PN SR 3SG.F.PST-bend.down
da *i-man* = *a* *nang* = *bətəng* *təpm* = *a*
 PURP 3SG.F.PST-remove = PAT tree = PL.CLF:SLE with = PAT
u = *viok*
 leave = PL.CLF:FLAT
 ‘They (dl.m.) saw Namugi bending down to take away branches with
 leaves on.’ [LG-VI-028]

- (437) *iap o təpm =a kəlun =a ga və =*
 3SG.M TOP with =PAT green.sp. = SG.CLF:MASC across 3SG.M.POSS.AL =
kən.
 neck
 ‘He is with vegetables on his neck.’ [JK-PP-029]

The property described is usually concrete, but can be abstract sometimes:

- (438) *ngan-e, ‘əu! laik =a o təpm =a k~kəmak.’*
 1SG-QUOT INTJ big = SG.CLF:MASC TOP with =PAT NMLZ~lie
 ‘I think, ‘oh! the ancestors are full of lies.’ [JK-PP-053]

One special meaning of *təpm* is ‘(do something) to (someone)’, usually related to sorcery/magical actions:

- (439) *lokuvə laik = ta ta-kubək ba tipur təpm =a*
 man.PL big = PL.CLF:HUM 3PL.NPST-chant in bush with =PAT
vakue.
 woman.SG.CLF:FEM
 ‘The adult men chanted in the bush with some bearing on the woman.’ [WM-MP-025]

6.4.3.4 *bətəpm/bətək* ‘all over’

The form *bətəpm* means ‘all over someone or something’:

- (440) *ibən = biok bətəpmə ta.*
 earth = PL.CLF:FLAT all.over 3PL
 ‘(They have) colored earths all over them.’ [AL-HD-048]

The coincidence of the spatial relationship can be without contact:

- (441) *nə-m~bo ngə-t~ton bem =a kəvop, to idə-ngot*
 LOC-CON~UP 1SG.PST-IPFV~look at =PAT dog SR 3N.PST-smell
kup bətəpm =a nangə me tə = be tipur nə-bət.
 all all.over =PAT tree and TO = at bush LOC-PROXH
 ‘Up there I saw the dogs, they were sniffing all over the trees and went into the bush there.’ [DV-HP-039]

bətəpm ‘all over’ has the same form with aspectual marking *bə + təpm* (442).

- (442) *Mərīma o bə = təpm = a utəki = a, Paulo o təpm*
 PN TOP IAM = with = PAT spear = SG.CLF:MASC PN TOP with
 = a a-pəkət.
 = PAT ART-knife
 ‘Mərīma was with a spear, Paulo was with a knife.’ [JK-TS-070]

However, the two prepositions have almost opposite meanings. As shown in 444, both prepositions are used to describe similar relationship: 1) the person is *təpm* the headdress; 2) the headdress is *bətəpm* the person’s head. As it is described in Table 6.3, the difference in animacy and dependency involved with the two prepositions make it possible to differentiate *bətəpm* and *bə + təpm*.

- (443) *ngi-toti a-moli = a a-bət doto*
 2SG.NPST-see ART-person = SG.CLF:MASC 3SG.M-PROXH when
a-te~men təpm = a u-bət bətəpm = a
 3SG.M.NPST-IPFV~dance with = PAT 3N-PROXH all.over = PAT
və = lat = a.
 3SG.M.POSS.INAL = head = SG.CLF:MASC
 ‘You see that man when he is dancing with these (headdress) all over his head.’ [AL-HD-067]

bətək has the same meaning as *bətəpmə*, but is less commonly used.

- (444) *ngə-təng n = a məl bətək ngang.*
 1SG.PST-wear APPL = PAT cloth all.over 1SG
 ‘I wore clothes on me.’ [E]

6.4.3.5 *bətm* ‘with; from’

The form *bətm* encodes involvement, and has two interpretations: 1) physical copresence with someone (and in some sense dependent on the person). In this case the complement is usually a human being (445); 2) marks a causer or source. In this case the complement can be either human beings (446) or inanimate objects (447).

- (445) *ngang ngə-mengəp bətm = a ba va*
 1SG 1SG.PST-sleep with = 3SG.M.PAT in 3SG.M.POSS.AL
məngəd = a nə-m~mu be Neretiret.
 home = SG.CLF:MASC LOC-CON~INSIDE at PN
 I stayed (lit. sleep) with him at his home inland at Neretiret.
 [AL-GN-003]

- (446) *və-bakət mat =pon n =a inək bətm*
 3SG.M.PST-change take =SG.CLF:DIM INSTR =PAT money with
 =a *kəvər = a.*
 =PAT white = SG.CLF:MASC

‘He bought the thing (a radio) with money from a white man.’

[AL-RD-006]

- (447) *idə-m~mang idə bətm =a vənu = a.*
 3N.PST-IPFV~burn 3N from =PAT sun = SG.CLF:MASC

‘They [the plants] burnt/dried out because of the sun.’ [AL-RM-134]

bətm has many idiomatic usages, such as combine with the verb *bitəmut* ‘believe’:

- (448) *iap to kori və-bitəmut bətm =a Laik = a o*
 3SG.M SR NEG 3SG.M.PST-believe with =PAT god = SG.CLF:MASC TOP
və-tor.
 3SG.M.PST-sit

‘The one who does not believe in god, he can stay.’

[JK-PP-088]

- (449) *ngə-toti nandi ngan-e nə-mumə o bətmə*
 1SG.PST-look like.this 1SG.NPST-think LOC-DOWN.DIST TOP with
ta o mərek, me ngang o bətmə ngang o
 3PL.CLF:HUM TOP good but 1SG TOP with 1SG TOP
ngə-t~ton o kori go mərek.
 1SG.PST-IPFV~look TOP NEG NSPEC good

‘I saw like this I think, (the life) down there (at Australia) with them is good, but with me, I saw and it was not good.’

[ER-EA-010]

6.4.3.6 *bəm/bərodəm* ‘within’

The preposition *bərodəm* also encodes relationships of interiority, as *ba* (§6.3.1). Different from *ba*, the relation is more specific concerning total containment:

- (450) *tove nə-mu bərodəm =a e-vi a-Turlour o tære*
 because LOC-INSIDE inside =PAT 3SG.F-PROXS ART-PN TOP thing
kurek = pənik nə-mu.
 bad = PL.CLF:DIM LOC-INSIDE

‘Because inside her, Turlour (figure created by sorcery), are bad things in there.’

[WM-AT-011]

Like other type II prepositions, *bərodəm* can take pronouns as complements:

- (451) *də-pal da kori də-mət mərek da də-no~mətor*
 1PL.NPST-fast PURP NEG 1PL.NPST-eat good PURP 1PL.NPST-IPFV~sit
konəng da ar be von to da d-en o iava
 only PURP still at SG.CLF:DIM SR PURP 1PL.NPST-dance TOP light
bərodəm udu.
 inside 1PL
 ‘we fasted so we could not eat properly, so we were just sitting waiting
 for the day that we will dance, so we will be light inside.’
 [WM-DC-009]

bərodəm can also occur by itself without a complement when the complement is implied in the context:

- (452) *bə= kori go ioi nə-mu bərodəm. b= idə-təv*
 IAM= NEG NSPEC water LOC-INSIDE inside IAM= 3N.PST-dry
 = *a ioi bərodəm.*
 = PAT water inside
 ‘There’s no water inside (the coconuts). The water inside were dried.’
 [AL-RM-176]

The form *bəm* is a shortened form of *bərodəm*. It has the form of the corresponding type II preposition of *ba* ‘in’, but the meaning is different.

- (453) *e-vi o ta-tə~mət =a vətə mə=nə-mu*
 3SG.F-PROXS TOP 3PL.NPST-IPFV-eat =PAT meat FROM=LOC-INSIDE
bəm =e, o ta-tə~mət.
 inside = 3SG.F.PAT TOP 3PL.NPST-IPFV-eat
 ‘As for her (the shell), they eat meat from inside her, they eat this.’
 [LN-SL-051]

6.4.3.7 *gəvənm* ‘under’

gəvənm encodes a spatial relationship of inferiority.

- (454) *kori ngi-nunman gəvənm =a məl to kəletuak*
 NEG 2SG.NPST-enter/exit under =PAT clothes of woman.PL
 ‘You do not pass through under the clothes belong to women.’
 [WM-LP-045]

The form *gəvənəm* can be used adverbially (for phonological rules involved see §2.5.2):

- (455) *du-k~kədəp* *kup nə-m~bo* *təda nangə laik idə* *do,*
 1PL.PST-IPFV~search all LOC-CON~UP for tree big 3N.POSS head
me iap o və-nakun o nə-mə ko gəvənəm.
 and 3SG.M TOP 3SG.M.PST-cry TOP LOC-DOWN only under
 ‘We were searching everywhere up there at the top of the big trees, and
 he was just crying down there at under (the trees)’ [LN-TO-025]

6.4.3.8 *nəgot* ‘for’

nəgot means ‘for the sake of; in favor of’, and marks benefaction.

- (456) *du-p~povər* *nəgot =a kitəng nanbat*
 1PL.PST-IPFV~dig for =PAT pole like.that
 ‘We were digging for the poles [so that we can build the poles] like that.’
 [AL-BT-006]

- (457) *ngi-re* *kəl=e* *nə-m~bo* *nəgot tang.*
 2SG.NPST-carry torch = SG.CLF:FEM LOC-IPFV~UP for CON
 ‘You carry the torch up there for yourself.’ [AL-TC-019]

6.4.3.9 *mən(ə)* ‘off’

mən(ə) means physically departing something from another, such as in ‘(remove) off’.

- (458) *it-ter* *mənə u=viok* *to e-Namugi i-vəgarə*
 3DL.PST-pick off leaf = PL.CLF:FLAT SR ART.M-PN 3SG.F.PST-cover
təvat n =a lak=a *təpm =a ioi u-vi*
 release APPL =PAT lake = SG.CLF:MASC with =PAT water 3N-PROXS
to i-məkata *mat bem.*
 SR 3SG.F.PST-fetch.water get at.
 ‘They (dl.) took off the leaf/branches that Namugi used to covered the
 pool that she was fetching water from.’ [CM-TP-018]

mən(ə) can also mean increasing the distance of one thing from another such as *nor mənə* ‘send off someone to do something’, *tulai mənə* ‘accompanying someone to somewhere’.

- (459) *a-sulka = ip ip-vi it-ti = e i-nor*
 ART-PN = DL.CLF:MASC 3DL.M-PROXS 3DL.M.POSS-mother 3SG.F.PST-send
mən = ip da i-pun = a a-uk.
 off = 3DL.M PURP 3DL.M.PST-throw = PAT ART-hook
 ‘These two Sulka men’s mother sent them to catch fish (lit: throw hooks)’
 [GK-CC-002]

When *mən(ə)* combines with the patientive marking, it has the same form as *məna* ‘wait’.

- (460) *bə = tə-vari tang n = a p~pən mən = a*
 IAM = 3PL.PST-help REFL/RECP APPL = PAT GEN~fight remove = PAT
kəvər = ta
 white = PL.CLF:HUM
 ‘They helped each other with fighting to chase away the white people.’
 [AL-IP-060]

6.4.3.10 *mənu* ‘back.of’

mənu encodes a spatial relationship of posteriority. Depending on the shape of the object, *mənu* can mean ‘behind’, usually has the connotation of following (461)⁵⁴; or ‘on top of; at the back of’ (462).

- (461) *ar e-ti~vi mənu ngang tə = ba məngəd = a.*
 still 3SG.F.NPST-IPFV~go behind 1SG TO = in home = SG.CLF:MASC
 ‘She will follow me home.’ [WM-LP-023]

- (462) *to-Kankan və-lar bem = e to və-pətuk mənu*
 ART.M-PN 3SG.M.PST-try at = 3SG.F.PAT SR 3SG.M.PST-tread back.of
 = e.
 = 3SG.F.PAT
 ‘Kankan tried at her (the log) that he trod on the back of her.’
 [AL-L1-016]

The meaning of *mənu* extends to express ‘follow (the way, time, etc.)’.

54. Another expression encoding posteriority is *pədəm (n)*. It is usually used to indicate physical position, but not the meaning of ‘following’

- (463) *də-p~pi mərek mənʉ du idəkən = e.*
 1PL.NPST-IPFV~go good back.of 1PL.POSS language = SG.CLF:FEM
 ‘We follow our language well.’ [JN-BL-015]

- (464) *ar kori də-p~pi mərek mənʉ a-taem.*
 still NEG 1PL.NPST-IPFV~go good back.of ART-time
 ‘we don’t follow the time well.’ [WM-CM-011]

6.4.3.11 *təm* ‘at (the start/entrance of)’

təm means at the beginning or origin of a road or river. It has the same form as verb *təm* ‘know’.

- (465) *iep i-mu təvat n = udu nə-bo təm = a*
 3SG.F 3SG.F.PST-put release APPL = 1PL LOC-UP at.entrance = PAT
tuk = a və = do
 road = SG.CLF:MASC 3SG.M.POSS.INAL = head
 ‘She dropped us up there at the beginning of the road.’ [GV-TF-025]

6.5 Prepositions of shared categories

The prepositions being presented in this section may be used in other word classes with the same form, such as verbs and subordinators. Subordinators that are used as prepositions usually do not behave exactly like prototypical prepositions.

6.5.1 *mət(ə)* ‘in.mouth’

The verb *mət* ‘eat’ can also be used as a preposition meaning ‘in someone’s mouth’.

- (466) *iap ar v-əngəp bətm = a tivən lok = e*
 3SG.M still 3SG.M.PST-die with = PAT rock hot = SG.CLF:FEM
e-vi to i-təng n = e mət
 SG.CLF:FEM-PROXS SR 3SG.F.PST-stick.in APPL = 3SG.F.PAT in.mouth
 = a.
 = 3SG.M.PAT
 ‘He died with the hot rock that she stuck into his mouth.’ [SV-ES-054]

- (467) *mət* = *ip* *ip-mənan* = *a* *viuv = a* *to avar*
 prep = 3DL.M 3DL.M.PST-feel = PAT taste = SG.CLF:MASC SR also
kəməron
 different
 ‘In their mouth, they felt the taste that is also different.’ [SV-ES-054]

- (468) *ngi-nu* *ngi =* *nok* *təkə = nə-mu* *mətə* *ngang, ar*
 2SG.NPST-put 2SG.POSS = hand TO = LOC-INSIDE in.mouth 1SG still
ngi-ruv = *a* *ngi* *nok = pətəkəm* *tə = mətə*
 2SG.NPST-hook = PAT 2SG.POSS hand = DL.CLF:SEG TO = in.mouth
ngang.
 1SG
 ‘You put your both hands into my mouth, you hooked your two hands
 in my mouth.’ [LR-DW-040]

6.5.2 Purposive *da* and negative purposive *ti*

Purposive *da* and negative purposive *ti* are commonly used to introduce independent or subordinate clause (12.1.2.1). When used as prepositions, they have the meanings of ‘for’ and ‘afraid of’. They are not prototypical prepositions. For instance, *ti* does not take patientive pronoun as the complement:

- (469) *iaor* *nging ti* *iap.*
 afraid 2SG LEST 3SG.M
 ‘You are afraid of him.’ [AL-HD-052]

- (470) *lang-mə* *ngang da* *go* *ioi.*
 want-APPL 1SG PURP NSPEC water
 ‘I want some water.’ [E]

6.5.3 *to* ‘of’

to ‘of’ can link two NPs, bearing a function similar to the English preposition *of*: it identifies the NP after it as a modifying element in relationship to the NP before it, with the most common function being possession (471a), in which case the *to*-construction can be used in alternation with the possessive construction (cf. §5.8). In 471b, the two NPs linked by *to* have another type of relationship, where the

second NP describes a property of the first one ('a time of darkness'). The same form is also used as a general subordinator (§12.1.2.2), leading various types of subordinate clauses⁵⁵.

- (471) a. *do maok = a a-to ta, me kori go*
 here space = SG.CLF:MASC 3SG.M-of PL.CLF:HUM and NEG NSPEC
a-to ngang.
 3SG.M.PAT-of 1SG
 'This is their land, not my land.' [SV-N1-121]
- b. *doto bəvon be du laik = ta, ba maok = a*
 when before at 1PL.POSS big = PL.CLF:HUM in time = SG.CLF:MASC
 [*a-to vul = a*]_{PP}, *təm ar kotək idə,*
 3SG.M-of night = SG.CLF:MASC knowledge still absent 3N
me pək = a o ar kotək = a, do ba
 and bright = SG.CLF:MASC TOP still absent = SG.CLF:MASC here at
məngəd = a.
 home = SG.CLF:MASC
 'When before at our ancestor's [time], during time of darkness, know-
 ledge were still absent, and enlightenment was still absent, here at
 home.' [AL-HD-004]

When *to* is used as a preposition, it can be optionally indexed like other prepositions. However the forms of indexes used in this case are different from indexes on other prepositions (cf. §4.7.7). It is difficult to identify whether the index is present or not, when the modified NPs have SG.MASC/FEM class markings *a/e*: in this case, the index of *to* have the same form *a/e* with the nominal class markings, and the vowel deletion rule in hiatus (§2.5.1) delete one of the vowels in this case (for instance: /maoka/ + /ato/ → /maokato/). However, when the person index is 3 neuter singular (unspecified gender), it is optional (present in 472b and omitted in 472a):

- (472) a. *ton to molimoli = a a-bət o laik.*
 bone of person = SG.CLF:MASC 3SG.M-PROXH TOP big
 'And bones of this man is big.' [AL-BT-015]

55. *to* is glossed as 'of' when used as a preposition, and SR in subordinate clauses.

- b. *tədor i-to Laika a-bo davə ba utəm=e o avar*
 power 3N-of god 3SG.M-UP above in sky=SG.CLF:FEM TOP also
bə= laik.
 IAM= big
 The power of the god up there in the sky is also big. [AL-SO-120]

The modified NP can be omitted (467a, 473), similar to the grammatical behavior of comitative *n* (see §6.4.3.2). In this case, the person index of *to* is compulsory, as a strategy to identify the modified NP. However, differing from *to* ‘of’, comitative *n* always has to be accompanied by a person index.

- (473) *a-vi ror=a, a-vi o a-to*
 3SG.M-PROXS headdress=SG.CLF:MASC 3SG.M-PROXS TOP 3SG.M-of
molimoli=ta to ta-ti~vi nogət n =a
 people=PL.CLF:HUM SR 3PL.NPST-IPFV~go ahead APPL =PAT
p~pən.
 NMLZ~fight
 ‘This headdress, it belongs to people who lead the fight.’ [AL-HD-042]

Similar to *da/ti*, *to* does not take patientive pronoun (*a/e*), but the full forms *iap/iep* as the complement.

- (474) *io kədikən=e e-to iep, o itnav=e*
 then anger=SG.CLF:FEM 3SG.F-of 3SG.F TOP rain=SG.CLF:FEM
i-p~pən.
 3SG.F.PST-IPFV~hit
 ‘Then there was anger from her (the magic potion for making rain), rain was falling/destroying.’ [AL-RM-118]

6.6 Directional clitics

Two morphemes are usually procliticized to the prepositional phrase, indicating the source and goal of a change of location: *mən* ‘from’ SOURCE; *tə* ‘to’ GOAL. They can also precedes other type of adjuncts such as temporal/locational adverbs and adverbial demonstratives, see §3.5.4.

The following example shows the simple preposition *be* ‘at’ combining with both of the directional clitics:

- (475) *idə-m~mang təvi mə(n) = nə-m~mə, nə-m~bo,*
 3N.PST-IPFV~burn along from = LOC-CON~DOWN LOC-CON~UP
nə-m~bo, mən = be Tropicana tə = be Central.Mart, tə = be Ling's,
 LOC-CON~UP FROM = at PN TO = at PN TO = at PN
io tə = be Big.Rooster.
 then TO = at PN
 ‘It was burning along from down there, up and up, from Tropicana to
 Central Mart, to Ling’s, to Big Rooster (all shop names).’ [GV-TF-014]

Prepositions differ in their ability to combine with the directional clitics: prepositions encoding physical locations are more likely to be procliticized with directional clitics. Almost all the prepositions indicating specific locations (such as ‘in’, ‘at’, ‘on’ and ‘under’) can be attached by the orientational clitics, and result in rather transparent meanings. Here are some more examples:

- (476) a. *ava və-kə = tang mən = da vit = e*
 again 3SG.M.PST-arise = REFL/RECP FROM = on mat = SG.CLF:MASC
təkə = nə-bo
 TO = LOC-UP
 ‘Again he got up from the mat, went up.’ [AL-TO-028]
- b. *io tə-loli tə = bətəpmə ngang n = a ta*
 then 3PL.PST-urinate TO = all.over 1SG INSTR = PAT 3PL.POSS
ilelu kurek.
 urine bad
 ‘Then they urinated (to) all over me with their bad urine.’
 [MP-GW-015]
- c. *ngi-tuk ko tə = mət = a n = a*
 1SG.NPST-give only TO = in.mouth = 3SG.M.PAT INSTR = PAT
ioi.
 water
 ‘You just give to his mouth with water.’ [LN-BU-022]

6.7 Adverbials derived from prepositions

Some place adverbials are possibly derived from prepositions, such as *dəratəm* ‘outside’, *bəro* ‘at the creek’, *davə* ‘high above’, related respectively to *ba(bə)* and *da(də)*.

The ‘object’ of the prepositions in these words are not identifiable nouns, for instance, there is no noun **ro* meaning ‘creek’ in the word *bəro* ‘at the creek’.

- (477) *ngi-nunman* *o* *ngi-kət* *mən* = *a* *iep* *to*
 2SG.NPST-enter/exit TOP 2SG.NPST-lift remove =PAT 3SG.F SR
avar nging lang-mə *nging vədəm* = *e* *o* *ngi-re*
 still 2SG want-APPL 2SG for = 3SG.F.PAT TOP 2SG.NPST-carry
tə = dərətəm.
 TO = outside

‘You enter, you lift the woman you want to be with off (the bed), you carry her outside.’ [AL-SO-094]

- (478) *kori ip-valət* = *e* *me kori ip-loti*
 NEG 3DL.M.PST-break = 3SG.F.PAT and NEG 3DL.M.PST-pour
 = *e* ***tə = bəro.***
 = 3SG.F.PAT TO = creek

‘They (dl.m.) didn’t break it (the bamboo with herbs for making rain) and they didn’t pour it into the water.’ [AL-RM-116]

- (479) *kom = a* *o* *və-m~mət* *be ibən* *me*
 hornbill = SG.CLF:MASC TOP 3SG.M.PST-IPFV~eat at ground and
muruvu = e *o* ***mən = davə.***
 cassowary = SG.CLF:FEM TOP FROM = above

‘Hornbill used to eat on the ground while cassowary was living above.’ [LR-HC-003]

Chapter 7

Demonstratives

Demonstratives are defined by Himmelmann in terms of the following two characteristics Himmelmann (1996:210): firstly, an element must be in a paradigmatic relation to elements which locate the entity referred to on a distance scale when used exophorically; secondly, the element should not be amenable to uses which are characteristic of definite articles.

This definition expands the functional class of demonstratives to include not only the basic ones that make reference to locations on a distance scale (proximal, distal, etc.), but also spatial reference terms that are not distance-based (e.g. elevation, landforms), usually defined as a separate class called ‘directionals’ in other grammars (cf. Hyslop, 2001; Stebbins, 2011). In Tulil, these geocentric forms have the same morphological and distributional properties as the basic demonstratives (like ‘this’ and ‘that’), and they can entail participant- and distance-oriented uses in both cases where a speaker/addressee is involved (e.g. down there from where the speaker is standing) or not (e.g. down there where another object/person in the narrative is standing).

On the other hand, the definition excludes spatial deictics that are in themselves adverbs, such as *do* ‘here; now’. Another specification that one can add to the definition of demonstrative in Tulil is that the primary use of demonstratives is nominal. This means, all demonstrative s can be used adnominally, co-occurring with nouns (Table 7.2). The necessity of including this point lies in the fact that there are cases like the restrictive verb *vəde* ‘(come) this way (towards self)’, which has spatial deictic function, and can be used predicatively (480a) and adverbially (480b), but cannot be used nominally/pronominally. A full list of demonstrative stems is shown in Table 7.1 (the original meaning of each term is bolded).

- (480) a. *avar a-vi* *a-te*, **‘ngi-vəde’**.
 again 3SG.M-PROXS 3SG.M-QUOT 2SG-PROXS.way
 ‘He said again, “You come over here.”’ [ML-YE-034]

Table 7.1: Tulil demonstrative stems

	stems	meaning	SUBS (substantive)	L-ADV local adverbial	M-ADV manner adverb
Simple	<i>vi</i>	close to s(peaker)	✓		✓
	<i>bət</i>	close to H(earer)	✓	✓	✓
	<i>mu</i>	far from s & H; ‘inside’, ‘inland’	✓	✓	
	<i>umu</i>	far from s & H invisible	✓	✓	
	<i>bo</i>	‘up’, ‘front’, ‘uphill’	✓	✓	
	<i>mə</i>	‘down’, ‘back’, ‘downhill’	✓	✓	
	<i>və</i>	non-specific	✓		
Derived	<i>bi</i>	‘where’	✓	✓	
	<i>m~bo</i>	‘up.far’; ‘continuous up’	✓	✓	
	<i>m~mə</i>	‘DOWN.DIST’; ‘continuous down’	✓	✓	
	<i>p-bo</i>	‘up.near’; ‘stop-go up’	✓	✓	
	<i>p-mə</i>	‘down.near’; ‘stop-go down’	✓	✓	
	<i>vi + bo</i>	‘up.near’	✓	✓	
	<i>vi + mə</i>	‘down.near’	✓	✓	
	<i>mu + mə</i>	‘DOWN.DIST’; ‘seawards’	✓	✓	

- b. *du-p~pi nu-vøde tə = ba mængəd = a.*
 1PL.PST-IPFV~go LOC-PROXS.way TO = in home = SG.CLF:MASC
 ‘We went this way (to) home.’ [GV-TF-025]

Table 7.2: Forms and syntactic functions of demonstratives

	Substantive (SUBS)	Local Adverbial (L-ADV)	Manner adverbial (M-ADV)
Forms	CLF/index-stem	LOC(<i>nə</i>)-stem	<i>na</i> -SG.CLF:DIM (<i>von</i>)-stem
stems	all stems	no <i>vi/və</i>	only <i>vi</i> and <i>bət</i>
Functions	nominal: co-occurring with nouns or as arguments of verbs; pred: identifier (motion)	adverb	adverb
Examples	<i>a-vi</i> ‘this/this one (MASC)’	<i>nə-mumə</i> ‘there (seawards)’	<i>na-vo-di</i> ‘like.this’

Tulil demonstratives have three types of forms: 1) substantive forms (SUBS) with person index before the demonstrative stems; 2) local adverbial forms (L-ADV) with locative prefix *nə*-; 3) manner adverbial forms (M-ADV). Different forms utilize all or a subset of the possible demonstrative stems, and subsume spatial deictics of various syntactic functions, as shown in Table 7.2, and examples can be found in 481 to 483. Demonstrative stems can be either simple or derived (§7.1.1).

(481) **Substantive form**

a. **Pronominals cooccurring with nouns**

go təre = a a-bət o tor konəng
 NSPEC thing = SG.CLF:MASC 3SG.M-PROXH TOP wood only
= bələ vələ-bət to vələ i-ti~miau.
 = SG.CLF:SPH SG.CLF:SPH-PROXH SR SG.CLF:SPH 3N.NPST-IPFV~fly
 ‘That thing is just a piece of wood that flies.’ [AL-GN-016]

b. **Pronominals as arguments**

at-e, “u-vi ar i-ti~miau...”
 3SG.M.NPST-QUOT 3N-PROXS also 3N-IPFV~fly
 ‘he said, ‘these also flies...’ [ER-EA-029]

c. **Non-verbal predicate: identifier**

“do o tul u-vi”.
 here TOP bird 3N-PROXS
 ‘These are birds.’ [ER-EA-029]

d. **Non-verbal predicate: locational**

to-Petro a-mumə konəŋ.

ART.M-PN 3SG.M-DOWN.DIST only

‘Petro is just down there (at his village).’ [JK-P1-020]

e. **Non-verbal predicate: motion**

ngi-nəŋgar tuk =a nga mukəm da a-n

2SG.NPST-say give =PAT 1SG.POSS.AL in.law PURP 3SG.M-COM

=a go lokuvə ta-m~bo ta-ton da

=PAT NSPEC man.PL 3PL-CON~UP 3PL.NPST-look PURP

bəli = a.

pig = SG.CLF:MASC

‘You tell my in-law for he and some men go up and look for the pig.’

[DV-HP-088]

(482) **Local adverbial form**

tə-p~pi da tə-galat nə-mumə da Voibəli.

3PL.PST-IPFV~go PURP 3PL.PST-dive LOC-DOWN.DIST on PN

‘They went to dive down at Voibəli (the pig river).’ [AK-FH-004]

(483) **Manner adverbial form**

kori go i-ta~mang io ta-tirəp navonbət da

NEG NSPEC 3N.NPST-IPFV~burn then 3PL.NPST-mix like.that PURP

i-ta~mang puikət.

3N.NPST-burn sharp

‘It (alcohol) is not strong, then they mix like that to make it really strong.’

[WM-JJ-018]

The function of demonstratives as spatial deictics, the relative distance may be measured based on the position of the speaker exclusively, or the speaker and hearer. As pointed out by Foley (1986:75), Papuan languages most commonly have a deictic system of the first type, ranging from a two-term system (‘this’ and ‘that’) to more complicated ones with other parameters such as visibility and elevation, while Austronesian languages usually have a three-way distance distinction (close to speaker, close to hearer, and away from both). Both other languages of the area, Mali Baining (Stebbins, 2011:76-82) and Tolai (Mosel, 1982) have a system of the first type, with additional parameters concerning landscapes, etc. Tulil uses

a combination of the two types, similar to some Papuan languages such as Fore (Scott, 1978:82). In Tulil, there is a three-way distinction on the distance scale: near speaker, near hearer, and away from both; on a larger distance scale, other parameters are also involved, such as elevation and landscape. The semantics of the spatial deictic use of demonstratives will be discussed in §7.2.

In addition to their primary use as **exophoric deixis** to refer to an element that is external to the text (spatial deictics, temporal deictics, etc.), demonstratives have a range of **endophoric functions** as well to make text-internal references (Halliday & Hasan, 1976:57-76). The endophoric use is subdivided into the (i) anaphoric, (ii) discourse deictic, and (iii) recognitional uses, following Himmelmann (1997).

7.1 Morphology of demonstratives

In Tulil, three morphological forms of demonstratives can be formed based on the demonstrative stems (Table 7.1), namely: substantive forms (SUBS forms), local adverbial forms (L-ADV forms) and manner adverbial forms (M-ADV forms) (Table 7.2). SUBS forms can occur in various syntactic positions, function as 1) pronominals cooccurring with nouns in NP (481a) or pronominals as verb arguments (481b), 2) predicates in non-verbal clause (481c), (481d), (481e); while L-ADV forms and M-ADV forms function as adjuncts of the verb complex (482, 483), or non-verbal predicate (Diessel, 1997, 1999).

Cross-linguistically, languages differentiate nominal and adverbial demonstratives formally (such as in English *this* and *here*). Tulil makes a similar distinction in forms of the two types: though utilizing the same set of demonstrative stems, nominal demonstratives are prefixed by person indexes while adverbial demonstratives are prefixed by locative *nə-*. The demonstrative stem *vi* ‘close to S’ cannot be used to form a local adverbial demonstrative (no **nəvi*). The respective meaning ‘here’ is expressed by the adverb *do* (484). The non-specific demonstrative stem *və* is also not possible in forming an adverbial demonstrative⁵⁶.

- (484) *udu avar du-mətor ko do, me ngən o ar i-ngəp*
 1PL also 1PL.PST-sit only here and 2PL TOP still 2PL.NPST-die
nə-bət da mət.
 LOC-PROXH PURP eat

‘We are just sitting here, and you will die there of hunger.’

[AL-IP-038]

56. *və* is not a spatial deictic, but a non-specific deictic. Given that it has the same syntactic characteristics as the other demonstrative stems when used in nominal demonstratives, I’ll include it as the demonstratives class.

Nominal demonstratives can either make up a complete NP or occur in an NP with a noun or a personal pronoun. The terms “pronominal demonstrative / demonstrative pronoun” are usually used for the former, and “adjectival demonstrative / demonstrative adjective” for the latter. In Tulil, the same demonstrative forms are used for both cases, so I will just use the label “nominal demonstrative”.

Predicative demonstrative and nominal demonstrative are morphologically the same, however, they are slightly different in the following respects: 1) 1st / 2nd person indexes of all numbers can only attach to predicative demonstratives but not nominal demonstratives; 2) Another minor difference is that reduplicative form such as *m~bo* ‘CON~up’ cannot have the connotation of ‘moving’ in nominal demonstratives (*ta-m~bo* has two meanings: ‘they are moving up’ and ‘they are up there far away’; but *molimolia ambo*, cannot mean ‘*the one who’s moving up’, but only ‘the one who’s up there far away’).

7.1.1 Simple stems and derived stems

Demonstrative stems can be either simple or derived (for all forms see Table 7.1). There are two types of derived stems: compound stems (formed by two simple stems) and endpoint/continuous stems (formed by certain types of reduplication from simple stems).

The demonstrative stems with their original meanings fall into the ‘distance’ and ‘vertical’ categories and are usually morphologically simple, while the stems of landform expressions are usually complex.

7.1.1.1 Compound stems

The combination of deictic stems based on distance (*vi* ‘PROXS’ and *mu* ‘DIST’) and elevation (*bo* ‘UP’ and *mə* ‘DOWN’) can form three compound demonstrative stems: *vibo*, *vimə* and *mumə*, see Table 7.3. Generally these compound stems have the original senses related to landforms, and *vibo* / *vimə* can also mean ‘front’ / ‘back’. There is no combination as **mubo*, and the meaning concerning landforms that are ‘up-far’ is usually expressed by *bo* ‘up’.

7.1.1.2 End-point and continuous stems

The two demonstrative stems *bo* ‘up’ and *mə* ‘down’ can be affixed to form two types of stems: *p*-STEM ‘end-point’ and *m*-STEM ‘continuous’, meaning ‘rather close; moving and stopping’ and ‘very far; continuous moving’ respectively.

Table 7.3: Compound demonstrative stems

		Distance	
		<i>vi</i> 'near speaker'	<i>mu</i> 'far'
Vertical	<i>mə</i> 'down'	<i>vimə</i> 'down.near'	<i>mumə</i> 'DOWN.DIST'
	<i>bo</i> 'up'	<i>vibo</i> 'up.near'	

(485) STEM	END-POINT	CONTINUOUS
	[+STOP]-	C~
<i>bo</i>	<i>p-bo</i>	<i>m~bo</i>
<i>mə</i>	<i>p-mə</i>	<i>m~mə</i>

The underlying form of the prefixed /p/ and /m/ in both forms can be seen as two types of phonological doubling, where /p/ is the result of the following bilabial feature (of both /b/ and /m/) copied onto a [+STOP] element, and /m/ is the result of gemination (/bb/ realized as [mb] due to prenasalization of voiced stops, §2.1.1). There is an iconic component in the formation of these two forms. Firstly, /m/ in the continuous *m*-STEM is often elongated symbolically to represent an extension of space/distance. Secondly, the Mali Baining language also has a distinction between 'terminal end point' terms and 'general direction with no terminal end point' (Stebbins, 2005:201-203), and the 'terminal end point' terms have the forms of the 'non-terminal forms' plus a final stop /k/, /p/ or /t/:

(486)	SIMPLE	TERMINAL	NON-TERMINAL
	<i>vuk</i> 'up'	<i>vuik</i>	<i>vui</i>
	<i>mək</i> 'down'	<i>manəp</i>	<i>mani</i>
	<i>muk</i> 'across'	<i>muit</i>	<i>mui</i>

In Tullil, the END-POINT stem and CONTINUOUS stem can be used in all three types of demonstrative forms:

(487) a. **Nominal**

i-toti tuk =a a-bət n =a
 2PL.NPST-see road =PAT 3SG.M-PROXH APPL =PAT

kəvəru =a, to ngunu-kavər mənū go tərə =a
 ash = SG.CLF:MASC SR 1DL.PST-mark follow NSPEC thing = SG.CLF:MASC

a~p-mə.

3SG.M~EP-DOWN

You people see this track with ash, that we (dl.) have marked with white powder following this thing down there.’ [JN-KL-014]

b. **Predicative**

ngə-matər, ngan-e, ‘ngang o lang-mə ngang da
 1SG.PST-stand 1SG.NPST-QUOT 1SG TOP want-APPL 1SG PURP

ava du-m~bo.’

again 1PL-CON-UP

‘I stood up, I said, “I want us to go up again.”’ [JK-PP-100]

c. **Adverbial**

udu katum konəng du-vari tang, to da
 1PL all only 1PL.PST-help REFL/RECP SR PURP

du-p~povər nə-m~mə.

1PL.PST-IPFV~dig LOC-CON~DOWN

‘All of us was helping each other, for us to dig down.’ [LN-SO-017]

For each type of the two stem forms, there are two types of meanings associated with them: stating 1) the distance of the location, or 2) the manner of the movement. When used to describe the location, they have the same meanings as *vimə* and *vibo* (488).

(488) <i>Type of base</i>	<i>Distance of location</i>	<i>Manner of movement</i>
END-POINT	‘rather close’	‘moving and stopping’
CONTINUOUS	‘very far’	‘continuous moving’

(489) a. *bər ngun, ngang nga-nə nging da nga-tulai*
 set.off 1DL 1SG 1SG-COM 2SG PURP 1SG.NPST-accompany

nging nə-p~mə ba məngəd = a.

2SG LOC-EP~DOWN at home = SG.CLF:MASC

Let’s go, I will come with you to accompany you home (a bit down there). [ML-YE-022]

- b. *korī du-p~pī tə=be Təkəmə, me du-t~tade*
 NEG 1PL.PST-IPFV-go to=at PN and 1PL.PST-IPFV~church
ko nə-vimə.
 only LOC-DOWN.PROX
 ‘We were worshipping there some times, we do not went to Təkəmə,
 we just worshipped there (a bit down)’ [SV-N1-187]

The second meaning only exists for the adverbials. But the two types of meanings are not totally exclusive of each other: in a sentence where movement is involved and the second meaning is activated, CONTINUOUS has a connotation of emphasizing the far distance of the destination, and END-POINT shows the destination is relatively close, and every step of movement is also of short distance.

How the manner of movement differs for the two types of stems can be illustrated by the following two examples:

- (490) *du-p~pī nə-m~mə, nə-m~mə, nə-m~mə,*
 1PL.PST-IPFV~go LOC-CON-DOWN LOC-CON-DOWN LOC-CON-DOWN
nə-m~mə, ar lət n =udu tuk =a laik=ta
 LOC-CON-DOWN still arrive APPL =1PL give =PAT big=PL.CLF:HUM
nə-mə ba kəlak to du-mengəp.
 LOC-DOWN in house SR 1PL.PST-sleep
 ‘We were walking down and down and down, we arrived with the elders
 down at the house where we slept.’ [SV-BE-041]
- (491) *io ip-mat =a kəvəru=a da i-kə~kavər*
 then 3DL.M.PST-get =PAT ash=SG.CLF:MASC PURP 3DL.M.PST-mark
təvi, nə-p~mə, nə-p~mə, nə-p~mə,
 along 3SG.M~EP-DOWN 3SG.M~EP-DOWN 3SG.M~EP-DOWN
nə-p~mə, ar təkə=nə-mumə bəro.
 3SG.M~EP-DOWN still TO=LOC-DOWN at.creek
 ‘Then they (two children) got the ash and throwing/spreading/sprinkling
 them down to(wards) the creek (marking the way).’ [JN-KL-012]

In the two examples above, both the adverbial demonstratives are describing the manner of the movement. The difference is that in 490, ‘we’ were moving continuously for a long distance, and in 491, the ‘two children’ were engaging in some activities along the way, thus the END-POINT stem is used here.

7.1.2 Directional clitics

The two directional morphemes *mən* ‘from’ and *tə/təkə* ‘to’ are usually procliticized to prepositional phrase (cf. §6.6), adverbial demonstratives and other type of adjuncts that indicate location or time. Both clitics can be combined with all types of adverbial demonstratives (including interrogative *nə-bi*), and when combining with demonstratives, the allomorph *təkə* is used rather than *tə*. Examples can be found throughout this chapter.

- (492) *i-ti~vi* *tə=ba* *tipur, kori* *du-təm* = *ip* *ba*
 3DL.M-IPFV~go TO=in bush NEG 1PL.PST-know = 3DL.M or
i-təkə = nə-bi.
 3DL.M.NPST-TO = LOC-where
 ‘They (dl.m) go into the bush, we didn’t know where they go to.’
[AL-DA-034]

7.2 Syntactic functions of demonstratives

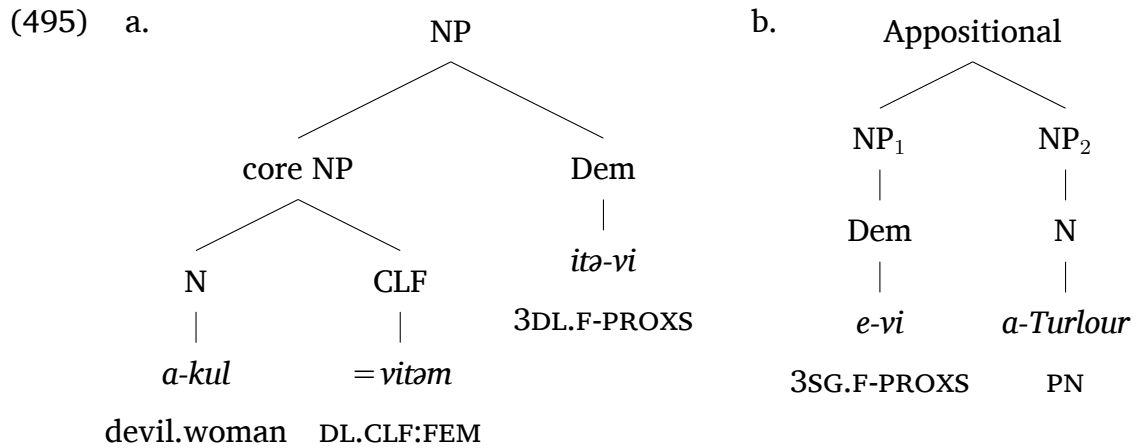
7.2.1 Demonstrative as pronoun

In Tulil, nominal demonstratives are used as independent pronouns: they are either used as arguments of verbs or adjoined to a coreferential noun in apposition (see S5.1.2). The co-occurrence of nominals and nominal demonstratives has two types of word orders: the noun (the core nominal) preceding the demonstrative, and the nominal following the demonstrative, as shown in the following two examples:

- (493) *it-nə~nakun* *nandi* *io* *a-kul = vitəm*
 3DL.M-IPFV-cry like.this then ART-devil.woman = DL.CLF:FEM
itə-vi *ava* *itə-liu* *nandi.*
 3DL.F-PROXS again 3DL.F.PST-return like.this
 ‘They were crying and these two witches went back.’ [TV-MA-026]

- (494) *e-vi* *a-Turlour* *avar* *e-pən-m* = *a*
 3SG.F-PROXS ART-PN also 3SG.F.NPST-kill-APPL = PAT
molimoli = ta.
 people = PL.CLF:HUM
 ‘This “*aTurlour*”, she usually kills people.’ [WM-AT-018]

In both cases, the nominal demonstrative is used pronominally. In 493, the postnominal demonstrative semantically modifies the core NP in an appositional NP, while in 494, the pronominal demonstrative is in fact an NP itself and apposed to another NP, as the semantic head (as in 495). In the second structure, the nominal demonstrative is modified by an NP to provide more specific information to identify the referent. Example 496 shows a case where the two uses co-occur.



- (496) *i-vərtovo* *be Təkəbur me ta-vi* [*iduləŋga*
 3SG.F.PST-teach(Tolai) at PN and 3PL-PROXS child.PL
ta-vi *ba məŋəd = a*]_{NP} *o kori gət-a*
 3PL-PROXS in home = SG.CLF:MASC TOP NEG NSPEC-SG.CLF:MASC
və-p~par *n = a va* *go*
 3SG.M.PST-IPFV~finish(Tolai) APPL = PAT 3SG.M.POSS.AL NSPEC
a-vərtovo *ba məŋəd = a,* *ta-vi* *lokuvə.*
 ART-education in home = SG.CLF:MASC 3PL.NPST-PROXS man.PL
 ‘She studied at Təkəbur and they the children at home, none of them
 finished his study at home, they the boys.’ [SV-N1-176]

In the second case, the NP after the pronominal demonstrative mainly serves a specificational and clarificational function, generally in two respects: 1) when a referent that is presumably not familiar to the hearer is introduced, as a specific entity that needs to be explained further (as shown above in 494); 2) identify one referent that was already mentioned in the discourse, when more than one possibility exists (contrastive anaphora) (497). In the first case, only *vi* can be used, while in the second case, most demonstratives can occur in the structure.

- (497) *io mata a-vi laik = a o kori*
 then after.that 3SG.M-PROXS big = SG.CLF:MASC TOP NEG
v-ən-m = a go bəli = a, io bə =
 3SG.M.PST-hit-APPL = PAT NSPEC pig = SG.CLF:MASC then IAM =
v-ən ko mat = a a-vi idil = a.
 3SG.M.PST-hit only get = PAT 3SG.M-PROXS small = SG.CLF:MASC
 ‘then the adult (father) didn’t kill any pig, then he killed the kid.’
 [SV-ES-011]

7.2.2 Demonstratives as indentifier/locational

Predicative demonstratives are those that occur in verbal clauses (locative clause, §3.2.2.4). There are three types of meanings related to a predicative demonstrative: 1) identify the referent, as in English ‘*This is...*’ (498); 2) indicate a location, which can fill out different roles in different event types, such as is location (where a referent is found, 499), goal (500), path (501). The determination of the specific interpretation is context-based.

- (498) *doto mą̄gəte molimoli = a to a-ti~vi nogət n*
 when like people = SG.CLF:MASC SR 3SG.M.NPST-IPFV~go first APPL
= a p~pən me iap va ror = a
 = PAT NMLZ~fight and 3SG.M 3SG.M.POSS headdress = SG.CLF:MASC
a-vi.
 3SG.M-PROXS
 ‘When it’s like the man who leads the fight, and his headdress is this one (specifically to him).’
 [AL-HD-022]

- (499) *mətmət u-vi konəng, məie nging o mə = nə-bi?*
 food 3N-PROXS only but 2SG TOP FROM = LOC-where
 ‘Food is just here, but where did you come from?’
 [DV-HP-085]

- (500) *kori ngi-mumə, nging o ngi-toti u-bət o kurek.*
 NEG 2SG-DOWN.DIST 2SG TOP 2SG.PST-see 3N-PROXH TOP bad
 ‘You don’t go down there, you saw those (dreams) was not good.’
 [JK-GT-023]

For instance, in example 499, the clause with a demonstrative predicate can mean either ‘The food is just here.’ or ‘This is just food.’ if occurring in isolation,

but the story shows that the addressee of this sentence is hungry and looking for food.

In the use of the predicative demonstrative as describing a motion, the stem is sometimes the reduplicated form (501, see §7.1.1.2 for details). Though indicating a type of event in this case, no formal distinction can be identified between the dynamic use and the static use (the same person index is used for both non-past and past event, compare 500 and 502), thus it is taken as a type of dynamic reading expressed by a verbless construction (cf. Västi & Kittilä 2016).

- (501) *go vati=von o du-m~bo, takə=nə-bo*
 NSPEC day=SG.CLF:DIM TOP 1PL.PST-CON~UP TO=LOC-UP
d-anəng mat ta nu-vəde.
 1PL.NPST-run get 3PL LOC-PROXS.way
 ‘one day we go up, to up there we get them here.’ [CM-B2-005]

- (502) *ngunu-mət katum ava nga-mumə ngə-morən mat =a*
 1DL.PST-eat finish again 1SG-DOWN.DIST 1SG.PST-wrap get =PAT
ragum=ip io ngə-p~pi nə-bo.
 green=DL.CLF:MASC then 1SG.PST-IPFV~go LOC-UP
 ‘We finished eating, I went down, I wrapped two parcels of greens then
 I went up.’ [ML-YE-018]

7.2.3 Local adverbial demonstratives

Like other adverbs, adverbial demonstratives can occur in various positions in a sentence: 1) at the beginning of the clause as topic / frame-setting elements (503a); 2) modifying the verb complex (503b)(for structure of verb complex, see §8); 3) as topic (504a) or complement (504b) of the non-verbal clause.

- (503) a. *io nə-mumə be Niu.Ailand o ta-to~bokbok*
 then LOC-DOWN.DIST at PN TOP 3PL.NPST-IPFV~talk
tat-e, nə-bo Levator e-bət b=
 3PL-QUOT LOC-UP PN 3SG.F-PROXH IAM=
e-l~liu takə=nə-mə da Vərgoi.
 3SG.F.NPST-IPFV~return TO=LOC-DOWN on PN
 ‘then there at New Ireland, they usually say that, that’s Levator coming back to Vərgoi.’ [AL-DL-032]

- b. *v-at mat =a gələt=pon*
 3SG.M.PST-get get =PAT frog/noisy.things = SG.CLF:DIM
no(n)-dī o və-re von nə-mumə
 SG.CLF:DIM-PROXS TOP 3SG.M.PST-carry SG.CLF:DIM LOC-DOWN.DIST
tuk =a va tti=e at-e, ...
 give =PAT 3SG.M.POSS.AL parent = SG.CLF:FEM 3SG.M-QUOT
 ‘He got this radio and he carried it down there to her mum, he said ...’
 [AL-RD-029]

- (504) a. *nə-mə o kori go kəgor=vənəm, məie kəbəlu=a*
 LOC-DOWN TOP NEG NSPEC eel = SG.CLF:SLE but tail = SG.CLF:MASC
to a-vi vəvat=a.
 of 3SG.M-PROXS masalai = SG.CLF:MASC
 ‘Down there was not a long eel, but the tail of this masalai.’
 [LN-TO-040]

- b. *itə= mənɡəd=a o nə-bo ba Makol.*
 3DL.M.POSS= village = SG.CLF:MASC TOP LOC-UP in PN
 ‘Their village is up in Makol.’
 [JN-TW-011]

Adverbial demonstratives co-occur with verbs to indicate the location of the event or situation (505), as well as the direction/motion (506).

- (505) *a-botəl=von o von i-t~tor nə-mu*
 ART-bottle = SG.CLF:DIM TOP SG.CLF:DIM 3N.NPST-IPFV~sit LOC-INSIDE
ba ioi.
 in water
 ‘A bottle was staying there inside the water’
 [WM-JJ-016]

- (506) *tar=ta tə~m-bokbok da udu nə-m~bo*
 many = PL.CLF:HUM 3PL.PST~IPFV-talk PURP 1PL LOC-CON~UP
də-tulai ta.
 1PL.NPST-send 3PL
 ‘Many people were talking that we want to go up and send them (home).’
 [CM-B2-066]

The local adverbial demonstrative can also be used as a predicate in non-verbal clauses, but does not usually co-occur with the person indexes. Except for the

clause structure shown in 504b, the subject of the clause can also be expressed by topic or/and the object of the applicative marker *nə*:

- (507) *ngang o mə = nə-mu konəng nə ngang, nga-n = a*
 1SG TOP FROM-LOC-DIST.INVS only APPL 1SG 1SG-COM = PAT
vove e-Tudəke.
 grandma ART.F-PN

‘I was just from inside (the house), with grandma *Tudəke*.’

[GV-TF-009]

Exceptionally, there is one case where the adverbial form of demonstrative takes person index with interrogatives.

- (508) *et-e, ‘ngi-təkə = nə-bi?’*
 3SG.F-QUOT 2SG.NPST-TO = LOC-where
 ‘She said, where are you going?’

[DV-HP-034]

7.2.4 Manner adverbial demonstratives

Manner adverbial demonstratives *navodi* ‘like this’ (shortened form *nandi*) and *navonbət* ‘like that’ (shortened form *nanbət*) are derivative forms of the two stems *vi* ‘close to speaker’ and *bət* ‘close to hearer’. The bases are the nominal demonstratives that are inflected for the diminutive nominal class (CLF:DIM).

	stem	nominal (CLF:DIM)	manner adverbial	short form
(509)	<i>vi</i> ‘close to S’	<i>vodi</i> ‘this (one)’	<i>na-vodi</i> ‘like.this’	<i>nandi</i>
	<i>bət</i> ‘close to H’	<i>vonbət</i> ‘that (one)’	<i>na-vonbət</i> ‘like.that’	<i>nanbət</i>

The form of the manner adverbial demonstratives with the morpheme *na-* has likely developed from the structure applicative/instrumental *n* + patientive *a* + nominal demonstrative *vodi/vonbət*.

The functions expressed by these two forms can be either exophoric or endophoric. When used exophorically, they can refer to a manner, way or action. *navondi/nandi* ‘like this’ refers to something that is being shown by the speaker by action or gesture (510a); *navonbət/nanbət* refers to something related to the action of the listener (510b).

- (510) a. *ta-bət* *o* *ta-pə~ve* *idə be ta* *latə*
 3PL-PROXH TOP 3PL.NPST-IPFV~tie 3N at 3PL.POSS.AL head
navodi [gesture].
 like.this
 ‘Those people they tie them at their head like this [gesture]’
 [AL-HD-046]
- b. *b=* *i-mu* *idə nə-bət* *io* *bə=* *ngə-ton,*
 IAM= 3SG.F.PST-put 3N LOC-PROXH then IAM= 1SG.PST-look
 “*ah, nging o* *tə=ga* *nivur* ***nanbət?***”
 INTJ 2SG TOP TO=across market(Tolai) like.that
 ‘She put them there then I saw, “ah? you are going to sell like that?”’
 [CK-YE-034]

On the other hand, the two forms can be used to refer to a manner, way or action that is endophoric. *navondi/nandi* refers to something that was immediately mentioned (in the same utterance) or is just about to be mentioned in the discourse (511a); *navonbət/nanbət* refers to something that was mentioned earlier in the discourse (511b).

- (511) a. *və-təvat* *n* = *e* *nə-mu* *ba vərαι = a*
 3SG.M.PST-drop APPL = 3SG.F.PAT LOC-INSIDE in pit = SG.CLF:MASC
nandi, *o* *və-rov* = *e*.
 like.this TOP 3SG.M.PST-bury = 3SG.F.PAT
 ‘He dropped it into the pit like this, and buried it.’ [AL-TC-034]
- b. *doto be men,* *avar nanbət.*
 when at dance also like.this
 ‘When at dance ceremony, it is also like that.’ [AL-HD-065]

Specifically, they can refer to a piece of direct speech: *navondi/nandi* is used to refer to something that is about to be said (preceding the direct speech) (512a); and *navonbət/nanbət* is used to refer to something that has just been said (following the direct speech) (512b).

- (512) a. *a-pir* *idil* *u-vi* *o* ***nandi***.
 ART-story little 3N-PROXS TOP like.this
 ‘The little story is like this.’ [AL-RD-003]

- b. “*da it-tən vəkai navodi, to ngə-məngar tuk ngən.*”
 PURP 2PL.NPST-think tight like.this SR 1SG.PST-say give 1PL
iap v-əngar tuk =a idulənga nanbət.
 3SG.M 3SG.M.PST-say give =PAT small.PL like.that
 ‘You have to keep firmly in mind like this, about these things I told
 you.’ He said to the children like that.’ [AL-IP-013/014]

The two words sometimes behave like interjections for confirming what has been said (‘it is like this/that’). *navodi/nandi* is usually used at the end of a prosodic unit (513a); and *navonbət/nanbət* is used at the beginning of a prosodic unit. This kind of usage is more common in older people’s speech (513b).

- (513) a. *ava v-əngar at-e, ‘ava ngu-pi təgət.’ navodi.*
 again 3SG.M.PST-say 3SG.M-QUOT just 1DL.NPST-go one like.this
 ‘Again he said, ’we go together. It was like this.’ [LR-DW-028]
- b. *navonbət, kəvov=a a-n =a tudək=a*
 like.that dog=SG.CLF:MASC 3SG.M-COM =PAT wallaby=SG.CLF:MASC
o kəvov=a va var mərek=a
 TOP dog=SG.CLF:MASC 3SG.M.POSS.AL friend good=SG.CLF:MASC
tudək=a.
 wallaby=SG.CLF:MASC
 ‘Like that, as of the dog and the wallaby, the dog’s good friend is
 wallaby.’ [LR-DW-005]

7.2.5 Modifying elements: PPs and adverbs

All three types of demonstratives can co-occur with a PP, and the latter is used to specify the more detailed position that the demonstratives refer to.

- (514) **Nominal demonstrative**
Arti və-tak bem =a molimoli=a a-bət [
 PN 3SG.M.PST-call at =PAT people=SG.CLF:MASC 3SG.M-PROXH
be ibən]_{PP} va itən=e.
 at ground 3SG.M.POSS.AL name=SG.CLF:FEM
 ‘Arti called the name of that man on the ground.’ [AL-DA-135]

(515) **Predicative demonstrative**

be vati = von non-bət to da ngunu-mumə
 at day = SG.CLF:DIM SG.CLF:DIM-PROXH SR PURP 1DL.PST-DOWN.DIST

[*tə = ba viuv = e*]_{PP}, *da ngut-nanət o*
 TO = in sea = SG.CLF:FEM PURP 1DL.NPST-swim TOP

ngi-re ngi go ragum.
 2SG.NPST-carry 2SG.POSS NSPEC veges

‘On that day that we will go down to the sea, let’s swim and you carry some greens.’ [LR-DW-008]

(516) **Local adverbial demonstrative**

io ngang o du-p~pi nə-mumə ar ngə-toti
 then 1SG TOP 1PL.PST-IPFV~go LOC-DOWN.DIST still 1SG.PST-see

ləmat idə nung nə-mu [*ba viuv = e*]_{PP}.
 coconut 3N.POSS trunk LOC-INSIDE in sea = SG.CLF:FEM

‘When I went down there I saw the stem/stems of the coconut trees in the sea.’ [KM-TH-024]

Two adverbs *tan* ‘across’ and *liu* ‘back’ are placed after the demonstratives with a modifying function. *tan* is not used in any other places in the language, while *liu* is used as a verb meaning ‘return’. *tan* ‘across’ can only modify *mumə* and *vimə*, while *liu* can be used to modify almost all demonstratives except *vi* ‘close to speaker’.

tan adds a meaning of ‘across’ to the two demonstrative bases, meaning ‘to the other side of (river/forest/mountain)’.

(517) *doto tə-rup tang nə-bət be bokbok,*

when 3PL.PST-gather REFL/RECP LOC-PROXH at talk

nə-mumə da ioi = voi da Ilu, me ioi = voi

LOC-DOWN.DIST on water = SG.CLF:FLAT on PN and water = SG.CLF:FLAT

ioi-vi o avar logə = vət bəranmə voi,

SG.CLF:DIM-PROXS TOP also bridge = SG.CLF:SEG above SG.CLF:FLAT

da vəduvədur idə-t~təvək nə-mumə tan me

PURP car 3N.PST-IPFV~cross LOC-DOWN.DIST across and

nu-vəde.

LOC-this.way

‘When they gather there for talking, down there at the river at Ilu, and this river has a bridge over it, for cars to across down to the other side, at across this way.’ [AL-IP-025]

- (518) *io b= inə-mənan =a u-vi to ngə-mume ngən be*
 then IAM= 2PL.PST-hear =PAT 3N-PROXS SR 1SG.PST-tell 2PL at
akul u-vi, do e-Kot e-vi e-n =a
 devil.woman 3N-PROXS here ART.F-PN 3SG.F-PROXS 3SG.F-COM =PAT
e-Kokopagol to ittə-manəng ta, nə-vimə tan.
 ART.F-PN SR 3DL.F.PST-run 3PL LOC-DOWN.PROX across
 ‘you have heard about this story I told you about this devil woman, Kot
 and Kokopagoi that they always chase them, on the other side of the
 river.’ [LM-WT-017]

7.3 Semantics of demonstratives in spatial referencing

The main function of demonstratives in Tulil is to specify the location of a referent in relation to the deictic centre (519a). The location can be and quite frequently further specified with a modifying PP (519b).

- (519) a. *molimoli = ta nə-mumə avar tar = ta*
 people = PL.CLF:HUM LOC-DOWN.DIST also many = PL.CLF:HUM
vəvat, kori mətə udu do.
 very NEG like 1PL here
 ‘People there are too many, not like us here.’ [ER-EA-007]
- b. *at-e, Tulil o ta-bi? tat-e, ta o*
 3SG.M-QUOT PN TOP 3PL-where 3PL-QUOT 3PL TOP
ta-mə [ba lokəm laik]_{PP}.
 3PL-DOWN in slope big
 ‘He said, “where are the Tulils?” They said, “They are down there at
 the big slope/valley.”’ [LR-TH-063/064]

Demonstratives can also be used to describe motions (directions). It is less likely for nominal demonstratives to be used for directions, but predicative (520) and adverbial demonstratives (521) are quite often used for these functions. If occurring together in a clause, directional adverbial demonstratives are placed to the right of the static adverbial demonstratives, and they are not modified by PPs.

- (520) *io a-vi v-arkat =a vativon*
 then 3SG.M-PROXS 3SG.M.PST-leave =PAT 3SG.M.POSS.INAL.brother
at-e, 'na ngi-mator, ngi-t~ton be a-marau.'
 3SG.M-QUOT wait 2SG.NPST-sit 2SG.PST-IPFV~look at ART-crocodile
io iap o a-m~bo.
 then 3SG.M TOP 3SG.M-CON~UP
 'Then he left his brother, he said, "you sit here first, you look at the
 crocodile." then he was going up.' [GK-CC-024/025]

- (521) *doto ta-toti =e mǝ = nǝ-mu be NiuAiland ba*
 when 3PL.NPST-see =3SG.F.PAT FROM=LOC-INSIDE at PN in
viuv=e, o ta-t~ton tuk =a Ailand
 sea=SG.CLF:FEM TOP 3PL.NPST-IPFV~look give =PAT island
tat-e Ailand to a-ti~vi nǝ-mu ba
 3PL-QUOT island SR 3SG.M.NPST-IPFV~go LOC-INSIDE in
viuv=e nǝ-mǝ me a-liu mǝ = nǝ-mǝ
 sea=SG.CLF:FEM LOC-DOWN and 3SG.M.NPST-return FROM=LOC-DOWN
nu-vǝde.
 LOC-this.way
 'When they see her from New Ireland in the sea, they see an island they
 think it is an island moving down there inside the sea, then it comes back
 there to here.' [AL-DL-029]

In 521, *nǝmu* is an adverbial demonstrative describing the destination of the movement, which is further specified by the PP *ba viuve* 'in the sea', while *nǝmǝ* describes the direction of the movement. In the second part of the sentence, *mǝ = nǝmǝ* is also indicating the source of the movement, thus also a position, with an adverb *nuvǝde* 'to here, this way' specifying the direction.

In the same sense, in (520), the predicative demonstrative *a-mbo* indicates the action of moving ('he was going up'), rather than the position ('he was up there'). Also the position of the destination is not specified. However, the latter meaning can be expressed by the same construction. The deictic centre can be either the speaker, or another location in the discourse.

In Tulil, there are several sub-domains of spatial meaning: distance, interiority, vertical axis, front-back axis and landforms (Table 7.4). The first four sub-domains are generally involved in small-scale spaces that are closer, or more accessible⁵⁷ to

57. The concept of accessibility is necessary due to the modern technology such as mobile phone. It creates circumstances in which the speaker and hearer are far away from each other, but accessible. For instance, if

Table 7.4: Tuli demonstrative stems

	distance	interiority	vertical	horizontal	front-back	landforms	movement
<i>vi</i>	close to s(peaker)						
<i>bət</i>	close to H(earer)						
<i>mu</i>	far from s & H	‘inside’				‘inland’	
<i>umu</i>	far from s & H (invisible)						
<i>bo</i>			‘up’	‘closer’	‘front’	‘uphill’	
<i>mə</i>			‘down’	‘further away’	‘back’	‘downhill’	
<i>m~bo</i>						‘far.up’	‘continuous going up’
<i>m~mə</i>						‘far.down’	‘continuous going down’
<i>p~bo</i>				‘closer’	‘front’	‘up.near’	‘(move and stop) going up’
<i>p~mə</i>				‘further away’	‘back’	‘down.near’	‘(move and stop) going down’
<i>vibo</i>					‘front’	‘up-near’	
<i>vimə</i>					‘back’	‘down-near’	
<i>mumə</i>						‘down-far (seawards)’	
<i>və</i>	non-specific						
<i>bi</i>	interrog. ‘where’						

the deictic centre. In contrast, landforms usually refer to the space that is further away from the deictic centre.

We can see from Table 7.4 that the demonstrative stems can have more than one sense in relation to the different sub-domains: for instance, *-mu* can be used as distance (‘far from both speaker and hearer’), interiority (‘inside’) and landform (‘inland’). In this case, the first sense is likely to be the original meaning.

In Table 7.4, the most likely original meaning of each demonstrative stem is noted in bold, and the other senses are the extended meanings. We can see that demonstrative stems with their original meanings fall into the ‘distance’ and ‘vertical’ categories are usually morphologically simple, while the stems of landform expressions are usually derived (cf. §7.1).

Although they tend to be used in different situations, the semantic parameters are not totally independent. The demonstratives are chosen according to which of the parameters (distance, vertical, interiority and landform) are the most relevant one to the discourse, in the perception of the speaker.

For instance, the following two examples describe the same spatial relationship of ‘a body’/‘bones’ and a pit on the ground where they are in. However, two different demonstratives are used: *mu* ‘inside’ (interiority) in the first case, and *mə* ‘down’ (vertical) in the second.

- (522) *du-mu mat idə nandi, ava du-liu idə təkə = nə-mu*
 1PL.PST-put get 3N like.this again 1PL.PST-return 3N TO = LOC-INSIDE
ba vərαι = a ava du-mərop liu n = idə.
 in pit = SG.CLF:MASC again 1PL.PST-bury return APPL = 3N
 ‘We put them [the bones] like that, we put them back into the hole, we buried those back again.’ [AL-BT-016]

- (523) ***a-bo*** *ava a-kər mə = nə-mə o*
 3SG.M-UP again 3SG.M.NPST-rise FROM = LOC-DOWN TOP
a-tor nə-bo da vərαι = a və =
 3SG.M.NPST-sit LOC-UP on pit = SG.CLF:MASC 3SG.M.POSS.INAL =
kiou.
 mouth
 ‘the one (I mentioned) climbed up again from down there, then he sat up there at the side of the pit.’ [AL-SO-018]

A is telling B on the phone that he will be there (where A is) soon, he will say

- (i) *kəra nga-bət.*
 soon 1SG-PROXH
 ‘I’ll be there soon.’

[E]

rather than using a landform demonstrative that is usually used for long-distance space.

In 522, *mu* ‘inside’ is used to emphasize that the ‘bones’ are inside the hole, in contrast with the concept of ‘outside’ as the deictic centre that is set up by ‘our’ position. In 523, *mə* is used in contrast with *bo* to describe a movement from ‘down’ in the pit to ‘up’ at the side of the pit.

A basic account of the functional system underlying the use of demonstratives is outlined in this section, though more systematic research in spatial deixis is needed for detailed description.

7.3.1 Distance

Table 7.5: Tulil demonstrative stems

	distance	interiority	landforms
<i>vi</i>	close to s(peaker)		
<i>bət</i>	close to H(earer)		
<i>mu</i>	far from s & H	‘inside’	‘inland’
<i>umu</i>	far from s & H (invisible)		

In Tulil, there is a three-way distinction on the distance scale⁵⁸: near speaker (*vi*), near hearer (*bət*), and away from both (*mu*). An additional parameter of visibility is combined with the distal distance (*umu*, glossed as DIST.INVS, possibly derived from *mu*). Because the distance to the addressee is relevant, it is called a **person-oriented system** according to Anderson & Keenan (1985:282-286), in contrast to the distance-oriented system, where ‘middle’ term refers to a location in medial distance relative to the deictic center, and make a distinction among PROXIMAL, MEDIAL and DISTAL.

- (524) a. *ngang ngan-e, “ləi, ngi-na~manəng =a kəreku = vənik*
 1SG 1SG-QUOT INTJ 2SG.PST-IPFV~run = PAT chicken = PL.CLF:DIM
vənik u-bət da gəri?”
 PL.CLF:DIM 3N-PROXH PURP what
 ‘I said, ‘hey, why are you chasing those small chickens?’

[ER-EA-026]

58. Languages in the same area are commonly found to have two-way distance distinction: PROXIMAL vs. DISTAL, such as Mali Baining (Stebbins, 2011:76-82) and Tolai (Mosel, 1982).

- b. *at-e, 'do kori go kareku u-vi, me do o*
 3SG.M-QUOT here NEG NSPEC chicken 3N-PROXS and here TOP
tul.'
 bird
 'He said, "these are not chickens, they are birds.'" [ER-EA-027]

The examples in 524 show a conversation between A (I) and B (he) in the same scenario, where the deictic centre shifts between the two people, and two different demonstratives are used for pointing at the same referent ('the small chickens'). The referents were close to B when he was chasing them, so they were addressed by A with *-bat* 'close to hearer', and by B with *-vi* 'close to listener'.

- (525) *vəngar tuk =a vativon at-e, 'a,*
 3SG.M.PST.say give =PAT 3SG.M.POSS.INAL.brother 3SG.M-QUOT INTJ
vudulung u-mu konəŋ.'
 malay.apple 3N-DIST only
 'He said to his brother, "there's a malay apple tree just there."'
 [TV-MA-010]

In 525, the referent (a Malay apple tree) is far from both the speaker and the hearer, thus the demonstrative *mu* 'far from S/H' is used in this case.

- (526) *'nging o ngi-mətor do da a-kul=e*
 2SG TOP 2SG.PST-sit here PURP ART-devil.woman = SG.CLF:FEM
e-umu, udu o bə = derən.'
 3SG.F-DIST.INVS 1PL TOP IAM = 1PL.NPST.run
 'You just sit here to wait for the devil woman there, we are going to run.'
 [LM-WT-007]

In the context of example 526, the speaker and the hearer already heard the sign ('whistling' sound) indicating the vicinity of the devil woman. That is to say, they haven't seen her but predict that she is approaching, thus they use *e-umu* to refer to her.

mu has the extended meanings 'interior', and can also mean 'inland'. The first one will be discussed in the following section, and the second one will be discussed in the landforms section §7.2.4.

7.3.2 Interiority: *mu*

The interiority meaning of *mu* 'inside' is a semantic extension of the sense 'far from both S and H', given that a space that is far away may imply a certain degree of

inaccessibility and invisibility (*mu* as indicating distance/interiority can both be either visible or invisible). *mu* is glossed as INSIDE to avoid confusion, instead of using the glossing as DIST.

mu ‘inside’ specifies a interior space (the location of referent) in relation to the space outside (the deictic centre), when the two spaces are separated by some kind of boundary. The boundaries can be walls, water surface, fences, holes/caves, etc. It usually combines with preposition *ba* ‘in’ (partial containment), and *bərodəm* ‘inside’ (full containment).

- (527) *ngə-toti* *ləmat* *idə* *nung nə-mu* *ba viuv = e.*
 1SG.PST.PST-see coconut 3N.POSS trunk LOC-INSIDE in sea = SG.CLF:FEM
 ‘I saw the stem/stems of the coconut trees in the sea.’ [KM-TH-024]

7.3.3 Vertical/horizontal axes

Table 7.6: Tulil demonstrative stems

	vertical	horizontal	front-back
<i>bo</i>	‘up’		‘front’
<i>mə</i>	‘down’		‘back’
<i>pbo</i>			‘front’
<i>pmə</i>			‘back’
<i>vibo</i>			‘front’
<i>vimə</i>			‘back’

There are three axes used in spatial reference of Tulil - one vertical (up vs. down) and two horizontal (close to one vs. further away; front vs. back) - all related to the pair of demonstrative stems *mə* ‘down’ and *bo* ‘up’ and their derivatives.

mə ‘down’ and *bo* ‘up’ originally express spatial relations with reference to a vertical axis. They are often found in collocation with the following positions that are expressed by prepositional phrases or adverbs: *mə* ‘down’ with *be ibən* ‘on the ground’, *ba vərəia* ‘in the pit’, *ba ioivoi* ‘in the river’; and *bo* with *be utəme* ‘in the sky’, *davə* ‘high up’.

- (528) *i-məṇəvən* *mə = nə-bo* *təkə = nə-mə* *be ibən, me*
 3SG.F.PST-fall FROM=LOC-UP TO=LOC-DOWN at ground and
kom = a *v-iau* *mə = nə-mə* *be ibən*
 bird.sp. = SG.CLF:MASC 3SG.M.PST-fly FROM=LOC-DOWN at ground
təkə = nə-bo *davə, və-bakət* *nə-bo* *davə* *at-e,*
 TO=LOC-UP above 3SG.M.PST-exchange LOC-UP above 3SG.M-QUOT
 “hahahahaha...”

INTJ

‘She fell from up there down to ground, and koma flew from down there up to high up, he changed up there, said, “hahahahaha”.’

[LR-HC-017]

Often the vertical axis shows the contrast between two points on the bottom of the vertical axis and the top of the axis. Thus the point on the vertical axis is a relative matter, and the speaker has a subjective choice between the different demonstratives, and the deictic centre can also be changed according to the context. This point can be illustrated by the contrast between 529 and 528, where the location ‘on the ground’ can be used with either *mə* and *bo* depending on the context.

- (529) *ko* *go* *maut* *o* *iap* *o* *b = a-kər*
 NEG NSPEC long.time TOP 3SG.M TOP IAM = 3SG.M.NPST-rise
mə = nə-mə *ba vərαι = a,* *o* *b = a-tengəp*
 FROM=LOC-DOWN in pit=SG.CLF:MASC TOP IAM = 3SG.M.NPST-sleep
nə-bo *be ibən,* *nə-bo* *dəratəm.*
 LOC-UP at ground LOC-UP outside
 ‘Not long time he rise from down there in the pit, he sleeps up there on the ground, up there outside.’

[AL-SO-016]

A common semantic extension of *mə* and *bo* is when they are used to refer to two points on the human body: *bo* ‘head-ward’, *mə* ‘foot-ward’. In this sense, they are not strictly on a vertical axis because the body does not need to be in a standing position.

- (530) *ngi-turən* *ar* *mə = nə-bo* *be ngi* *lat = a*
 2SG.NPST-wash still FROM=LOC-UP at 2SG.POSS head = SG.CLF:MASC
ar *nə-mə* *ngi-turən* *n* *= a.*
 still LOC-DOWN 2SG.NPST-wash APPL = 3SG.M.PAT

‘You wash from up at your head to down, you wash with that (potion).’

[WM-LP-043]

- (535) *voin = a* *və-tauk* *mat = a* *molimolimoli = a*
 devil = SG.CLF:MASC 3SG.M.PST-*hold* get = PAT human = SG.CLF:MASC
və = *nok, io* *və-kir* *n* = *a*
 3SG.M.POSS.INAL = hand then 3SG.M.PST-stick.in INSTR = APPL
və = *nok* *nə-mu* *bərodəm tang,* *io* *lət*
 3SG.M.POSS.INAL = hand LOC-INSIDE inside REFL/RECP then arrive
tənin *n* = *a* *və =* *nok* *nə-vimə.*
 through APPL = PAT 3SG.M.POSS.INAL = hand LOC-DOWN.PROX
 ‘The devil held the man’s hand, put his hand through (the opening) inside
 him, the hand went through to the back.’ [TV-DM-019]

Another meaning that is usually expressed by *pbo* and *pmə* is ‘one end of a horizontal line’, with the former indicating a point that further away from the reference point, and the latter closer. The actual use may be more complex.

- (536) *at-e,* ‘*e-bo,* *ngang o* *ngə-m~mət* *ar*
 3SG.M-QUOT 3SG.F-UP 1SG TOP 1SG.PST-IPFV~eat still
nə-p~mə, *ar* *nə-p~mə.*’ *io,* *i-rut* *nə-p~mə.*
 LOC-EP~DOWN still LOC-EP~EP then 3SG.F-move LOC-EP~DOWN
 ‘he said, ’you there, I used to eat the fruits towards the end of the branch.’
 then, she moved to the end.’ [LR-HC-010]

- (537) *nging o* *ngi-nitəng* *nə-bət,* *me* *ngun o* *ngu-titəng*
 2SG TOP 2SG.NPST-bite LOC-PROXH and 1DL TOP 1DL.NPST-bite
do, *təgət = a* *do* *me* *təgət = a* *nə-p~bo,* *me*
 here one = SG.CLF:MASC here and one = SG.CLF:MASC LOC-EP~UP and
nging o *nə-bət* *mədərəp moli o* *nging ngi-nitəng.*
 2SG TOP LOC-PROXH middle real TOP 1SG 2SG.PST-bite
 ‘You bite there, and we bite here, one here and one at the other end, and
 you bite right in the middle.’ [ER-TD-018]

bo / *mə* and the derived forms can also express landforms, which will be discussed in details in §7.2.4.

7.3.4 Landforms

The Tulil people live in the Eastern part of New Britain Island, situated between the coastal area and the more mountainous Baining area. The main points of orientation are the vertical axis (higher altitude vs. lower altitude) and the landform axis sea-side (seawards) vs. the mountain/bush-side (inland).

The space reference in the landform parameter is a reflection of the three general directional terms ‘up’, ‘down’ and ‘inside’, respectively, ‘uphill’, ‘downhill’ and ‘inland’. There are three main pairs of landform axes related to forms: uphill/upstream vs. downhill/downstream (*bo* vs. *mə*), up-near vs. down-near (*vibo/pbo* vs. *vimə/pmə*), inland vs. seawards (down-far) (*mu* vs. *mumə*). A common semantic extension for the contrast of *bo* vs. *mə* is main road vs. side road.

Table 7.7: Tulil demonstrative stems

	distance	general direction	landform
<i>bo</i>		‘up’	‘uphill; upstream’
<i>mə</i>		‘down’	‘downhill; downstream’
<i>vibo / pbo</i>		‘front’	‘up-near’
<i>vimə / pmə</i>		‘back’	‘down-near’
<i>mu</i>	far from S & H	‘inside’	‘inland’
<i>mumə</i>			‘down-far (seawards)’

The first contrast (*bo* vs. *mə*) is usually used when the axis is of a closer angle to the vertical axis comparing to the horizontal axis, which means a specific mountain/hill or river/stream is involved, or the elevation difference between the spatial referent and the deictic centre is significantly large. The landform axis ‘down’ vs. ‘up’ could be ‘downhill/uphill’ as of a slope, or ‘down/up’ along the river. The big roads are usually referred to as ‘up’, while going off the big road into small tracks are ‘down’ (if similar altitude).

The second contrast (*vibo/pbo* vs. *vimə/pmə*) is used when the distance between the referent and the deictic centre is relatively close. The *pbo-pmə* pair can also denote motion.

There is no term specifically for ‘seaward’, and *mumə* ‘down-far’ can be taken as semantically contrastive with *mu* ‘inland’ when needed, given that seaward places are in most of the cases also lower in altitude.

7.3.4.1 Uphill *bo* vs. downhill *mə* or *mumə*

With reference to locations in the landscape, *bo* encodes locations higher in reference to the deictic centre, commonly at the top of the mountain etc; while *mə* and *mumə* refers to lower locations, such as down to the creek.

- (538) *du-kər* *bətəpm* = *a* *reit* = *e*, *təkə* = *nə-bo* *da*
 1PL.PST-climb over = PAT slope = SG.CLF:FEM TO = LOC-UP on
bərən = *bən*, *io* *du-bunən* *nə-mumə* *tə* = *da*
 mountain = SG.CLF:AUG then 1PL.PST-go.down LOC-DOWN.DIST TO = on
ioi = *voi*, *to* *voi* *idə* *itən* = *e*
 water = SG.CLF:FLAT SR SG.CLF:FLAT 3N.POSS name = SG.CLF:FEM
Tavanakot.
 PN

‘we climbed up the slope, up to the mountain, then we go down to the river, the name of the river is Tavanakot.’ [CM-B1-019]

- (539) *tə-t~ton* *nə-m~mə* *təkə* = *nə-mə* *bəro*,
 3PL.PST-IPFV~look LOC-CON~DOWN TO = LOC-DOWN at.creek
tə-t~ton *ba a-galat*, *nə-mə* *bəro*.
 3PL.PST-IPFV~look in ART-glass LOC-DOWN at.creek
 ‘Then they [people on plane] looked down, they looked down to the river, they looked through binocular, down at the river.’ [PP-PH-014]

When identifying places in reference with landforms, *mə* and *mumə* can be used interchangeably. However, the latter seems to be more common for places that are further away, which overlaps with the usage of *mumə* as ‘seawards’.

7.3.4.2 Upstream *bo* vs. downstream *mə*

With reference to locations along a river/stream, *bo* encodes locations that are closer to the river/stream’s origin; while *mə* refers to locations that are further away from the origin. In this case, *mumə* cannot be used interchangeably with *mə*.

- (540) *b* = *itə-toti* *umavək* = *a* *nə-bo* *da* *ioi* = *vəp*
 IAM = 3DL.M-see mud = SG.CLF:MASC LOC-UP on water = SG.CLF:ROUND
idə *do* *me melamelep*, *to* *a-vi* *a-mə* *to*
 3N.POSS head and rubbish SR 3SG.M-PROXS 3SG.M-DOWN SR
bə = *və-mutukup*.
 IAM = 3SG.M.PST-struggle
 ‘They saw dirt (in water) up there on top of the water, and rubbish, because he down there was struggling to come out.’ [AK-FH-009]

- (541) *voi idə-p~povər mən = a nangə io voi*
 SG.CLF:FLAT 3N.PST-IPFV~dig off =PAT tree then SG.CLF:FLAT
idə-re idə nə-mə ba ioi = voi da nə-mə
 3N.PST-carry 3N LOC-DOWN in water = SG.CLF:FLAT PURP LOC-DOWN
tə = be viuv = e.
 TO = at sea = SG.CLF:FEM
 ‘The river dug out trees then river carried them down to the sea.’
 [AL-DL-008]

7.3.4.3 *vimə* and *vibo*

When identifying places in reference with landforms, the basic function of the two demonstrative stems *vimə* ‘down-near’ and *vibo* ‘down-far’ are similar to the contrastive pair *mə* and *bo*, except that 1) the elevation gradient is not steep (close to vertical: *mə*, *bo*; close to horizontal: *vimə*, *vibo*); 2) the distance between the referred position is relatively close to the deictic centre.

- (542) *du-t~tade nə-bət be vətak u-və*
 1PL.PST-IPFV~church LOC-PROXH at PL.CLF:SEG 3N-NSPEC
vəti = vənik vənik u-və kori du-p~pi
 day = PL.CLF:DIM PL.CLF:DIM 3N-NSPEC NEG 1PL.PST-IPFV~walk
tə = be Təkəma, me du-t~tade ko nə-vimə.
 TO = at PN and 1PL.PST-IPFV~church only LOC-DOWN.PROX
 ‘We worshiped there sometimes, sometimes we donot go to Təkəma, and we just worshiped down there(near)’
 [SV-N1-187]

- (543) *lomən = a a-vi o kori it-təm*
 creek = SG.CLF:MASC 3SG.M-PROXS TOP NEG 3DL.M.PST-know
it-e, a-kul vitəm itə-vibo ba və =
 3DL.M-QUOT ART-witch 3DL.F 3DL.F-UP.PROX in 3SG.M.POSS.INAL
do ba bek = a.
 head in cave = SG.CLF:MASC
 the small creek, they didn’t know that, two witches lived at the head of the creek in a cave.
 [TV-MA-003]

7.3.4.4 Big road vs. side road

Usually *bo/mə* and their derivatives can be used to denote relationships between big roads and side roads. For instance, taking the deictic centre as the big road, the location of the side road is referred to as *mə*; and in the opposite situation, *bo* is used.

- (544) *ngu-re konəng ar təkə = nə-bo be tuk laik = a.*
 1DL.PST-carry only still TO = LOC-UP at road big = SG.CLF:MASC
 ‘We just carry them to the big road.’ [ML-YE-030]

Relationship between side roads can sometimes captured by the *vibo-vimə* pair, and the difference lies in elevation.

7.3.4.5 Inland/bushside vs. seawards

mumə ‘down-far’ can mean ‘seawards’, and be semantically contrastive with *mu* ‘inland’, given that seaward places are in most of the cases also lower in altitude (545). Off-shore, including places abroad can also be denoted by *mumə* (546).

- (545) *ngang o ngə-matme nə-mumə be Vunapope*⁶⁰.
 1SG TOP 1SG.PST-work LOC-DOWN.DIST at PN
 ‘I, I worked down there at Vunapope.’ [JK-TS-003]

- (546) *ngang nga iaia, a-mumə be Australia.*
 1SG 1SG.POSS.AL grandkid 3SG.M-DOWN.DIST at PN
 ‘My grandson, he is down there at Australia.’ [ER-EA-024]

On the other hand, *mu* refers to a position that is inland.

- (547) *ava ngunu-təvək = a Laikpoi, təkə = nə-mu ba tipur.*
 again 1DL.PST-cross = PAT PN TO = LOC-INSIDE in bush
 ‘Then we crossed the big river (Vargoi), into there in the bush.’
 [WL-HT-024]

- (548) *bə = tə-lam nə ngən nə-mu ba Gaulim*⁶².
 IAM = 3PL.PST-show APPL 1PL LOC-INSIDE in PN
 ‘They showed you (your photos) in there at Gaulim.’ [SV-PH-013]

60. Vunapope is a district of Kokopo where the Catholic mission resides, accommodating various convents.

62. For the position of Gaulim see Figure 1.2.

7.4 Other uses of demonstratives

As mentioned earlier, the primary use of demonstratives is as spatial deictics, but they may also be involved in many other pragmatic uses. Demonstratives can be used as temporal deictics, as well as endophoric uses such as anaphoric and discourse deictic.

7.4.1 Time deictics

Time deixis is a reference to time in relation to a temporal reference point, typically the moment at which the speech event take place (cf. Levinson, 1983, 2004).

In Tulil, there are five demonstrative stems that can be used for time expression: *vi* ‘this’, *pmə* ‘(near/far) past’, *pbo* ‘(near/far) future’, *mumə* ‘far past/future’, *və* ‘one, some’(indefinite). When these stems form nominal demonstratives, they can be used with calendrical nouns like *vənu(=a)* ‘day’, *atade(=e)* ‘week’, *vəgam(=e)* ‘month’, *laləng(=a)* ‘year’. Note that when the reference point is the time point when the utterance is issued, *vənu=a* ‘day’ is seldom used, but instead definite time specification is used, such as *məgət* ‘today; nowadays’, *bərui* ‘tomorrow’, *mior* ‘yesterday’, *bavonbə* ‘any day before yesterday (near past); any day after tomorrow’ (near future)⁶³ and the deictic forms are less used.

An adverbial demonstrative with the locative prefix *nə-* can be used as an adverbial, non-calendrical time reference. And there is no indefinite use of an adverbial demonstrative (**nəvə*).

- (549) *be laləng=a* *a-p~mə,* *a-mumə,* *məte*
 at year=SG.CLF:MASC 3SG.M-EP~DOWN 3SG.M-DOWN.DIST like
təgət=a *me nereita ko* *mukəm.magərunɡ,* *me libəti me*
 one=SG.CLF:MASC and six plus three.SG.CLF:MASC and five and
nereita ko *mukəm,* *laləng=a* *a-bət...*
 six plus two, year=SG.CLF:MASC 3SG.M-PROXH
 ‘In a year before, like 1958, that year...’ [JK-PP-036]

63. *bavonbə* is a derived form from the structure *ba* + non-specific *bə* as a nominal demonstrative form inflected for the diminutive nominal class (CLF:DIM).

- (550) *mət* = *ip* *ip-mə-nan* = *a* *viuv* = *a* *to* *avar*
 in.mouth = 3DL.M 3DL.M-feel = PAT taste = SG.CLF:MASC SR also
kaməron, *mən* = *be* *vəti* *katum* *konəng* = *bənik* ***nə-p~mə*** *kia*
 different FROM = at day all only = PL.CLF:DIM LOC-EP~DOWN first
n = *a* *vəti* = *von* *vo-di*
 APPL = PAT day = SG.CLF:DIM SG.CLF:DIM-PROXS
 ‘The taste in their mouth they felt different from all previous days before
 this day.’ [LG-VI-016]

Just as in case of the place deictics, demonstratives can be used when the reference time is the current time (551), as well as another time point in the discourse (552).

- (551) *təbətəm* *mərek*, *be* *vəti* = *von* ***no-di*** *məgət*.
 afternoon good at day = SG.CLF:DIM SG.CLF:DIM-PROXS today
 ‘Good afternoon, at this day today.’ [KM-TH-002]

- (552) *məte* *nga-nəkən* *idə* *məgət*, *io* *avar* ***nə-p~bo*** *avar*
 like 1SG.NPST-plant 3N today then again LOC-EP~UP also
i-tu *be* *a-taem* *a-vi* *to* *ngə-məkən*.
 3N.NPST-grow at ART-time 3SG.M-PROXS SR 1SG.PST-plant
 ‘like I plant them today, then next year it will grow at the same time that
 I planted.’ [BM-PP-010]

7.4.2 Anaphoric use

Anaphora is defined as “a relation between two or more linguistic elements, in which the interpretation of one (anaphoric expression) is in some way determined by the interpretation of the other (antecedent)” (Huang, 2000). Demonstratives can be used as an anaphoric expression to refer back to an antecedent (usually an NP) in the preceding discourse. In Tulil, there are three demonstratives that can be used anaphorically: the two distance-based demonstrative *vi* ‘near speaker’ (553), *bət* ‘near listener’ (554) and the vertical oriented demonstrative *bo* ‘up’ (555). In general the three demonstratives can be used interchangeably without much effect to the meaning; However, further research may be needed to reveal differences in their discourse functions. When used anaphorically, demonstratives can occur in all possible syntactic context as nominal (either as independent pronouns or with a co-occurring noun), predicative and adverbial demonstratives.

- (553) a. *ngang ngə= mativon Taman me ngunu*
 1SG 1SG.POSS.INAL= brother PN and 1DL.POSS
vil=ip o [David Alo me Blasius Alo
 kid=DL.CLF:MASC TOP PN PN and PN PN
*]*_i. ***ip-vi***_i *o ngunu mativon laik=a*
 3DL.M-PROXS TOP 1DL.POSS brother big=SG.CLF:MASC
vil=ip.
 3SG.M.POSS.INAL.kid=DL.CLF:MASC
 ‘My brother Taman and our sons are David Alo and Blasius Alo. These
 two are our big brother’s son.’ [LN-TO-002/003]
- b. *pau u-vi o [udu du laik=a*
 ritual.article 3N-PROXS TOP 1PL 1PL.POSS big=SG.CLF:MASC
molimoli təgət=a to va itən=e
 people one=SG.CLF:MASC SR 3SG.M.POSS.AL name=SG.CLF:FEM
*to-Kabang]*_i, *iap və-kəbənət =a u-vi, me*
 ART.M-PN 3SG.M 3SG.M.PST-make =PAT 3N-PROXS and
*molimoli=a a-vi*_i *o və-təm =a*
 people=SG.CLF:MASC 3SG.M-PROXS TOP 3SG.M.PST-know =PAT
təre kurek=pənik.
 thing bad=SG.CLF:DIM
 ‘The ritual was made by one of our uncles whose name is Kabang,
 and that man knows many bad things.’ [AL-DA-131/132]
- (554) *ngi-təbətīt kon =a vagur=vən tə=be*
 2SG.NPST-spit only =PAT ginger.sp=SG.CLF:AUG TO=at
 [*molimoli=e]*_i *imi, o e-bət*_i *o*
 people=SG.CLF:FEM 3SG.F.POSS.INAL.eye TOP 3SG.F-PROXH TOP
b= e-terən konəng mənū nging.
 IAM= 3SG.F.NPST-run only back.of 2SG
 ‘You just spit the ginger in front of that woman’s eyes, and she will just
 chase after you.’ [WM-LP-011]

- (555) [*go idil konəŋ=a mægəte to-Pius*]_i, *to ba*
 NSPEC small only=SG.CLF:MASC like ART.M-PN SR in
və= do do konəŋ, a-bo_i a-perən.
 3SG.M.POSS.INAL= head here only 3SG.M-UP 3SG.M.NPST-climb
 ‘Just a small kid like Pius, that he is only this tall, he climbs.’
 [AL-RM-163]

Himmelmann (1996:229) points out that the use of anaphoric demonstratives after the first mention of a new discourse participant is especially common in languages that do not have a definite article; which is clearly the case in Tuli.

7.4.3 Discourse deixis

Discourse deixis encodes reference to some portion of the text in which the utterance is located (Levinson, 1983:85). It means that discourse deixis can refer to an earlier or forthcoming portion of the discourse relative to the speaker’s current location in the discourse. Similar to the anaphoric use of the demonstratives, the commonly used ones in Tuli are deictic and spatial terms: *vi* (upcoming text), *bət* and *bo* (earlier text).

- (556) *a-pir idil u-vi o nandi.*
 ART-story small 3N-PROXS TOP like.this
 ‘The little story is like this.’ [AL-RD-003]
- (557) *u-bət konəŋ me toktok.*
 3N-PROXH only and end
 ‘Just these (that I talked about) and it ends.’ [SV-ES-060]
- (558) *kori go a-pir to da nagapon me nə-bo a-pir to*
 NEG NSPEC ART-story SR PURP how and LOC-UP ART-story SR
təda t~tərak, me a-pir u-bo təre moli.
 for GEN~laugh and ART-story 3N-UP true real
 ‘It is not a story about what, but a story for laughing, and the story is a true one.’ [AL-TC-049]

Chapter 8

Structure of the verb complex

In this chapter, I will discuss the structure of the verb complex. The verb complex is the head of the verbal clause (cf. §3.2), as shown in Figure 8.1. A verb complex comprises the head (§8.2), verbal adjuncts (§8.3), and flagging/serial verbs (§8.4).

Pre-VC elements that are commonly related to verbal operators are considered to be clause-level constituents, rather than components of the VC, given the fact that they behave similarly to both verbal and non-verbal predicates (cf. §3.1.4). These constituents include irrealis *ka/aka*, iamitive *bə* and the negator *kori/ko*, and are discussed in §4.11. *bə* and *da* are particles that can also precede phrase-level constituents. Details of these elements can be found in word class chapter (§4).

O/S_O arguments, oblique arguments and adjuncts occur as post-VC elements.

- (559) [*də-tukmən mat*]_{VC} [=*a tivən*]_O *n_{PREP}* [=*a doedə*]_{OBL}
1PL-pick get =PAT rock INSTR =PAT tong
[*təkə=nə-mu ba tuaina a-bət to bə= du-mu*
TO=LOC-INSIDE in food.name 3SG.M-PROXH SR IAM= 1PL.PST-put
=*a ba tubakav=e*]_{ADJUNCT}·
=3SG.M.PAT in leave=SG.CLF:FEM
'We will pick stones from the fire with the tongs into the 'tuaina' that
we've already put in the leaf set.' [AL-TN-004]

The verb stem includes A/S_A person/tense prefixes and reduplication (imperfective aspect), as well as the applicative suffix *nə/mə* and incorporation. The morphological structure of Tulil verbs will be discussed in §9.

8.1 Structure of the verb complex

In Tulil, the term “verb complex” is used to label the structure including the verb and accompanying grammatical elements, without the pre- or post-VC arguments.

Curly brackets mark alternatives, and parentheses stand for optionality. A star marks that there may be multiple instances of a particular word class or phrase type.

Figure 8.1: Structure of verbal clause

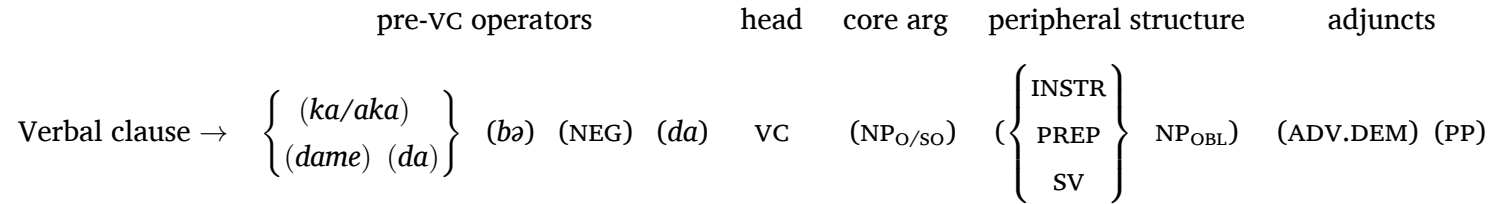
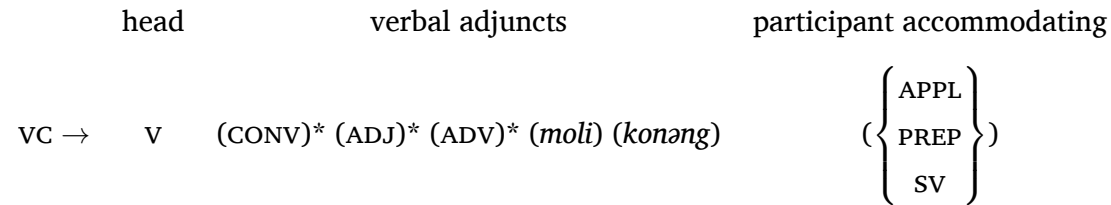


Figure 8.2: Structure of verb complex



The verb complex in Tulil roughly corresponds to what is recognized as a complex nucleus in “verb phrase” in the descriptions of some Oceanic languages (eg. Hyslop 2001)⁶⁴ The structure of the verb complex in Tulil is represented in Figure 8.2 and with further details in Figure 8.3.

The verb complex in Tulil is a surface constituent in descriptive terms, rather than a completely coherent unit in its deep structure (Pawley, 2003:151). The elements inside a VC occur in a fixed order. However, the right end of the VC is loosely bound - the further the elements are from the nucleus (verb stem), the more likely they 1) are intervened by other elements, such as adverbial demonstratives; 2) form a new intonation unit. The lexicalized status of the elements that occur in slot 3 (Figure 8.3) as the right boundary of the VC are not quite clear-cut. This will be discussed in details in §8.4.1.

Figure 8.3: Structure of VC

slots	1	2	3
structure	VC → V	(CONV)* (ADJ)* (ADV)* (<i>moli</i>) (<i>konəŋg</i>)	$\left\{ \begin{array}{l} \text{APPL } n(\partial) \\ \text{PREP} \\ \text{SV} \end{array} \right\}$
function	head	adjuncts	accommodating participants
valency of VC		valency → 0	valency → 1
member v	all	various (see §8.3.1)	<i>mat</i> ‘take’ <i>tuk</i> ‘give’ <i>vari</i> ‘help’

The only obligatory element in a VC is the head. The head verb is also the left boundary of the VC. Example 560 shows two minimal VCs with an active-intransitive verb and a stative-intransitive verb as respective heads.

- (560) [*v-əŋgar*]_{VC} *nandi*, ‘*kori* [*lang-mə*]_{VC} *ŋgang*’.
 3SG.M.PST-say like.this NEG want-APPL 1SG
 ‘He said like this, ‘I don’t want to.’ [SV-N1-028]

A more complex VC may involve VC-internal adjuncts (slot 2) and flagging/serial verbs (slot 3) (561). A VC that ends in verbal adjuncts cannot take an argument

64. In some descriptions, the structure labelled “verb complex” includes the post-v arguments, such as in Haiman (1980), Thieberger (2006), amongst others. It denotes a similar structure with VP, but is adopted to avoid making a strong claim of the existence of a “verb phrase” in the transformational grammar’s sense, or potential confusions with grammars which adopt “VP” in this sense.

directly after it (thus the VC valency becomes 0 after including verbal adjuncts); while the VC that ends in flagging/serial verbs always requires an argument (the VC valency becomes 1 after including a flagging/serial verbs). The right boundary of the VC is loosely defined, and elements close to the boundary (in slot 3) may be subject to reanalysis, and have a range of syntactic/semantic status in relation to the verb (§8.4).

- (561)
$$\overbrace{\begin{array}{cccccc} d\partial\text{-}t\sim t\partial m_V & p\sim p\partial r\partial t_{CVB} & kia_{ADV} & kon\partial ng_{PTCL} & n\partial & ta. \\ 1\text{PL.NPST-IPFV}\sim\text{know} & \text{CVB}\sim\text{break} & \text{first} & \text{only} & \text{APPL} & \text{3PL} \\ \underbrace{\hspace{10em}} & \underbrace{\hspace{10em}} & \underbrace{\hspace{10em}} & \underbrace{\hspace{10em}} & \underbrace{\hspace{10em}} & \underbrace{\hspace{10em}} \\ & 1 & 2 & & 3 & \end{array}}^{VC}$$
- ‘We differentiate them(the dark sorcerers) [from others] very early.’
[AL-SO-005]

8.2 Head

VCs are headed by verbs. For stative-intransitive verbs, the head is a bare verb stem (562); while for transitive verbs (563) and active-intransitive verbs (562), the head also includes an A/S_A person index. A detailed account of verb morphology can be found in chapter §9.

- (562)
$$M\partial r\partial b\partial t\ o\ b\partial =\ [m\partial l\ e_V\ ko\ n\partial\]_{VC}\ ta,\ b\partial =\ kori\ \partial va$$
- PN TOP IAM= rest only APPL 3PL IAM= NEG again
- $$[\ t\partial\text{-}v\partial r\partial t\partial r\partial t_V\]_{VC}.$$
- 3PL.PST-make.noise
- ‘The Bainings just stopped, they didn’t say any disagreement any more (lit. make noise).’ [SV-N1-192]

- (563)
$$b\partial =\ [t\partial\text{-}kut\partial ng\ k\partial rot\ n\]_{VC}\ =\ a.$$
- IAM= 3PL.PST-cut into.pieces APPL = 3SG.M.PAT
- ‘Then they cut it (the big eel) into pieces.’ [JN-KL-030]

Some stative intransitive verbs cannot take a post-VC argument on their own, and have to be accompanied by a slot 3 element (flagging/serial verb) inside a VC. Adjectives can be used in the same setting, and discussion of how to differentiate adjectives and stative verbs can be found in §4.4.

- (564) *bə* = [*kərvuk_v nə*]_{vc} *ngang to ngang o kori ngə-təm*
 IAM = drown APPL 1SG SR 1SG TOP NEG 1SG.PST-know
mərek n =a n~nanət.
 good APPL =PAT GER~swim
 ‘I will drown because I don’t know well about swimming.’
 [LR-DW-029]

8.3 Verbal adjuncts

A VC can include one or more VC-internal modifiers (adjuncts), which is not uncommon across Papuan languages (cf. verb adjunct construction, in Pawley 2006). As described by Pawley, verbal adjuncts are ‘an open class of roots and derived words, which occur only as the partner of a verb in a complex predicate.’

In Tulil, members of the verbal adjunct class are not homogeneous semantically or syntactically. These words can be adjectives (566), quantifiers (567), verbs (converb, 568), adverbial particles (569) and adverbs that only occur in this position (565). One property noun *pək = a* ‘brightness’ also occurs as a verbal adjunct, and it is not used in its root form, but as a full NP in which the class marking reflects its inherent class.

- (565) **Adverbs**
 [*i-raot pikət ko n*]_{vc} = *e mən = ba*
 3SG.F.PST-drag acutely only APPL = 33SG.F.PAT FROM = in
məlang = a və = nok.
 lizard = SG.CLF:MASC 3SG.M.POSS.INAL = hand
 ‘She pulled her in a rush from the lizard’s hands.’ [AL-RM-052]

- (566) **Adjectives**
 [*və-nakin kurek moli*]_{vc}.
 3SG.M.PST-cry bad real
 ‘He cried really badly.’ [SM-DW-011]

- (567) **Quantifiers**
 [*ngunu-ton təgət tuk*]_{vc} = *a.*
 1DL.PST-look one give = 3SG.M.PAT
 ‘We (dl.) looked at him at the same time.’ [LN-TO-030]

(568) **Converbs**[*ngi-nan* *t~təvat* *konəŋ*]_{VC}.

1SG.NPST-listen CVB~drop only

‘You just listen in a careless manner.’

[ER-TD-012]

(569) **Particles***a-vi* *ba viuv = e* *o* *ava* [*və-re* *moli*
3SG.M-PROXS in sea = SG.CLF:FEM TOP again 3SG.M.PST-carry again*ko n*]_{VC} = *a* *aen tarə*.

only APPL = PAT fish many

‘He who went to the sea brought a lot of fish again.’

[TV-CC-006]

(570) **Noun**[*ngi-bəlok* *pəka* *tuk*]_{VC} = *ip* *da* *ta-təm*.

2SG.NPST-divulge brightness give = 3DL.M PURP 3PL.NPST-know

‘You divulge clearly to them, for them to know.’

[AL-RM-122]

There can be multiple verbal adjuncts inside a VC, and the adjuncts tend to have a rather fixed position in relation to each other. That is to say, when stacking in two or more, the relative order is fixed for specific combinations of lexical items. Examples of multiple VC modifiers are shown in 571 to 574. Figure 8.3 presents a general tendency of the order of the elements, while individual items have different specifications (this may depend on their level of grammaticalization and scope). For instance, converbs tend to occur close to the verb stem, while particles tend to occur towards the end of the VC. This is a general tendency, and as shown in 573 and 574, converbs can come after some other types of elements.

(571) *də-t~təm_V* *p~pərat_{CONV}* *kia_{ADV}* *konəŋ_{PTCL}* *nə* *ta*.

1PL.NPST-IPFV~know CVB~break first only APPL 3PL

‘We differentiate them(the dark sorcerors) [from others] very early. ’

[AL-SO-005]

(572) *ta-bət* *o* *tə-tətel* *l~ləklək_{CONV}* *k~kup_{CONV}*

3PL-PROXH TOP 3PL.PST-wander CVB~naked CVB~thoroughly

konəŋ_{PTCL}.

only

‘They just wandered around totally naked.’

[WM-LB-004]

- (573) *ngə-p~pe vəkai_{ADV} t~təvat_{CONV} n =a ro = vənəm*
 1SG.PST-IPFV~tie tight CVB~release APPL = PAT bamboo = SG.CLF:SLE
vənə-vi təpm =a kəvənav =e nə-mu
 SG.CLF:SLE-PROXS with = PAT rain = SG.CLF:FEM LOC-INSIDE
 ‘I could tie the bamboo cut with the rain potion inside tightly (and leave it).’ [AL-RM-063]

- (574) *ngunu kəra bə = ngunu-tir mərek_{ADJ} k~kup_{CONV} n*
 1DL soon IAM = 1DL.PST-ask good CVB~thoroughly APPL
 = e.
 = 3SG.F.PAT
 ‘We soon asked her thoroughly.’ [AL-DA-152]

Verbal adjuncts cannot precede arguments directly, regardless of the transitivity of the verb. The following examples show VC with verbal adjuncts. When the head verb is a transitive verb (575a), a slot 3 element such as prepositions/serial verbs are required in the VC to precede the argument (575b). This will be discussed in further details in §8.4.

- (575) a. *nə-bət o vəvat = a a-vi,*
 LOC-PROXH TOP monster = SG.CLF:MASC 3SG.M-PROXS
 [*a-tə~nakən]_{VC} = a kəbərək.*
 3SG.M.NPST-IPFV~drink = PAT blood
 ‘That is a masalai, the “blood drinker” (lit. he drinks blood).’ [LN-TO-048]
- b. *ip-məkətə mat = a ioi ba it nok*
 3DL.M-fetch(water) get = PAT water in 3DL.M.POSS hand
da [it-nakən l~lar_{CONV} be]_{VC} ioi u-vi to
 PURP 3DL.M.NPST-drink CVB~try at water 3N-PROXS SR
ip vove b = i-məkətə mat bem.
 3DL.M.POSS grandmom IAM = 3SG.F.PST-fetch(water) get at
 ‘Both saw water in pool and they fetch water in their palm to taste the water that their grandmom had fetched from.’ [LG-VI-034]

8.3.1 Members of the verbal adjunct class

8.3.1.1 Converbs

In Tulil, converbs are a closed class of non-finite verbs forms (cf. §9.2.3), coded with reduplication and bearing a non-detached, verb modifying function inside an VC (cf. Haspelmath, 1995:3-8). The converbs can be found in Table 8.1 and a list of examples are given in 576 to 578.

Table 8.1: List of converbs

verb	glossing	converb	glossing
<i>mat</i>	‘take; get; give birth’	<i>m~mat</i>	‘finished’
<i>kup</i>	‘stick.into’	<i>k~kup</i>	‘thoroughly’
<i>təvat</i>	‘drop, discard, release’	<i>t~təvat</i>	‘drop’; ‘in a careless manner’
<i>tulai</i>	‘accompany someone somewhere’	<i>t~tulai</i>	‘accompany’
<i>lar</i>	‘try’	<i>l~lar</i>	‘tentatively’
<i>vərat</i>	‘break’	<i>p~pərat</i>	‘distinguish’

- (576) *kəvər=ta ar kori tə-təvat n =udu ... da ar*
 white=PL.CLF:HUM still NEG 3PL.PST-drop APPL =1PL PURP still
ta ar tə-ton t~tulai bem udu.
 3PL still 3PL.PST-look CVB~accompany at 1PL
 ‘The white men also didn’t release us...so they looked after us all along.’
 [AL-IP-090]

- (577) *nging avar ngi-nitəng vəkai konəng me ngi-nan t~təvat*
 2SG also 2SG.NPST-bite tight only and 2SG.NPST-listen CVB~drop
konəng.
 only
 ‘You just bite tightly and you just ignore anything you hear.’
 [ER-TD-021]

- (578) *it-nakən l~lar me idə-məng vəvat.*
 3DL.M-drink CVB~try and 3N.PST-burn very
 ‘They (dl.m.) tasted it (lit: drank tentatively) and it was very salty.’
 [LG-VI-035]

Table 8.2: Adverbs and other classes used as modifiers in VC

adverbs	glossing	others	glossing
<i>kərot</i>	‘into pieces’	<i>pəka</i>	‘clearly’ (n. ‘brightness’)
<i>pikət/puikət</i>	‘intensely’	<i>ləm</i>	‘fresh’ (adj. ‘new; fresh’)
<i>tərngəp</i>	‘failed; thoroughly’	<i>pet</i>	‘wide’ (adj. ‘wide’)
<i>tərvi</i>	‘failed’	<i>tək</i>	‘full’ (adj. ‘full’)
<i>təvi</i>	‘along’	<i>toktok</i>	‘end; lastly’ (adj. ‘end’)
<i>vəkai</i>	‘tightly’	<i>tiktik</i>	‘tight’ (adj. ‘thick; tight’)
<i>vəvavon</i>	‘slowly’	<i>kəbəkək</i>	‘all.kinds’ (adj. ‘miscellaneous’)
		<i>təgət</i>	‘continuously; together’ (num. ‘one’)

- b. *kori da tuain = a a-pə~vunə puikət,*
 NEG PURP egg = SG.CLF:MASC 3SG.M.NPST-IPFV~throw intensely
da tuain = a avar a-pə~vunə vəvavon
 PURP egg = SG.CLF:MASC just 3SG.M.NPST-IPFV~throw slowly
konəng.
 only

‘The “Tuaina” [cuisine name] shouldn’t be boiling intensely, but it should just be boiling mildly.’ [AL-TN-004]

- (582) *i-kə~kədəp təvi ba ioi = voi vədəm*
 2DL.NPST-IPFV~search along in water = SG.CLF:FLAT for
 = *a nang = a to va itən = e*
 = PAT herb = SG.CLF:MASC SR 3SG.M.POSS.AL name = SG.CLF:FEM
a-kidəkidam.
 ART-herb.sp.

‘You search along the way in the river, for this herb whose name is *kidəkidam*.’ [AL-RM-052]

- (583) *doto nga-kəbənət ləm n = idə, me nga-nu*
 when 1SG.NPST-make fresh APPL = 3N and 1SG.NPST-put
 = *a nə-mu bərodəm, o a-bət o*
 = 3SG.M.PAT LOC-INSIDE inside TOP 3SG.M-PROXH TOP
va varvar o vəvat.
 3SG.M.POSS.AL happy TOP very
 ‘When I make those potions fresh (when they are still fresh), and I put
 them inside (the basket), he (the devil) is very happy.’ [AL-SO-046]

- (584) a. *bə= vəti təgə= von, e-Namugi i=*
 IAM= day one= SG.CLF:DIM ART.M-PN 33SG.F.POSS.INAL=
kəln= ip ip-məngar təgət da i-povər pet
 son= DL.CLF:MASC 33DL.M-say one PURP 3SG.F.PST-dig wide
n = a lak= a.
 APPL = PAT lake= SG.CLF:MASC
 ‘One day, Namugi’s grandsons talked together to dig wide the pool.’
 [LG-VI-042]
- b. *bə= ngə-t~təng tək n = a ve*
 IAM= 1SG.PST-IPFV~stuff.in full APPL = PAT 3SG.F.POSS.AL
ratənəm, n = a nangə, me ləmat, me təre= vənīk,
 basket INSTR = PAT tree and coconut and thing= PL.CLF:DIM
gəri idə to təməng= a.
 what 3N SR heavy= SG.CLF:MASC
 ‘I stuffed her [the buffalo’s] basket full, with herbs and coconuts and
 many things, those that are heavy.’ [LN-BU-045]

8.4 Flagging and serial verbs

A VC can include a flagging/serial verb in slot 3 (Figure 8.3) to accommodate the O/S_o argument. These elements include the general applicative *n* (585), prepositions (586), and serial verbs including *mat* ‘get’ 587, *tuk* ‘give’ or *vari* ‘help’. The type of slot 3 element chosen depends on the semantic role of the argument, as well as the specification of the verb stem. Elements with same forms are used to flag oblique arguments as well outside the VC (e.g. *tuk* RECIP in 585 and *n* INSTR in 586).

(585) **General applicative**

[*tə-nor* *n*]_{VC} = *a* *a-buk* = *poi* *tuk* = *a*
 3PL.PST-send APPL = PAT ART-book = SG.CLF:FLAT give = PAT

Den a-n = *a* *to-Kaelam*.

PN 3SG.M-COM = PAT ART.M-PN

‘They sent one letter to Den and Kaelam.’ [PP-PH-022]

(586) **Preposition**

[*ta-pə~vəgarə* *təm*]_{VC} = *a* *a-dram* = *bən*
 3PL.NPST-IPFV~cover at.entrance = PAT ART-drum = SG.CLF:AUG

n = *a* *mətə* = *vən*.

INSTR = PAT banana.leaf = SG.CLF:AUG

‘They covered the drum (container) with banana leaves.’

[WM-JJ-010]

(587) **Serial verb**

[*ngi-nəngar* *mat*]_{VC} = *a* *ta-bət* *ta* *titi* = *a*.
 2SG.PST-say get = PAT 3PL-PROXH 3PL.POSS parent = SG.CLF:MASC

‘You talk to their father.’

[CM-B2-048]

The term ‘flagging’ is used as a cover term for case/adpositions (cf. Haspelmath, 2005). Tulil shows a double flagging pattern: apart from the various prepositions and serial verbs occurring in slot 3, signalling various semantic roles in combination with the verb stem, a highly grammaticalized case marking for patient-like arguments (= *a*, glossed as =PAT) is always present on post-v / post-prep elements). This is discussed extensively in §3.2.1.3, and will not be treated in this section.

Given that slot 3 elements are used to accommodate post-v arguments, a VC with a slot 3 element can always take a post-v argument. That is to say, adding a slot 3 element into the VC may increase valence of the VC (588), or keep the original valence (589), regardless of the transitivity of the verb stem (as suggested by Margetts 1999 the need to distinguish between the valence of constituents on different levels, for instance of verbs, of VC and of verb clauses).

(588) a. [*i-kəmak*]_{VC} *et-e* *da* *e-tərnəm*.
 3SG.F.PST-lie 3SG.F-QUOT PURP 3SG.F.NPST-defacate

‘She lied that she was going to defacate.’

[RR-AD-046]

- b. *və-t~tən* *da gə-vət* *da* *ava*
 3SG.M.PST-IPFV~think on NSPEC-SG.CLF:SEG PURP again
 [*a-kəmak* *n*]_{VC} = *a* *voin* = *a*.
 3SG.M.NPST-lie APPL = PAT devil = SG.CLF:MASC
 ‘this man was frightened so he was thinking a way to trick the devil.’
 [TV-DM-020]

- (589) a. *kədu = a* [*a-ta~manəng*]_{VC} = *a*
 bird.sp. = SG.CLF:MASC 3SG.M.NPST-IPFV~chase = PAT
məliar = e.
 bird.sp. = SG.CLF:FEM
 ‘The kau bird always chases the malip bird.’ [LR-MK-042]

- b. *du-p~pi* *da* [*du-manəng* *mat*]_{VC} = *a* *Mərubət*
 1PL.PST-IPFV~go PURP 1PL.PST-run get = PAT PN
nə-bo *be Baram*.
 LOC-UP at PN

‘We went to get the Bainings up there at Baram here.’

[CM-B2-002]

8.4.1 Right boundary of the verb complex

In Tulil, the right boundaries of the different levels of constituents in a verb clause (such as verb, VC) are loosely defined, and elements close to the boundaries may be subject to reanalysis, specifically the slot 3 elements appearing at the right boundary of the verb complex. Some identical forms of these elements such as the verbs *mat/tuk*, applicative *n* and certain prepositions are able to occur on different levels with limited formal differences. Take applicative *n* for example: it can occur on the level of head verb as an applicative affix, on VC level as an applicative particle, and in the peripheral structure (as a preposition indicating instrumental function). Example 590 shows the function of *n* as applicative particle and instrumental preposition. The case of applicative affix is discussed in §9.1.4.

- (590) *bə =* [*tə-kutəng* *kərot* *n*]_{VC} = *a* ... *da*
 IAM = 3PL.PST-cut fragmentary APPL = 3SG.M.PAT PURP
 [*tə-mugati* *kup* *nə*]_{VC} *təng* *n* = *a*.
 3PL.PST-share thoroughly APPL REFL/RECP INSTR = 3SG.M.PAT
 ‘They cut it into pieces ... so they could share it.’ [JN-KL-030]

(B) accommodate a THEME.

We have seen from earlier discussions (cf. §8.3) that verbal adjuncts inside the VC cannot precede an argument directly and has to be followed by a slot 3 element when the VC still asks for an argument. In this case, the patient-like argument of the transitive verb is usually preceded by applicative *n*:

- (592) *a-mənə tenəvərtovo [tə-kul]_{VC} = a ləvək = pənik,*
 ART-people teach 3PL.PST-buy = PAT banana = PL.CLF:DIM
[tə-kul par nə]_{VC} vənik.
 3PL.PST-buy finish APPL PL.CLF:DIM
 ‘The teachers bought the bananas, they bought all of them.’
 [ML-YE-039]

This use of *n* also quite commonly occurs with stative intransitive verbs or impersonal transitive verbs, given that the argument following VC is the sole argument for these verbs, and thus is obligatory in the VC, when there is a verbal adjunct present:

- (593) a. *vatər tədərngəp me b = [idə-bok]_{VC} = a*
 3SG.M.PST.stand still and IAM = 3N.PST-break = PAT
nangə.
 tree
 ‘He stood still and the trees were already falling down.’
 [TV-DM-009]
- b. *[idə-bok ko n]_{VC} = a nangə nandi nandi, iap*
 3N.PST-break only APPL = PAT tree like.this like.this 3SG.M
o bə = kurek = a da a-terən.
 TOP IAM = bad = 3SG.M.PAT PURP 3SG.M.NPST-run
 ‘(the trees) were still falling down like this, he badly wanted to run away.’
 [TV-DM-010]

The other function of *n* is to support the **theme** semantic role as the applied object.

- (594) *bə = du-mətor nanbət me du-todarə n = a turin.*
 IAM = 1PL.PST-sit like.that and 1PL.PST-stare APPL = PAT fire
 ‘We sat like that and we stared at the fire.’
 [SV-BE-010]

- (595) *kori və-muek n =a kəbərək me və-p~pi*
 NEG 3SG.M.PST-vomit APPL =PAT blood and 3SG.M.PST-IPFV~go
konəŋ.
 only
 ‘He didn’t vomit blood, he was just walking.’ [JK-GT-027]

n can express causative⁶⁶, possibly as a result of the applicative *n* marking an ‘affected’ argument that entails a causer:

- (596) *doto bə= kədu, o iep i-mə-nəm o i-mənəm*
 when IAM= bird.sp. TOP 3SG.F 3SG.F.PST-wake TOP 3SG.F.PST-wake
nə ngang.
 APPL 1SG
 ‘When it was already the time that the bird cries, she woke up, she woke me up.’ [DV-HP-031]

- (597) a. *it-tərut ba tipur ti e-Namugi e-tot(i) = ip.*
 3DL.M.PST-hide in bush LEST ART.F-PN 3SG.F.NPST-see = 3DL.M
 ‘They hid in bush so that Enamugi cannot see them.’ [LG-VI-027]
- b. *və-tərut n =a və= lat=a*
 3SG.M.PST-hide APPL =PAT 3SG.M.POSS.INAL= head= SG.CLF:MASC
o və-p~pi tə=ba məŋəd=a
 TOP 3SG.M.PST-IPFV~go TO=in home= SG.CLF:MASC
 ‘He hid his head, then he went home.’ [TV-CC-017]

8.4.3 Serial verbs

Verb serialization refers to “the juxtaposition of two or more verbs, each of which would also be able to form a sentence of its own”, defined by Bisang (1996:533). I adopt the following criteria in identifying serialization in Tulil (adapted from Durie 1997:291):

- 1) The serial verbs make up the predicate of a single clause, with no clause boundary or dependency marker in between;
- 2) constitute one single prosodic entity, without pause;
- 3) share the same tense and aspect, marked on the V_1 ; share mood, polarity, marked by particles which have scope over the involved verbs.

66. as defined by Dixon as ‘a construction involving the specification of an additional argument, a causer onto a basic clause’ (Dixon, 2000:30).

Table 8.3: Combination of intransitive verb stems and *n*

verb stems		with <i>n</i>	
applicative			
<i>kəmak</i>	‘lie’	<i>kəmak n</i>	‘lie to sb.’
<i>leir</i>	‘make mistake’	<i>leir n</i>	‘destroy sth. harm sth./sb.’
<i>muek</i>	‘vomit’	<i>muek n</i>	‘vomit sth.’
<i>raot</i>	‘drag’	<i>raot n</i>	‘drag sth.’
<i>tikan</i>	‘search’	<i>tikan n</i>	‘search for sth.’
<i>məngar</i>	‘say’	<i>məngar n</i>	‘say with sth.(language)’
causative			
<i>mənəm</i>	‘wake up’	<i>mənəm n</i>	‘wake sb. up’
<i>rei</i>	‘move’	<i>rei n</i>	‘move sth.’
<i>təng</i>	‘enter’	<i>təng n</i>	‘push sth. into; wear (clothes)’
<i>tərut</i>	‘hide (oneself)’	<i>tərut n</i>	‘hide sth.’
<i>par</i>	‘finish’	<i>par n</i>	‘finish sth.’
<i>təvat</i>	‘drop; release’	<i>təvat n</i>	‘drop sth.’

Verb serialization is not particularly prevalent in Tulil - three verbs (*mat* ‘get’, *tuk* ‘give’ and *vari* ‘help’) can be used as serial verbs. These verbs in Tulil can occur in different positions (exemplified by *mat* ‘get’, not limited to serial verbs):

- 1) head verb in a VC (598);
- 2) slot 2 inside VC, non-finite form, converb (599);
- 3) slot 3 inside VC, nuclear-type, symmetrical SVC (600);
- 4) preceding oblique argument, core-type, symmetrical SVC (601);
- 5) head verb in clause chaining (602).

(598) *du-mat* = *a va ton.*
 1PL.PST-get = PAT 3SG.M.POSS.AL bone
 ‘We got his bones.’

[AL-BT-013]

- (599) *kavar nga-turən m~mat me nga-di~vi o*
 just.then 1SG.NPST-shower CVB~finish and 1SG.NPST-IPFV~go TOP
nga-bi təm = a imi.
 1SG.NPST-go at.entrance = PAT 3SG.F.POSS.AL.eyes.
 ‘As soon as I finish taking a shower, and I go, I walk in front of her eyes.’
 [WM-LP-023]
- (600) *nga-kəri mat = a itəvok mən = do ba molimoli = a*
 1SG.NPST-pluck get = PAT hair FROM = here in people = SG.CLF:MASC
və = teləbi.
 3SG.M.POSS.INAL = armpit
 ‘I pluck (and get) the hair from here under his armpit.’ [WM-LP-057]
- (601) *vanəm = bənik o məgəte mərəm, to ta-kə~kuv = idə*
 few = PL.CLF:DIM TOP like plant.sp. SR 3PL.NPST-IPFV~pull = 3N
mat = a idə = nung nə-mə to pet.
 get = PAT 3N.POSS = bottom LOC-DOWN SR wide
 ‘Sometimes like this *mərəm*, they pulled it out, get its trunk down there
 which is wide.’ [AL-HD-037]
- (602) *ta-pəvur n = a ləvək, mat ko n = a ioi.*
 3PL.NPST-squeeze APPL = PAT banana get only APPL = PAT water
 ‘They squeeze the banana, only get the water (from the banana).’
 [WM-JJ-011]

Real cases where the serialized verb retain its full semantic content are rather rare: 1) the serial verb is used as slot 3 element in a VC (a nuclear-type, symmetrical SVC), denoting a sequence of actions; 2) the serial verb is used to lead an oblique argument (a core-type, symmetrical SVC). This section will focus on the discussion of the first type, and in many of these cases the serial verbs still lose some of their lexical contents and have been grammaticalized to a certain degree.

8.4.3.1 *mat* ‘take’

The verb *mat* ‘take’ has the greatest flexibility to occur in multiple positions in a verb clause (598 to 602). It is the only verb that can occur in all three slots - verb root, verbal adjunct (non-finite form), and slot 3, while still keeping its semantic property as a full verb (603). However no examples have been found for *mat* to take up both slot 2 and slot 3 at the same time, also no examples were found for *mat* to be modified by the converb *m~mat* ‘completive’.

Table 8.4: Elements in complex predicates

Uses	<i>mat</i>	<i>tuk</i>	<i>vari</i>	<i>lar</i> (etc.)	<i>n(ə)</i> (other prep)
head verb	‘take’	‘give’	‘help’	‘try’	COMITATIVE
converb	COMPLETIVE			‘tentatively’	
serial verb	‘take’; AFFECTEE	‘give’, RECIP/GOAL	‘help to (do)’		APPL
peripheral	‘take’	‘give’, RECIP/GOAL			APPL
clause chaining	‘take’	‘give’			APPL; INSTR

- (603) *ar be idil i-mənəm m~mat_{CONV}, i-mat_V mat_{SV} = a*
 still at small 3SG.F.PST-wake CVB~finish 3SG.F.PST-take take = PAT
kədək = pon.
 ferule = SG.CLF:DIM
 ‘Still early, she already woke up, she took the ferule.’ [RR-AD-046]

mat as a nuclear-type serial verb can accommodate participants, and have a variety of senses as the result of combining with various head verbs. *mat* mainly has a sense of ‘obtaining’, and introduce more affectedness to the second argument. It has different degrees of grammaticalization in this position.

When the head verb is a transitive verb, *mat* can sometimes have its full semantic content as ‘take’.

- (604) a. *ngunu-kutəng = a nang = a təd = a t~tangədə.*
 1DL.PST-cut = PAT tree = SG.CLF:MASC for = PAT GER~cook
 ‘We (dl.) cut (PST.) wood for cooking.’ [WL-HT-006]
- b. *ngi-kutəng mat = a go ro = vənəm.*
 2SG.NPST-cut take = PAT NSPEC bamboo = SG.CLF:SLE
 ‘You cut and get some bamboo cuts.’ [AL-RM-047]
- (605) a. *du-kul = a məl təd = a p~pe tang.*
 1PL.PST-buy = PAT clothes for = PAT GER~tie REFL/RECP
 ‘We bought clothes for dressing [lit. tie ourselves].’ [WM-MG-014]
- b. *nane i-kul mat = a a-rait da i-tangədə*
 mom 3SG.F.PST-buy get = PAT ART-rice PURP 3SG.F.PST-cook
mev = ip.
 for = 3DL.M
 ‘Mom bought rice for her to cook for them (dl.m).’ [CM-B2-063]

The difference between 604 and 605 is that, in the former examples, *mat* adds the meaning of ‘get’: in 604b, it is possible to cut and leave (even though from the context we know the ‘getting’ can be inferred); while in 605b, it is quite unlikely for someone to buy without taking. In this sense, *mat* emphasizes the sense of ‘obtaining’. The effect of *mat* can be subtle, as also shown in the following two examples:

(606) *bə= tə-mənan mat =a a-tepin idil=von*
 IAM= 3PL.PST-hear take =PAT ART-airplane small= 3SG.CLF:DIM
 ‘They heard a small airplane.’ [PP-PH-013]

(607) *vume mat ngang.*
 3SG.M.PST.teach take 1SG
 ‘He taught me.’ [AL-RM-059]

When the head verb is an intransitive verb, *mat* is usually used to accommodate a new participant, with various semantic roles associated with the ‘affectee’:

(608) *ngar mat/tuk* ‘talk to’
 a. *kori və-ngar mərek mat udu.*
 NEG 3SG.M.PST-talk good take 1PL
 ‘He didn’t talk in a good manner to us.’ [RR-AD-020]

b. *və-ngar tuk =a at-e, ...*
 3SG.M.PST-talk give = 3SG.M.PAT 3SG.M-QUOT
 ‘He talked to him, said...’ [AL-TC-039]

(609) *ton mat/tuk* ‘saw/look at’
 a. *io bə= ngə-ton mat =a kəletuak.*
 then IAM= 1SG.PST-look take =PAT woman
 ‘Then I saw the women.’ [MP-GW-008]

b. *ta-ton tuk =a ailənd tat-e,...*
 3PL.NPST-look give =PAT island 3PL-QUOT
 ‘They look at the island, thinking...’ [AL-L1-029]

If we compare 608a/609a with 608b/609b, the difference between *mat* and *tuk* in these cases is that *tuk* emphasizes a ‘give - receive’ relationship, while *mat* emphasizes a sense of ‘obtain - affected (by the obtention)’. A similarly subtle difference can be observed from applicative *n* and *mat* in the following examples,

where the former is merely stating the fact of ‘lying’, and the latter emphasizes the fact that ‘we’ were ‘affected’ by the lie:

- (610) a. *tə-kəmak n =a Pater tat-e...*
 3PL.PST-lie APPL =PAT Father 3PL-QUOT
 ‘They lied to father they said...’ [LR-TH-069]
- b. *molimoli =ta tə-kəmak mat udu tat-e...*
 person = PL.CLF:HUM 3PL.PST-lie take 1PL 3PL-QUOT
 ‘People lied to us, they said...’ [AL-DA-103]

Also, the combination of head verb and the serial verb *mat* can have an idiomatic reading. For instance, the verb *manəng* ‘chase; run’ means ‘bring sb. [here]’ after combining with *mat* (611); and the intransitive verb *matər* ‘stand’ means ‘wait for sb.’ (612a) or ‘start with sth.’ (612b).

- (611) *du-p~pi da du-manəng mat =a Mərubət nə-bo be*
 1PL.PST-IPFV~go PURP 1PL.PST-run take =PAT Baining LOC-UP at
Baram.
 PN
 ‘We went and got Bainings up there at Baram.’ [CM-B2-002]
- (612) a. ‘wait for’
ngi-natər mat ngang nə-bət.
 2SG.NPST-stand take 1SG LOC-PROXH
 ‘You stop and wait for me there.’ [LR-DW-027]
- b. + **nominalized verb phrase ‘start with’**
ngə-matər mat =a [m~məkən =a li].
 1SG.PST-stand take =PAT GER~plant =PAT taro
 ‘I started with planting taro.’ [WM-MG-005]

8.4.3.2 *tuk* ‘give; RECIPIENT, GOAL’

tuk as a head verb means ‘give’ (613); when combining with the serial verb *tuk*, it can indicate either the goal (614a) or the recipient (614b).

- (613) *də-tuk* = *e* *n* = *a* *ioi* *da* *e-tə~nakən*.
 1PL.NPST-give = 3SG.F.PAT INSTR = PAT water PURP 3SG.F.NPST-IPFV~drink
 ‘We will give her water for her to drink.’ [AL-SO-109]

- (614) a. *i-p~pi* *tuk* = *a* *nga* *dərng* = *e*,
 3SG.F.PST-IPFV~go give = PAT 1SG.POSS old = SG.CLF:FEM
i-məngə~məngar *dəm* = *e*.
 3SG.F.PST-IPFV~talk for = 3SG.F.PAT
 ‘She went to see my wife, she was scolding her.’ [DV-HP-082]

- b. *lət* *nə* *ngun bətm* = *e* *avar ngunu-vəlok* *tuk*
 arrive APPL 1DL with = 3SG.F.PAT also 1DL.PST-divulge give
 = *a* *nane*.
 = PAT mom
 ‘We arrived with her, we divulged the thing to her.’ [AL-DA-146]

8.4.3.3 *vari* ‘help’

The verb *vari* ‘help’ differs from *tuk/mat* that it only occurs as a serial verb in slot 3 after the verb stem (meaning ‘help to do’), but cannot be used in any other cases to accommodate a new participant.

- (615) *ngu-re* *vari* *tang* *n* = *a* *ləvək* *da*
 1DL.NPST-carry help REFL/RECP APPL = PAT banana PURP
təkə = *nə-bo* *ba* *məngəd* = *a*.
 TO = LOC-UP in home = SG.CLF:MASC
 ‘We help each other carry the banana to home.’ [ML-YE-020]

- (616) a. *a-tərat* *vari* *ta*.
 3SG.M.NPST-cut.grass help 3PL
 ‘He helped them to cut grass.’ [JK-P1-014]

- b. *ngi-te* *vari* *ngang*.
 2SG.PST-scrape help 1SG
 ‘You help me to scrape [the taros].’ [LR-MK-011]

Chapter 9

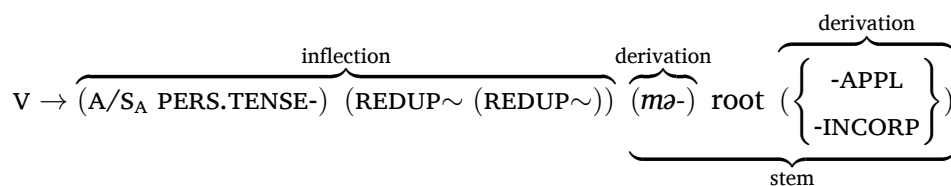
Verb morphology

Verb morphology in Tulil is more complex than the morphology of other word classes. Verb inflection⁶⁷ involves mainly prefixing, including A/S_A person/tense prefixes (cf.§9.1.2) and reduplication (imperfective aspect) (cf.§9.1.3). Derivational processes include the formation of M-stem, applicative suffix *-m* (cf.§9.1.4) and incorporation (cf.§9.1.5). The morphophonological pattern of verb inflection in Tulil is not immediately transparent, and will be discussed in §9.3.

9.1 Verb structure

A template of Tulil verbs is shown in Figure 9.1. This section will describe this general template of the verb forms, whereas a detailed account of verb paradigms will be given in §9.3.

Figure 9.1: Tulil verb morphology



Transitive and active-intransitive verbs are prefixed by person indexes, while stative-intransitive verbs are not. The person prefixes encode person, number, gender for A/S_A arguments, as well as tense (Table 9.1b).

Different combinations of the stem forming morpheme *m∂* and reduplication result in at most 5 different stems (including the root) for verbs. According to the number of stems and reduplication patterns, four verb classes can be identified, with three sub-classes within class IV (cf.§9.1.1).

67. I follow Bickel & Nichols (2007)'s definition of *inflection* as 'the regularly responsive to the grammatical environment in which they are expressed.'

Table 9.1: Verb forms of class IV.iii verb *mə-tor* ‘to sit’

(a) Roots and stems

	red~ red~M-root	use	examples	glossing
ROOT	<i>tor</i>	NPST.PF	<i>də-tor.</i>	‘We will sit.’
STEM ₁ (citation)	<i>mə-tor</i>	IMP	<i>mə-tor!</i>	‘Sit!’
		PST.PF	<i>i-mə-tor.</i>	‘She sat.’
STEM ₂	<i>no~mə-tor</i>	NPST.IPFV	<i>ta-tno~mə-tor.</i>	‘They are sitting.’
STEM ₃	<i>məto~mə-tor</i>	PST.IPFV	<i>iu-məto~mə-tor.</i>	‘You(dl.) were sitting.’
		GER	<i>ta məto~mə-tor o kəməron.</i>	‘Their lives are different.’
		INF	<i>kavar məto~mə-tor.</i>	‘Always sitting.’
STEM ₄	<i>məm~məto~mə-tor</i>	3DL.M.PST.IPFV	<i>ip-məm~məto~mə-tor.</i>	‘They(dl.m.) were sitting.’
		EMPH.INF	<i>kavar məm~məto~mə-tor.</i>	‘Always sitting and sitting.’

(b) Inflectional paradigm

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>dor</i> ^a	<i>nga-</i>	<i>no~</i>	<i>mətor</i>	<i>ngə-</i>	<i>mətor</i>	<i>ngə-</i>	<i>məto~</i>	<i>mətor</i>
1DL	<i>ngu-</i>	<i>ttor</i>	<i>ngu-</i>	<i>tno~</i>	<i>mətor</i>	<i>ngunu-</i>	<i>mətor</i>	<i>ngunu-</i>	<i>məto~</i>	<i>mətor</i>
1PL	<i>də-</i>	<i>tor</i>	<i>də-</i>	<i>no~</i>	<i>mətor</i>	<i>du-</i>	<i>mətor</i>	<i>du-</i>	<i>məto~</i>	<i>mətor</i>
2SG	<i>ngi-</i>	<i>dor</i>	<i>ngi-</i>	<i>no~</i>	<i>mətor</i>	<i>ngi-</i>	<i>mətor</i>	<i>ngi-</i>	<i>məto~</i>	<i>mətor</i>
2DL	<i>i-</i>	<i>ttor</i>	<i>i-</i>	<i>tno~</i>	<i>mətor</i>	<i>iu-</i>	<i>mətor</i>	<i>iu-</i>	<i>məto~</i>	<i>mətor</i>
2PL	<i>i-</i>	<i>ttor</i>	<i>i-</i>	<i>tno~</i>	<i>mətor</i>	<i>inə-</i>	<i>mətor</i>	<i>inə-</i>	<i>məto~</i>	<i>mətor</i>
3SG.M	<i>a-</i>	<i>ttor</i>	<i>a-</i>	<i>tno~</i>	<i>mətor</i>	(<i>v</i>)-	<i>vətor</i>	<i>və-</i>	<i>məto~</i>	<i>mətor</i>
3SG.F	<i>e-</i>	<i>ttor</i>	<i>e-</i>	<i>tno~</i>	<i>mətor</i>	<i>i-</i>	<i>mətor</i>	<i>i-</i>	<i>məto~</i>	<i>mətor</i>
3DL.M	<i>i-</i>	<i>ttor</i>	<i>i-</i>	<i>tno~</i>	<i>mətor</i>	<i>i-</i>	<i>pmətor</i>	<i>i-</i>	<i>pməmməto~</i>	<i>mətor</i>
3DL.F	<i>i-</i>	<i>ttor</i>	<i>i-</i>	<i>tno~</i>	<i>mətor</i>	<i>itə-</i>	<i>mətor</i>	<i>itə-</i>	<i>məto~</i>	<i>mətor</i>
3PL	<i>ta-</i>	<i>ttor</i>	<i>ta-</i>	<i>tno~</i>	<i>mətor</i>	<i>tə-</i>	<i>mətor</i>	<i>tə-</i>	<i>məto~</i>	<i>mətor</i>
3N	<i>i-</i>	<i>ttor</i>	<i>i-</i>	<i>tno~</i>	<i>mətor</i>	<i>idə-</i>	<i>mətor</i>	<i>idə-</i>	<i>məto~</i>	<i>mətor</i>

^a Boldface shows the consonants that go through initial mutation.

(619) *ngang o ngə-tar + kuvit konəng bətəpm = a*
 1SG TOP 1SG.PST-stick.into + nail only on = PAT
 PERS.TENSE-ROOT + INCORP

urəng = a nə-m~bo, nə-m~bo, nə-m~bo...
 waterfall = SG.CLF:MASC LOC-CON~UP LOC-CON~UP LOC-CON~UP

‘Then I climbed up the waterfall with my hands, up and up...’

[AL-RM-063]

- (620) *io vareot vareot vareot to ip-məm~mu + von.*
 then long.time long.time long.time SR 3DL.M.PST-IPFV~put + SG.CLF:DIM
PERS.TENSE-M-root + INCORP
 ‘Then for a long time they did the same thing (cooking rice together).’
 [KK-RC-004]

- (621) *b = i-p~pətə, b = i-matər mat*
 IAM = 3SG.F.PST-IPFV~creek.collecting IAM = 3SG.F.PST-stand get
 = *a p~pətə.*
 = PAT INF~creek.collecting
 ‘She was collecting (protein) in the creek, she started with collecting.’
 [SM-DW-006]

9.1.1 Root, stems and verb classes

Each verb has 3 to 5 different stems (including the root) depending on the verb class it belongs to. Except the root, the stems are named with numbers: stem₁ is the citation form (include *mə-* in class IV.iii), while stem_{2/3/4} are reduplicated forms. Each root/stem is related to certain inflectional categories. The forms and functions of these root/stems are shown in table 9.2.

Verb roots in Tulil are the verb forms that are relevant in all types of inflectional paradigms, and cannot be reduced further (but can be affected by initial consonant mutation). It is also the inflectional base for NPST.PF. Verb roots begin with consonants /l/, /r/, /t/, /k/, /b/, /g/, /n/, /ŋ/(ng), /β/(v), /m/. Loanwords with initial /d/ are also attested, but so far no native words with /d/ as initial are found in Tulil.

Stem₁ is the citation form of the verb, and also used for imperatives, PST.IPFV and serial verb. The form of stem₁ coincides with the roots in verbs belonging to class I, II, III and IV.i/ii. Stem₁ in class IV.iii is formed by attaching morpheme *mə-* to the roots (e.g. root *nan*, stem₁ *mə-nan* ‘to listen’).

Verbs with their stem₁ having the same initials usually have the same inflectional patterns (Table 9.3 below). Loanwords like *par* ‘to finish’ and *vok* ‘to work’ follow a similar inflection patterns with CLASS I verbs, rather than with native words start with /v/ such as *vovər* ‘dig’. Another loanword *dok* ‘to kill’ follows an inflection pattern of class II verbs.

Both **stem₂** and **stem₃** are reduplicated forms with stem₁ as base. The primary use of both stems are imperfectives (stem₂ for NPST and stem₃ for PST). Stem₃ is also used as non-finite forms such as infinitives, gerunds and converbs (cf.§9.2).

Table 9.2: Verb classes and verb stems

class	no.	root	stem ₁	stem ₂	stem ₃	stem ₄
I	3	root = stem ₁		stem ₂ = stem ₃ ; C-stem ₁ ^a		Cə-stem ₃
II	4	root = stem ₁		Cə-stem ₁	C-stem ₁	Cə-stem ₃
III	4	root = stem ₁		Cə-stem ₁	C-stem ₁ (stem ₁ /v/→/p/)	Cə-stem ₃
IV	i	root = stem ₁		CV _(R) -stem ₁ ^b	C-stem ₁	Cə-stem ₃
	ii	root = stem ₁		CV _(R) -stem ₁	C-stem ₁	Cə-stem ₃
	iii	<i>t</i> -initial	<i>mə</i> -root	NV _R -stem ₁	C ₁ V ₁ C ₂ V ₂ -stem ₁	CəC-stem ₃
use	NPST.PF	IMP PST.PF serial verb	NPST.IPFV 1PL.NPST.PF ^c (except IV.ii/.iii)	PST.IPFV INF, GER converb	3DL.M.PST.IPFV ^c EMPH.INF	

^a Schemes such as this for stem_{2/3/4} show the reduplicative pattern, where C stands for consonant and V stands for vowel.

^b Subscripted R stands for root, means the first vowel of the root. For class IV.i and .ii, the first vowel of the root is the same as the base (stem₁), while for IV.iii, they are different.

^c This two special case involves may be phonologically conditioned.

Table 9.3: Verb classes and verb forms

	initial	glossing	root	stem ₁	stem ₂	stem ₃	stem ₄	
Class I	<i>t</i>	'to cook'	<i>tangədə</i>		<i>t~tangədə</i>		<i>tə~t~tangədə</i>	
	<i>l</i>	'to try'	<i>lar</i>		<i>l~lar</i>		<i>lə~l~lar</i>	
	<i>r</i>	'to wait'	<i>rut</i>		<i>r~rut</i>		<i>rə~r~rut</i>	
Class II	<i>d</i>	'to kill'	<i>dok</i>		<i>də~dok</i>	<i>d~dok</i>	<i>də~d~dok</i>	
	<i>n</i>	'to drink'	<i>nakən</i>		<i>nə~nakən</i>	<i>n~nakən</i>	<i>nə~n~nakən</i>	
	<i>k</i>	'to stick into'	<i>kup</i>		<i>kə~kup</i>	<i>k~kup</i>	<i>kə~k~kup</i>	
	<i>g</i>	'to hunt'	<i>gup</i>		<i>gə~gup</i>	<i>g~gup</i>	<i>gə~g~gup</i>	
	<i>ŋ</i>	'to smell'	<i>ngot</i>		<i>ngə~ngot</i>	<i>ng~ngot</i>	<i>ngə~ng~ngot</i>	
	<i>b</i>	'to climb'	<i>bunən</i>		<i>bə~bunən</i>	<i>b~bunən</i>	<i>bə~b~bunən</i>	
Class III	<i>v</i>	'to dig'	<i>vovər</i>		<i>və~vovər</i>	<i>p~povər</i>	<i>pə~p~povər</i>	
Class IV	i	<i>m</i>	'to suck'	<i>mikmik</i>		<i>mi~mikmik</i>	<i>m~mikmik</i>	<i>mə~m~mikmik</i>
	ii	<i>m</i>	'to get'	<i>mat</i>		<i>ma~mat</i>	<i>m~mat</i>	<i>mə~m~mat</i>
	iii	<i>m</i>	'to sit'	<i>tor</i>	<i>mə-tor</i>	<i>no~mator</i>	<i>məto~mator</i>	<i>məm~məto~mator</i>
		<i>m</i>	'to say'	<i>ngar</i>	<i>mə-ngar</i>	<i>na~məngar</i>	<i>mənga~məngar</i>	<i>məm~mənga~məngar</i>
	<i>m</i>	'to listen'	<i>nan</i>	<i>mə-nan</i>	<i>na~mənan</i>	<i>məna~mənan</i>	<i>məm~məna~mənan</i>	

In the reduplicated /dd/, /gg/, /bb/, the first phoneme is usually surfaced as /n/, /ng/ and /m/.

Stem₂ has four types of reduplication patterns: 1) gemination of initial consonants of base, same as stem₃ (class I); 2) initial consonant is copied, and a schwa is inserted between the consonant and the base (class II/III); 3) for class IV.i/.ii, the first syllable of the root is copied; 4) for class IV.iii, the first vowel of the root (not stem₁) is copied, and an *n* is added before the reduplicated vowel.

Stem₃ involves three types of reduplication: 1) gemination of initial consonants of base (class I, II, IV.i/.ii); 2) initial /v/ in base changes to /p/, and is geminated (class III); 3) copy the first two syllables of stem₁ (class IV.iii).

Stem₄ is a reduplicated form with stem₃ as the base. Except for class IV.iii, whose stem₄ is formed by a CəC- reduplication, all other classes have a Cə- reduplication.

Examples of all the root/stem forms in different verb classes can be found in table 9.3).

9.1.2 Prefixes: person indexes

As discussed in chapter 5, A/S_A arguments are indexed on the verb by pronominal prefixes, specifying the person, number and gender of the argument. There are two sets of prefixes, one marking past and one marking non-past.

Table 9.4: A/S_A indexes

(a) PST A/S_A INDEXES

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngə-</i>	<i>ngunu-</i>	<i>du-</i>	
2	<i>ngi-</i>	<i>iu-</i>	<i>inə-</i>	
3.MASC	<i>v-</i>	<i>iT-</i>	<i>idə-</i>	<i>tə-</i>
3.FEM	<i>i-</i>	<i>itə-</i>		
3.NEUT	<i>idə-</i>			

(b) NPST A/S_A INDEXES

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngaN-</i>	<i>nguT-</i>	<i>d-</i>	
2	<i>ngiN-</i>	<i>iT-</i>	<i>iT-</i>	
3.MASC	<i>aT-</i>	<i>iT-</i>	<i>iT-</i>	<i>taT-</i>
3.FEM	<i>eT-</i>			
3.NEUT	<i>iT-</i>			

Table 9.4 shows the underlying forms of the person indexes, where the last consonant (featural such as *T*(stop)/*N*(nasal) or substantial such as *v* and *d*) of the forms (that are indicated by capitalization) are triggers of initial consonant mutation of the verb stem, and most of the time surface on the verb stem as consonant clusters, when attaching to verb stems with different initials (detailed analysis can be found in §9.3).

9.1.3 Reduplication

In Tulil, reduplication in verbs can be seen as an inflectional process, expressing aspect: the language marks imperfective, in contrast with perfective, by reduplication of the verb stems. In both NPST (622) and PST (623) tense, verbs can be inflected as imperfective (words marked by underlines).

- (622) *i-to~bokbok* *tuk udu da d-a~matme da*
 3DL.M.NPST-IPFV~talk give 1PL PURP 1PL.NPST-IPFV~work PURP
pi=vənik təda də-rup tang da də-bokbok me
 go=PL.CLF:DIM for 1PL.NPST REFL/RECP PURP 1PL.NPST-talk and
də-pun =a inək.
 1PL.NPST-throw =PAT money
 ‘They (dl.m.) are saying to us for us to hold activities, for us to meet together to talk, and to gather (lit. throw) money.’ [MW-CM-005]

- (623) *ngə-p~povər,* *ngə-p~povər,* *ngə-vovər katum, ava*
 1SG.PST-IPFV~dig 1SG.PST-IPFV~dig 1SG.PST-dig all again
ngə-mu ba vərαι idə to ngang ngə-p~povər.
 1SG.PST-put in pit 3N SR 1SG 1SG.PST-IPFV~dig
 ‘I was digging and digging, I finished digging, I then put (the seeds) in the pits that I was digging.’ [ML-YE-008]

Stative intransitive verbs can also be reduplicated:

- (624) *bə = lə~lət n =a ioi.*
 IAM= IPFV~arrive APPL =PAT water
 ‘Water kept coming.’ [JN-KL-041]

Tulil has several types of reduplicative patterns, as shown in table 9.5. Full paradigms can be seen in 9.3.

The reduplicated stem is also subjected to consonant mutation when prefixed by person indexes, such as the example *ngə-nu~mume* shown in Table 9.5.

Table 9.5: Types of verb reduplication

	root	base	reduplication	glossing
C-	<i>tərək</i>	<i>tərək</i>	<i>ngə-t~tərek</i>	‘I was laughing.’
Cə-	<i>gup</i>	<i>gup</i>	<i>ngə-gə~gup</i>	‘I am hunting.’
CV-	<i>mume</i>	<i>mume</i>	<i>ngə-nu~mume</i>	‘I am teaching.’
NV _R -	<i>tor</i>	<i>mə-tor</i>	<i>ta-tno~mətor</i>	‘They are sitting.’
C ₁ V ₁ C ₂ V ₂ -	<i>tor</i>	<i>mə-tor</i>	<i>ngə-məto~mətor</i>	‘I was sitting.’
CəC-	<i>nan</i>	<i>məna~mənan</i>	<i>i-pməm~mənamənan</i>	‘They (dl.m) were climbing.’

(625) a. *ngə-nume bem = a molimoli mukəm.magərung.*
 1SG.NPST-tell about = PAT people three.CLF:MASC
 I will tell about three men. [AK-FH-002]

b. *ngang o ngə-nu~mume iduləngə.*
 1SG TOP 1SG.NPST-IPFV~teach child.PL
 ‘As of me, I am teaching children.’ [TV-DM-003]

(626) *ngəN-mume > ngə-nume.* ‘I will teach/tell.’
ngəN-mu~mume > ngə-nu-mume. ‘I am teaching/telling.’

The following initial consonant mutation processes are also shown in table 9.5:

(627) a. *taT-no~mətor > ta-tno~mətor*
 b. *iT-məm~mənamənan > i-pməm~mənamənan*

9.1.4 Applicative suffix -m

We know from the previous discussion that applicative *n* (allomorph *nə*) occurs at the end of the VC as a valency increasing device (cf. §8.4.2):

(628) *vətək u-və o b = a-leir n = a*
 PL.CLF:SEG 3N-NSPEC TOP IAM = 3SG.M.NPST-damage APPL = PAT
vakue nə-mu ba i = ronəng.
 woman.SG.CLF:FEM LOC-INSIDE in 3SG.F.POSS.AL = stomach
 ‘Sometimes he damages the women inside their stomach.’

[WM-LK-014]

However, given the frequent co-occurrence with certain verbs, the applicative morpheme may have a tendency to be reanalyzed as part of these verbs. For instance, the stative intransitive verb *læt(n)* ‘arrive’ never occurs by itself without the applicative *n*: *læt* cannot take an argument by itself, and an applicative *n* always precedes the subject:

- (629) *io* [*læt n*]_{VC} = *a p~pən i-to a-Siapan.*
 then arrive APPL = PAT NMLZ~fight 3N-of ART-Japan
 ‘Then the war of the Japanese arrived.’ [JK-PP-006]

However, when the verb root is modified by an adverbial, the applicative *n* still occurs after the adverbial:

- (630) [*læt kup n*]_{VC} = *a molimoli = ta da*
 arrive thorough APPL = PAT person = PL.CLF:HUM PURP
tə-toti = ip
 3PL.PST-see = 3DL.M
 ‘Many people came to see them (dl.m.).’ [CM-B2-063]

Thus, it is not particularly clear whether the applicative *n* in 629 could be part of the verb or not. However, the tendency of the applicative marking being part of the verb is shown clearly by the existence of the allomorph *-m* (similar to *nə*, *mə* is a phonologically conditioned allomorph, occurring before consonants) of the applicative suffix. For instance, the stative intransitive verb *lang(m)* ‘want’ has a behavior similar to *læt(n)*: firstly, the morpheme *lang* cannot take an argument by itself (631a); secondly, when modified by an adverbial, the verb root can occur by itself without the applicative suffix *-m*, but has to take the applicative particle *nə* at the end of the VC (631b). However, *lang(m)* differs from *læt(n)* in that the applicative can be marked twice in the clause as a suffix inside the verb and a particle inside the VC, when modified (631c). This suggests that the applicative marking shows a tendency to be reanalyzed as part of the verbs.

- (631) a. *lang-mə ngang da nga-natme nga go*
 want-APPL 1SG PURP 1SG.NPST-make 1SG.POSS.AL NSPEC
latu = e.
 garden = SG.CLF:FEM
 ‘I want to make myself some garden.’ [WM-MG-001]
- b. *ngang o [lang vəvat nə]_{VC} ngang..*
 1SG TOP want very APPL 1SG
 ‘I really want...’ [KM-TH-089]

- c. *vakue e-bət to ngang [lang~lang-mə_v vəvat*
 woman.SG.CLF:FEM 3SG.F-that sub 1SG IPFV~want-APPL very
nə]_{vc} ngang vədəm =e, me iep o ko
 APPL 1SG with = 3SG.F.PAT and 3SG.F TOP NEG
go [lang-m]_{vc} =e vədəmə ngang...
 NSPEC want-APPL = 3SG.F.PAT with 1SG
 ‘That woman who I really want to be with, but she does not want to
 be with me...’ [AL-TN-026]

Only five verbs cooccurring with the allomorph *mə* are found in the corpus. Except *lang(m)* ‘want’, the other ones are all intransitive verb roots (transitive when occurring with applicative), including *pən(m)* ‘hit; kill’, *mun(m)* ‘pierce.through’, *mong(mə)* ‘have sex’, *tan(m)* ‘copulate’(examples shown in 632 to 636). The latter two words each only occurs once in the corpus, and the speaker reported that they can be used intransitively. These words show *m* as a possible allomorph of *n* when occurring after nasals. The allomorph *m* of applicative morpheme only occurs within the verbs. Thus in (632) the applicative *n* after *təng* ‘put.on’ does not show the same allomorphy after /ŋ/ (the reason why it is not outside VC will be discussed in the following section), as ‘*lang-mə*’.

- (632) *iap ar v-əngəp bətm =a tivən lok =e*
 3SG.M still 3SG.M.PST-die with =PAT stone hot = SG.CLF:FEM
e-vi to [i-t~təng n]_{vc} =e mət
 3SG.F-PROXS SR 3SG.F-IPFV~put.on APPL = 3SG.F.PAT in.mouth
 = a.
 = 3SG.M.PAT
 ‘he’s already dead with the hot stone that she stuck into his mouth.’
 [SV-ES-031]

- (633) *ipə-p~pən-m =a kətiləm nə-m~bo me kəgorə,*
 3DL.M.PST-IPFV~hit-APPL =PAT prawn LOC-CON~UP and eel
a-marek, ipə-p~pən təvi konəng nə-m~bo...
 ART-fish.sp. 3DL.M.PST-IPFV~hit along only LOC-CON~UP
 ‘They (dl.m.) caught (lit: hit/kill) prawns, eels, small fish, as they were
 following the creek up.’ [TV-MA-005]

- (634) a. *imə~mun lar be a-vi a-marau.*
 3DL.M.PST-pierce try at 3SG.M-PROXS ART-crocodile
 ‘They pierced the crocodile tentatively.’ [GK-CC-029]
- b. *ta-tu~mun-mə tang n = a utaki.*
 3PL.NPST-IPFV~pierce-APPL REFL/RECP APPL = PAT spear
 ‘They always pierce each other with the spears.’ [AL-HD-035]
- (635) *lok = a ar kori və-mong-m = a go*
 man = SG.CLF:MASC still NEG 3SG.M.PST-have.sex-APPL = PAT NSPEC
vakue.
 woman.SG.CLF:FEM
 ‘The man hasn’t slept (had sex) with women.’ [WM-ML-004]
- (636) *a-t~tan-m = a kaletuak.*
 3SG.M.PST-IPFV~have.sex-APPL = PAT woman.SG.CLF:FEM
 ‘He (the monster) has sex with women. (*tan*: have sex (animals))’
 [WM-LK-009]

Thus we can see that the formal delimitation between APPL affix inside the verb stem and the APPL particle outside the stem are relatively clear when it surfaces as the allomorph *m*. However, given the fact that the applicative particle *n* is quite commonly used with an intransitive root in an VC to accommodate a new argument, it is particularly hard to tell if *n* is part of the verb or not.

9.1.5 Incorporation

Incorporation is defined by Matthews as ‘a regular process by which lexical units which are syntactically complements of verbs can also be realized as elements within the verb itself’ (2014:173). In Tulil, a verb stem can incorporate another element such as a nominal root (noun, adjective or pronoun) or a manner adverb (cf. Harley, 2005). Example 638 shows an example of the verb (*m*)*u-gati* ‘share with’, in which (*m*)*u* is a verb meaning ‘put’ (637a) and *gati* is a noun root meaning ‘a share (of food)’ (637b). The new verb *mugati* ‘share’ usually takes the recipient as the O argument (638).

- (637) a. *i-mu viu ba ta mətət.*
 3SG.F.PST-put sea.water in 3PL.POSS.AL food
 ‘She put (PST.) sea water in their food.’ [LG-VI-012]

- b. *idil = ip* *ip-mə~mət* *ip*
 child = DL.CLF:MASC 3DL.M.PST-IPFV~eat 3DL.M.POSS
gati = viokəm.
 share = DL.CLF:FLAT
 ‘The two kids were eating their share of food.’ [LG-VI-015]

- (638) *tə-mugati* *tang* *n* = *a* *ibən = e* *e-bət.*
 3PL.PST-share REFL/RECP INSTR = PAT land = SG.CLF:FEM 3SG.F-PROXH
 ‘They shared that piece of land within themselves.’ [JK-GT-009]

There is clear evidence that the incorporated noun root *gati* is part of the verb, rather than being an argument of the verb: firstly, the incorporated elements sometimes do not change the valency of the verb. As shown in example (638), the verb *mugati* ‘share’ takes the reflexive pronoun *tang* as the O argument. If *gati* is an argument itself, an additional argument *tang* REFL/RECP has to be preceded by a preposition or applicative/instrumental particle. Secondly, no other words can come between a verb root and the incorporated element. For instance, arguments are outside VC, and would not come before the manner adverbs which are inside the VC (cf. §8), such as shown by example (639). However, incorporated element would come before the manner adverbs (640).

- (639) a. *du-mat* = *a* *va =* *(t)ton o* *du-mu* *idə*
 1PL.PST-get = PAT 3SG.M.POSS.AL = bone TOP 1PL.PST-put 3N
nə-bo *be ibən.*
 LOC-UP at ground
 ‘We got his bones, we put them up on the ground.’ [AL-BT-013]
- b. *doto* *du-mu* *mərek n* = *idə* *be ibən* *o* *du-mume*
 when 1PL.PST-put good APPL = 3N at ground TOP 1PL.PST-tell
n = *a* *nang = bon* *bətəpm = idə.*
 INSTR = PAT stick = SG.CLF:DIM on = 3N
 ‘When we put them properly on the ground, we measured with the stick on top of the bones.’ [AL-BT-014]

- (640) [*du-mugati* *kup* *nə*]_{VC} *ta n* = *a* *təre = vənik*
 1PL.PST-share all.round APPL 3PL with = PAT thing = PL.CLF:DIM
 We shared things to everyone. [CM-B2-073]

Verb roots that can commonly take an incorporate element are *mu* ‘put’ and *tar* ‘stick.into’. The incorporated constituent can also be a nominal class marking, or an element that is unrecognizable synchronically (represented by ? in Table 9.6).

Table 9.6: Verbs with incorporation

Verb root	incorporated element				new verb	
<i>mu</i> ‘put’	+	<i>von</i>	pron.	‘SG.CL:DIM’	→ <i>mu-von</i>	‘do the same thing’
		<i>kadək</i>	n.	‘joke’	→ <i>mu-kadək</i>	‘make fun’
		<i>kin</i>	?	?	→ <i>mu-kin</i>	‘count.date’
		<i>mədən</i>	adj.	‘smooth’	→ <i>mu-mədən</i>	‘resolve (problems)’
		<i>kəvədək</i>	adj.	‘short’	→ <i>mu-kəvədək</i>	‘shorten’
		<i>kəri</i>	v.	‘scratch’	→ <i>mu-kəri</i>	‘put.attention.to.hear’
<i>tar</i> ‘stick.into’	+	<i>kuvit</i>	n.	‘nail’	→ <i>tar-kuvit</i>	‘climb up with hands’
		<i>vəti</i>	pron.	‘SG.CL:SEG’	→ <i>tar-vəti</i>	‘fart’
		<i>gitəng</i>	?	?	→ <i>tar-gitəng</i>	‘squat’

- (641) *udu o du-mukəri da də-nan tərvi ba gəri*
 1PL TOP 1PL.PST-listen.carefully PURP 1PL.NPST-listen fail in what
u-vi itə-nakun.
 3N-PROXS 3DL.F.PST-cry
 ‘We put our ears on the ground for us to listen (but fail) what is crying’
 [LN-TO-023]

9.2 Non-finite verb forms

In Tulil, the notion of non-finiteness is used in its traditional sense in terms of its contrast with ‘finite’ forms, which are marked for person/number and tense-aspect (cf. Koptjevskaja-Tamm 1994). There are several types of non-finite verb forms in Tulil: infinitives, gerunds, converbs, and emphatic infinitives. Except for emphatic infinitives (with the form of stem₄), the other three non-finite forms have the form of stem₃.

9.2.1 Infinitives

Infinitives use stem₃ as their form, and have the following functions:

1) Following purposive *da*, when the subject is implied by the topic (642), or the main clause (643). But in this case, the preferred verb form is still the finite verb forms.

- (642) *ngang o da m~mat konəŋ n =a u-vi, mən =bem*
 1SG TOP PURP INF~get only APPL =PAT 3N-PROXS FROM = at
 =a *molimoli =a.*
 =PAT people = SG.CLF:MASC
 ‘I want to get these, from the man.’ [AL-SO-023]

- (643) *iduləŋga məgət o bə = ta-tə~nakun da*
 child.PL.CLF:HUM today TOP IAM = 3PL.NPST-IPFV~drink PURP
m~mət =a mət mət u-vi to kəvər =ta.
 INF~eat =PAT food 3N-PROXS of white = PL.CLF:HUM
 ‘The children today, they cry to eat food of the white people.’
 [WM-LB-019]

2) The adverb *kavar* ‘always’ can introduce a clause with an infinitive, or an emphatic infinitive (with stem₄):

- (644) a. *kavar m~mengəp.*
 always INF~sleep
 Always sleeping. [PO]
- b. *kavar mə~m~mengəp.*
 always EMPH~INF~sleep
 Always sleeping and sleeping. [PO]
- (645) a. *kavar məto~mə-tor.*
 always INF~M-sit
 Always sitting. [PO]
- b. *kavar məm~məto~mə-tor.*
 always EMPH~INF~M-sit
 Always sitting and sitting. [E]

9.2.2 Gerunds

Gerunds form noun-like verbal constructions, usually following prepositions (646) and VC as arguments (647). They use the verb form of stem₃.

- (646) *bə = kori du go ioi gəmon da təd = a t~turən*
 IAM = NEG 1PL.POSS NSPEC water near PURP for = PAT GER~wash
me n~nakən me t~tangədə.
 and GER~drink and GER~cook
 ‘We do not have water nearby for the purpose of washing and drinking
 and cooking.’ [AL-RM-127]

- (647) *ngə-matər mat = a m~məkən = a li.*
 1SG.PST-stand get = PAT GER~plant = PAT taro
 ‘I started with planting taros.’ [WM-MG-005]

Gerunds can take arguments, such as shown in 647. Gerunds also have some nominal characteristics such as being possessed (648).

- (648) *bə = kori ngə-təm = a ta t~tak be vənəm*
 IAM = NEG 1SG.PST-know = PAT 3PL.POSS GER~call at SG.CLF:SLE
nagapon.
 how
 ‘I don’t know how they call the long thing.’ [CM-TP-046]

Impersonal verbs such as *ipəvau* ‘be.hungry.NPST’ also have gerundive forms:

- (649) *ar ngi-ngəp təpm = a ngi i-pə~pau.*
 still 2SG.NPST-die with = PAT 2SG.POSS.AL 3N.NPST-GER~hungry
 ‘Still you die of your hunger.’ [ER-EA-021]

9.2.3 Converbs

As shown in §8.3.1.1, *converb* is a non-finite verb form that can be used as a type of verbal adjunct, modifying the head verb. The gemination of converbs may not be too obvious in fast speech (comparing to gerunds and infinitives), but class III verbs (*v* - initials) can give a clearer pattern, given that the initials in stem₃ changes from *v* to *p*. Compare the two verbs *vari* ‘help’ (also used as serial verb) and *vərat* ‘break’ (also used as *converb*): 650a and 651a show the stem₁ (citation form) of

the two verbs, while 650b and 651b shows the stem₃ of the two verbs (see table 9.2). Thus in 652, it is clearly shown that the serial verb uses stem₁ (652a) and the converb uses stem₃ (652b).

- (650) a. *bə = tə-vari tang be p~pən mən = a*
 IAM = 3PL.PST-help REFL/RECP at NMLZ~fight off = PAT
kəvər = ta.
 white = PL.CLF:HUM
 ‘They helped each other in fighting off the white people.’
 [AL-IP-060]
- b. *kati nga-n = a nga go var = a*
 IRR.COND 1SG-COM = PAT 1SG.POSS.AL NSPEC friend = SG.CLF:MASC
da və-p~pari ngang...
 PURP 3SG.M.PST-IPFV~help 1SG
 ‘If only I was with some friend of mine so he was helping me...’
 [DV-HP-069]
- (651) a. *ta-vi o tə-vərət nə tang təpm = a bokbok*
 3PL-PROXS TOP 3PL.PST-break APPL REFL/RECP with = PAT talk
libəti.
 five
 ‘They separated from each other (and ended up) with five languages.’
 [KM-BS-027]
- b. *ioi avar idə-p~pərət nə tang da bə = laik*
 water also 3N.PST-IPFV~break APPL REFL/RECP PURP IAM = big
vəvat.
 very
 ‘Water was spreading very wide.’
 [LG-VI-048]
- (652) a. *a-tərat vari_{SV} ta.*
 3SG.M.NPST-cut.grass help 3PL
 ‘He helped them to cut grass.’
 [JK-P1-014]
- b. *bə = ngi-təm p~pərət_{CONV} n = a kəl = e*
 IAM = 2SG.PST-know CVB~break APPL = PAT flame = SG.CLF:FEM
e-bət.
 3SG.F-PROXH
 ‘Now you know clearly what kind of ‘flame’ it is (a torch).’
 [AL-TC-007]

9.3 Verb paradigms

The formation of verbs involve complex interaction between person indexing prefixes, reduplication and verb stems/roots. In the previous section a general verb template was presented. To better illustrate the interaction between the person prefixes and initial consonants of verb stems, as well as various reduplicative patterns, this section will present verb paradigms of inflected verbs, organized according to different verb classes.

The pattern is based on paradigm elicitation of 81 verbs with two speakers, as well as instances found in texts. The two speakers generated the same items almost for all forms, though that sometimes they show certain degree of uncertainty with 3DL.M.PST/NPST forms (this is also the place where kids or second language speakers may provide reanalyzed forms). No contradictory forms in the texts are found when compare with the elicitation. The full paradigms of verbs of different initials are given in Appendix A, for the reader to consult and bring up different analyses.

The behaviour of verb inflection differs according to the initial consonants of both root and stem₁. If we take both person prefixes and reduplication into consideration, two verbs with different initial consonants never have exactly the same behaviour. This section is organized in the way that the inflection pattern for verbs of all different consonants are given, with list of verbs and text examples. However, there are also a great amount of similarities, thus one tenable analysis is given, based on the assumptions that 1) the person indexes behave the same across all categories in one specific tense; 2) the person indexes do not have allomorphes, and the last featural consonants in the indexes trigger the initial consonant mutation of the stems, and surface solely on the stems.

9.3.1 Initial consonant mutation of stems

The A/S_A person indexes (table 9.4) trigger initial consonant mutation of the stems. The indexes can end in a vowel, a substantial consonant, and an unspecified nasal or stop (represented by N or T, as shown in Table 9.4). I will discuss the initial consonant mutation when the last consonant is a featural consonant.

9.3.1.1 Person indexes ending in vowels

For person indexes whose last phoneme is a vowel (most PST indexes), the verb is formed by simply attaching the person indexes to the relevant stem, and no morphophonological change (initial consonant mutation) is involved.

(653) *i-nakun* > *i-nakun*. ‘She cried.’

9.3.1.2 Person indexes ending in substantial consonants

Table 9.7: Verb paradigms

	initial	glossing	root	<i>d</i> - 1PL.NPST	IPFV	<i>v</i> - 3SG.M.PST	IPFV	
I	<i>t</i>	‘to give’	<i>tuk</i>	<i>də-tuk</i>	<i>də-t~tuk</i>	<i>və-tuk</i>	<i>və-t~tuk</i>	
	<i>l</i>	‘to try’	<i>lar</i>	<i>də-lar</i>	<i>də-l~lar</i>	<i>və-lar</i>	<i>və-l~lar</i>	
	<i>r</i>	‘to wait’	<i>rut</i>	<i>də-rut</i>	<i>də-r~rut</i>	<i>və-rut</i>	<i>və-r~rut</i>	
II	<i>d</i>	‘to kill’	<i>dok</i>	<i>də-dok</i>	<i>də-d~dok</i>	<i>və-dok</i>	<i>və-d~dok</i>	
	<i>n</i>	‘to drink’	<i>nakən</i>	<i>də-nakən</i>	<i>də-n~nakən</i>	<i>və-nakən</i>	<i>və-n~nakən</i>	
	<i>k</i>	‘to stick into’	<i>kup</i>	<i>də-kup</i>	<i>də-k~kup</i>	<i>və-kup</i>	<i>və-k~kup</i>	
	<i>g</i>	‘to hunt’	<i>gup</i>	<i>də-gup</i>	<i>də-g~gup</i>	<i>və-gup</i>	<i>və-g~gup</i>	
	<i>ŋ</i>	‘to smell’	<i>ngot</i>	<i>də-ngot</i>	<i>də-ng~ngot</i>	<i>və-ngot</i>	<i>və-ng~ngot</i>	
	<i>b</i>	‘to climb’	<i>bunən</i>	<i>də-bunən</i>	<i>də-b~bunən</i>	<i>və-bunən</i>	<i>və-b~bunən</i>	
III	<i>v</i>	‘to dig’	(<i>v</i>) <i>ovər</i>	<i>də-vovər</i>	<i>də-p~povər</i>	<i>vovər</i>	<i>və-p~povər</i>	
IV	i	<i>m</i>	‘to suck’	<i>mikmik</i>	<i>də-mikmik</i>	<i>də-m~mikmik</i>	<i>və-mikmik</i>	<i>və-m~mikmik</i>
	ii	<i>m</i>	‘to get’	(<i>m</i>) <i>at</i>	<i>dat</i>	<i>də~mat</i>	<i>vat</i>	<i>və-m~mat</i>
		<i>m</i>	‘to sit’	(<i>t</i>) <i>or</i>	<i>də-tor</i>	<i>də-no~mator</i>	<i>və-tor</i>	<i>və-mato~mator</i>
	iii	<i>m</i>	‘to say’	<i>ngar</i>	<i>də-ngar</i>	<i>də~məngar</i>	<i>və-ngar</i>	<i>və-mənga~məngar</i>
		<i>m</i>	‘to listen’	<i>nan</i>	<i>də-nan</i>	<i>də~mənan</i>	<i>və-nan</i>	<i>və-məna~mənan</i>

Person indexes ending in a substantial consonant (*d*- 1PL.NPST and *v*- 3SG.M.PST) have allomorphs with an additional schwa, when the initial of the stem is a consonant other than *m* (except class IV.i) or *v* (only for *v*- 3SG.M.PST):

(654) a. *d-nakun* > *də-nakun*. ‘We will cry.’

b. *v-nakun* > *və-nakun*. ‘He cried.’

When attached to stems starting a *v*, *v*- 3SG.M.PST merges with the initial:

(655) *v-vovər* > *vovər*. ‘He dug.’

Also, when attached to non-reduplicated stems (perfective) starting with *m* (except class IV.i), the initial /m/ is substituted by /v/ or /d/. Note that in example 657 the stem is stem₁ (for PST.PF), and in example 658 the stem is the root (for NPST.PF). The imperfective form for *v*- 3SG.M.PST) with *m* initial stems is regular (657c).

(656) **class IV.i**

- a. *v-mikmik* > *və-mikmik*. ‘He sucked.’
 b. *d-mikmik* > *də-mikmik*. ‘We (pl.) suck.’

(657) a. *v-mət* > *vət*. ‘He ate.’

- b. *v-mə-nan* > *və-nan*. ‘He listened.’
 c. *v-m~mət* > *və-m~mət*. ‘He was eating.’

(658) a. *d-mət* > *dət*. ‘He ate.’

- b. *d-nan* > *də-nan*. ‘He listened.’

d- 1PL.NPST in IPFV usually has stem₃ rather than stem₂ as the base (compare 659a with 659b), except for class IV.ii/iii verbs (660) (pattern for *tor* ‘to sit’ is different from the others).

(659) a. *nguT-nə~nakən* > *ngu-tə~nakən*. ‘We (dl.) are drinking.’

- b. *d-n~nakən* > *də-n~nakən*. ‘We (pl.) are drinking.’

(660) a. *d-ma~mat* > ***da~mat***. ‘We (pl.) are getting.’

- b. *d-na~mə-nan* > ***d-a~mə-nan***. ‘We (pl.) are listening.’
 c. *d-na~mə-ngar* > ***d-a~mə-ngar***. ‘We (pl.) are saying.’
 d. *d-no~mə-tor* > ***də-no~mə-tor***. ‘We (pl.) are sitting.’

9.3.1.3 Person indexes ending in featural consonants

Featural consonants include *N* and *T*, and behave differently in PST and NPST. Almost all NPST person indexes have the featural consonants *N* or *T* (except 1PL.NPST *d-*), and only one PST person index has *T* (3DL.M.PST *iT-*). For all possible variations see table 9.9.

The initial consonant mutation in verbs is triggered by a mixed morphophonological environment. It has six grade (defined as ‘labels referring to constellations of contexts’ by ?:118): sonorants, nasals and stops (PST.PF), stops (PST.IPFV), stops (NPST.PF) and stops (PST.IPFV). I take the stems under the sonorant grade as corresponding to the underlying forms. The corresponding triggers are person prefixes whose endings are [+V], *N* and *T*.

In the initial consonant mutation of verbs, verb stems with /m/ as the initial consonant (*m*-initial verb stems) differ from non-*m*-initial verb stems. Non-*m* initial stems generally have more straightforward patterns, as shown in Table 9.8. I will treat *m*-initial, class IV.ii verbs as having a general consonant mutation rule with the other classes, and class IV.i/iii as special cases. Class IV.i (only *mikmik* ‘suck’) can be seen as a special case where the root is not subject to mutation because of the reduplicated verb form, and class IV.iii verbs differ in their patterns according to the initial consonant of the verb root.

Table 9.8: Initial consonant mutation

Grade	non-m initial stems											
Sonorant (PST.)	t	d	n	l	r	k	g	ŋ	p	b	v	m
Nasals	t	d	n	l	r	k	g	ŋ	p	b	b	n
Stops (NPST. PF)	t	td	tn	l	r	k	kg	kŋ	p	pb	p	t
Stops (NPST. IPFV)	t	t	t	l	r	k	k	k	p	p	p	t
Stops (PST. PF)	tt	td	tn	tl	rər	kk	gəg	kŋ	pp	pb	pv	pm
Stops (PST. IPFV)	tt	td	tn	tl	tr	kk	g	kŋ	pp	pb	pp	pm

Table 9.9: Verb paradigms according to initials

	initial	glossing	root	<i>ngaN-</i> 1SG.NPST	IPFV	<i>nguT-</i> 1DL.NPST	IPFV	<i>iT-</i> 3DL.M.PST	IPFV	
Class I	<i>t</i>	‘to give’	<i>tuk</i>	<i>nga-tuk</i>	<i>nga-t~tuk</i>	<i>ngu-tuk</i>	<i>ngu-t~tuk</i>	<i>i-ttuk</i>	<i>i-ttət~tuk</i>	
	<i>l</i>	‘to try’	<i>lar</i>	<i>nga-lar</i>	<i>nga-l~lar</i>	<i>ngu-lar</i>	<i>ngu-l~lar</i>	<i>i-tlar</i>	<i>i-tləl~lar</i>	
	<i>r</i>	‘to wait’	<i>rut</i>	<i>nga-rut</i>	<i>nga-r~rut</i>	<i>ngu-rut</i>	<i>ngu-r~rut</i>	<i>i-rərut</i>	<i>i-trər~rut</i>	
Class II	<i>d</i>	‘to kill’	<i>dok</i>	<i>nga-dok</i>	<i>nga-də~dok</i>	<i>ngu-tdok</i>	<i>ngu-tə~dok</i>	<i>i-tdok</i>	<i>i-tdəd~dok</i>	
	<i>n</i>	‘to drink’	<i>nakən</i>	<i>nga-nakən</i>	<i>nga-nə~nakən</i>	<i>ngu-tnakən</i>	<i>ngu-tə~nakən</i>	<i>i-tnakən</i>	<i>i-tnən~nakən</i>	
	<i>k</i>	‘to stick into’	<i>kup</i>	<i>nga-kup</i>	<i>nga-kə~kup</i>	<i>ngu-kup</i>	<i>ngu-kə~kup</i>	<i>i-kkup</i>	<i>i-kkək~kup</i>	
	<i>g</i>	‘to hunt’	<i>gup</i>	<i>nga-gup</i>	<i>nga-gə~gup</i>	<i>ngu-kgup</i>	<i>ngu-kə~gup</i>	<i>i-gəgup</i>	<i>i-gəg~gup</i>	
	<i>ŋ</i>	‘to smell’	<i>ngot</i>	<i>nga-ngot</i>	<i>nga-ngə~ngot</i>	<i>ngu-kngot</i>	<i>ngu-kə~ngot</i>	<i>i-kngot</i>	<i>i-kngəng~ngot</i>	
	<i>b</i>	‘to climb’	<i>bunən</i>	<i>nga-bunən</i>	<i>nga-bə~bunən</i>	<i>ngu-pbunən</i>	<i>ngu-pə~bunən</i>	<i>i-pbunən</i>	<i>i-pbəb~bunən</i>	
Class III	<i>v</i>	‘to dig’	<i>vovər</i>	<i>nga-bovər</i>	<i>nga-bə~vovər</i>	<i>ngu-povər</i>	<i>ngu-pə~vovər</i>	<i>i-pvovər</i>	<i>i-ppvər~povər</i>	
Class IV	i	<i>m</i>	‘to suck’	<i>mikmik</i>	<i>nga-mikmik</i>	<i>nga-ni~mikmik</i>	<i>ngu-mikmik</i>	<i>ngu-ti~mikmik</i>	<i>i-pmikmik</i>	<i>i-pməm~mikmik</i>
	ii	<i>m</i>	‘to get’	<i>mat</i>	<i>nga-nat</i>	<i>nga-na~mat</i>	<i>ngu-tat</i>	<i>ngu-ta~mat</i>	<i>i-pmat</i>	<i>i-pməm~mat</i>
	iii	<i>m</i>	‘to sit’	<i>tor</i>	<i>nga-dor</i>	<i>nga-no~mator</i>	<i>ngu-ttor</i>	<i>ngu-tno~mator</i>	<i>i-pmator</i>	<i>i-pməmməto~mator</i>
		<i>m</i>	‘to say’	<i>ngar</i>	<i>nga-nəngar</i>	<i>nga-na~məngar</i>	<i>ngu-təngar</i>	<i>ngu-tna~məngar</i>	<i>i-pməngar</i>	<i>i-pməmmənga~məngar</i>
	<i>m</i>	‘to listen’	<i>nan</i>	<i>nga-nan</i>	<i>nga-na~mənan</i>	<i>ngu-tnan</i>	<i>ngu-tna~mənan</i>	<i>i-pmənan</i>	<i>i-pməmməna~mənan</i>	

Chapter 10

Nominal classification

This chapter deals with the nominal classification system in Tulil. Traditionally, a distinction is usually between gender/noun class (highly grammaticalized agreement system) and classifier (lexico-syntactic free forms). The two different systems are usually considered as prototypes as ‘focal points on continua of various properties’ rather than ‘discrete entities’ (Aikhenvald, 2000:13).

From an areal perspective, nominal classes are present in the nearby Baining languages (Stebbins, 2005, 2011:136-155), but not in any of the Austronesian languages of the area. In fact, nominal classification has been proposed as a possible commonality among the non-Austronesian languages of the Bismarck Archipelago, Bougainville, and the Solomons region (Terrill, 2002).

The Baining languages are reported to be different from other non-Austronesian languages in the region in having a large set of nominal class distinction: for instance, Mali Baining has contrasts in nominal classification based on sex (masculine, feminine), size (diminutive), shape (reduced, flat, excised, long, extended) (see Table 10.1 for the forms of noun class endings in Mali) (Stebbins, 2005). Tulil has a semantically and morphologically rather similar system, with 11 different nominal classes, even though the grammatical specifications are different.

For instance, nominal class is usually marked multiple times on the noun and all modifiers in Mali Baining, with the presence of a relator before the modifier (661), but in Tulil, it is only marked once as an enclitic of the whole NP as phrasal inflection (cf. §5). Given this characteristic, I will use ‘nominal class’ rather than ‘noun class’, simply because the marking is not related to the noun only, but the whole NP.

Table 10.1: Nominal class marking in Mali Baining (Stebbins, 2011:137)

Class	Singular	Dual	Plural
masculine	<i>ka</i>	<i>iom</i>	<i>ta</i> (human) \emptyset (non-human)
feminine	<i>ki</i>	<i>vem</i>	\emptyset
diminutive	<i>ini</i>	<i>ithom</i>	<i>ithong</i>
reduced	<i>vəm</i>	<i>vam</i>	<i>vap</i>
flat	<i>vəs</i>	<i>imelem</i>	<i>imelək</i>
excised	<i>igl</i>	<i>iglem</i>	<i>igleng</i>
long	<i>vet</i>	<i>isem</i>	<i>iseng</i>
extended	<i>ia</i>	<i>inəm</i>	<i>inək</i>
count neutral	\emptyset		

(661) **Mali Baining**

vandi ngu-thəs kama muli-ki ama amor-ki ama amiar-ki
 DESID 1SG.II-eat.FUT ART₁ orange-F.SG REL₃ big-F.SG REL₃ green-F.SG
ama amər-ki.
 REL₃ good-F.SG

‘I want to eat the big, green, sweet [good] orange.’

(Stebbins, 2011:162)

(662) *be vəti təgə = von o molimoli təgət = e*

at day one = SG.CLF:DIM TOP people one = SG.CLF:FEM

i = vil = a və-p~pi

3SG.F.POSS.INAL = son/daughter = SG.CLF:MASC 3SG.M.PST-IPFV~go

təkə = nə-mumə da ibən laik = pət be Rəbəul.

TO = LOC-DOWN.DIST on land big = SG.CLF:SEG at PN

‘One day a woman’s son went down to Rabaul city.’ [AL-RD-004]

Similar to Baining languages, Tulil also has a smaller system (gender) that distinguishes only masculine, feminine and unspecified, which was the only nominal classification system described in earlier studies of Tulil (Laufer 1950 reported FEM, MASC and NEUT). Gender is fully predictable from nominal classes, thus they are intrinsically two sub-systems of a single nominal classification system (cf. Fedden & Corbett (2017)’s comment on Mali Baining).

10.1 Morphosyntactic characteristics

There are two sub-systems of the nominal classification system in Tulil: a nominal class system (11 different classes including distinction in sex, size, shape), and a gender system (3 classes, only include sex). The two sub-systems are involved in different morphosyntactic contexts: the nominal class system is mainly used inside the core NP, and the gender system is used for various indexes such as person indexes prefixed to verbs; and the free pronominals/demonstratives can involve both systems. The details of these morphosyntactic contexts are shown in Table 10.2.

Table 10.2: Morphosyntactic contexts of class marking in Tulil

morphosyntactic context	sub-system	section
core NP	nominal class	§10.1.1.1
free personal pronoun	nominal class / gender1	§10.1.4
non-specific pronoun <i>go</i>	nominal class	§10.1.1.2
nominal demonstrative	nominal class / gender1	§10.1.4
A/S _A person indexes (PST.)	gender1	§10.1.2.1
A/S _A person indexes (NPST.)	gender2	§10.1.2.1
quotative indexes	gender2	§10.1.2.4
possessive indexes	gender1	§10.1.2.2
prepositional indexes	gender1	§10.1.2.3

10.1.1 The nominal class system

The nominal class system in Tulil has 11 classes, which include contrasts based on sex (CL1-masculine and CL2-feminine), size (CL3-diminutive, CL4-augmentative), shape (CL5 to CL10), and an unspecified class (CL11, usually in the bare form).

10.1.1.1 NP

NPs in Tulil inflect for both number (SG, DL and PL) and nominal classes, both of which are realized together as a cumulative morpheme (nominal class marking) at the right edge of a core NP (full forms see Table 10.3; NP structure see §5). Nominal class marking encliticizes to the rightmost element (host) in a core NP, which can be a head noun (663a), an attributive adjective (663b), a numeral (663c), a quantifier (663d) or a particle (663e)⁶⁸.

68. A semantically similar set of class markings can be found in Baining languages such as Mali (Stebbins, 2005, 2011:136-155) and Qaqet (Hellwig, pers.comm.). However in these languages, the nominal class is

- (663) a. *lət n* [= *a livət_N = pitəm*]_{NP} *ga və =*
 arrive APPL = PAT tusk = DL.CLF:FEM across 3SG.M.POSS.INAL =
kiou.
 mouth
 ‘Two tusks appeared at his [a wild boar] mouth.’ [DV-HP-053]
- b. [*nga var_N mærek_{ADJ} = pələgəp*]_{NP} *iu...*
 1SG.POSS.INAL friend good = DL.CLF:FEM 2DL
 ‘My two good friends you two...’ [JN-KL-035]
- c. *ngi-kup mat = a kəvəlok = a ba tipur*
 2SG.PST-pull.off take = PAT seed = SG.CLF:MASC in bush
təpm = a mæte iap to u = viok o mæte [
 with = PAT like 3SG.M SR leave = PL.CLF:FLAT TOP like
miokəm magəviok_{NUM}]_{NP}, [*balakətəria_{NUM} = viok*]_{NP}.
 three.CLF:FLAT four = CLF:FLAT
 ‘You pull off the seed in the bush, on the kind of tree whose leaves
 are like three leaves or four leaves.’ [WM-LP-039]
- d. [*vəti_N tar_{QUANT} = vənik*]_{NP}, *vəgam me lələng tarə to mæte*
 day many = PL.CLF:DIM month and year many SR like
ip to it-i~vi nogət n = udu mæte e-Luit
 3DL.M SR 3DL.M.NPST-IPFV~go first APPL = 1PL like ART.F-PN
me to-Midəl, it-o~bokbok tuk udu da...
 and ART.M-PN 3DL.M-IPFV~talk give 1PL PURP
 ‘For many days, months and years, those two leaders like Louise and
 Midəl, they are saying to us for us to...’ [WM-CM-005]
- e. [*tərə_N katum_{QUANT} konəng_{PTCL} = bənik*]_{NP} *o idə-mang katum*
 thing all only = PL.CLF:DIM TOP 3N.PST-burnt all
nə vənik.
 APPL PL.CLF:DIM
 ‘Everything was burnt down.’ [GV-TB-022]

The NP, if not marked by any class marking, denotes an unspecified entity that is mass/uncountable (class 11, such as *ioi* ‘water’ in example 664), or a non-human, plural entity in MASC and FEM class (thus non-human plural is not glossed in the interlinear glossing, such as *bəli* ‘pig’ in 665). In the latter case, when the host is

usually marked multiple times on the noun and all modifiers, marking concord.

a numeral, there is no distinction between non-human and human marking (this will be discussed later in this section).

(664) *ngi-tuk ko tə=mət =a n =a ioi.*
 2SG.PST-give only TO=in.mouth =3SG.M.PAT APPL =PAT water
 ‘You just give some water to his mouth.’ [LN-BU-022]

(665) *bərn=a a-bət o bə tar=ta o*
 hill=SG.CLF:MASC 3SG.M-PROXH TOP IAM many=PL.CLF:HUM TOP
bəli idə-pən-mə ta, me ngang konəng o bəli=a
 pig 3N.PST-kill-APPL 3PL and 1SG only TOP pig=SG.CLF:MASC
kori vən-mə ngang, me ngang ngə-vən-m =a
 NEG 3SG.M.PST.kill-APPL 1SG and 1SG 1SG.PST-kill-APPL =PAT
bəli=a.
 pig=SG.CLF:MASC
 ‘On that hill many people were killed by the pigs, but only me, the pig
 didn’t kill me, I killed the pig.’ [DV-HP-092]

Table 10.3: Nominal class marking (nouns/adjectives) in Tullil

Class	Singular	Dual	Plural
CL1: masculine	<i>a</i>	<i>ip</i>	<i>ta</i> (human) \emptyset (non-human)
CL2: feminine	<i>e</i>	<i>vitəm</i>	
CL3: diminutive	<i>von</i>	<i>vələgəp</i>	<i>vənik</i>
CL4: augmentative	<i>vən</i>	<i>vədabəm</i>	<i>vədau</i>
CL5: flat	<i>voi</i>	<i>viokəm</i>	<i>viok</i>
CL6: round	<i>vəp</i>	<i>vəbakəm</i>	<i>vəbak</i>
CL7: slender	<i>vənəm</i>	<i>vətəm</i>	<i>vətəng</i>
CL8: segment	<i>vəti</i>	<i>vətəkəm</i>	<i>vətək</i>
	<i>vət</i>		
CL9: spherical	<i>vələ</i>	<i>vələkəm</i>	<i>vələk</i>
CL10: cluster	<i>vəgi</i>	<i>vəgatəm</i>	<i>vəgatəng</i>
CL11: unspecified	\emptyset		

Morphologically, nominal class markers show features of a clitic in the sense of “*categorially unrestricted bound formatives*”, given their ability to attach to hosts from various word classes (Bickel & Nichols, 2007:174-180). Nominal class marking reflects the number/class features of the whole NP, and is detached from the

noun root when modifiers are present. This morphosyntactic status of the class marking detached from the noun root suggests that the nominal classification system behaves more like ‘classifiers’ than a typical gender system (cf. ‘canonical gender’, Corbett & Fedden 2016), and to some extent functions like a modifier in the core NP.

The nominal class marking as clitics shows different degrees of fusion with different hosts: they are readily segmentable when attached to nouns and adjectives (with consonant assimilation, see later this part), but less separable with numerals (see Table 10.4).

Table 10.3 shows the nominal class markings which are attached to nouns and adjectives. We can see that most forms of nominal class marking start with v (/β/) plus a full vowel or a schwa ə (/ə/), except for singulars and plurals of CL1/CL2, and dual of CL1. This may suggest a historical morpheme of similar forms (eg. * $və$ -) whose function is unclear synchronically. Each nominal class marking has sets of allomorphs that relate to the phonological realization of $v(ə)$ - /β(ə)/, and are phonologically predictable. The initial /β/ of the nominal class markings realized as other bilabials according to the preceding phoneme (an example is shown in Figure 10.1, and similar rules can be observed for all class markings with /β/ initials), undergoing assimilation processes that change the first phoneme v (/β/) that occurs in most of the class markings to bilabials b (/b/) or p (/p/) (see §2.5.3).

Figure 10.1: Allomorphs of *von* diminutive

$$/βon/ \rightarrow \left\{ \begin{array}{l} /pon/ \text{ / Stops(/t/, /k/)}_* \\ /bon/ \text{ / Nasals}_* \\ /βon/ \text{ / elsewhere} \end{array} \right\}$$

[+N Class]

For **numerals**, nominal class marking can be more tightly fused into the host, as shown in Table 10.4. For number such as ‘4’, ‘5’ and ‘6’, the morphological pattern of class markings mostly conform to those occurring with nouns and adjectives - the class marking simply attaches to the end of the root (e.g. *libəti* = *vənik* five = PL.CLF:DIM). However, differing from nouns and adjectives, numerals do not differentiate human vs. non-human in MASC/FEM plurals (‘3’, ‘4’, ‘5’, ‘6’, etc.), and only the bare form is used; class 11 - unspecified class is uncountable so cannot take numerals. For number ‘1’ and ‘2’ and ‘3’, the forms of the markings are similar but less regular:

‘1’: the last stop t in the root *təgət* is kept for CL1 and CL2, but is elided for all the other nominal classes.

‘2’: if we compare the forms with all the dual forms in Table 10.4 with the

Table 10.4: Inflected patterns of numerals

Number	1	2	3	4	5	6
CL1: masculine	<i>təgəta</i>	<i>mukəm</i>	<i>mukəm magərurum</i>	<i>balakətəria</i>	<i>libəti</i>	<i>nereita</i>
CL2: feminine	<i>təgəte</i>	<i>muitəm</i>	<i>muitəm magət</i>			
CL3: diminutive	<i>təgəvon</i>	<i>muləgəp</i>	<i>muləgəp magəvənik</i>	<i>balakətəria vənik</i>	<i>libəti vənik</i>	<i>nereita vənik</i>
CL4: augmentative	<i>təgəvən</i>	<i>mudabəm</i>	<i>mudabəm magəvədau</i>	<i>balakətəria vədau</i>	<i>libəti vədau</i>	<i>nereita vədau</i>
CL5: flat	<i>təgəvoi</i>	<i>miokəm</i>	<i>miokəm magəviok</i>	<i>balakətəria viok</i>	<i>libəti viok</i>	<i>nereita viok</i>
CL6: round	<i>təgəvəp</i>	<i>mubakəm</i>	<i>mubakəm magəbətək</i>	<i>balakətəria vəp</i>	<i>libəti vəp</i>	<i>nereita vəp</i>
CL7: slender	<i>təgəvənəm</i>	<i>muvətəm</i>	<i>muvətəm magəvətəng</i>	<i>balakətəria vətəng</i>	<i>libəti vətəng</i>	<i>nereita vətəng</i>
CL8: segment	<i>təgəvət</i>	<i>mutakəm</i>	<i>mutakəm magəvətək</i>	<i>balakətəria vətək</i>	<i>libəti vətək</i>	<i>nereita vətək</i>
	<i>təgəvəti</i>					
CL9: spherical	<i>təgəvələ</i>	<i>mulakəm</i>	<i>mulakəm magəvələk</i>	<i>balakətəria vələk</i>	<i>libəti vələk</i>	<i>nereita vələk</i>
CL10: cluster	<i>təgəvəgi</i>	<i>mugatəm</i>	<i>mugatəm magəvəgatəng</i>	<i>balakətəria vəgatəng</i>	<i>libəti vəgatəng</i>	<i>nereita vəgatəng</i>

inflected forms of number ‘2’, we can see that except for CL1, all the inflected forms of number ‘2’ can be achieved by substituting *v* /β/ to *m* /m/ before vowel /i/ (e.g. *viokəm* vs. *miokəm*), or /βə/ to /mu/ before consonants (e.g. *vələgəp* to *muləgəp*)⁶⁹.

‘3’: number ‘3’ consists of two phonological words with both of them inflected. One of them has the same set of forms ‘2’, when the other may has the root *magət* (meaning unknown). ‘3’ in CL1 is irregular.

Quantifiers have the same inflection pattern as nouns and adjectives, but they are limited to the plural number (no singular/dual forms), and make a distinction between human/non-human in CL1 and CL2. For instance, *nangə vanəm* ‘a few trees/herbs’, *molimoli tar = ta* ‘many people’, *vəti katum = bənik* ‘all the days’. Inflected patterns of the quantifiers can be found in Table 10.5.

69. This may further suggest *v/və* as a separate morpheme historically.

Table 10.5: Inflection of quantifiers

Class		‘many’	‘all’	‘few’
CL1:male CL2:feminine	human	<i>tar = ta</i>	<i>katum = ta</i>	<i>vanəm = ta</i>
	non-human	<i>tarə</i>	<i>katum</i>	<i>vanəm</i>
CL3: diminutive		<i>tar = vənik</i>	<i>katum = bənik</i>	<i>vanəm = bənik</i>
CL4: augmentative		<i>tar = vədau</i>	<i>katum = bədau</i>	<i>vanəm = bədau</i>
CL5: flat		<i>tar = viok</i>	<i>katum = biokəm</i>	<i>katum = biok</i>
CL6: round		<i>tar = vəbak</i>	<i>katum = bəbak</i>	<i>vanəm = bəbak</i>
CL7: slender		<i>tar = vətəng</i>	<i>katum = bətəng</i>	<i>vanəm = bətəng</i>
CL8: segment		<i>tar = vətak</i>	<i>katum = bətak</i>	<i>vanəm = bətak</i>
CL9: spherical		<i>tar = vəlak</i>	<i>katum = bəlak</i>	<i>vanəm = bəlak</i>
CL10: cluster		<i>tar = vəgatəng</i>	<i>katum = bəgatəng</i>	<i>vanəm = bəgatəng</i>
CL11: unspecified		<i>tarə</i>	<i>katum</i>	<i>vanəm</i>

10.1.1.2 Non-specific pronoun

The full inflection pattern of *go* is shown in Table 10.6. Except that the form of human plural is irregular (*gətəm*), all the other forms conform to the pattern of nominal class marking of nouns/adjectives (Table 10.3). Also, the inflection base is *gət* rather than *go* (root), and the inflection forms are similar to the numeral *təgət* ‘one’ as shown in Table (10.4), by losing *tə*. This may suggest some connection between the two words. Examples of the use of non-specific pronoun can be found in §4.7.2.

10.1.2 The gender system

In addition to the nominal class system with 11 distinct classes system, Tulil also has a gender system, interacting with number and person. The gender system in Tulil is realized in person indexes⁷⁰, demonstratives and free pronouns (the latter two involve both of the nominal class and gender systems, and will be discussed in §10.1.4).

Tulil has 3 classes in third person: masculine, feminine and neuter (neuter gender does not have number distinction); also, in plural, the gender categories are neutralized, and a distinction is made between human and non-human. The gender system has two subsystems (gender1 and gender2) that have different types of syncretism, exemplified respectively by A/S_A verbal indexes in PST and NPST (Table

70. The term “(person) indexes” is used here for **bound person forms**, and “indexing” as “the process of providing verbs, nouns and adpositions with person indexes”, following Haspelmath(2013).

Table 10.6: Non-specific pronouns

Class	Singular	Dual	Plural
CL1: masculine	<i>gət-a</i>	<i>gət-ip</i>	<i>gət-əm</i> (human) <i>go</i> (non-human)
CL2: feminine	<i>gət-e</i>	<i>gə-vitəm</i>	
CL3: diminutive	<i>gə-von</i>	<i>gə-vələgəp</i>	<i>gə-vənik</i>
CL4: augmentative	<i>gə-vən</i>	<i>gə-vədabəm</i>	<i>gə-vədau</i>
CL5: flat	<i>gə-voi</i>	<i>gə-viokəm</i>	<i>gə-viok</i>
CL6: round	<i>gə-vəp</i>	<i>gə-vəbakəm</i>	<i>gə-vəbak</i>
CL7: slender	<i>gə-vənəm</i>	<i>gə-vətəm</i>	<i>gə-vətəng</i>
CL8: segment	<i>gə-vəti</i>	<i>gə-vətəkəm</i>	<i>gə-vətək</i>
	<i>gə-vət</i>		
CL9: spherical	<i>gə-vələ</i>	<i>gə-vələkəm</i>	<i>gə-vələk</i>
CL10: cluster	<i>gə-vəgi</i>	<i>gə-vəgatəm</i>	<i>gə-vəgatəng</i>
CL11: unspecified	<i>go</i>		

10.7a and 10.7b). As shown, both subsystems neutralize the gender distinction in plural, and non-human plural has the same form as neuter. However in gender2, the syncretism involves more categories: 2nd/3rd person dual, 2nd person plural also have same form as neuter/non-human plural.

10.1.2.1 A/S_A indexes

In A/S_A indexes, gender not only interacts with person and number, but also with tense, being realized as a set of pronominal prefixes attaching to the verb stem (consonant mutation occurs at prefix-verb boundaries, see §2.5.5 and §9.3).

- (666) *doto e-Kin i-toti molimoli=a a-bət to*
 when ART.F-PN 3SG.F.PST-see man = SG.CLF:MASC 3SG.M-PROXH SR
du-ter bətəpm =a, o iep o i-nakun.
 1PL.PST-dig on = 3SG.M TOP 3SG.F TOP 3SG.F.PST-cry
 ‘When Kin saw that man we dug out, she cried.’ [AL-BT-011]

Table 10.7: A/S_A indexes(a) PST A/S_A INDEXES

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngə-</i>	<i>ngunu-</i>	<i>du-</i>	
2	<i>ngi-</i>	<i>iu-</i>	<i>inə-</i>	
3.MASC	<i>v-</i>	<i>ip-</i>	<i>idə-</i>	<i>tə-</i>
3.FEM	<i>i-</i>	<i>itə-</i>		
3.NEUT	<i>idə-</i>			

(b) NPST A/S_A INDEXES

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngaN-</i>	<i>nguT-</i>	<i>d-</i>	
2	<i>ngiN-</i>	<i>iT-</i>	<i>iT-</i>	
3.MASC	<i>aT-</i>	<i>iT-</i>	<i>iT-</i>	<i>taT-</i>
3.FEM	<i>eT-</i>			
3.NEUT	<i>iT-</i>			

- (667) *vanəm = ta von i-tat mat = a nanbət*
 few = PL.CLF:HUM SG.CLF:DIM 3N.NPST-take take = PAT like.that
a-ti~vi tə = ba tipur o bə kori a-liu.
 3SG.M.NPST-IPFV~go TO = in bush TOP IAM NEG 3SG.M.NPST-return
 ‘For some of them, the thing (the feeling after taking betelnut juice) gets
 him, he goes into the bush, and doesn’t come back.’ [AL-DA-032]

10.1.2.2 Possessive indexes

The possessive indexes differentiate gender, number and person, and index the possessor inside an adnominal possessive construction (§5.8 Possession). In 1.SG, 3.MASC.SG and 3.FEM.SG, distinctive forms are used for alienable/inalienable possession. The full paradigm is shown in Table 10.8. The inalienable forms are very similar to the A/S_A indexes in past tense (Table 10.8), except 3PL forms.

Table 10.8: Possessive indexes

	SG		DL	PL	
	POSS.AL	POSS.INAL		NON-HUMAN	HUMAN
1	<i>nga</i>	<i>ngə</i>	<i>ngunu</i>	<i>du</i>	
2	<i>ngi</i>		<i>iu</i>	<i>inə</i>	
3.MASC	<i>va</i>	<i>və</i>	<i>it</i>	<i>idə</i>	<i>ta</i>
3.FEM	<i>ve</i>	<i>i</i>	<i>itə</i>		
3.NEUT	<i>idə</i>				

- (668) *doto a-pume va var = a*
 when 3SG.M.NPST-beat 3SG.M.POSS.AL friend = SG.CLF:MASC
və = lat = a n = a təreuk u-bət...
 3SG.M.POSS.INAL = head = SG.CLF:MASC INSTR = PAT thing 3N-PROXH
 ‘When he beats his friend’s head with these things...’ [AL-HD-039]

- (669) *ta-ta~mat = a [nangə vanəm]_{POSSESSOR} idə [*
 3PL.NPST-IPFV~take = PAT tree few 3N.POSS
u = viok]_{POSSESSEE}
 leaf = PL.CLF:FLAT
 ‘They get the leaves of a few trees.’ [AL-TN-026]

10.1.2.3 Prepositional indexes

There are several types of prepositional indexes. General prepositional indexes are the same as the person indexes used with demonstratives (Table 10.9). The same forms are also used for positional adverbs such as *nogət* ‘before; in front’ and *pədəm* ‘after; behind’ (§4.7.7). On the other hand, not all prepositions require indexes, for details and more examples, see §4.7.7.

Table 10.9: General prepositional indexes

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>nga-</i>	<i>ngunu-</i>	<i>du-</i>	
2	<i>ngi-</i>	<i>iu-</i>	<i>inə-</i>	
3MASC	<i>a-</i>	<i>i(p)-</i>	<i>idə-</i>	<i>ta-</i>
3FEM	<i>e-</i>	<i>itə-</i>		
3NEUT	<i>idə-</i>			

General prepositional indexes can be used in non-verbal clauses with prepositions as predicates (670). When the subject is indicated as the topic, the person indexes can be omitted (671).

- (670) *kəm̄aron = e* *i-m̄anan* *ba it̄a* *k̄an* *to*
 different = SG.CLF:FEM 3SG.F.PST-listen in 3DL.F.POSS voice SR
it̄a-gun *da* *it̄a-ga* *p~p̄at̄a*.
 3DL.F.PST-count PURP 3DL.F-across IPFV~collecting.protein
 ‘A devil woman heard them talking that they planned to go collecting
 protein in the river.’ [SM-DW-004]

- (671) a. *laik = ta* *o* *t̄əpm = a* *k̄amak*.
 big = PL.CLF:HUM TOP with = PAT lie
 ‘The ancestors were full of lies.’ [JK-PP-053]
- b. *ta-vi* *M̄arub̄at o* *ta-ba* *ib̄an = e* *to Tulil*.
 3PL-PROXS PN TOP 3PL-in land = SG.CLF:FEM of PN
 ‘These Baining people are in the land of Tulils.’ [KM-BS-093]

One exception is that **the prepositions *n* ‘COM’** is always obligatory:

- (672) *ta-vi* *M̄arub̄at a-moli* *muk̄əm maḡarung*, *lok = ip*
 3PL-PROXS PN ART-person three.CLF:MASC man = DL.CLF:MASC
it-n = *a* *vakue*
 3DL.M-COM = PAT woman.SG.CLF:FEM
 ‘These Bainings are three people, two men and one woman.’
 [CM-B2-056]

The preposition *to* ‘of’ has indexes that differ in form from the general prepositional indexes. The NP before *to* indicate the possessee, and can only be non-human (cf. §6.5.3).

Table 10.10: Person indexes for preposition *to* ‘of’

	SG	DL	PL
3.MASC	<i>a-</i>	\emptyset	<i>i-</i>
3.FEM	<i>e-</i>	\emptyset	
3.NEUT	<i>i-</i>		

10.1.2.4 Quotative indexes

Person indexes on quotative *e* use the gender2 system in 3rd person, in which the 3rd person dual has the same form as neuter/non-human plural. However, unlike A/S_A.NPST indexes, 2nd person dual and plural still have distinct forms⁷¹. The person indexes for *e* do not reflect tense distinction, and both past (673a) and non-past (673b) are expressed by the same set of indexes.

Table 10.11: Person indexes for quotative *e*

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>ngan-</i>	<i>ngunun-</i>	<i>dun-</i>	
2	<i>ngin-</i>	<i>iun-</i>	<i>inən-</i>	
3.MASC	<i>at-</i>	<i>it-</i>	<i>it-</i>	<i>tat-</i>
3.FEM	<i>et-</i>			
3.NEUT	<i>it-</i>			

- (673) a. *nə-bo ba mængəd = a ip-məngar tuk = a ip*
 LOC-UP in home = SG.CLF:MASC 3DL.M-say give = PAT 3DL.M.POSS
vove e-vi e-Namugi it-e, ...
 grandma 3SG.F-PROXS ART.F-PN 3DL.M-QUOT
 ‘Up back home they (dl.m.) told their grandmom, they said, ...’
 [LG-VI-037]

- b. *itə-ngar tuk ta iun-e, ...*
 2PL.NPST-say give 3PL 2DL-QUOT
 ‘You (dl.) say to him, say, ...’
 [AL-RM-126]

10.1.2.5 Forms of indexes

There are similarities in forms between the types of indexes discussed above, which is common cross-linguistically (see Siewierska 1998). Some noteworthy points considering index forms are:

- (A) Past tense A/S_A indexes (Table 10.7a) have exactly the same forms as inalienable possessive indexes (Table 10.8);

71. It could be that the root form of *e* involves an initial consonant that goes through initial consonant mutation, given that the last consonant in person indexes before *e* has the similar N/T alternation as alternation triggered by A/S_A.NPST indexes. However, it is not necessary in the analysis here, given that A/S_A.NPST indexes differ from the quotative indexes in 1st person dl/pl. 1st person dl./pl. actually have forms similar to A/S_A.PST indexes.

- (B) Except NPST tense A/S_A indexes (Table 10.7b), all other indexes have the same forms for MASC.DL *it*, FEM.DL *itə* and SG.NEUT./DL.NEUT/NHUM.PL *idə*.

10.1.3 Mapping of the two sub-systems

We have seen in the discussion above that the formally specified categories in different nominal categorization systems are different. Tutil utilizes the mapping rules shown in Figure 10.2 to assign one NP to the two systems: gender manifests itself in agreement with a NP, while nominal class markers signal the class on respective NPs. These rules include:

First, all members of CL1 correspond to MASC gender and all members of CL2 correspond to FEM gender. All the other classes correspond to NEUT gender.

- (674) *kəmur = vən* *idə-məkən* *mat tang* *nə-bət,* *o*
 smoke = SG.CLF:AUG 3N.PST-plant take REFL/RECP LOC-PROXH TOP
bərivu = a *və-bənakən* *tang.*
 wind = SG.CLF:MASC 3SG.M.PST-turn.over REFL/RECP
 ‘The cloud started to gather there, the wind changed direction.’
 [AL-RM-075]

In example (674), we can see the correspondence between CL4 marking *vən* ‘augmentative’ with neuter indexes, and CL1 with with masculine gender.

Secondly, in the nominal class system, the animacy distinction of non-human vs. human referents is only salient in plural of CL1 and CL2, while in the gender system, all classes make the animacy distinction in plurals.

Below is an example of human referents being involved in size/shape-based NPs. In example (675a), the NP *lok = pon* ‘young man’ belongs to CL3:DIM, and agrees with the NEUT gender, while in plural (675b), CL3:DIM corresponds to the 3PL.HUM gender.

- (675) a. *lok = pon* *idə-toti* *bəli = a*
 man-SG.CLF:DIM N.PST-see pig = DL.CLF:MASC
 ‘The young man saw a pig.’ [E]
- b. *lok = pənik* *mən = do* *tə-məngar* *tət-e...*
 man-PL.CLF:DIM FROM = here 3PL.PST-say 3PL-QUOT
 ‘Young men from here they said[...].’ [CM-B2-066]

However, the mapping does not totally conform to the two rules just listed. It is not uncommon to see mismatches between the gender and nominal class system

that a specific NP is assigned to. Compare (676) with (675a): in (676), the NP *var*=*von* ‘friend’ (CL3:DIM) is assigned to the masculine gender in both demonstrative and verb agreement.

- (676) *go t̄areuk tikilik u-b̄ət o nga-nat idil bem =a*
 NSPEC thing little 3N-PROXH TOP 1SG.NPST-get small at =PAT
nga var = von a-mu to v̄ə-nḡap.
 1SG.POSS.AL friend = SG.CLF:DIM 3SG.M-INSIDE SR 3SG.M.PST-die
 ‘A bit of this thing, I get a bit (of this) from my little friend there, who
 is dead.’ [AL-SO-039]

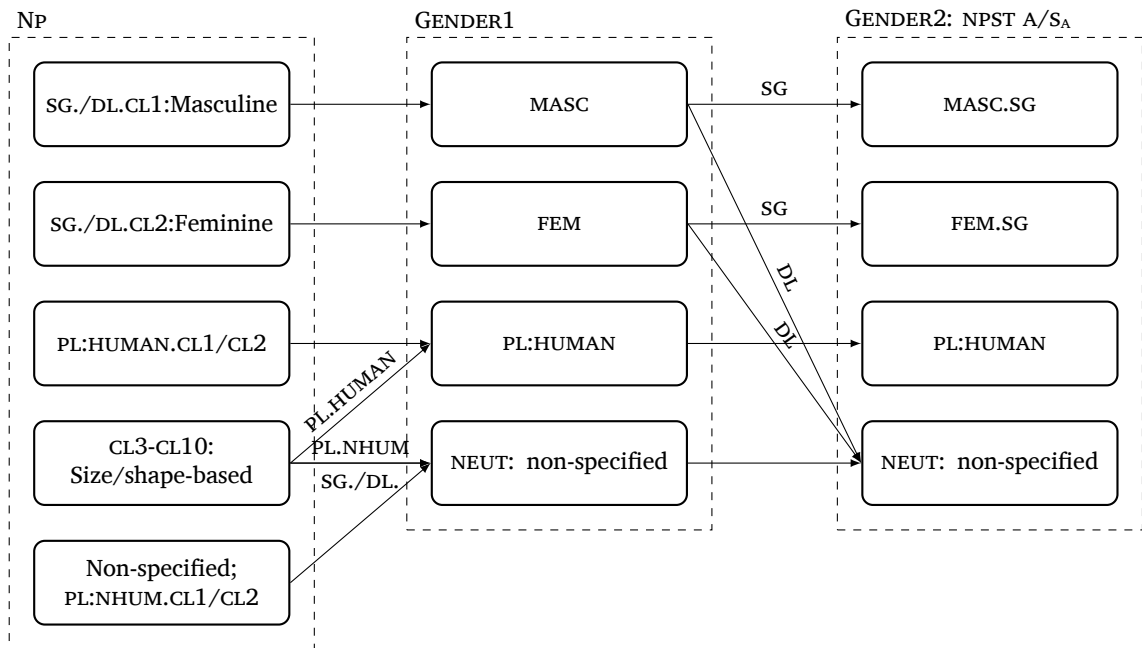


Figure 10.2: Mapping rules of two sub-systems of nominal classification

10.1.4 Free pronouns and demonstrative phrases

Free pronouns and demonstrative phrases differ from person indexes in that they can involve either the nominal class system or the gender system. For example, **pronouns** can be from both:

(677) a. **Nominal class**

ngə-kutəŋ mat = a ləvək = pənik_i da nga-təd
 1SG.PST-cut get = PAT banana = PL.CLF:DIM PURP 1SG.NPST-go.to
 = a vət_i = von təpmə vən_ik_i.
 = PAT day = SG.CLF:DIM with PL.CLF:DIM
 ‘I cut (PST.) a lot of bananas for me to go to market with them.’
 [ML-YE-009]

b. **Gender**

təre = vən_ik_i o b = idə-m~mang idə_i
 thing = PL.CLF:DIM TOP IAM = 3N.PST-IPFV~burn 3N
 ‘things were burnt (dried out).’ [AL-RM-011]

Table 10.12: Free personal pronoun (gender)

	SG		DL	PL	
	A/S _A	O/S _O		NON-HUMAN	HUMAN
1	<i>ngang</i>		<i>ngun</i>	<i>udu</i>	
2	<i>nging</i>		<i>iu</i>	<i>ngən</i>	
3.MASC	<i>iap</i>	<i>a</i>	<i>ip</i>	<i>idə</i>	<i>ta</i>
3.FEM	<i>iep</i>	<i>e</i>	<i>vitəm</i>		
3.NEUT	<i>idə</i>				

The variation can also be seen in the use of free pronouns when they head a relative clause (cf. §12.3). For example in (678a) and (678b), *idə* (as in the gender system) and *vən_ik_i* (as in the nominal class system) can both be used to refer to the same NP *təre = vən_ik_i* ‘thing = PL.CLF:DIM’.

(678) a. **Nominal class**

d-at mat kup n = a təre = vən_ik_i
 1PL.NPST-take finish thoroughly APPL = PAT thing = PL.CLF:DIM
vən_ik_i to da d-atme.
 PL.CLF:DIM SR PURP 1PL.NPST-work
 ‘We get all the things that are for us to work on.’ [AL-TN-025]

b. **Gender**

Table 10.13: Proforms (nominal class) in Tullil

class	SG		DL	PL	
	A/S _A	O/S _O		NON-HUMAN	HUMAN
CL1: masculine	<i>iap</i>	<i>a</i>	<i>ip</i>	<i>idə</i>	<i>ta</i>
CL2: feminine	<i>iep</i>	<i>e</i>	<i>vitəm</i>		
CL3: diminutive	<i>von</i>		<i>vəlagəp</i>	<i>vənik</i>	
CL4: augmentative	<i>vən</i>		<i>vədabəm</i>	<i>vədau</i>	
CL5: flat	<i>voi</i>		<i>viokəm</i>	<i>viok</i>	
CL6: round	<i>vəp</i>		<i>vəbakəm</i>	<i>vəbak</i>	
CL7: slender	<i>vənəm</i>		<i>vətəm</i>	<i>vətəng</i>	
CL8: segment	<i>vəti</i>		<i>vətəkəm</i>	<i>vətək</i>	
	<i>vət</i>				
CL9: spherical	<i>vələ</i>		<i>vələkəm</i>	<i>vələk</i>	
CL10: cluster	<i>vəgi</i>		<i>vəgatəm</i>	<i>vəgatəng</i>	
CL11: unspecified	<i>idə</i>				

vanəm = ta ta-tat = a tære kurek = pənik_i
 few = PL.CLF:HUM 3PL.NPST-take = PAT thing bad = PL.CLF:DIM
idə_i to təd = a p~pən-m = a molimoli = ta
 3N SR for = PAT GEN~kill-APPL = PAT people = PL.CLF:HUM
 ‘Some people learn bad things that are used for killing people.’
 [AL-DA-061]

The forms of free pronouns in the nominal class system and the gender system are shown in Table 10.12 and Table 10.13. A/S_A and O/S_O differ in the forms of 3rd singulars, also, the O/S_O proforms cliticize to the preceding element, so the initial *v* is subject to consonant assimilation, following the rules stated in Figure 10.1. As exemplified by (679), the O/S_O proform following *tuk* ‘give’ has an allomorph *pələ*, and the A/S_A proform *vələ* is same as the underlying form.

(679) *ta-t~tuk = pələ n = a tədor avar i-to*
 3PL.NPST-IPFV~give = SG.CLF:SPH INSTR = PAT strong still 3N-of
ta, da vələ i-ti~miau.
 3PL PURP SG.CLF:SPH 3N-IPFV~fly
 ‘They give their power to the log, for the log to fly.’ [AL-GN-037]

Nominal demonstratives (cf. §7) can consist of both nominal class marking and gender marking in plural (680a). In this case, the class marking can be omitted, while the gender marking cannot (for instance, in 680b, only gender marking is used).

Table 10.14: Demonstrative indexes (gender)

	SG	DL	PL	
			NON-HUMAN	HUMAN
1	<i>nga-</i>	<i>ngunu-</i>	<i>du-</i>	
2	<i>ngi-</i>	<i>iu-</i>	<i>inə-</i>	
3.MASC	<i>a-</i>	<i>ip-</i>	<i>u-</i>	<i>ta-</i>
3.FEM	<i>e-</i>	<i>itə-</i>		
3.NEUT	<i>u-</i>			

Table 10.15: Demonstrative indexes (nominal class)

class	SG	DL	PL	
			NON-HUMAN	HUMAN
CL1: masculine	<i>a</i>	<i>ip</i>	<i>u</i>	<i>ta</i>
CL2: feminine	<i>e</i>	<i>itə</i>		
CL3: diminutive	<i>von</i>	<i>vəlagəp</i>	<i>vənik</i>	
CL4: augmentative	<i>vən</i>	<i>vədabə</i>	<i>vədau</i>	
CL5: flat	<i>voi</i>	<i>viokə</i>	<i>viok</i>	
CL6: round	<i>vəp</i>	<i>vəbakə</i>	<i>vəbak</i>	
CL7: slender	<i>vənə</i>	<i>vətə</i>	<i>vətəng</i>	
CL8: segment	<i>vəti</i>	<i>vətakə</i>	<i>vətak</i>	
	<i>vət</i>			
CL9: spherical	<i>vələ</i>	<i>vələkə</i>	<i>vələk</i>	
CL10: cluster	<i>vəgi</i>	<i>vəgatə</i>	<i>vəgatəng</i>	
CL11: unspecified	<i>u</i>			

- (680) a. *ta-tinak* = *a* *vədəm* = *a* *təre* = *vənik*
 3PL.NPST-ask = 3SG.M.PAT for = PAT thing = PL.CLF:DIM
vənik-u-vi_{DEM} *nandi*.
 3PL.CLF:DIM-3N-PROXS like.this
 ‘They ask him for these things.’

[WM-LK-019]

- b. *do t̄re = v̄anik u-vi_{DEM} o id̄a-k̄ab̄an̄at = a*
 here thing = PL.CLF:DIM 3N-PROXS TOP N.PST-make = PAT
idum = ip to kalam̄alam = e.
 3N.POSS.eye = DL.CLF:MASC SR eagle = SG.CLF:FEM
 ‘These things here they make (represent) the eyes of an eagle’
 [AL-HD-095]

However, in singular and dual for all classes, or non-human plural for CL1 and CL2, nominal demonstrative only use nominal class marking:

- (681) *ta-tuar bem = a tor = v̄al̄a v̄al̄a-b̄at_{DEM}.*
 3PL.NPST-shout at = PAT wood = SG.CLF:SPH SG.CLF:SPH-PROXH
 ‘They shout at that piece of wood.’ [AL-GN-024]
- (682) *turin u-vi_{DEM} o kori id̄a-nḡap.*
 fire 3N-PROXS TOP NEG 3N.PST-die
 ‘This fire did not stop.’ [GV-TF-016]

When demonstratives are used predicatively, the indexes are the same as those used with nominal demonstratives, except that nominal demonstratives do not use 1st and 2nd person indexes.

- (683) *kori go ‘ngi id̄a u-b̄at’ o kori, me ‘k̄ara ngi*
 NEG NSPEC 2SG.POSS 3N 3N-PROXH TOP NEG and just 2SG.POSS
v̄anik v̄anik-u-b̄at’, me ‘k̄ara ngi von
 PL.CLF:DIM PL.CLF:DIM-3N-PROXH and just 2SG.POSS SG.CLF:DIM
von-b̄at’.
 SG.CLF:DIM-PROXH
 ‘Not ‘ngi id̄a ub̄at’, but it’s ‘k̄ara ngi v̄anik v̄anik ub̄at’ (that’s your character/ways) and ‘k̄ara ngivon vonb̄at’ (that’s your way).’ [JN-BL-008]

In both pronouns and demonstratives where both systems are involved, the choice of which system is to be used in these cases may be affected by pragmatic factors, which are beyond the scope of this study.

10.1.5 Irregular class marking patterns

Some nouns in Tulil get irregularly marked when they occur as the last component before class marking in the core NP. These nouns are mainly kinship nouns, with some other common nouns.

Table 10.16: Irregularly marked kinship nouns in Tulil

glossing	SG	DL	PL
‘father (Fa)’	<i>mama</i>	<i>mama = ip</i>	<i>mama = nəvənik</i>
‘mother (Mo)’	<i>nane</i>	<i>nane = vitəm</i>	<i>nane = nəvənik</i>
‘son (So)’	<i>vil = a</i>	<i>vil = ip</i>	<i>vil = vənik</i>
‘daughter (Da)’	<i>vil = e</i>	<i>vil = vitəm</i>	
‘brother (Br)’ ‘brother-in-law (CoHu)’	<i>mativon</i>	<i>mativon = nip</i>	<i>mativon = nəvənik</i>
‘sister (Z)’ ‘sister-in-law (CoWi)’	<i>bon</i>	<i>bon = nəvitəm</i>	<i>bon = nəvənik</i>
‘uncle (Un)’	<i>laik = a</i>	<i>laik = ip</i> or <i>laik = nip</i>	<i>laik = ta</i> or <i>laik = nəvənik</i>
‘grandfather (GrFa)’ ‘grandchild’ (GrSo, GrDa)’	<i>iaia</i>	<i>iaia = nip</i>	<i>iaia = nəvənik</i>
‘grandmother (GrMo)’ ‘aunt (Au)’	<i>vove</i>	<i>vove = nəvitəm</i>	<i>vove = noak</i>
‘(women’s) grandson’	<i>kəl = a</i>	<i>kəl = nip</i>	<i>kəl = nəvənik</i>
‘(women’s) granddaughter’	<i>kəl = e</i>	<i>kəl = nəvitəm</i>	
‘daughter-in-law’	<i>bani = e</i>	<i>bani = nəvitəm</i>	<i>bani = nəvənik</i>
‘cousin (M)’	<i>məlɲ = a</i>	<i>məlɲ = (n)ip</i>	<i>məlɲ = (n)əvənik</i>
‘cousin (F)’	<i>məlɲ = e</i>	<i>məlɲ = (n)əvitəm</i>	
‘daughter-in-law (SoWi)’	<i>bani = e</i>	<i>bani = nəvitəm</i>	<i>bani = nəvənik</i>

Some kinship single nouns end in phonemes such as /a/ (*mama* ‘dad.SG’, *iaia* ‘grandfather’), /e/ (*nane* ‘mom.SG’, *vove* ‘grandmother’), /von/ (*mativon* ‘brother.SG’). Though having the same forms as the class markings = *a* ‘SG.CLF:MASC’, = *e* ‘SG.CLF:FEM’ and = *von* ‘SG.CLF:DIM’ respectively, these phonemes do not behave the same as NP class markings with common nouns: endings of kinship nouns are not overt markings of NP class, and are non-separable parts within the noun root; on the contrary, roots of common nouns seldom end in these phonemes⁷². First of all, the final phonemes in these nouns are kept in the dual and plural forms (Table 10.16). Secondly, when the irregular kinship terms is the final element of the NP, no class marker is added. As shown in the following examples, the NPs always get overt class marking when the head noun is modified in the NP, so that the class marker attaches

72. One exception is the borrowed noun *a-tade* ‘Sunday; church; week’

(i) *i-mator mata a-tade muitəm.*
33SG.F.PST-sit for ART-sunday two.CLF:FEM
‘It (rain) stayed for two weeks.’

[AL-RM-092]

to other elements, such as an adjective, a particle (684), or a numeral (685). We can see from (685) that the word *mativon* ‘brother’ belongs to the masculine class (rather than diminutive class as suggested by the ending phonemes *von*) and requires a masculine class marker to form an NP, if there is a modifier in the NP. And in cases like (684), it is probably the case that the addition of a class marker =*a* merges with the noun root which also ends in vowels (cf. §2.2.2).

- (684) *bə = mama konəŋ = a o kori və-ŋəp.*
 IAM = dad only = SG.CLF:MASC TOP NEG 3SG.M.PST-die
 ‘It was only dad that didn’t die.’ [KV-SO-027]

- (685) *ngang nga-n = a nga laik = a me*
 1SG 1SG-COM =PAT 1SG.POSS.AL uncle = SG.CLF:MASC and
ngə = mativon təgət = a o du-pədəm
 1SG.POSS.INAL = brother one = SG.CLF:MASC TOP 1PL-after
 ‘I, my uncle and my brother were [going] after [them].’ [CM-B2-080]

In addition, kinship nouns get irregular dual and plural markings. A nasal element /n(ə)/ is usually inserted between kinship roots and class markings. On the other hand, while DL markings usually correspond to NP class, PL markings use CLF:diminutive rather than masculine or feminine classes, e.g. *iaia = nəvənik*.

Other irregular nouns are summarized in Table 10.17. The same pattern holds true for irregular nouns: when they occur with modifiers, the class markings are usually regular (686b). However, the plural form can also be used as the stem (686c).

- (686) a. *doto da tə-p~pən-mə tang ta-n = a*
 when PURP 3PL.PST-IPFV~fight-APPL REFL/RECP 3PL-COM =PAT
Mərubət, o lokuvə me kəletuak tə-p~pən.
 Baining TOP man.PL and woman.PL 3PL.PST-IPFV~fight
 ‘when they want to fight with Baining people, men and women fought.’
 [AL-BT-024]
- b. *doto laik = ta ta-ti~vi tə = be p~pən, me*
 when big = PL.CLF:HUM 3PL.NPST-IPFV~go to IPFV~fight and
lok ləm = ta
 man young = PL.CLF:HUM
 ‘When elders go out to fight, and the young men...’ [AL-HD-025]

- c. *lokuvə laik = ta ta-kubək ba tipur təpma vakue.*
 men big = PL.CLF:HUM 3PL.NPST-chant in bush with woman
 ‘The elder men will chant in the bush for (enchancing) a woman.’
 [WM-LP-025]

Table 10.17: Irregularly marked nouns in Tulil

glossing	SG	DL	PL.HUM	PL.NHUM	UNSPEC
‘female’ (human, animal)	<i>vakue</i>	<i>vak = pitəm</i>	<i>kəletuak</i>	<i>vak</i>	
‘male’ (human, animal)	<i>lok</i>	<i>lok = ip</i>	<i>lokuvə</i>	<i>lok</i>	
‘child’ (human, animal)	<i>idil = a</i> <i>idil = e</i>	<i>idil = ip</i> <i>idil = vitəm</i>	<i>idulənga</i>	<i>iduləng</i>	
‘something’	<i>təre = a</i>			<i>təre = vənək</i>	<i>təreuk</i>

In the case of the noun *təre* ‘something’, the plural form is *təre = vənək*. The unspecified class form is *təreuk*. The modifying pattern utilize different stems for these two.

- (687) a. *ta-bət o ta-to~bokbok ta-te, udu o*
 3PL-PROXH TOP 3PL.NPST-IPFV~talk 3PL-QUOT 1PL TOP
du-kəbənət = a go təreuk kurek u-bət da təda
 1PL.PST-make =PAT NSPEC thing bad 3N-PROXH PURP for
leir n = a molimoli = ta.
 harm APPL =PAT people = PL.CLF:HUM
 ‘They said that we made something bad for harming people.’
 [AL-RM-124]
- b. *malir o mətə bokbok = pon to idə-vəgar = a təre*
 potion TOP like talk = SG.CLF:DIM SR 3N.PST-cover =PAT thing
tar = vənək.
 many = PL.CLF:DIM
 ‘*malir* is like a word that covers many things.’ [WM-LP-002]

Sometimes an NP is assigned to a nominal class other than CL11 or non-human plural of CL1/CL2, but not overtly marked by nominal class markings. When another modifying constituent such as an adjective occurs, the marking will appear. The class can also manifest in agreement forms. This commonly happens when the noun is a borrowing (e.g. *a-pəkət* ‘knife’ belongs to FEM, *a-taem* ‘time’ belongs to MASC as shown in 688), or proper nouns (eg. 689).

- (688) *nə-p~bo* *avar i-tu* *be a-taem* *a-vi* *to*
 LOC-EP~UP also 3N.NPST-grow at ART-time 3SG.M-PROXS SR
ngə-məkən.
 1SG.PST-plant
 ‘Next year it will grow at the same time that I planted.’ [BM-PP-010]
- (689) *tove* ***a-country*** *papua.new.guinea* *o* *ləm konəng=a...*
 because ART-country PN TOP new only = SG.CLF:MASC
 ‘because the papua new guinea country is still a new one...’
 [ER-EA-041]

10.2 Functions of nominal class: a preliminary account

Each noun root in Tulil is associated with the assignment to one or more nominal classes. As we have already seen in earlier examples, when adjectives and quantifiers are used as NP heads, they have the ability to take all class markings according to the context.

- (690) *kəvər* ‘white’ (ADJ)
 kəvər = a ‘white man; the white one (CL1)’
 kəvər = e ‘white woman; the white one (CL2)’
 kəvər = von ‘the white small one (CL3)’

As for nouns, noun roots are in themselves unspecified in terms of nominal class membership. Thus one noun root can be seen with different class endings, and the corresponding NPs can have different types of denotations (and respective reference) depending on the nominal class marking they take.

- (691) *bəli = a* ‘boar’ (CL1:masculine)
 bəli = e ‘sow’ (CL2:feminine)
 bəli = von ‘piglet’ (CL3:diminutive)

Nouns are still somewhat restricted concerning the types of class marking they can be assigned with. Table 10.18 is a list of examples of NP (nouns) as in different classes (all singular forms):

Semantically, the classes of MASC and FEM differ from the size and shape based classes in the following ways:

- 1) They are associated with the largest classes of Tulil nouns (count).
- 2) Size/shape-based classes can be derivational and productive, while the assignment of referents into MASC/FEM classes are mostly conventional, with the

Table 10.18: Examples of NP membership assignment

root	(<i>idə</i> ^a) <i>nok</i>	<i>ioi</i>	<i>nang</i>	<i>ləvək</i>	(<i>idə</i>) <i>kiou</i>
CL1: masculine	<i>idə nok = a</i> 'a finger'		<i>nang = a</i> 'a tree'	<i>ləvək = a</i> 'a banana'	<i>idə kiou = a</i> 'a mouth'
CL2: feminine	<i>idə nok = e</i> 'a thumb'		<i>nang = e</i> 'a dead/hardened tree/wood'		<i>idə kiou = e</i> 'a chin'
CL3: DIMINUTIVE	<i>idə nok = pon</i> 'an arm'		<i>nang = bon</i> 'a small stick'	<i>ləvək = pon</i> 'a small banana'	
CL4: augmentative			<i>nang = bən</i> 'a big stick'		
CL5: flat	<i>idə nok = poi</i> 'a wing'	<i>ioi = voi</i> 'a river'	<i>nang = boi</i> 'a tree leaf'		
CL6: round		<i>ioi = vəp</i> 'a pond'			
CL7: slender			<i>nang = bənəm</i> 'a slender stick'		
CL8: segment	<i>idə nok = pəti</i> 'a hand'			<i>ləvək = pət</i> 'a banana field'	
CL9: spherical			<i>nang = bələ</i> 'a log'		<i>idə kiou(v) = vələ</i> 'a lip'
CL10: cluster				<i>ləvək = pəgi</i> 'a cluster of banana tree trunks'	
CL11: unspecified		<i>ioi</i> 'water'			

^a 3rd neuter possessive pronoun; compulsory for inalienably possessed nouns in citation forms.

criteria somehow unclear (except for humans and some livestock, when they reflect the natural gender).

3) MASC and FEM are mutually exclusive in the sense that they cannot classify the same referent (that is to say, a referent cannot belong to MASC and FEM at the same time). However, the size/shaped-based classes are most of the time descriptive and add new semantic content to the NP, and identify the type of referent more specifically, so they are not incompatible with the MASC / FEM classes. For instance, in 692, the referent 'my Butam ancestors' are denoted by different NPs belonging to different nominal classes: *laik = ta* 'ancestors' as in MASC/FEM.PL, *molimoli laik = ta* 'big men' (MASC/FEM.PL), *kabar = ta* 'tall men' (MASC/FEM.PL) and *mərot = pədau* 'huge ones' (AUG.PL).

- (692) *ngang o nga laik = ta Butəm o molimoli*
 1SG TOP 1SG.POSS big = PL.CLF:HUM PN TOP people
laik = ta me kabar = ta me mərət = pədau.
 big = PL.CLF:HUM and tall = PL.CLF:HUM and huge = PL.CLF:AUG
 ‘My ancestors Butam are big and tall and huge people.’ [AL-BT-020]

10.2.1 Class assignment of masculine/feminine

10.2.1.1 Natural gender

For referents that are human/livestock, masculine and feminine class marking reflect the natural gender of these referents. Table 10.19 shows the same noun root that are human/livestock assigned into MASC and/or FEM classes.

Table 10.19: Natural gender in class assignment

STEM		MASC		FEM	
<i>lok</i>	‘male’	<i>lok = a</i>	‘a man’	<i>lok = e</i>	‘a tomboy’
<i>vak</i>	‘female’	<i>vaku = e</i>	‘a woman’		
<i>bəli</i>	‘pig’	<i>bəli = a</i>	‘a boar’	<i>bəli = e</i>	‘a sow’
<i>kəreku</i>	‘chicken’	<i>kəreku = a</i>	‘a cock’	<i>kəreku = e</i>	‘a hen’
<i>kəvop</i>	‘dog’	<i>kəvov = a</i>	‘a male dog’	<i>kəvov = e</i>	‘a female dog’
<i>tul</i>	‘bird (generic)’	<i>tul = a</i>	‘a male bird’	<i>tul = e</i>	‘a female bird’

For the generic term *tul* ‘bird’, the class marking can also reflect the class of the specific species the bird belongs to that is conventionalized. For instance, *balut = a* ‘bird sp.’ can be referred as *tul = a* ‘bird = SG.CLF:MASC’ and *məliar = e* ‘parrot sp.’ can be referred as *tul = e* ‘bird = SG.CLF:FEM’.

10.2.1.2 Conventional gender

The class assignment of masculine and feminine are most of the time conventional. Most animals do not differentiate between masculine and feminine class, and are assigned to either conventionally. The semantic basis of the MASC/FEM difference is not immediately clear and is beyond the scope of this study. Table 10.20 shows some examples of NPs, and Table 10.21 shows example of the same noun roots associated with both classes.

Table 10.20: Class assignments of masculine and feminine

category	MASC		FEM	
ANIMALS	<i>tudək = a</i>	‘wallaby’	<i>muruvu = e</i>	‘cassowary’
	<i>kəgor = a</i>	‘eel’	<i>kiuv = e</i>	‘crab’
	<i>kənunət = a</i>	‘mosquito’	<i>kətongtong = e</i>	‘butterfly’
BODY PARTS	<i>(idə) nung = a</i>	‘buttocks’	<i>(idə) tukəm = e</i>	‘knee’
	<i>gən = a</i>	‘brain’	<i>bəlbəl = e</i>	‘liver’
OTHERS	<i>təron = a</i>	‘smell’	<i>latu = e</i>	‘garden’
	<i>kətəlun = a</i>	‘earthquake’	<i>kəvənav = e</i>	‘rain’
	<i>togor = a</i>	‘circle’	<i>kəbit = e</i>	‘rope’
	<i>pək = a</i>	‘brightness’	<i>kədikən = e</i>	‘angry’

Table 10.21: Class assignment of inanimate (sample)

stem	MASC		FEM	
<i>kəlak</i>	<i>kəlak = a</i>	‘house with gable roof’	<i>kəlak = e</i>	‘house with flat roof’
<i>(idə) nok</i>	<i>(idə) nok = a</i>	‘finger’	<i>(idə) nok = e</i>	‘thumb’
<i>kəmur</i>	<i>kəmur = a</i>	‘cloud, fog’	<i>kəmur = e</i>	‘smoke’
<i>nang</i>	<i>nang = a</i>	‘tree’	<i>nang = e</i>	‘dead tree, hardened wood’
<i>urəng</i>	<i>urəng = a</i>	‘waterfall’	<i>urəng = e</i>	‘flat river’
<i>bərən</i>	<i>bərən = a</i>	‘hilltop’	<i>bərən = e</i>	‘slope’
<i>viu</i>	<i>viuv = a</i>	‘taste; tasty’	<i>viuv = e</i>	‘sea’
<i>kəl</i>	<i>kəl = a</i>	‘torch’	<i>kəl = e</i>	‘flame’
<i>ton</i>	<i>ton = a</i>	‘back; spine’	<i>ton = e</i>	‘bone’

10.2.1.3 Borrowings

Borrowings in Tulil can also be assigned to the masculine and feminine classes, and are sometimes not overtly marked in the singular forms (Table 10.22).

10.2.2 Class assignment of size/shape-based classes

As we can see from the discussion above, member assignment of masculine and feminine classes is most of the time arbitrary, except when the biological gender is involved. In contrast, the size- and shape-based classes are commonly semantically transparent and used in a more productive way, often allowing for the derivation of

Table 10.22: Class assignment of borrowings (sample)

MASC		FEM	
<i>a-purpur = a</i>	‘flower’	<i>a-pəkət</i>	‘knife’
<i>aeland</i>	‘island’	<i>a-tad = e</i>	‘sunday; church’
<i>a-lain</i>	‘linage’	<i>a-pato = e</i>	‘duck’
<i>a-taem</i>	‘time’	<i>a-torotel</i>	‘turtle’
<i>a-rot</i>	‘road’		
<i>a-tepelin</i>	‘airplane’		

different nouns from the same root, using different class markers. In a few cases the use of these classes in NPs are lexicalized to some extent. I will briefly discuss the commonly found members of each nominal class, and comment on the meanings. For a full picture of the semantics of each class, further research (elicitation or stimulus-based enquiries) will be needed.

10.2.2.1 Diminutive class

The prototypical members of the diminutive class are physical objects that are small in size (693). Some examples are shown in Table 10.23.

- (693) *idil = a* *və-tar* = *a* ***utəki = von*** *be*
 small = SG.CLF:MASC 3SG.M.PST-stick.into = PAT spear = SG.CLF:DIM at
nə-mə *mənu* *a-vi* *nang = a*.
 LOC-DOWN back.of 3SG.M-PROXS tree = SG.CLF:MASC
 ‘A boy stuck the small spear onto the back of the tree.’ [JN-KL-026]

Table 10.23: Noun class of animals (sample)

STEM		MASC/FEM		DIM
<i>lok</i>	‘male’	<i>lok = a</i>	‘a man’	<i>lok = pon</i> ‘a boy/young man’
<i>vak</i>	‘female’	<i>vak = e</i>	‘a woman’	<i>vak = pon</i> ‘a girl/young woman’
<i>bəli</i>	‘pig’	<i>bəli = a</i>	‘a boar’	<i>bəli = von</i> ‘a piglet’
<i>kəreku</i>	‘chicken’	<i>kəreku = e</i>	‘a hen’	<i>kəreku = von</i> ‘a chick’
<i>tul</i>	‘bird’	<i>tul = a</i>	‘a bird’	<i>tul = von</i> ‘a small bird’
<i>tuk</i>	‘road’	<i>tuk = a</i>	‘a road’	<i>tuk = pon</i> ‘a trail’

Some common lexicalized uses of the diminutive class involved *kəl = von* ‘face’,

vəti = *von* ‘day’, *ngə* = *von* ‘sickness’⁷³. These nouns are always associated with diminutive class, and the semantic transparency of the class marking is lost. Thus in example 694, *ngə* = *von* ‘sickness’ is modified by the adjective *laik* ‘big’. The meaning of the modifier does not interfere with the diminutive class marking.

- (694) *təgə* = *von* *o* *tət-e* *ngəp laik* = *pon* *idə-vən-mə*
 one = SG.CLF:DIM TOP 3PL-QUOT die big = SG.CLF:DIM 3N.PST-hit-APPL
ta.
 3PL
 ‘One theory (lit. saying) is that they say a plague hit/killed them.’
 [LR-TH-081]

Diminutive marking also commonly expresses things relating to language/sound: *Bior* = *von* ‘Tolai language’; *Tulil* = *von* ‘Tulil language’; *bokbok* = *pon*⁷⁴ ‘one piece of saying; one word’; *təvəng* = *bon* ‘a song’; *məkatak* = *pon* ‘a dirty word’, etc. In example 694, *təgə* = *von* means a type of saying, without a specified noun root.

10.2.2.2 Augmentative class

The augmentative class usually associates with physical objects that are big in size, e.g. *nangbən* ‘a big stick’. Common members of this class include *kəmur* = *vən* ‘cloud’, *bərən* = *bən* ‘mountain’, *dərəng* = *bən* ‘bowels; rectum’, *nung* = *bən* ‘a big ass’, *ber* = *vən* ‘umbrella’, *ivu* = *vən* ‘grave mound’ etc.

- (695) *ngə-kutəng* *mat* = *a* *nang* = *bən* *o* *ngə-vok* = *a*
 1SG.PST-cut take = PAT wood = SG.CLF:AUG TOP 1SG.PST-break = PAT
bəli = *a* *və* = *lat* = *a*.
 pig = SG.CLF:MASC 3SG.M.POSS.INAL = head = SG.CLF:MASC
 ‘I cut (pst.) and got a big stick, I broke the pig’s head.’ [DV-HP-062]

- (696) *ivu* = *vən* *nə-bət* *o* *kotək* = *pən*,
 grave.mound = SG.CLF:AUG LOC-PROXH TOP absent = SG.CLF:AUG
vən *to* *du-mərov* = *a* *io* *du-kəbənət*
 SG.CLF:AUG SR 1PL.PST-bury = 3SG.M.PAT then 1PL.PST-make
 = *pən*.
 = SG.CLF:AUG
 ‘The grave mound there was missing, the one that we buried him and made.’
 [AL-SO-019]

73. *ngəp* ‘die’ + *von* SG.CLF:DIM → *ngə* = *von* ‘sickness’

74. In Tulil village 2 (the Catholic community, *bokbok* = *pət* with CL5:SEG marking is commonly used in this case.)

- (700) *də-təvat* *n* = *idə nə-mu* *bərodəm* = *a*
 1PL.NPST-release APPL = 3N LOC-INSIDE inside = PAT
ioi = vəp *to ləmat = a,* *nə-mu* *ba*
 water = SG.CLF:ROUND of coconut = SG.CLF:MASC LOC-INSIDE in
tubakav = e.
 leaf.container = SG.CLF:FEM
 ‘We put them inside the water of the coconut milk, inside the leaves.’
 [AL-TN-020]

10.2.2.5 ‘Slender’ class

The ‘Slender’ class usually describes an object which is long and narrow, and is relatively small in size, such as *nang = bənəm* ‘a small stick’. Other members include *ro = vənəm* ‘a piece of bamboo’, *kəgor = vənəm* ‘a small eel’, *kubək = pənəm* ‘a worm’, *idə kən = bənəm* ‘a neck’, *apəkət = vənəm* ‘a small knife’, *ratə = vənəm* ‘a small basket’.

- (701) *molimoli = a* *a-vi* *a-n* = *a* *va*
 people = SG.CLF:MASC 3SG.M-PROXS 3SG.M-COM = PAT 3SG.M.POSS
dərng = e *ip-mat* = *a* *ro = vənəm,* *io*
 old = SG.CLF:FEM 3DL.M-get = PAT bamboo = SG.CLF:SLE then
ip-valət = *pənəm.*
 3DL.M-split = SG.CLF:SLE
 ‘Then the man and his wife they got the bamboo cut, they split it.’
 [AL-RM-103]

10.2.2.6 ‘Segment’ class

The ‘segment’ class is associated with segments that are cut off from a ‘complete’ object, with straight/sharp boundaries, such as *ibən = bət* ‘a piece of land’, *logə = vət* ‘a bench (made of a piece of wood)’, *li = vət* ‘a piece of taro’. The meaning of ‘land’ and ‘sitting bench’ can be transferred to other entities belong to these categories. For instance, *mato ~ mator = vət IPFV ~ sit = SG.CLF:SEG* can mean either ‘the place we stay’ or ‘the thing we sit on’.

- (702) *nga-kutəng təd = a balakətəria = vətəng, io nga-tar*
 1SG.NPST-cut for = PAT four = PL.CLF:SEG then 1SG.NPST-stick.into
vətəng...
 PL.CLF:SEG
 ‘I cut it (the pitpit) into four short pieces, then I stick them (into the pits).’ [BM-PP-018]

vət and *vəti* are included the same class because they have same dual and plural forms. Two words are found for *vəti*: *idə nok = pəti* ‘arm’ and *idə katə = vətəti* ‘a leg’, which may conform to the semantic description of ‘segment’ in the sense that they can be viewed as easily cut off of the whole body, with clear boundaries.

Other lexicalized use of *segment* class include *vul = vət* ‘darkness’ (*vul = a* ‘night’) and *bokbok = pət* ‘a saying, a word’ (commonly used in Tulil village no.2) (cf. §1.1).

10.2.2.7 ‘Spherical’ class

Prototypical members of the spherical class can be of spherical or cylindrical shape, such as *mərənəmən = bələ* ‘a seed’, *vəgəl = vələ* ‘a stem’, *tor = vələ* ‘a log’, *nang = vələ* ‘a log’, *tənur = vələ* ‘a rope of a basket’, *tun = bələ* ‘a drum’; or a partition of the spherical/cylindrical surface (bulging surface), such as *ku = vələ* ‘a muscle’, *idumi = vələ* ‘an eye lid’, *idə kiou = vələ* ‘a lip’, *idə latə = vələ* ‘front part of the head/face’.

- (703) ‘*go təre = a a-bət o tor konəng = bələ*
 NSPEC thing = SG.CLF:MASC 3SG.M-PROXH TOP log only = SG.CLF:SPH
vələ-bət to vələ i-ti~miau.’
 SG.CLF:SPH-PROXH SR SG.CLF:SPH 3N.NPST-IPFV~fly
 ‘That ‘something’ is just a log that is flying.’ [AL-GN-016]

The spherical class can also have diminutive meaning: *apəkət = pələ* ‘a small knife’, *kələk = pələ* ‘a small house’, *məl = vələ* ‘a piece of cloth; handkerchief’.

10.2.2.8 ‘Cluster’ class

Two members are found in the cluster class: *turin = bəgi* ‘stove made by a pile of stones’ and *ləvək = pəgi* ‘banana tree trunks growing together’.

- (704) *vi* *ba tuk=pon* *o* *və-tərut* *ba*
 3SG.M.PST.go in road=SG.CLF:DIM TOP 3SG.M.PST-hide in
ləvək=pəgi, *təpm =a* *a-pəkət=pənəm*.
 banana=SG.CLF:CLU with =PAT ART-knife=SG.CLF:SLE
 ‘He walked on the small trail, he hid among the banana trunks, with a
 knife.’ [GK-CC-026]

Chapter 11

Coordination

‘Coordination’ refers to the symmetrical relation between syntactic units into some larger group of the same category or status. The syntactic units being linked are called **coordinands**, and the linking elements are commonly called **coordinators** (cf. Haspelmath, 2004, 2007).

Coordinators in Tulil include *me* ‘and’, *ba* ‘or’, *məie* ‘but’. Other conjunctions are also involved in expressing coordination, such as (*io* ‘and then’, etc.) However, conjunctions other than coordinators usually cannot link elements on a phrasal level, but only clausal level (see table 11.1; for detailed differences and similarities between coordinators and connective adverbs, see chapter on word class, cf. 4). Also, given that there is no morphosyntactic criteria to clearly distinguish a sentence from a clause, the cases of clauses being coordinands in this chapter is merely based on prosodic structure, and is probably not always unproblematic.

Semantically, different types of coordination can be distinguished (cf. Haspelmath, 2004:5-6):

- (A) Conjunctive coordination
- (B) Adversative coordination
- (C) Disjunctive coordination

11.1 The syntactic structure of coordinate constructions

11.1.1 Juxtaposition

In Tulil, coordination can be either **syndetic** (have overt linking items), or **asyndetic** (lack an overt linking item; also called **juxtaposed**). Clause combining in Tulil is commonly structured juxtaposedly:

Table 11.1: Coordination in Tulil

Types of coordination	Syntactic strategies	Coordinands	
		Phrases	Clauses
Conjunctive	Juxtaposition	✓	✓
	<i>me</i> ‘and’	✓	✓
	<i>io</i> ‘and then’	×	✓
	<i>o</i> TOP	×	✓
Disjunctive	Juxtaposition	✓	×
	<i>ba</i> ‘or’	✓	✓
Adversative	<i>mæie</i> ‘but’	✓	✓

- (705) [*du-kərtang mə= nə-m~bo mənibərui*], [*du-p~pi*
 1PL.PST-rise FROM= LOC-IPFV~UP morning 1PL.PST-IPFV~go
],
 [*du-p~pi*], [*du-p~pi*], [*bə= du-vi*
 1DL.PST-IPFV~go 1PL.PST-IPFV~go IAM= 1PL.PST-go
ba tuk kəməron=a], [*bə= du-vi ba*
 at road different=SG.CLF:MASC IAM= 1PL.PST-go at
tuk=a iap to tə-raot n =a nangə].
 road=SG.CLF:MASC 3SG.M SR 3PL.PST-pull APPL =PAT tree
 ‘We set off from there in the morning, we walked and walked, we
 walked on a different track, we went on the road they cut down trees
 (logging).’ [CM-B2-053]

In Tulil, phrases can also be juxtaposed, such as the juxtaposition of two NPs in (706) (the second NP only includes an inflected numeral, and the referent ‘month’ is understood from the former NP):

- (706) *tə-kubək mata mətə* [*vəgam muitəm*]_{NP}, [*muitəm.magət*]_{NP}.
 3PL.PST-fast for like month two.CLF:FEM three.CLF:FEM
 ‘They fasted for like two or three months.’ [WM-DC-002]

In the case of multiple coordination, it could be the case that every coordinand involves a coordinator, or no coordinators at all as shown in (705). However, a coordinate construction can also have coordinators accompanying coordinands in an unpredictable way. There is no syntactic regulation on where the coordinators should occur in this case.

- (707) *ləvək o məte u-vi* [*a-iaɤ*]_{NP},
 banana TOP like 3N-PROXS ART-banana.sp.
 [*a-kin = a*]_{NP}, [*ləvək*
 ART-banana.sp. = SG.CLF:MASC banana
a-kin = a]_{NP}, *me* [*ləvək a-tiai*]_{NP},
 ART-banana.sp. = SG.CLF:MASC and babana ART-banana.sp.
 [*a-mogi*]_{NP}, [*a-maram*]_{NP}, [*ləvək idə to*
 ART-banana.sp. ART-banana.sp. banana 3N SR
mən~məningau]_{NP}.
 RED~ripe
 ‘The bananas [I talked about] is like these (listing species of bananas),
 those bananas that get ripe.’ [WM-JJ-004]

In (707), the names of different types of bananas (NPs) are listed, with one generalizing NP at the end. The NPs are mostly juxtaposed, except that one coordinator *me* ‘and’ is attached to the fourth phrase. The coordinator *me* in this case does not differ functionally from simple juxtaposition, but could be merely signalling a hesitation.

Also we can see from the above examples that only few formal indication can be drawn on to identify a juxtaposed coordination, except prosody: The final clause is marked by falling intonation, and there is usually a slight rise in intonation at the end of each clause (pitch contours of multiple declarative clauses is discussed in §2.4.2).

11.1.2 Coordinators

In a coordinate construction, the coordinator usually occurs between the coordinands, syntactically closer to the coordinand that follows it (“A co-B”), due to two reasons:

- (A) The natural intonation break is before the coordinator (so does punctuation, when the speakers write);
- (B) Coordinators such as *me* ‘and’, *məie* ‘but’ can introduce a sentence while occurring in sentence-initial positions, forming an elliptical structure, where the first coordinand is recoverable from the context; and functioning as a conversation starter (708, 709).

- (708) *io ava i-tir moli, et-e, 'mæie ngunu*
 then again 3SG.F.PST-ask again 3SG.F.NPST-QUOT but 1DL.POSS
uil = a b = a-bi?
 child = SG.CLF:MASC IAM = 3SG.M-where
 '[She asked, 'where's our son', he did not reply.] she asked again, she
 said, "but where's our son?"' [SV-ES-029]

- (709) *io nga-tir kup ngan-e, "me ta-ti~vi*
 then 1SG.PST-ask thorough 1PL.NPST-QUOT, 'and 1PL.NPST-IPFV~go
ko takə = nə-bo?"
 only TO = LOC-UP'
 '[They told us everything about the mountain, ...we looked up to the
 mountain like that, the name of the mountain is Baram.] Then I asked
 (about everything) I said, "and people just go up there?"'
 [CM-B2-035]

In (708), the woman has already asked her husband exactly the same question, but he did not reply, so she asked again with *mæie* introducing the sentence. While in (709), the quoted question intends to add more understanding about the mountain that "we" have already talked about, which is the question, "do people go up there?" In both cases, the coordinators are conversation starters that build connection to the former contexts.

There is no clear boundary between membership of the coordinator category, and other linking elements belonging to the preposition or adverb categories. Coordinators in Tulil typically include *me* 'and', *ba* 'or', *mæie* 'but'. Other conjunctions involved in expressing coordination include discourse connective (*io* 'and then, so') and topicalizer *o*.

11.1.3 Coordinands

In Tulil, the coordinands can be phrases (NP, PP) or clauses. It is possible to have binary coordination (two coordinands in a coordinate structure, as in 710), as well as multiple coordination (more than two coordinands in a coordinate structure). Only *me* 'and' (711a) and *ba* 'or' (711b), but not *mæie* 'but', can be used in multiple coordination.

- (710) *vanəm = ta o tə-merti idə, me vanəm = ta*
 some = PL.CLF:HUM TOP 3PL.PST-reject 3N and some = PL.CLF:HUM
o kori tə-təm da a-taup bem = idə.
 TOP NEG 3PL.PST-know PURP 3SG.M.NPST-hold at = 3N
 ‘Some people refused to take them, and some they didn’t know how to
 handle them (the things coming from “white men”).’ [AL-TC-004]

- (711) a. *iep i-kəvaon = a mətmət me tul me vadok.*
 3SG.F 3SG.F.PST-steal = PAT food and bird and shell
 ‘She stole food and birds and shell money.’ [JN-KL-005]
- b. *doto udu o mukəm.magərung n = udu, ba udu o*
 when 1PL TOP three.CLF:MASC APPL = 1PL or 1PL TOP
balakətəria n = udu, ba iu o mukəm konəng nə
 four APPL = 1PL or 2DL TOP two.CLF:MASC only APPL
iu, ba udu o libəti n = udu, avar təng~təgət = a
 2DL or 1PL TOP five APPL = 1PL still RED~one = SG.CLF:MASC
ngi tubakav = e i-mətor nə-bət təpm
 2SG.POSS parcel = SG.CLF:FEM 3SG.F.PST-sit LOC-PROXH with.on
= a ngi pau.
 PAT 2SG.POSS ritual.article.
 ‘When we are three of us, or we are four of us, or you (dl.) are just
 two of you, or we are five of us, still each one of you has your parcel
 there with your ritual articles.’ [AL-DA-009]

All coordinators can be used with both phrasal and clausal coordinands and their various combinations (exemplified by *me* ‘and’).

11.1.3.1 Clause-internal coordination

The coordinands can be clause-internal, such as NPs (712) and PPs/locational (713, 714) phrases. The NP coordinands can be arguments of the verb (712a), or arguments of the preposition (712b).

(712) **NPs**

- a. *bə = də-p~pi, ti [lok ləm = ta]_{NP} me*
 IAM = 1PL.NPST-IPFV~go LEST man young = PL.CLF:HUM and
 [*vak ləm = ta*]_{NP} *ta-tengəp.*
 woman young = PL.CLF:HUM 3PL.NPST-sleep
 ‘Let’s go, lest the young men and women go to bed (so they won’t see what we are going to show).’ [AL-GN-022]
- b. *və-təm = a m~miau ba [tarəgau me kələmələm]_{NP}.*
 3SG.M.PST-know = PAT GEN~fly in eagle and bird.sp
 ‘He knows how to fly by eagle and bird.’ [AL-DA-133]

(713) **PPs**

- a-mar mukəm konəng to ləm bem ta, [be Tulil]_{PP} me [be Butəm]_{PP}.*
 ART-hundred two only SR alive at 3PL at PN and at
 PN
 ‘Only 200 were alive among them, among the Tulil people and among the Butam people.’ [LR-TH-048]

(714) **LOCATIONAL PHRASES**

- ngə-nang idə ba ngə = nok, [təkə = nə-mu ba*
 1SG.PST-rub 3N in 1SG.POSS.INAL hand TO = LOC-INSIDE in
kat = a] ba [tə = ba mətəvən = boi]
 container = SG.CLF:MASC or TO = in banana.leaf = SG.CLF:FLAT
 ‘I rubbed them in my hand, into inside the pot, or into the banana leave.’ [KP-CT-012]

It is also possible to link phrases of different kinds, such as NP + PP:

- (715) *ta məngədə [Nolvon]_{NP}, me [Təvələura]_{NP}, me*
 3PL.CLF:HUM village PN and PN and
 [*ba Malira]_{PP}, me [ba Utəma]_{PP}, nə-mumə term = a*
 in PN and in PN LOC-DOWN beside = PAT
vüv = e.
 sea = SG.CLF:FEM
 ‘Their villages are Nolvon, Təvələura, and at Malira, and at Utəma, down there next to the sea.’ [LR-TH-018]

In (715), the coordinands are place names, linked by the coordinator *me* ‘and’. The first two place names are NPs, while the two others are PPs⁷⁵).

11.1.3.2 Clausal coordination

Clausal coordination includes coordination of verbal clauses and non-verbal clauses:

(716) a. Verbal clauses

bə = tə-ŋəp katum, tove [tə-p~pi bərtəm]
 IAM = 3PL.PST-die all because 3PL.PST-IPFV~go night

me
 and

[tə-m~miau ba taragau] me [tə-p~pən m
 3PL.PST-IPFV~fly in eagle and 3PL.PST-IPFV~hit APPL
 = a molimoli = ta]

= PAT people = PL.CLF:HUM

‘They all died because they were walking at night and they were flying in eagles and they killed people.’ [AL-DA-157]

b. Nonverbal clauses

[lokuvə o avar molimoli laik = ta] me [kəletuak
 man.PL TOP also human big = PL.CLF:HUM and woman.PL
o avar molimoli laik = ta]

TOP also human big = PL.CLF:HUM

‘Men are big people and women are also big people.’ [AL-BT-021]

Unlike the coordination of nonverbal clauses shown in (716b), it is sometimes difficult to tell apart the coordination of nonverbal clauses and simple noun phrases, given that NPs can be nonverbal clauses on their own without other elements (§3.3).

(717) *ngang o nga laik = ta Butəm o [molimoli*
 1SG TOP 1SG.POSS.AL big = PL.CLF:HUM PN TOP people
laik = ta] me [kabar = ta] me [mərot = pədau
 big = PL.CLF:HUM and tall = PL.CLF:HUM and huge = PL.CLF:AUG
]

‘My ancestors Butam are big and tall and huge people.’ [AL-BT-020]

75. Place names commonly include a preposition that is conventional, and behave grammatically both like an NP and PP: on the one hand, they are used in listing of names as shown in, on the other hand, a place name such as *ba Malira* cannot follow another preposition (cf. §4.2.2.1

In (717), the coordinating construction *molimoli laik = ta me kabar = ta me m̄arot = p̄ad̄au* linked by two *me* ‘and’ can be analyzed as: 1) a coordination of three modifiers of NPs (‘The Butam ancestors are big and tall and huge people.’); 2) a coordination of three NPs (‘The Butam ancestors are big people and tall (people) and huge (people).’) 3) a coordination of three nonverbal clauses (‘The Butam ancestors are big people, and they are tall (people), and they are huge (people)’). All the above analyses are valid in this case.

It is also possible to link elements of different kinds (718, linking a verbal and a nonverbal clause), even on different levels (719, linking a verbal clause and prepositional phrase).

- (718) *doto* [*v-̄atuk* *m̄anu* = *e*] *me* [*tiktik*],
 when 3SG.M.PAT-step back.of = 3SG.F.PAT and strong,
io b̄a = v-atang *t̄a = m̄anu* = *e* *da b̄a =*
 so IAM = 3SG.M.PST-jump TO = back.of = 3SG.F.PAT PURP IAM =
v̄a-t̄av̄ak = *a* *il̄am = a* *a-n* = *a* *k̄avop*.
 3SG.M.PST-cross = PAT flood = SG.CLF:MASC 3SG.M-COM = PAT dog
 When he stepped on its [a log’s] back, and [he felt that] it was strong, so
 he hopped on its back to cross the flood with the dogs. [AL-DL-017]

- (719) *doto* [*l̄at* *n* = *a* *v̄atir̄a*] *me* [*t̄a = b̄em* = *a*
 when arrive APPL = PAT enemy and TO = at = PAT
m̄anḡad = a *to k̄aletuak* *kon̄ang ta n̄a-b̄at*]_{PP},
 home = SG.CLF:MASC SR woman.PL only 3PL LOC-PROXH
k̄aletuak ta-p̄an.
 woman.PL 3PN-fight
 ‘When people of different race come, and to the place where only women
 are there, women will fight.’ [AL-BT-036]

11.2 Types of coordination

Several semantic types of coordination can be identified: Conjunctive coordination, disjunctive coordination, and adversative coordination.

11.2.1 Conjunctive coordination

Conjunctive coordination is primarily expressed by the coordinator *me* ‘and’ and juxtaposition, but can also be associated with other linking elements such as *io* ‘then’, and the topicalizer *o*.

In a conjunctive relation, two or more coordinands are connected in a sentence, without specifying the semantic relationship between them. Different interpretations arise as implicature of the contexts.

Conjunction can be either symmetric (the order of coordinands are interchangeable) or asymmetric (the order of coordinands are not interchangeable). In the latter case, different orders of coordinands convey different meanings. No asymmetrical cases are found in the corpus when both coordinands are phrases.

11.2.1.1 Symmetrical conjunction

The conjunctive construction can be symmetric, which means the coordinands can be reversed without a change of meaning. Conjunction of phrases is only found to be symmetric, while conjunction of clauses can be either symmetric or asymmetric.

Symmetrical conjunctions are expressed by means of juxtaposition or coordinator *me*, and the latter is most commonly used. Juxtaposition of phrases is always symmetric, however, juxtaposition of clauses are commonly temporal/consecutive (will be discussed later).

- (720) *da nga-nume bem = a a-moli mukəm.magərung,*
 PURP 1SG.NPST-teach at =PAT ART-person three.CLF:MASC
 [*to-Gila*], [*Piniau*], [*Valivur*], *ta mativon me tang.*
 ART.M-PN PN PN PN 3PL.POSS brother and
 ‘I’m going to tell about three men, ToGila, Piniau, Valivur, they are
 brothers.’ [AK-FH-002]

Unlike juxtaposition, coordinator *me* can be used in the symmetrical conjunction of clauses.

- (721) [*təgət = a mən = be varet = e*] *me* [
 one = SG.CLF:MASC FROM = at side = SG.CLF:FEM and
təgət = a mən = be varet = e].
 one = SG.CLF:MASC FROM = at side = SG.CLF:FEM
 ‘One man from one side, and one man from one (the other) side.’
 [AL-IP-076]

me is also commonly combined with the reflexive/reciprocal pronoun *tang* ‘self; each.other’ in a possessive construction, forming an idiomatic expression that describes the reciprocal relationship between participants⁷⁶.

76. Tulil has a comitative preposition *n* generally associated with meaning of ‘with’, see §6.4.3.2

- (722) a. *v-ənan* *bətmə ngang tove* *ngunu* *mativon me*
 3SG.M.PST-listen with 1SG because 1DL.POSS brother and
tang.
 REFL/RECP
 ‘He listened to me because we are brother (with each other).’
 [AK-FH-002]
- b. *manəni o ip* *var me tang.*
 first TOP 3DL.M.POSS friend and REFL/RECP
 ‘At the beginning the two were friends (with each other).’
 [LR-DW-051]

11.2.1.2 Contrastive conjunction

Conjunctive constructions can also express contrastiveness. Contrastive conjunctions can be either symmetric (723) or asymmetric (724). In the latter case, it is pragmatically problematic to reverse the two coordinands in this type of construction, when the last part rather than the first one needs to be emphasized.

- (723) [*a-vi* *mən=ba tipur ava kori və-re* *go*
 3SG.M-PROXS FROM=in bush also NEG 3SG.M.PST-carry NSPEC
təreuk], ***me*** [*a-vi* *ba viuv=e* *o* *ava*
 thing and 3SG.M-PROXS in sea=SG.CLF:FEM TOP also
və-re *moli kon =a aen tarə*].
 3SG.M.PST-carry again only =PAT fish many
 ‘the one who went to the bush got nothing, and the one who went to the sea brought a lot of fish again.’
 [TV-CC-006]
- (724) a. [*udu avar du-mətor ko do*], ***me*** [*ngən o ar*
 1PL also 1PL.PST-sit only here and 2PL TOP still
i-ngəp nə-bət da mət].
 2PL.NPST-die LOC-PROXH PURP eat
 ‘We are just sitting here, and you will die there of hunger.’
 [AL-IP-038]
- b. [*ngən konəng*], [*ngang o ngə-mətor konəng*].
 2PL only 1SG TOP 1SG.PST-sit only
 ‘Just you (pl.) (go there), as for me I’m just going to staying.’
 [CM-B2-037]

In the 723 and 724a, the two clauses form a structure where topic and focus in both clauses are of similar structure. This type of paralleled structure gives rise to a contrastive reading.

me is quite often used when an adversative interpretation can be applied. In this case, *me* can express either 1) a denial of an expectation (725a), or 2) the contrast between a negative and positive expression (725b). This is called *substitutive adversative coordination* by Haspelmath (2007:28).

- (725) a. *kəletuak o doto ngi-t~ton mat =e o*
 woman.PL TOP when 2SG.PST-IPFV~stare get =3SG.F.PAT TOP
ngin-e molimoli lok=a, me kori, nə-bət o
 2SG-QUOT person man=SG.CLF:MASC and NEG LOC-PROXH TOP
vak konəng=e e-bət, to umək=pənik
 woman only=SG.CLF:FEM SR breast=PL.CLF:DIM at
bem ta o kori go umək laik.
 3PL TOP NEGNSPEC breast big
 ‘women when you saw her coming towards you think it’s a man, but no, that one is just a woman, because small breasts on them are not big breasts.’ [AL-BT-022]
- b. *ngang o bə= kori ngə-merən, me bə= ngə-matər*
 1SG TOP IAM= NEG 1SG.PST-run and IAM= 1SG.PST-stand
konəng.
 only
 ‘As for me, I didn’t run, but I was just standing.’ [RR-AD-028]

Juxtaposition can also be used for substitutive adversative coordination:

- (726) *kori du-m~mengəp mənə do, du-mmengəp ar nə-mu ba*
 NEG 1PL-IPFV~sleep just here 1PL-IPFV.sleep still LOC-INSIDE at
məngəd = a.
 home = SG.CLF:MASC
 ‘We were not sleeping just here, we were sleeping still in there at home.’ [SV-N1-133]

11.2.1.3 Temporal conjunction

Conjunctive constructions describing temporal relations are asymmetric: the orders of coordinands convey the temporal sequence of the events. Temporal conjunction can be expressed by juxtaposition; coordinator *me*; *io* and topicalizer *o*.

The most common strategy of expressing temporal sequence is juxtaposition.

- (727) [*ngə-mənan bətm =a*], [*ngə-p~pi nə-m~bo*
 1SG.PST-hear with = 3SG.M.PAT 1SG.PST-IPFV~go LOC-CON~UP
],
 [*ngə-mat mat =a nangə u-bət*].
 1SG.PST-get get =PAT tree 3N-PROXH
 ‘I heard his words, I went up, I got those herbs.’ [AL-RM-039]

Another common structure is when a complex sentence starts with a string of juxtaposed coordinate clauses/phrases (predicates), with *io* ‘and then’ leading the last one.

- (728) [*du-vi nə-m~bo*], [*du-mat =a tuk =a*
 1PL.PST-go LOC-CON~UP 1PL.PST-get =PAT road = SG.CLF:MASC
a-vi nə-mbo], [*təkə = nə-bo be tuk*
 3SG.M-PROXS LOC-CON~UP TO = LOC-UP at road
laik =a], **io** [*du-bat*].
 big = SG.CLF:MASC then 1PL.PST-diverge
 ‘We walked up, we followed this road going up, up there at the big road,
 then we went into the other track.’ [LN-TO-008]

me ‘and’ is seldomly used in the case of temporal conjunction. In the example below, the events linked by *me* happen in order, but the meaning of the sentence is not emphasizing the order of the events, rather the fact that both of the events happened, and collectively lead to the result (“he being happy”).

- (729) *doto nga-kəbənət ləm n =idə, me nga-nu =a*
 when 1SG.NPST-make new APPL = 3N and 1SG.NPST-put = 3SG.M
nə-mu bərodəm, o a-bət o va varvar o
 LOC-INSIDE inside TOP SG.M-PROXH TOP 3SG.M.POSS happy TOP
vəvat.
 very
 ‘When I make these fresh, and I put him (ghost) inside, he is very happy.’
 [AL-SO-046]

The topicalizer *o* can also be used to link events of a certain temporal order:

- (730) a. *ngi-nunman* *o* *ngi-kət* *mən* = *a* *iep* *to* *avar*
 1SG.NPST-enter/exit TOP SG.PST-lift off =PAT 3SG.F SR still
nging lang-mə *nging vədəm* = *e* *o* *ngi-re*
 2SG want-APPL 2SG for =3SG.F.PAT TOP 2SG.PST-carry
tə=də ratəm.
 TO=on outside
 ‘You enter, you lift the woman you want to be with off (the bed), you
 carry her outside.’ [AL-SO-094]
- b. *du-mat* = *a* *va* *ton* *o* *d-umu* *idə nə-bo* *be*
 1PL-get =PAT 3SG.M.POSS bone TOP 1PL.PST-put 3N LOC-UP on
ibən.
 ground
 ‘we got his bones, we put them up on the ground.’ [AL-BT-013]

Elements like *io* ‘and then’ and the adverb *ava* ‘again’ can be combined with *me* ‘and’, but can be considered to have a coordinating function when *me* is not present. Both *io* and *ava* are used in the case of temporal conjunction. *io* ‘and then’ also has the connotation of consequence, while *ava* has a connotation of *again*:

- (731) a. *də-taon* *mat* = *a* *ləmat*, *me* *varən*,
 1PL.NPST-collect get =PAT coconut and coconut.with.shoot
də-tirəv = *idə to* *də-kət* *idə, io* *də-tut*
 1PL.NPST-mix =3N SR 1PL.NPST-scrape 3N then 1PL.NPST-smash
 = *a* *purət*, *io* *də-pur.*
 =PAT strain then 1PL.NPST-milk
 ‘we will collect coconut, and the coconut with new shoots, we mix
 them when we will scrape them, then we smash the coconut husk
 (we make strain), then we put milk (onto the food).’ [AL-TN-014]
- b. *io*, ***ava*** *nu-vəde*, ***ava*** *v-atər*, ***ava***
 then again LOC-this.way again 3SG.M.PST-stand again
və-t~ton *nə-mə*, *muləgəp* *nə* *von*,
 3SG.M.PST-IPFV~look LOC-DOWN two.CLF:DIM APPL SG.CLF:DIM
muləgəp.magəvon, *avar nə* *von*, *io* *a-vəde.*
 three = CLF:DIM also APPL SG.CLF:DIM then 3SG.M-this.way
 ‘Then again this way, again he stood, again he was staring down
 there, the second time, the third time, also another time, then he
 came this way.’ [JK-GT-030]

11.2.2 Disjunctive coordination

Disjunctive coordination is used to state two or more alternatives (three alternatives as shown in 732), expressed by either phrases, or clauses. In Tullil, *ba* ‘or’ can be used in both phrasal (733), NPs and PPs⁷⁷ and clausal disjunction (734). Juxtaposition, on the other hand, can only be used in NP disjunction (735).

- (732) *io iap o a-kutəŋ mat =a ve go*
 then 3SG.M TOP 3SG.M.NPST-cut get =PAT 3SG.F.POSS.AL NSPEC
təreuk be ve go məl=a, ba kolot, ba
 thing at 3SG.F.POSS.AL NSPEC laplap=SG.CLF:MASC or meriblaus or
gəri, məl to kəletuak.
 what clothes SR woman.PL
 ‘Then he will cut some of her things (small piece) from her laplap, meriblaus,
 or what, clothes belong to women.’ [WM-AT-005]

- (733) a. **NPS**
du-k~kədəp vədəm =a nakun u-vi, to udu
 1PL.PST-IPFV~search for =PAT cry 3N-PROXS SR 1PL
o dun-e [lekət idil=e]_{NP} ba [vəkəit
 TOP 1PL-QUOT bird.sp. small=SG.CLF:FEM or bird.sp.
idil=a]_{NP}.
 small=SG.CLF:MASC
 ‘We were searching for this crying, that we thought it was a small
lekət bird or a small *vəkəit* bird.’ [LN-TO-027]
- b. **PPS**
ngi-nat =a ro=vənəm, ngi-bəlok [ba
 1SG.NPST-get =PAT bamboo=SG.CLF:SLE 1SG.NPST-pierce in
və= kəlom]_{PP} ba [ba i= kəlom
 3SG.M.POSS.INAL= nose or in 3SG.F.POSS.INAL= nose
]_{PP}.
 ‘You get a short bamboo, you pierce in his nose or her nose (the
 buffalo’s nose).’ [LN-BU-010]

77. The coordinator *ba* ‘or’ and preposition *ba* ‘in’ are homonyms. They can co-occur, as shown in 733b.

(734) **Clause**

[*nga-t~təduk* = *a ve vəne = a nə-mu*
 1SG.NPST-IPFV~choke = PAT 3SG.F breath = SG.CLF:MASC LOC-INSIDE
ba kəlak = a to i-mengəp], **ba** [*nga-natme da*
 in house = SG.CLF:MASC SR 3SG.F.PST-sleep or 1SG.NPST-do PURP
gəri idə, idə to da i-leir n = a e-bət ngang
 what 3N 3N SR PURP 3N.NPST-harm APPL = PAT 3SG.F-PROXH 1SG
ngə = bon].
 1SG.POSS.INAL = sister

‘I choke her breath inside the house where she was sleeping, or I do something, something bad that it harms her my sister.’ [AL-SO-064]

(735) **Juxtaposed NPs**

du-toti ko n = a məlivuv = e, me vətə o
 1PL.PST-see only APPL = PAT fish.trace = SG.CLF:FEM and animal TOP
kori du-toti idə, məte [a-marek]_{NP}, [kətiləm]_{NP}, [kəgorə
 NEG 1PL.PST-see 3N like ART-fish.sp. prawn eel
]_{NP}.

‘We (pl.) only saw the traces of fish, but didn’t see anything like fish, prawns or eels.’ [JK-PP-089]

Alternative questions can be formed by *ba*: 1) *ba* + *wh*-interrogatives (736); 2) *ba* + negator *kori* (737a).

(736) *do kətələn = a ba gəri?*
 here earthquake = SG.CLF:MASC or what
 ‘Now it’s an earthquake or what?’

[TV-MA-016]

(737) a. *da ngi-nət ba kori?*
 PURP 2SG.NPST-eat or NEG
 ‘You want to eat or not?’

[E]

b. *da ngi-nət ba da ngi-turən?*
 PURP 2SG.NPST-eat or PURP 2SG.NPST-shower
 ‘You want to eat or you want to take a shower?’

[E]

c. *da ngi-nət ba?*
 PURP 2SG.NPST-eat or
 ‘You want to eat or?’

[E]

In (737c), the sentence can be interpreted as an elliptical expression of either of the two questions in (737b) and (737c), namely, ‘eat or not to eat?’ or ‘eat or doing something else?’

ba can also end a declarative sentence with a sense of guessing:

- (738) *b = idə-tər udu vəd =a n~nakun to məgəte tul*
 IAM = 3N.PST-meet 1PL for =PAT GEN~cry SR like bird
idil = a ba.
 small = SG.CLF:MASC or
 ‘We were startled by crying of something like a small bird or (what).’
 [LN-TO-020]

11.2.3 Adversative coordination

An adversative coordination is used to contrast propositions. In Tulil, both clauses (739) and phrases (740) can be coordinated with the adversative conjunction *məie* ‘but’. In the latter case, the structures are elliptical.

- (739) *nging o aka ngə-mət nging, məie nging o nga*
 2SG TOP IRR 1SG.PST-eat 2SG but 2SG TOP 1SG.POSS.AL
makut = a nging, io kori ngə-leir nə nging.
 brother.in.law = SG.CLF:MASC 2SG so NEG 1SG.PST-harm APPL 2SG
 ‘As of you, I would have killed you, but you are my brother in law, so I did not harm you.’
 [PP-RA-007]

- (740) a. **Linking PPs**
kori ngə-mat idil [məgem tang]_{PP}
 NEG 1SG.PST-get small leave.behind REFL/RECP
məie [məge nga vove, e-Met]_{PP}.
 but leave.behind 1SG.POSS.AL grandma, ART.F-PN
 ‘I did not get this small one (story) myself, but from my grandma, e-Met.’
 [LR-TM-013]

b. Linking NPs

nə-mə *o* [*kori* *go* *kəgor = vənəm*]_{NP},
 LOC-DOWN TOP NEGNSPEC eel = SG.CLF:SLE but
məie [*kəbəl = a*]_{NP} *to* *a-vi*
 tail = SG.CLF:MASC of 3SG.M-PROXS masalai = SG.CLF:MASC
vəvat = a, to *va* *kəbəl = a mə(n) =*
 SR 3SG.M-POSS.AL tail = SG.CLF:MASC FROM = LOC-CON~UP
nə-m~bo bətəpm = a *kəlkal = e ar*
 on = PAT green.sp = SG.CLF:FEM still direct
tənin = *a* *təkə =* *nə-mə ba ioi.*
 = SG.CLF:MASC TO = LOC-DOWN in water
 ‘Down there was not a long eel, but the tail of this masalai, that his
 tail from up there around the *kəlkal* tree went all the way down to
 the river.’ [LN-SO-040]

Note that the above example could have two analyses due to the fact that NPs can in themselves be nonverbal clauses in Tuli: 1) coordination of two NPs ‘no eel’ and ‘tail’; 2) coordination of two nonverbal clause ‘it is not an eel’ and ‘but it is the tail’).

məie can be used as a preposition (though rare, only one instance found) in a similar sense: ‘except’.

(741) *ba mængədə u-vi* *o* *viuv = e* *b =* *i-vən-m*
 in village 3N-PROXS TOP sea = SG.CLF:FEM IAM = 3SG.F.PST-hit-APPL
 = *idə məie ləmat, ar ngang ar ngə-toti ləmat idə*
 = 3N except coconut, still 1SG still 1SG.PST-see coconut 3N.POSS
nung nə-mu ba viuve.
 bottom LOC-INSIDE in sea = SG.CLF:FEM

In these villages, the sea already destroyed them, except the coconut. I still saw the trunks of coconut trees inside the sea. [KM-TH-025]

11.2.4 Negation of coordinate constructions

The negator *kori* cannot have scope over the coordination of clauses. The negation just applies to the clause it attaches to (742), and if both clauses are to be negated, then negators need to be expressed on both clauses (743).

- (742) *bəvon o laik = ta o kori tə~ppe tang,*
 before TOP big = PL.CLF:HUM TOP NEG 3PL.PST-IPFV~tie REFL/RECP
me tə-p~pən ko nə tang.
 and 3PL.PST-IPFV~hit only APPL REFL/RECP
 ‘Before the ancestors were not wearing clothes, and they were just killing
 each other.’ [JK-CB-002]

- (743) a. *kori ip-valət = e me kori ip-loti*
 NEG 3DL.M.PST-break = 3SG.M.PAT and NEG 3DL.M.PST-pour
= e tə = bəro.
 = 3SG.M.PAT TO = creek
 ‘They (dl.m.) didn’t break it (the bamboo with herbs for making rain)
 and they didn’t pour it into the water.’ [AL-RM-116]

- b. *ta-vi mərubət, ta-bət o kori tə-mengəp ba*
 3PL-PROXS Baining, 3PL-PROXH TOP NEG 3PL.PST-sleep or
ta-bət o kori go məgəda.
 3PL-PROXH TOP NEG NSPEC home
 ‘These Baining people, they don’t sleep or they don’t have homes.’
 [KM-BS-050]

There are no instances found in our corpus of *ba* ‘or’ linking two clauses when the first one is negated by *kori*.

In the case of phrasal coordination, *ba* ‘or’ generally falls within the scope of a preceding negative when the two coordinands are phrases (744), while coordinate constructions with juxtaposition, *me* ‘and’ (745) and *məie* ‘but’ do not fall inside the scope.

- (744) *kori gət = a a-ton tə = bəm = ip, ba tə = bəm*
 NEG one = SG.CLF:MASC 3SG.M.NPST-look TO = at = 3DL.M or TO = at
ta.
 3PL
 ‘No one can see him, or see them.’ [AL-DA-036]

- (745) *da tə-məkətə mat to bəvon o kori go*
 PURP 3PL.PST-fetch.water get SR before TOP NEG NSPEC
a-plastic, kori go a-botol, me a-tomavok, ro, me
 ART-plastic.bottle NEG NSPEC ART-bottle and ART-? bamboo and
vudum to tə-matme dəm n =a ləmat.
 container SR 3PL.PST-work for APPL =PAT coconut
 ‘They fetched water, before there was no plastic bottles, bottles, but ato-
 mavok, bamboo, and containers that they made with coconut.’

[KM-BS-080]

Chapter 12

Subordination

Traditionally, a simple dichotomy between coordination and subordination is drawn between terms of clause combining strategies: conjuncts have equal grammatical status in coordinate constructions, while subordinates have unequal status in the subordinate constructions. Formally, the distinction is usually based on criteria such as **dependency** (the subordinate clause is dependent on the main clause) and **clausal embedding** (the subordinate clause takes on a syntactic function in the main clause) (cf. Lyons, 1968:178 and Haspelmath 1995).

Also, a differentiation between **embedding** and **hypotaxis** is usually made: embedded clauses are those that take up a function in the main clause [+embedded], while hypotactic clauses are also dependent on the main clause, but relate to the main clause as a whole [-embedded] (Matthiessen & Thompson, 1988). In this sense, complement clauses (functioning as NPs) and relative clauses (functioning as modifiers inside NP) are usually classified as embedding, and adverbial clauses (function as adverbials) as hypotactic (Matthiessen & Thompson, 1988).

However, it is recognized in cross-linguistic studies that neither the distinction between subordination/coordination nor the one between embedding and hypotaxis is a clear-cut one, but rather a syntactic continuum involving a number of independent parameters (Lehmann, 1988; Givón, 1990).

In Tūlil, all three types of subordinate clauses can be identified:

(746) **Complement clause**

Pater *və-tən* *at-e* [*da* *a-toti* *ta*]_{CC}.
Father 3SG.M.PST-think 3SG.M-QUOT PURP 3SG.M.NPST-see 3PL
'The priest was thinking that he wanted to see them.' [LR-TH-062]

(747) **Relative clause**

tə-tuk = *a* *molimoi* *təgət* = *a* [*to* *va*
 3PL.PST-give = PAT people one = SG.CLF:MASC SR 3SG.M.POSS.AL
itən = *e* *Eparəgum*]_{RC} *n* = *a* *gəri* *idə* [*to*
 name = SG.CLF:FEM PN INSTR = PAT what 3N SR
tə-mat *idə* *mən* = *təvənm* = *a* *bəli* = *e*]_{RC}.
 3PL.PST-get 3N FROM = after = PAT pig = SG.CLF:FEM
 ‘They gave one man whose name is Eparagum something that they get
 from after [killing] the pig.’ [KV-SO-025]

(748) **Adverbial clause**

tə-timərek *vədəm* = *a* [*tove* *iap* *o* *kori*
 3PL.PST-thank for = 3SG.M.PAT because 3SG.M TOP NEG
və-p~pəlok]_{AC}.
 3SG.M.PST-IPFV~divulge
 ‘They liked him because he didn’t leak secrets.’ [KV-SO-005]

12.1 Forms of subordination

In Tulil, distinguishing main vs. subordinate clauses is also problematic in terms of the traditional criteria of dependency and embedding. In Tulil, the following strategies of subordination and embedding are involved in subordinate clause formation:

- (A) **Special verb form:** Nominalized verbs (gerundive)
- (B) **Subordinating morphemes:**
 - (a) morphemes with no lexical meaning: *to* general subordinator;
 - (b) morphemes with lexical meaning: *doto* ‘when/if’; *mata* ‘until (time)’; *tove* ‘because’; *da* (purpose) *ti* (negative purpose/in-case); *kati* (counterfactual condition); *ka*;
 - (c) use of topic markers as separator of subordinate clause and main clauses (after subordinate clause and preceding main clause).

12.1.1 Inner structure of subordinate clause

There are generally two types of subordinate clause with regards to their inner structure: nominalized clause and sentential clause. A nominalized clause is used

in complementation, such as the complement of the verb *təm* ‘know’ (see §12.2 for details use of nominalization as complementation). Nominalized predicates in complement clauses lack person indexes, and can use a genitive construction to include the A/S argument, such as *idə* ‘3N.POSS.AL’ in 749b and *ngi* ‘2SG.POSS.AL’ in 749c, with the nominalized predicate as head. O/S_o arguments follow the nominalized verbs, and patientive marking =*a* is used when applicable. Morphologically, the verb in a nominalized complement usually has one of the reduplicative patterns (the gerundive verb form, see §9.2.2).

(749) **Nominalized complement**

- a. *lok = pənik o kori tə-t~təm = a* [
 man = PL.CLF:DIM TOP NEG 3PL.PST-IPFV~know = PAT
p~pern = a ləmat]_{COMP}.
 GEN~climb = PAT coconut
 ‘Young men, they didn’t know (how to) climb for coconut.’
 [AL-RM-158]
- b. *mərek vəvat be [idə mənə~mənən]_{COMP}.*
 thank very at 3N.POSS GEN~listen
 ‘Thank you for the listening [lit. (unspecified) someone’s listening].’
 [RR-AD-049]
- c. *mərek vəvat vəd = a [ngi mənə~mənən = a nga*
 thank very for = PAT 2SG.POSS GEN~listen = PAT 1SG.POSS.AL
bokbok]_{COMP}.
 talk
 ‘Thank you for your listening to my talk.’ [KM-TH-098]

Sentential clauses are the most common type of subordinate clauses. They are full clauses with person indexes, and can be used for all types of subordinate clauses

12.1.2 Subordinating morphemes

Subordinating morphemes are of different natures, taking various syntactic slots, and combining with each other when forming complex sentences. Morphemes like *to* usually occur at the left-most slot in a subordinate clause (coordinators *me* and *ba* also fit into this slot⁷⁸, see §11), while *da* PURP occur in the slot that is closest to the clause (probably clause internal).

78. Even though the subordinator *to* cannot co-occur with *tove* ‘because’, the coordinators can precede it. Other collocation restrictions that cannot be reflected in 750 is that *kati* cannot cooccur with *da* or *ti*.

(750)	<i>to</i> 'SR'	<i>doto</i> 'when/if'	<i>kati</i> 'IRR'	<i>dame</i> 'IRR.PURP'	<i>da</i> 'PURP'
	<i>tove</i> 'because'				<i>ti</i> 'LEST'

Many subordinating morphemes in Tulil are polyfunctional, serving another function such as prepositions. They can also introduce more than one type of subordinate clause, as well as leading a main clause by themselves:

Table 12.1: Functions of subordinating morphemes

	PREP (oblique)	complement clause	relative clause	adverbial clause	independent clause
<i>to</i>	✓	✓	✓	✓	
<i>-e</i>		✓			✓
<i>da</i>	✓	✓		✓	✓
<i>ti</i>	✓	✓		✓	✓
<i>doto</i>				✓	
<i>tove</i>	✓			✓	
<i>kati</i>				✓	✓

In this section I will discuss the subordinating morpheme *to* as a general subordinator, given that it can be used for more than one type of subordination, to give an idea of the flexibility in interpreting the clause/constituent relations in Tulil. The use of the purposive particle *da* and LEST *ti* will also be discussed: even though they are only used as subordinators in adverbial clauses, they can occur in all types of subordinate clauses as modality particles, expressing desiderative and apprehensional-epistemic meanings. This will also be clarified in §12.1.2.1. Other subordinating morphemes will be discussed locally concerning different types of subordinate clauses.

12.1.2.1 Purposive *da* and LEST *ti*

Purposive *da* and LEST *ti* have similar behaviors and distributions: both of them can introduce independent clauses, subordinate clauses and can be used as prepositions 'for' and 'afraid of', taking NP complements⁷⁹ (detailed discussion and examples can be found in §4.11.3). When forming independent clauses, *da* expresses desiderative and *ti* apprehensional-epistemics.

When used as subordinators, *da* and *ti* can introduce adverbial clauses (751). In this case, they express purposive 'in order to' (751a) and precaution 'avertive'

79. Uses of the two morphemes as leading NP elements will be glossed as 'for' and 'afraid of', and all other uses will be glossed as PURP and LEST respectively in the examples.

(751b) or ‘in-case’ (751c) respectively, in Lichtenberk (1995)’s terms (see §4.11.3 for more discussion).

(751) **Adverbial clause**

- a. *kori ngi-təvat, ngi-təvat o bə = ngi-tuk*
 NEG 2SG.NPST-release 2SG.NPST-release TOP IAM = 2SG.NPST-give
= a n = a maok = a da a-pən-mə
 = 3SG.M.PAT APPL = PAT space = SG.CLF:MASC PURP 3SG.M.NPST-hit-APPL
nging.
 1SG
 ‘You don’t let go, you let go and you will give him space for him to hit you.’ [LN-BU-039]
- b. *doto a-pbat nə-bət o nging avar*
 when 3SG.M.NPST-diverge LOC-PROXH TOP 2SG also
ngi-bat nə-bət, da ngi-kavit ti
 2SG.NPST-diverge LOC-PROXH PURP 2SG.PST-hide LEST
molimoli = ta ta-pbərət nging.
 people = PL.CLF:HUM 3PL.NPST-meet 2SG
 ‘When he diverges onto small tracks, you also diverge there, so that you hide lest people meet you.’ [AL-SO-054]
- c. *bə = də-p~pi, ti [lok ləm = ta]_{NP}*
 IAM = 1PL.NPST-IPFV~go LEST man young = PL.CLF:HUM
me
 and
 [*vak ləm = ta*]_{NP} *ta-tengəp.*
 woman young = PL.CLF:HUM 3PL.NPST-sleep
 ‘Let’s go, lest the young men and women go to bed (so they won’t see what we are going to show).’ [AL-GN-022]

Also, both morphemes can introduce complement clauses, to express that the event indicated by the complement clause is desirable or apprehensional:

(752) **Complement clause**

- a. *nga-tən da nga-toti maok = a*
 1SG.NPST-think PURP 1SG.NPST-see space = SG.CLF:MASC
a-bət.
 3SG.M-PROXH
 ‘I am thinking to have a look at that piece of land.’ [LR-TH-038]
- b. *ko go lang-mə ta da ta-tə = be Amerika.*
 NEG NSPEC want-APPL 3PL PURP 3PL-TO = at PN
 ‘They didn’t want to go to America.’ [PP-PH-032]
- c. *ngə-mu ngə = nok navodi, ngan-e,*
 1SG.PST-put 1SG.POSS.INAL = hand like.this 1SG.NPST-QUOT
(gesture), da kori d-əngar tove iaor ti vəvat = a
(gesture) PURP NEG 1PN-say because afraid LEST masalai = SG.CLF:MASC
a-tat = a du = kən.
 3SG.M-get = PAT 1PL.POSS = voice
 ‘I put (pst.) my hand like this, I did (a gesture), so that we won’t talk because afraid/lest that the masalai will get our voice.’ [JK-PP-069]

Given that *da* and *ti* can be used to mark modality in an independent clause, *da/ti* used in subordinate clauses are not necessarily subordinators. In this case, other subordinating morphemes are used to form subordinate clause: such as *to* for a relative clause (753), *doto* for an adverbial clause (754), and *-e* for a complement clause (755).

(753) **Relative clause**

- avar vətī = von to da ta-pən-m = a*
 again day = SG.CLF:DIM SR PURP 3PL.NPST-fight-APPL = PAT
molimoli = ta o avar ta-tu von.
 people = PL.CLF:HUM TOP again 3PL.NPST-put SG.CLF:DIM
 ‘Another day when they want to kill people, they do the same thing.’ [AL-BT-032]

(754) **Adverbial clause**

doto da ngi-bəlok, o ngi-bəlok mən=be kait
 when PURP 2SG.NPST-pierce TOP 2SG.NPST-pierce FROM=at left
vəret=e io tə=be molimoli vəret=e.
 side=SG.CLF:FEM then TO=at right side=SG.CLF:FEM

‘When you want to pierce through, you pierce from left side to right side.’ [LN-BU-011]

(755) **Complement clause**

Pater və-tən at-e da a-toti ta.
 father 3SG.M.PST-think 3SG.M-QUOT PURP 3SG.M.NPST-see 3PL

‘Father was thinking that he wanted to see them.’ [LR-TH-062]

The reason to identify clauses such as in (752a) as a complement clause rather than two juxtaposed clauses ‘I think’ and ‘I want to see that land’ is the fact that the semantic features of the valency of the complement-taking verb *tən* ‘think’ requires two arguments (as shown in (756), the verb complex formed by *tən* ‘think’ and *tə=bem* ‘onto’ meaning *think of*).

(756) *du mativon o bə= və-tən tə=bem =a bokbok*
 1PL.POSS brother TOP IAM= 3SG.M.PST-think TO=at =PAT talk
to mama.
 of dad

‘Our brother, he thought of what dad told us (dad’s words).’

[RR-AD-012]

12.1.2.2 **General subordinator *to***

to can be viewed as a relator that links constituents on different syntactic levels, signaling a wide range of semantic relationships. These relationships range from one end where *to* links two NPs, mainly expressing possession (§6.5.3), to the other end where *to* simply links two full independent clauses, suggesting a relationship whose nature needs to be inferred from the context⁸⁰. The constituent after *to* has an explanatory nature in relation to the constituent before it, thus *to* can be used in all types of subordinate clauses. I will discuss the use of *to* as a general subordinator in this section.

80. *to* is glossed as ‘of’ when used as a preposition, and SR in subordinate clauses.

to introducing complement clause

to can be used to lead a complement clause, usually after perception verbs such as *mənan* ‘hear; feel’ and *ton* ‘look’.

(757) **verb - to - clause**

- a. *doto* *ngi-na~mənan* *to* *it-təduk* *be* *ngi*
 when 2SG.PST-IPFV.hear/feel SR 3N.NPST-choke at 2SG.POSS
kən.
 throat
 ‘When you were feeling something choking at your throat.’
 [AL-DA-021]

- b. *ta-pi* *do* *nə-m~bo* *ba* *ioi=voi* *o*
 3PN-walk here LOC-CON~UP in water=SG.CLF:FLAT TOP
ta-ton *to* *ngə-tərat* = *a* *tuk=a*
 3PN-look SR 1SG.PST-cut.grass =PAT road=SG.CLF:MASC
nandi *nə-m~bo* *tə=da* *bərn=e,* *io* *ta-toti*
 like.this LOC-CON~UP TO=on hill.top=SG.CLF:FEM then 3PN-see
bəli=a *a-bo*.
 pig=SG.CLF:MASC 3SG.M-UP
 ‘They walk here upwards in the river, they see I cut grass on the road
 like this upwards to the top of the hill, then they see a pig up there.’
 [DV-HP-089]

to introducing relative clause

to can introduce a relative clause, immediately following the NP or proform that is modified.

(758) **NP - to - clause**

- nga-nume* *be* *molimoli=a* [*to* *va*
 1SG.NPST-tell at human=SG.CLF:MASC SR 3SG.M.POSS.AL
itən=e *to-Gumər.*]_{RC}
 name=SG.CLF:FEM ART.M-PN
 ‘I’m going to tell about a man whose name is Gumər.’ [PP-RA-001]

(759) **PRO - to - clause**

bə = ngunu-toti lak = a iap [to ngi-məkata
 IAM = 1DL.PST-see lake = SG.CLF:MASC 3SG.M SR 2SG.PST-fetch(water)
mat = a ioi bəm = a]_{RC}.
 get = PAT water inside = 3SG.M.PAT
 ‘We’ve seen the pool of water that you fetched water from.’

[LG-VI-038]

to introducing adverbial clause

Clauses introduced by *to* can also be interpreted as taking various adjunctive functions. *to* either directly follows the main clause, or modifies a pronominal adjunct such as *nəbət* ‘there; at that time’.

(760) a. **clause - to - clause: place**

i-pə~povər, i-pə~povər, me it-tau
 3DL.M.PST-IPFV~dig 3DL.M.PST-IPFV~dig and 3DL.M.PST-meet
tang nə-bət to vənu = a a-kə~kər.
 REFL/RECP LOC-PROXH SR sun = SG.CLF:MASC 3SG.M.NPST-IPFV~rise
 ‘They (dl.) were digging and digging, and they met each other there
 where the sun rises (east).’

[LG-VI-049]

b. **clause - to - clause: reason**

akra bə = kərvuk nə ngang to ngang o kori ngə-təm
 just IAM = drown APPL 1SG SR 1SG TOP NEG 1SG.PST-know
mərek n = a n~nanət.
 good APPL = PAT GEN~swim
 ‘I’ll soon drown because I don’t know well about swimming.’

[LR-DW-029]

(761) **place / reason**

b = itə-toti kəpalə nə-bo da ioi = vəp
 IAM = 3DL.M.PST-see faeces LOC-UP on water = SG.CLF:ROUND
idə = do to bə = və-mərnəm.
 3N.POSS = head SR IAM = 3SG.M.PST-excrete
 ‘They saw faeces up there at the pool’s top where he was shitting/because
 he was shitting.’

[AK-FH-014]

We can see that, when *to* is used by itself in introducing a clause without other subordinating morphemes, it marks a general relationship between a clause and its preceding NP/clause (sometimes it can be analyzed as either, see 762), as adding some kind of information to the former part, but does not help in identifying the specific relationship. The relationship can be specified clearly if pronominal forms are presented, or inferred semantically from the contents of the sentence. In this sense, the clause introduced by *to* could probably be identified as coordination rather than subordination, but here we will consider it as a type of subordination that is positioned towards the end of the continuum.

(762) **NP/clause *to* clause: relative clause/adverbial clause**

udu o du-k~kəbənət bətəpm =a ibən=bət to
 1PL TOP 1PL.PST-IPFV~make on =PAT ground=SG.CLF:SEG SR
tə-məro~mərov =a molimoli=ta bəvon be kia.
 3PL.PST-IPFV~bury =PAT people=PL.CLF:HUM before at first
 ‘We were cleaning the land block that/where they used to bury people
 long time ago.’ [AL-BT-006]

12.1.3 Position of subordinate clauses

Generally speaking, subordinate clauses can be positioned either before the main clause, after it, or inside⁸¹, depending on the type of the subordinate clauses.

Firstly, a relative clause introduced by *to* may appear inside the main clause, and cause discontinuity in the latter clause. However, the *to*-clause can only be seen as clearly embedded into the main clause in the following two cases: first, when it is inserted between the O and the oblique argument, as shown in the following example.

(763) **RC modifying O argument**

tə-tuk =a molimoli təgət=a [to va
 3PL.PST-give =PAT people one=SG.CLF:MASC SR 3SG.M.POSS.AL
itən=e Epərəgum]_{RC} n =a gəri idə [to
 name=SG.CLF:FEM PN APPL =PAT what 3N SR
tə-mat idə mən=təvənm =a bəli=e]_{RC}
 3PL.PST-get 3N FROM=after =PAT pig=SG.CLF:FEM
 ‘They gave to one man whose name is Epərəgum, with what they got
 from after they worked on the pig.’ [KV-SO-025]

81. The notion of embedding is quite often used as an important criterion for subordination, and can be ascertained by a number of syntactic tests, such as clause-internal word order, clause extraposition, and cataphoric reference (cf. Foley & Van Valin, 1984; Haspelmath, 1995).

This is due to the fact that a relative clause modifying O argument occurs to the right of the clause, and the general subordinator *to* can introduce all types of subordinate clauses. This causes a very common structural ambiguity in Tuli:

(764) **RC/Adverbial Clause**

v-arkatə *ngang nə-bo* *tə=ba* *məngəd=a* *vəd =a*
 3SG.M.PST-leave 1SG LOC-UP TO = at home = SG.CLF:MASC for =PAT
ngunu *iaia* *təgət=a* [*to* *bə=v-anəm*
 1DL.POSS grandson one = SG.CLF:MASC SR IAM = 3SG.M.PST-wake.up
və-nakun].
 3SG.M.PST-cry

‘He left me up there to (go to) home for the sake of one of our grandsons, who woke up and cried / because he woke up and cried.’ [ML-YE-006]

The second case where the subordinate clause is clearly an RC but not an adverbial clause, is when the modified argument is a pronoun and the whole NP is in patientive case. In this case, the whole NP rather than the pronoun is marked with patientive, thus the patientive marker = *a* is used, and the modified pronoun is the normal form (e.g. *iap* 3SG.M/*iep* 3SG.F) rather than the patientive form (= *a* 3SG.M.PAT/= *e* 3SG.F.PAT), as shown in (766). So we can identify (765) as employing an adverbial clause, given that there is no patientive marker before the pronoun *ta*.

(765) a. **Adverbial clause**

kəvov=e *i-mənga~məngar,* ‘*ho ho ho ho*’, *bem*
 dog = SG.CLF:FEM 3SG.F.PST-IPFV~say INTJ INTJ INTJ INTJ at
ta [*to* *tə-men*]_{AC}.
 3PL SR 3PL.PST-dance

‘The dog was barking, ‘ho ho ho ho’ at them when they were dancing.’
 [MP-GW-012]

b. **Relative clause**

iap to da a-tuk n =a bokbok tuk
 3SG.M SR PURP 3SG.M.NPST-give INSTR =PAT talk give
 =a ta [to ta-ti~vi nogət be p~pən]_{RC}, to ta
 =PAT 3PL SR 3PN-IPFV~go first at NMLZ~fight SR 3PL
to ta kəngəl=a a-vi o iap
 SR 3PL.POSS headdress = SG.CLF:MASC 3SG.M-PROXS TOP 3SG.M
o avar va kəngəl=a o avar
 TOP also 33SG.M.POSS.AL headdress = SG.CLF:MASC TOP also
kəməron = a.
 different = SG.CLF:MASC

‘He who want to talk to them, who are the leader of the war (lit: they walk ahead at the war), their headdresses are like this, his headdress is different.’ [AL-HD-011]

(766) a. **Adverbial clause**

vareot moli n =a [to və-bokbok]_{AC} me
 long.time real APPL =3SG.M.PAT SR 3SG.M.PST-talk and
udu ar bə= du-mengəp.
 1PL still IAM= 1PL.PST-sleep

‘For a long time, He was talking, and we already fell asleep’

[RR-AD-033]

b. **Relative clause**

it-re tuk =a iap [to a-ti~vi
 3DL.M.NPST-carry give =PAT 3SG.M SR 3SG.M.NPST-IPFV~go
nogət be a-tad=e]_{RC}.
 first at ART-church = SG.CLF:MASC

‘They took it [the butterfly] to the pastor (lit. he who goes ahead at church).’ [RN-BT-005]

Also, RC modifying O arguments cannot be inserted between O and adjuncts. In this case, the RC is extraposed to the right end of the clause, and the pronominal form coreferencing to the O argument needs to precede the subordinator *to*.

- (767) *ava du-mat =a bərn=a mə=nə-m~mə*
 again 1PL.PST-get =PAT hill=SG.CLF:MASC from=LOC-CON~down
iap
 3SG.M
 [*to du-kər tə=bem =a*]_{RC}.
 SR 1PL.PST-climb TO=at =3SG.M.PAT
 ‘Again we got on the hill from down there, the hill that we climbed on
 it.’ [CM-B2-043]

Also, a common arrangement of subordinate clauses is to place the subordinate clause before the main clause, and separate them by the topic marker *o*⁸². The use of the topic marker to indicate subordinate clauses is common in many Papuan and Oceanic languages (cf. Scott 1978; Haiman 1980).

- (768) **RC as topic**
 [*molimoli=a a-vi to v-engəp da*
 person=SG.CLF:MASC 3SG.M-PROXS SR 3SG.M.PST-sleep on
kuv=e [to tə-vir =e n =a
 mat=SG.CLF:FEM SR 3PL.PST-weave =3SG.F.PAT APPL =PAT
kəlgor=voi]], o iap o ava və-leir
 plant.sp.=SG.CLF:FLAT TOP 3SG.M TOP again 3SG.M.PST-harm
n =a nə-mu ba ngə= ronəŋ.
 APPL =PAT LOC-INSIDE in 1SG.POSS.INAL= stomach
 ‘The man who slept on the mat that they wove with leave, he made me
 sick (lit. he destroyed my stomach.) ’ [AL-DA-128]

82. The topic marker is not compulsory in this case, such as in the following example. But these instances are rather rare.

- (i) *doto ngunu-lam =a ip-vi idil=ip, ngun o ko go iaor ngun.*
 when 1DL.PST-show =PAT 3DL.M-PROXS child=DL.CLF:MASC 1DL TOP NEG NSPEC afraid 1DL
 ‘When we showed the two kids, we were not afraid, me and my brother were not afraid.’
 [LN-TO-041]

(769) **Adverbial clause as topic**

[*doto a-kngəp me v=uil=a*
 when 3SG.M.NPST-die and 3SG.M.POSS.INAL = child = SG.CLF:MASC
]_{AC} *o bə laik=a, o v=uil=a*
 TOP IAM big = SG.CLF:MASC TOP 3SG.M.POSS.INAL = child = SG.CLF:MASC
a-tat = a ror=a.
 3SG.M.NPST-get = PAT headdress = SG.CLF:MASC
 ‘When he dies and his son is a grown-up, his son will get the headdress.’
 [AL-HD-023]

The two events linked by the topic marker can be either simultaneous or consecutive, in the latter case, *io* ‘and then’ is also sometimes used instead of topic marker *o*.

(770) *doto ngə-təvək katum, io iləm=a ava*
 when 1SG.PST-cross finish then flood = SG.CLF:MASC again
və-re tor=e nə-mə ba ioi=voi.
 3SG.M.PST-carry wood = SG.CLF:FEM LOC-DOWN in water = SG.CLF:FLAT
 ‘When I finish crossing (the river), then the flood again carried the wood
 down in the river.’ [AL-L1-020]

Thirdly, a subordinate clause can be positioned at the end of the main clause. The most common case is what is shown above in (762), where an adverbial clause introduced by *to* is positioned at the end of the main clause, as a type of extraposed, after-thought explanation.

Adverbial clauses introduced by *doto* ‘when/if’ as can also occur at the end of the main clause, though the former position is more common:

(771) *kəngəl=a a-vi o tə-m~matme dəm*
 headdress = SG.CLF:MASC 3SG.M-PROXS TOP 3PL.PST-IPFV~work for
 = a, ***doto da tə-k~kəbənət mat tang da***
 = 3SG.M.PAT when PURP 3PL.PST-IPFV~make get REFL/RECP PURP
tə=be p~pən.
 TO = at NMLZ~fight
 ‘This headdress they made it, when they want to dress themselves up for
 going to a fight.’ [AL-HD-005]

The above examples show that we can find some degree of embeddedness in the subordinate clauses in Tuli, though rare.

12.2 Complement clauses

As defined by Noonan, complementation is “the syntactic situation that arises when a notional sentence or predication is an argument of a predicate” (1985:42). In this sense, a complement is a predicate that itself functions as an argument of the predicate in the main clause.

Noonan further refers to predicates that take subject or object complements as ‘complement-taking predicates’ (CTPs). I will adapt this term as ‘complement-taking verbs’ (CTVs) in this grammar. In Tulil, there are no verbs which take a complement clause as a subject. The complement clauses usually take up the function as the *o* argument of transitive verbs, and the oblique argument of stative intransitive verb.

(772) a. **Complement as *o* argument**

iep o b = i-təm = a [bingit = a
 3SG.F TOP IAM = 3SG.F.PST-know = PAT press = PAT
gələt = pənik]_{cc}.
 radio = PL.CLF:DIM

‘She knows (how to) press the radio.’ [AL-RD-030]

b. **Complement as oblique argument**

ngang o lang-mə ngang [da ava du-m~bo]_{cc}.
 1SG TOP want-APPL 1SG PURP again 1PL-CON~Up

‘I want us to go up there again.’ [JK-PP-100]

(773) **Complement of adjective in nonverbal clause**

də-mət = a u-bət o kori mərek [to də-mət = a
 1PL-eat = PAT 3N-PROXH TOP NEG good SR 1PL.NPST-eat = PAT
du var = ta]_{cc}.
 1PL.POSS friend = PL.CLF:HUM

‘We eat these, it is not good that we eat our friends.’ [LR-TH-018]

Tulil makes use of two complement types⁸³: the sentential complement (sentence-

83. Noonan (2007:59-74) identifies a number of complement types on the basis of their morphological characteristic:

- (A) Sentence-like complements (indicative and subjunctive);
- (B) Paratactic complements;
- (C) Infinitive complements;
- (D) Nominalized complements;
- (E) Participial complements.

like complement in Noonan's terms) and the nominalized complement. In sentential complements, the syntactic structure and morphology of the complement is identical to that of the corresponding independent clause. Sentential complements appear in the position of O/S_o arguments, or obliques, but not A/S_A arguments.

- (774) *bə = vətɪ təgə = von, e-Namugi i =*
 IAM = day one = SG.CLF:DIM ART.F-PN 3SG.F.POSS.INAL =
kəlɪn = ip ip-məŋgar təgət [da i-povər
 grandchild = DL.CLF:MASC 3DL.M.PST-say one PURP 3DL.M.PST-dig
pet n = a lak = a]_{CC}.
 wide APPL = PAT lake = SG.CLF:MASC
 'One day, *Namugi*'s grandsons talked together to dig wide the pool.'
 [LG-VI-042]

- (775) *ip ip-məŋgar tuk udu [da du-matme da*
 3DL.M 3DL.M.PST-say give 1PL PURP 1PL.PST-make on
vət-bət nə-mə]_{CC}.
 SG.CLF:SEG-PROXH LOC-DOWN
 'The two of them (masc.) told us to work on that piece of land down there.'
 [SV-N1-113]

Nominalized complements, on the other hand, either lack the person index (777, 778a), or use a genitive construction to include the argument (776, more examples can be found in §9.2).

- (776) **Nominalized complement**
ŋgi-təm = a [du mətor ba tipur]_{COMP}, udu adəpen
 2SG.PST-know =PAT 1PL.POSS sit at bush 1PL underpant
ko = bətəŋ, me kori go a-tərautet.
 only = PL.CLF:SEG and NEG NSPEC ART-trousers
 'you know our staying in the bush, we just wore underpants, without trousers.'
 [JK-PP-086]

Like sentential complements, nominalized complements also appear in O/S_o and oblique positions. However, in contrast with s-like complements, nominalized complements behave like NPs, and can be introduced by patientive marking when functioning as O/S_o arguments, and follow prepositions/applicatives when functioning as obliques.

- (777) *udu o molimoli=ta təpm =a təm, me udu o avar*
 1PL TOP people=PL.CLF:HUM with =PAT know and 1PL TOP also
molimoli=ta təpm =a [kori go mənā~mānan =a
 people=PL.CLF:HUM with =PAT NEG NSPEC GEN~listen =PAT
bokbok].
 talk
 ‘and we are people of knowledge, and we are also people who don’t listen
 to talk.’ [WM-XX-004]

Complementizers are morphemes that function to identify a clause as a complement. Elements that can be used as complementizers are *da* PURP (desiderative meaning), general subordinator *to* and quotative *e*. Complementizers may have semantic functions and different meanings arise for the same CTV to be associated with different complementizers (cf. Boye & Kehayov, 2016). Examples in (778) show the different meanings of complement clauses of the CTV *təm* ‘know’ when combining with nominalized complements (778a), complementizers *da* PURP (778b) and quotative *e* (778c).

- (778) a. *vanəm=ta o avar tə-təm =a [mu bətəpm*
 some=PL.CLF:HUM TOP also 3PL.PST-know =PAT put on
=a men]_{CC} me tə-təm =a [p~pən-m =a
 =PAT dance and 3PL.PST-know =PAT GEN~hit-APPL =PAT
molimoli=ta]_{CC}.
 people=PL.CLF:HUM
 ‘some people they know the art of dance (lit. put on dance) and they
 know how to kill people.’ [AL-DA-098]
- b. *kati dame avar udu du-m~man =e,*
 IRR.COND IRR.PURP still 1PL 1PL.PST-IPFV~remove =3SG.F.PAT
to udu o udu du-t~təm [da avar udu
 SR 1PL TOP 1PL 1PL.PST-IPFV~know PURP still 1PL
da-man =e]_{CC}, o da avar da-man
 1DL.NPST-remove =3SG.F.PAT TOP PURP still 1PL.NPST-remove
=e o avar mæk.
 =3SG.F.PAT still good
 ‘If only it was us who removed it (the rain potion), because we knew
 how to remove it, if we removed it, it would be good.’ [AL-RM-139]

- c. *doto b= i-t~təm* [*it-e,* *ip* *o*
 when IAM= 3DL.M.PST-IPFV~know 3DL.M-QUOT 3DL.M TOP
b= it-leir]_{CC}, *o ik-kər tang o*
 IAM= 3DL.M.PST-damage TOP 3DL.M.PST-rise REFL/RECP TOP
ip-vərkałat udu bətm =a Katiket man.
 3DL.M.PST-compensate 1PL with =PAT Catechist man
 ‘When they knew that they made a mistake, they got up and com-
 pensated us with Catechist.’ [AL-RM-137]

In the above examples, (778c) with the quotative *e* encodes a propositional complement, while both (778a) and (778b) mark state of affairs complements, meaning ‘know how to’. The difference between the two is that the complement led by *da* PURP has the connotation of an intention to accomplish something, while the nominalized complements simply state the ability. This can be seen clearly when the verb is negated. For instance, both examples in (779) express a lacking of certain ability, but (779b), the complement clause led by *da* PURP also suggest an intention to accomplish a result that is associated with the ability.

- (779) a. *kori məgəte udu do be Rəbəul to lok=pənik o kori*
 NEG like 1PL here at PN SR man=PL.CLF:DIM TOP NEG
tə-t~təm =a [p~per n =a ləmat]_{CC}.
 3PL.PST-IPFV~know =PAT GEN~climb APPL =PAT coconut
 ‘Not like us here in Rabaul, young men don’t know well about climb-
 ing for coconuts.’ [AL-RM-158]
- b. *bə= kori və-t~təm* [*da b= a-kngo*
 IAM= NEG 3SG.M.PST-IPFV~know PURP IAM= 3SG.M.NPST-off
 =*e*]_{CC}, *me e-vi o i-tuli təgət.*
 =3SG.F.PAT and 3SG.F-PROXS TOP 3SG.F.PST-shine still
 ‘He didn’t know how to turn it [the torch] off, and it was continuing
 shining.’ [AL-TC-023]

Another example is the CTV *tən*, which has basically two meanings: ‘think’ and ‘think of doing sth.’, according to the complement it takes: quotative *e* is associated with propositional complements (780a) and *da* PURP with state of affairs complements (780b). The two meanings can be categorized into two different semantics types respectively: propositional attitude and desiderative.

- (780) a. *ngə-tən* [*ngan-e, e-vi o bə = e-tə = ba*
 1SG.PST-think 1SG-QUOT 3SG.F-PROXS TOP IAM = 3SG.F-TO = in
məngəd = a to voin]_{CC}.
 home = SG.CLF:MASC of ghost
 ‘I thought, she is going to the home of ghosts.’ [JK-PP-032]
- b. *tə-t~tən* [*da bə = tə-mat = a tul*]_{CC}
 3PL.PST-IPFV~think PURP IAM = 3PL.PST-get = PAT bird
tove tə-toti tul to idə-miau o rəkən me kori
 because 3PL.PST-see bird SR 3N.PST-fly TOP group and NEG
tə-p~pən-m = a tarə.
 3PL.PST-IPFV~hit-APPL = PAT many
 ‘They were thinking of getting birds because they saw birds flying in
 groups and they didn’t kill many.’ [DV-BL-008]

The interpretation of CTVs also depends on coreferencing between the main clause and the complement clause. For instance, the two examples in (781) both involve the verb *məngar* ‘say’ and the morpheme *da* expressing desiderative. In (781a), when the addressee is the same as the subject of the complement clause, *məngar* means ‘tell someone to do’ and expresses manipulative meanings such as order/advice; while in (781b), when the subjects of the main clause and complement clause are the same, *məngar* simply describes the utterance event, which includes the will of the subject. As suggested by Hansen et al. (2016:183), this difference in meaning is ‘not from strict syntactic rules, but rather from the issues of volitionality and the capability of the agent to influence the state of affairs’.

- (781) a. *ngi-nəngar tuk = a nga mukəm da a-n*
 2SG.NPST-say give = PAT 1SG.POSS in.law PURP 3SG.M-APPL
 = a go *lokvə ta-m~bo ta-ton da bəli = a.*
 = PAT NSPEC man.PL 3PL-IPFV~UP 3PN-look on pig = SG.CLF:MASC
 ‘You say to my [brother] in law for him to go with some men up
 there, they look for the pig.’ [DV-HP-088]

- b. *du-p~pi ko ba tipur nə-m~mə, nə-m~mə,*
 1PL-IPFV~go only in bush LOC-IPFV~DOWN LOC-IPFV~DOWN
a-vi o bə= vəngar tuk udu da bə=
 3SG.M-PROXS TOP IAM= 3SG.M.PST.say give 1PL PURP IAM=
və-bat məgem udu.
 3SG.M.PST-diverge leave.behind 1PL
 ‘We were just walking in the bush going down and down, he said to us that he wanted to diverge into small road and leave us.’
 [SV-BE-032]

12.2.1 Classes of complement-taking verbs

Tulil has seven different classes of complement-taking verbs, according to the semantic classes of CTVs defined in Noonan (2007), as shown in Table 12.2. Also there are adjectives/nouns that can take complements, such as *mərek* ‘be good’ (positive evaluation).

Certain verbs can be used in more than one semantic classes (marked by subscripts of numbers), and the different uses are associated with the choice of complementizers, as discussed in the section above. The complementizers commonly associated with each CTV is also shown in Table 12.2.

12.2.1.1 Utterance verbs

Utterance verbs are used in sentences to describe a transfer of information, among which direct reported speech gives the actual wording of the original information, whereas indirect reported speech gives the content. Utterance verbs commonly take a complement introduced by the quotative *e*:

- (782) a. *və-bokbok tuk =a at-e, “ngang o aka*
 3SG.M.PST-speak give =3SG.M.PAT 3SG.M-QUOT 1SG TOP IRR
bə= ngə-təup nə-bo.”
 IAM= 1SG.PST-die LOC-UP
 ‘He told him, said, “I almost died up there.”’ [PP-RA-010]

Table 12.2: List of complement-taking verbs

semantic class	CTVs	complementizer	glossing
UTTERANCE	<i>mume</i>	<i>e</i>	‘to say, tell’
	<i>bokbok</i>	<i>e, da</i>	‘to tell’
	<i>məngar₁</i>	<i>e, da</i>	‘to say’
	<i>tir</i>	<i>e</i>	‘to ask’
	<i>tinak₁</i>	<i>e</i>	‘to ask for, to beg for’
	<i>tuar</i>	<i>e</i>	‘to shout’
	<i>kəmak</i>	<i>e</i>	‘to lie’
	<i>tak</i>	<i>e</i>	‘to call’
PROPOSITIONAL ATTITUDE	<i>tən₁</i>	<i>e</i>	‘to think’
	<i>bitəmut</i>	<i>e</i>	‘to believe’
(ACQUISITION OF) KNOWLEDGE	<i>təm</i>	NMLZ, <i>e, da</i>	‘to know’
	<i>idərəm</i>	<i>to</i>	‘to forget’
FEARING	<i>iaor</i>	<i>ti</i>	‘be.afraid’
DESIDERATIVE	<i>lang(mə)</i> (stat.v.)	<i>da</i>	‘to want’
	<i>tən₂</i>	<i>da</i>	‘to think (of doing)’
ACHIEVEMENT	<i>lar</i>	<i>da</i>	‘to try’
PHASAL	<i>matər mat</i>	NMLZ	‘to begin’
IMMEDIATE PERCEPTION	<i>toti</i>	<i>to</i>	‘to see, watch’
	<i>ton</i>	<i>to</i>	‘to look (at)’
	<i>mənan</i>	NMLZ, <i>to</i>	‘to hear, feel, smell’
MANIPULATIVE	<i>məngar₂</i>	<i>da</i>	‘to tell to do’
	<i>tinak₂</i>	<i>da</i>	‘to beg/ask to do’

- b. *doto vi bərənm =udu o ngang ngə-tir =a*
 when 3SG.M.go above =1PL TOP 1SG 1SG.PST-ask =PAT
nga iaia ngan-e, ‘iaia, nə-bət o gəri idə
 1SG.POSS grandpa 1SG-QUOT grandpa LOC-PROXH TOP what 3N
u-bət?’
 N-PROXH

‘When it passed over us, I asked my grandfather, “grandpa, what’s that?”’

[AL-GN-006]

Quotative *e* can also lead a naming proper noun with verb *tak* ‘call’.

- (783) a. *ta-t~tak* *tat-e* “*a-vulvul*”.
 3PL.NPST-IPFV~call 3PN-QUOT ART.F-PN
 ‘They call it avulvul [type of sorcery]’ [JK-PP-091]

The difference between direct and indirect speech lies in the reference of the quoted content: there is a shift of reference in direct quote (784, from third person to first person), but no shift in indirect quote (785, remains third person).

- (784) **Direct quote**
tudak = a *v-angar* *at-e,* ‘*mæie ngang*
 wallaby = SG.CLF:MASC 3SG.PST-say 3SG.M.NPST-QUOT but 1SG
o kori ngə-təm *mærek n* = *a n~nanət.*’
 TOP NEG 1SG.PST-know good APPL APPL = PAT
 ‘Wallaby said, “but I don’t know well about how to swim.”’
 [LR-DW-007]

- (785) **Indirect quote**
vəvat = a *a-umu* *və-tak* *bemə nging*
 masalai = SG.CLF:MASC 3SG.M-DIST.INVS 3SG.M.PST-call at 2SG
at-e, *iap* *o* *va* *var = von* *nging.*
 3SG.M-QUOT 3SG.M TOP 3SG.M.POSS.AL friend = SG.CLF:DIM 2SG
 ‘The masalai called your name he said, you are his friend.’
 [PP-RA-011]

da PURP can also be used as a complementizer for utterance verbs such as *məngar* ‘say’ or *bokbok* ‘tell’:

- (786) a. *tar = ta* *tə-m~bokbok* *da* *udu nə-m~bo*
 many = PL.CLF:HUM 3PL.PST-IPFV~talk PURP 1PL LOC-CON~UP
də-tulai *ta.*
 1PL.NPST-send 3PL
 ‘Many people they were talking for us to go up and send them off.’
 [CM-B2-066]
- b. *bə* *du-məngar* *da* *vanəm = ta* *ta-nogət.*
 IAM 1PN-say PURP few = PL.CLF:HUM 3PL.NPST-first
 ‘We said for a few people to go first.’ [CM-B2-075]

12.2.1.2 Propositional attitude

Propositional attitude verbs *tən* ‘think’ and *bitəmut* ‘believe’ express attitudes regarding the truth of the proposition indicated by the complements (Noonan 2007). The complement of these verbs are introduced by quotative *e*.

- (787) a. *udu o bə = du-bitəmut dun-e, kəvənav = e*
 1PL TOP IAM = 1PL.PST-believe 1PL-QUOT rain = SG.CLF:FEM
b = et-nəvən.
 IAM = 3SG.F.NPST-fall
 ‘We believed that the rain is about to come.’ [AL-RM-080]
- b. *ngə-tən ngan-e, e-vi o bə = e-tə = ba*
 1SG.PST-think 1SG-QUOT 3SG.F-PROXS TOP IAM = 3SG.F-TO = in
məngəd = a to voin.
 home = SG.CLF:MASC of ghost
 ‘I thought, she is going to the home of ghosts.’ [JK-PP-032]

12.2.1.3 Predicates of knowledge and acquisition of knowledge

Knowledge and acquisition of knowledge verbs include *təm* ‘know’ and (*idə*)-*rəm* ‘forget’ (impersonal verb). For instance, the word *təm* ‘know’ can take complements that are nominalized clauses (788a), or introduced by *da* (788b) or quotative *e* (788c). The difference in the meanings of the use of these complementizers with *təm* ‘know’ is discussed in §12.2 (beginning of this section).

- (788) a. *vanəm = ta o avar tə-təm = a [mu bətapm*
 some = PL.CLF:HUM TOP also 3PL.PST-know = PAT put on
= a men]_{CC} me tə-təm = a [p~pən-m = a
 = PAT dance and 3PL.PST-know = PAT GEN~hit-APPL = PAT
molimoli = ta]_{CC}.
 people = PL.CLF:HUM
 ‘some people they know the art of dance (lit. put on dance) and they know how to kill people.’ [AL-DA-098]

- b. *vanəm = ta o tə-merti idə, me vanəm = ta*
 some = PL.CLF:HUM TOP 3PL.PST-reject 3N and some = PL.CLF:HUM
o kori tə-təm da a-taup bem = idə.
 TOP NEG 3PL.PST-know PURP 3SG.M.NPST-hold at = 3N
 ‘Some people refused to take them, and some they didn’t know how to handle them (the things coming from “white men”).’ [AL-TC-004]
- c. *bərtəm o nane o b = i-ngəp, ngang o ar kori*
 night TOP mom TOP IAM = 3SG.F.PST-die 1SG TOP still NEG
go laik ngang, me ngə-m~mi bem = e, mətə
 NSPEC big 1SG and 1SG.PST-IPFV~suck at = 3SG.F.PAT like
kori go mək = pət, ko go viuv = a
 NEG NSPEC good = SG.CLF:SEG NEG NSPEC taste = SG.CLF:MASC
ba umək, me ngang avar kori ngə-təm ngan-e b =
 in breast and 1SG also NEG 1SG.PST-know 1SG-QUOT IAM =
i-ngəp.
 3SG.F.PST-die
 ‘During night mom died, I was still not big, and I was sucking on her, the milk was not tasty, I didn’t know that she was dead.’
 [JK-PP-010]

12.2.1.4 Predicates of fearing

Tulil has one verb expressing fear *iaor* ‘be.afraid’ that can take complements. The complements are usually introduced by *ti* LEST.

- (789) *ngə-mu ngə = nok navodi, ngan-e, (gesture),*
 1SG.PST-put 1SG.POSS.INAL = hand like.this 1SG-QUOT (gesture)
da kori d-əngar tove iaor ti vəvat = a
 PURP NEG 1PL.NPST-say because afraid LEST masalai = SG.CLF:MASC
a-tat = a du = kən.
 3SG.M.NPST-get = PAT 1PL.POSS = voice
 ‘I put (pst.) my hand like this, I did (a gesture), so that we won’t talk because afraid/lest that the masalai will get our voice.’ [JK-PP-069]

12.2.1.5 Desiderative verbs

Desiderative verbs take a complement proposition that expresses desire of the subjects of the verb. These include *tən* ‘think of’ and *lang(m)* ‘want’ (stative verb) in

- b. *lang-mə ngang da NP / CLAUSE*
 want-APPL 1SG PURP NP / CLAUSE
 ‘I want something / to do something.’ [PO]
- c. *lang-mə vitəm i-teltel.*
 want-APPL 3DL.F 3DL.F.NPST-wander
 ‘Two of them want to take a walk.’ [ER-TD-007]

12.2.1.6 Achievement verbs

Tulil has one achievement verb *lar* ‘try’, expressing negative (sometimes with manner adjunct *tərngəp* ‘failed’) realization of achievement. The verb usually takes a complement introduced by purposive *da*.

- (795) *du-lar tərngəp da d-ət =a vətə bətəpm =a*
 1PL.PST-try fail PURP 1PL.NPST-eat =PAT meat on =PAT
ton, kəvop avar kori idə-mət, to tədor vəvat.
 bone dog also NEG 3N.PST-eat SR tough very
 ‘We tried but failed to eat the meat on the bones, dog also couldn’t eat,
 because it was too tough.’ [CM-B1-031]

12.2.1.7 Phasal verbs

There is one complement-taking phasal verb (phrase) in Tulil: *matər mat* ‘start’, expressing inception of an event, by taking a nominalized clause as the complement⁸⁴.

- (796) *ngə-matər mat =a [m~məkən =a li, me ləvək,*
 1SG.PST-stand take =PAT GEN~plant =PAT taro and banana
kəmər].
 elephant.taro
 ‘I started planting taro, and banana, and elephant taro.’ [WM-MG-005]

84. The meaning of ‘finish’ is expressed by adverb *katum* (finish some substantial thing, like ‘eat all’) or *toktok*.

12.2.1.8 Immediate perception verbs

There are two immediate perception verbs, *toti* ‘see’ and *mənan* ‘hear/feel/taste’ expressing direct perception of certain events. The complement clause of these verbs are introduced by the general subordinator *to*.

- (797) *doto ngi-na~mənan to it-təduk be ngi kən.*
 when 2SG.NPST-IPFV~hear/feel SR 3N.NPST-choke at 2SG.POSS throat
 ‘When you were feeling something choking at your throat.’
 [AL-DA-021]

- (798) *a-toti =e to e-turən ləklək o*
 3SG.M.NPST-see = 3SG.F.PAT SR 3SG.F.NPST-wash naked TOP
a-timərek da ve vətə.
 3SG.M.NPST-like on 3SG.F.POSS.AL flesh
 ‘He sees her bathing naked, he likes her body.’ [WM-LK-011]

12.2.1.9 Manipulative verbs

Manipulative verbs ‘encode situations where the agent attempts to manipulate the affectee into performing some action or assuming some state’ (Noonan 2007:136). The two manipulative verbs *tinak* ‘ask/beg to do’ and *məngar* ‘tell to do’ both take complement introduced by purposive *da*.

- (799) *i-tinak ngang da ngə-mume be vəti to dame*
 3SG.F.PST-ask 1SG PURP 1SG.PST-tell at SG.CLF:SEG SR PURP.IRR
nga-nunman ba r~re angiet.
 1SG.NPST-enter in GEN~carry sorcery
 ‘She asked me to tell about the story that I almost get into learning sorcery.’ [AL-DA-195]

- (800) *bə = du-məngar [da vanəm = ta ta-nogət]_{cc}.*
 IAM = 1PL.PST-say PURP few = PL.CLF:HUM 3PL-first
 ‘We said that some of them goes first.’ [CM-B2-075]

12.2.1.10 Complement of ADJ

Certain adjectives such as (*mārek* ‘good’ can take complement, introduced by purposive *da* or subordinator *to*.

- (801) *də-mət =a u-bət o kori mārek to də-mət =a*
 1PN-eat =PAT 3N-PROXH TOP NEG good SR 1PL.NPST-eat =PAT
du var=ta.
 1PL.POSS friend = PL.CLF:HUM
 ‘We eat these, it is not good that we eat our friends.’ [LR-TH-099]

- (802) *kori mārek da go molimoli=a da a-pi.*
 NEG good PURP NSPEC people = SG.CLF:MASC PURP 3SG.M.NPST-go
 ‘It’s not good for people to go.’ [AL-RM-023]

12.3 Relative clause

A relative clause is usually defined in semantic terms to reconcile the syntactic differences across languages (cf. Downing, 1978; Keenan & Comrie, 1977), such as the one given by Comrie & Kuteva as ‘a clause narrowing the potential reference of a referring expression by restricting the reference to those referents of which a particular proposition is true’ (2013). Syntactically, relative construction consists of a ‘pivot constituent’ (usually an NP) and a subordinate clause (the relative clause) (De Vries, 2002:14).

According to the Accessibility Hierarchy of Relativization (subject > direct object > indirect object > oblique argument > genitive) proposed by Keenan and Comrie (1977), it is easier to relativize positions higher on the hierarchy than it is to relativize on lower positions, and a strategy that can be used for relativizing lower positions must be available to higher positions. The syntactic constructions of RC can differ typologically according to three parameters (cf. Lehmann 1986; Keenan 1985; Andrews 2007)⁸⁵:

- (A) Position of the semantic head: whether the semantic head is inside (**internally-headed**) or outside the RC (**externally-headed; preposed or postposed**) (also see Dryer 2013);

85. While Andrews considers internally/externally headed to be a subdivision under embedded RCs, Lehmann adopted a view that internally/externally headed and embedded/adjoined are two independent parameters. I will arbitrarily adopt the latter here as it employs a broader scope of ‘head’ as the functional head of the relative clause.

- (B) Relation between RC and main clause: whether the RC is **adjoined** with or **embedded** in the main clause.
- (C) The way to identify the role of the referent of the head noun within the relative clause (NP_{rel}). A language may utilize one or more of different strategies such as: leaving a gap at the position where (NP_{rel}) would be (**gap strategy**); include in RC a pronoun that explicitly references the grammatical relation of the NP_{rel} (**pronoun retention**); employ a special form (relative pronoun) to introduce RC.

In Tulil, relative clauses are externally-headed, and primarily utilizes the ‘pronoun-retention strategy’, which means a personal pronoun is used to explicitly indicate the position of relativization. A general subordinator *to* is usually used to introduce the relative clause. This strategy is used for relativization of all positions: A/ S_A argument (803), O/ S_O argument (804), secondary O argument (805), genitive (806) and oblique/adjunct (807).

(803) A/ S_A argument

və-m~ume *ngang be ta* [*to ta-ti~vi* *bərtəm*]_{RC}, *ta*
 3SG.M-IPFV~tell 1SG at 3PL SR 3PL.NPST-IPFV~go night 3PL
 [*to ta-tə~dok*]_{RC}.
 SR 3PL.NPST-IPFV~kill

‘He was telling me about those who walk at night, those who kill [= the sorcerers].’ [KV-SO-004]

(804) O/ S_O argument

təre = vənik [*to ta-kə~kəbənət* *idə da* *tə = bem*
 thing = PL.CLF:DIM SR 3PL.NPST-IPFV~make 3N PURP TO = at
 = *a* *kabak = e*]_{RC}
 = PAT basket = SG.CLF:FEM

‘Things that they make for putting into the basket’ [AL-SO-044]

(805) **Secondary O argument**

e-bət ar lət n =a e-bət bətmə ta, tuk
 3SG.F-PROXH still arrive APPL =PAT 3SG.F-PROXH with 3PL give
 =a *lok=a iap* [*to tə-təvəng mat =e*
 =PAT man = SG.CLF:MASC 3SG.M SR 3PL.PST-sing take = 3SG.F.PAT
tuk =a]_{RC}.
 give = 3SG.M.PAT

‘She comes to them, go to the man whom they sang to get her to give to.’
 [WM-LP-028]

(806) **Genitive**

ar bəvon kup a-moli mərubət=e [*to*
 still before thorough ART-person Baining = SG.CLF:FEM SR
ve itən=e e-Namugi]_{RC}.
 3SG.F.POSS.AL name = SG.CLF:FEM ART.F-PN

‘Long time ago there was a Baining woman whose name is Namugi.’
 [LG-VI-003]

(807) **Oblique argument/adjunct**

bə= ngunu-toti lak=a iap [*to ngi-məkətə*
 IAM = 1DL.PST-see lake = SG.CLF:MASC 3SG.M SR 23SG.M.PST-fetch(water)
mat =a ioi bəm =a]_{CC}.
 take = PAT water in = 3SG.M.PAT

‘We (dl.) saw the pool that you fetch water from.’ [LG-VI-038]

When an A/S_A argument is relativized, the cross-referencing material is the person prefix on the verb. Any other pronominals such as free personal pronouns or pronominal demonstratives are not possible before the verb inside the RC as an A/S_A argument.

The head of the relative clause is not marked according to its case in the main clause, but always take a case of A/S_A argument:

(808) *ngə-kət mən =e təkə =do.*
 1SG.PST-lift off = 3SG.F.PAT TO = here

‘I lifted her up and put her here.’ [JK-PP-025]

(809) O/S_o ARGUMENT

ngi-nunman o ngi-kət mən =a iep [*to avar*
 2SG.NPST-enter/exit TOP 2SG.NPST-lift off =PAT 3SG.F SR just
nging lang-mə nging vədəm =e]_{CC} *o ngi-re*
 2SG want-APPL 2SG for =3SG.F.PAT TOP 2SG.NPST-carry
tə = dərətəm.

TO = outside

‘You enter the room, you lift up the woman you want, you carry her outside.’ [AL-SO-094]

As shown in the above examples (809), the head *iep* modified by the relative clause is not in its patientive form =*e* (as in 808). Also, a whole NP which is modified by RC is preceded by patientive marking =*a*. One possible analysis is that the case of head reflects its function in the relative clause as a topic, given that personal pronouns in topic position use the full forms:

- (810) *iep o b = idə-tər =e to ngə-tar*
 3SG.F TOP IAM = 3N.PST-meet =3SG.F.PAT SR 1SG.PST-stick
 = *vənəm be imi io b = i-tuar.*
 = SG.CLF:SLE at 3SG.F.POSS.INAL.eye then IAM = 3SG.F.PST-shout
 ‘As of her, she was shocked because I put it (the burning stick) into her eye and she screamed.’ [SV-BE-017]

‘Gapping’ can sometimes be found for relativization O/S_o or oblique positions. In the following examples when the head NP is a 3rd person gender neuter referent, there are three possibilities for its manifestation in the relative clause: pronoun retention (811b), the pronoun is not present/the preposition is present (811c), both preposition and pronoun not present (811d).

- (811) a. *ngə-mətor da nga-nume bem =a a-pir.*
 1SG.NPST-sit PURP 1SG.NPST-tell at =PAT ART-story
 ‘I’m sitting to tell a story.’ [AL-RM-002]
- b. *tə-p~pe tul u-bət* [*to tə-t~ton bem idə*
 3PL.PST-IPFV~tie bird 3N-PROXH SR 3PL.PST-IPFV~look at 3N
]_{RC} *təkə = nə-bo ga avakavakau umi.*
 TO = LOC-UP across tree.sp. 3N.POSS.AL.eye
 ‘They tied the tamed birds (lit. the ones they look after) on to the branch [branches made to hunt birds].’ [DV-BL-016]

- c. *ngə-mətor nandi da nga-nume be a-pir* [to
1SG.PST-sit like.this PURP 1SG.NPST-tell at ART-story SR
nga iaia və-m~ume ngang bem]_{RC} *be doto*
1SG.POSS grandpa 3SG.M.PST-IPFV~tell 1SG at at when
ta-t~tek =a molimoli=a to bə=
3PL.NPST-IPFV~raise =PAT people=SG.CLF:MASC SR IAM=
v-əngəp.
3SG.M.PST-die
'I'm sitting like this to tell a story that my grandpa told me about how
they summon a dead man (lit. they raise a man who was already
dead).' [AL-SO-002]
- d. *nga a-pir* [to *iaia v-ume ngang*]_{RC}
1SG.POSS.AL ART-story SR grandpa 3SG.M.PST-teach 1SG
o toktok do.
TOP end here
'My story that grandpa told me end here.' [AL-BT-043]

However, the case when only the preposition is retained does not happen with referent of other genders. As shown in 812, when the O/S_O argument is a 3rd singular masculine referent (*məngəda* 'village; home'), the pronoun can be retained (812b), or both the preposition and the pronoun are omitted (812a). This suggests that the case when only the preposition is retained is a special case of argument omission for referent of 3rd neuter gender (cf. §3.2.1.3).

- (812) a. *tə-p~pi nə-mu ba məngəd=a* [to
3PL.PST-IPFV~go LOC-INSIDE in home=SG.CLF:MASC SR
ta-t~tak tat-e be Nəgunən]_{RC}.
3PL.NPST-IPFV~call 3PL-QUOT at PN
'They went inland to the vilage that they call 'at Nəgunən'. '
[PP-PH-004]
- b. *tə-kər mə=nə-mumə təkə=nə-bo ba*
3PL.PST-climb FROM=LOC-DOWN.DIST TO=LOC-UP in
məngəd=a to [ta-t~tak bem =a
village=SG.CLF:MASC SR 3PL.NPST-IPFV~call at =3SG.M.PAT
tat-e 'Ngənnakun']_{RC}.
3PL-QUOT PN
'They climbed from down there up to the village where they called
'Ngənnakun (lit: I was crying)'. '
[LR-TH-023]

This tendency of omitting the whole prepositional phrase (as shown in 812a) may echo with the analysis that the relative clause is taken as a comment to the head NP (as the topic), and information concerning arguments in these positions are not necessarily stated if they can be retrieved/understood.

Another possibility for the relative construction is when a personal pronoun modified by a relative clause is positioned after the head NP, indicating definiteness.

- (813) *da udu o bə = du-təm tang du-n = a*
 PURP 1PL TOP IAM = 1PL.PST-know REFL/RECP 1PL-COM = PAT
ta-mu kəməron = ta ta [to ta-t~tuk udu
 3PL-DIST different = PL.CLF:HUM 3PL SR 3PL.NPST-IPFV~give 1PL
n = a u-bət]_{CC}.
 INSTR = PAT 3N-PROXH
 ‘We want to know those ghosts (in the forest) who give us this [the know-
 ledge of dancing].’ [AL-DA-070]

- (814) *vətak u-və o molimoli = a iap [to*
 PL.CLF:SEG 3N-NSPEC TOP people = SG.CLF:MASC 3SG.M SR
lang-m = a vədəm = a vaku = e
 want-APPL = 3SG.M.PAT for = PAT woman = SG.CLF:FEM
e-bət], a-ti~vi o a-təngar mat
 3SG.F-PROXH 3SG.NPST-IPFV~go TOP 3SG.M.NPST-say take
 = e.
 = 3SG.F.PAT
 ‘Sometimes, the man who wants the woman, he’s going to talk to her.’
 [WM-AT-015]

- (815) *ko go maut me bə = lət konəng n = a*
 NEG NSPEC long.time and IAM = arrive only APPL = PAT
a-vi voin = a iap [to va
 3SG.M-PROXS devil = SG.CLF:MASC 3SG.M SR 3SG.M.POSS.AL
bərivu = a a-vi]_{RC}.
 wind = SG.CLF:MASC 3SG.M-PROXS
 ‘Not long and the devil came, the one who owns the wind.’
 [TV-DM-011]

Even though the personal pronouns *ta* and *iap* in this case are syntactic appositives to the head NPs, their functions are not necessarily non-restrictive. For instance, the examples in (813) and (814) are restrictive modification and in (815) is non-restrictive. And non-restrictive RCs are sometimes separated from the head NP by a prosodic stop:

- (816) *doto laik=ta ta-ti~vi tə=be p~pən, me*
 when big=PL.CLF:HUM 3PL.NPST-IPFV~go TO=at NMLZ~fight and
lok ləm=ta, ta [to ar kori mærek nə ta
 man young=PL.CLF:HUM 3PL SR still NEG good APPL 3PL
da tə=ba p~pən]_{RC}, ta o tə-mətor konəng ba
 PURP TO=in NMLZ~fight 3PL TOP 3PL.PST-sit only in
məngəd=a.
 home = SG.CLF:MASC
 ‘When the adults go to the war, the young people, those who are not yet
 good to go to the war, they just sit at home.’ [AL-HD-025]

- (817) *iap [to bu=a və=*
 3SG.M SR ceremony = SG.CLF:MASC 3SG.M.POSS.INAL =
nung=a], a-kəbənət =a log=a
 bottom = SG.CLF:MASC 3SG.M.NPST-make = PAT bench = SG.CLF:MASC
nə-bət, nə-mumə ba mətə~mətor gatə=bət.
 LOC-PROXH LOC-DOWN.DIST in NMLZ~sit secret.place = SG.CLF:SEG
 ‘He who is the leader of the ceremony, he organized the bench there,
 down there at the secret gathering place.’ [AL-DA-007]

Relative clause can modify adverbial elements such as *nə-bət* ‘there, that place/time/situation’:

- (818) *i-pə~povər, i-pə~povər me it-tau*
 3DL.M.PST-IPFV~dig 3DL.M.PST-IPFV~dig and 3DL.M.PST-meet
tang nə-bət to vənu=a a-kə~kər.
 REFL/RECP LOC-PROXH SR sun = SG.CLF:MASC 3SG.M.NPST-IPFV~rise
 ‘They were digging and digging and they met in the east (lit: where the
 sun rises).’ [LG-VI-049]

12.4 Adverbial clause

Adverbial clauses are those which function as modifiers of VCs or entire clauses. Strictly speaking, adverbial clauses relate to the main clause as a whole and are not ‘embedded’ in the main clause, but in a dependent relationship with the main clause. Adverbial clause is usually positioned after the main clause. It can be positioned before the main clause and separated from it by the topicalizer *o*. In Tulil, adverbial clauses include conditional clause, temporal clause and purpose clause.

Subordinators that can be used for adverbial clauses include *doto* ‘when/if’, *tove* ‘because’, *kati/ka* ‘if only’, *dame* (unrealized desire), purposive *da* and negative purposive *ti*. The general subordinator *to* is also commonly used to lead clauses that can have an adverbial interpretation of various kinds.

12.4.1 Reason clause: *tove* ‘because’

tove ‘because’ is used to introduce a reason clause.

- (819) *tə-timərek vədəm = a tove iap o kori*
 3PL.PST-thank for = 3SG.M.PAT because 3SG.M TOP NEG
və-p~pəlok.
 3SG.M.PST-IPFV~divulge
 ‘They liked him because he didn’t leak secrets.’ [KV-SO-005]

12.4.2 Conditional clause

Two general types of conditional clauses are usually distinguished, according to the semantics of the conditions: ‘reality’ conditionals and ‘unreality’ conditionals (cf. Schachter, 1971). Their subtypes are summarized by Thompson & Longacre (1985); Thompson et al. (2007), and the ones encountered in Tulil are exemplified:

Tulil uses the word *doto* for both temporal and conditional clauses. *kati* usually leads a clause of past tense and indicate unrealized condition (IRR.COND), combining with *ka* or *aka* (IRR).

- (820) **Generic**
doto a-ti~vi nandi ba tuk = a,
 if 3SG.M.NPST-IPFV~go like.this in road = SG.CLF:MASC
tul = a a-tə~nakun.
 bird = SG.CLF:MASC 3SG.M.NPST-IPFV~cry
 ‘If he walks like this on the road, bird cries.’ [KV-SO-014]

Table 12.3: Semantic types of conditionals

semantic type		construction	examples
REAL	habitual/generic	<i>doto</i> + NPST.IPFV	820
	past	<i>doto</i> + PST	821
UNREAL	predictive	<i>doto</i> + NPST.PFV	822
	hypothetical	<i>kati... (a)ka</i>	823
	counterfactual	<i>kati... (a)ka</i>	824

(821) **PST habitual**

kəŋgəl = a *a-vi* *o* *tə-m~matme* *dəm*
 headdress = SG.CLF:MASC 3SG.M-PROXS TOP 3PL.PST-IPFV~work on
 = *a*, ***doto*** *da* *tə-k~kəbənət* *mat tang* *da*
 = 3SG.M.PAT when PURP 3PL.PST-IPFV~make take REFL/RECP PURP
tə = be *p~pən*.
 TO = at NMLZ~fight

‘This headdress, they worked on it, when they wanted to prepare themselves for going to the war.’ [AL-HD-005]

(822) **Predictive**

doto da *bə =* *tat-nan* *təpm = e*, *ba iep* *avar*
 when PURP IAM = 3PL.NPST-listen with = 3SG.F.PAT or 3SG.F also
lange, io *nga-nu* *mədən n* = *e* *tuk* = *a*
 want then 1SG.NPST-put smooth APPL = 3SG.F.PAT give = PAT
nguil = a.
 1SG.POSS.INAL.child = SG.CLF:MASC

‘When they listen to her thought, or she also wants [to marry him], then I will get her to give to my son (lit. put smooth).’ [NK-MA-005]

(823) **Hypothetical**

ka *ngi-təup* *nə-bət*, ***kati*** *ngi-nə* *ngang, io* ***aka***
 IRR 2SG.PST-die LOC-PROXH IRR.COND 2SG-COM 1SG then IRR
mərek konəng.
 good only

‘You would have died there, if you were with me, you would be fine.’ [PP-RA-012]

Appendix A

Verb paradigms

Table A.1: Inflection pattern for *t*-initial verb *tangədə* ‘cook’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>tangədə</i>	<i>nga-</i>	<i>t~</i>	<i>tangədə</i>	<i>ngə-</i>	<i>tangədə</i>	<i>ngə-</i>	<i>t~</i>	<i>tangədə</i>
1DL	<i>ngu-</i>	<i>tangədə</i>	<i>ngu-</i>	<i>t~</i>	<i>tangədə</i>	<i>ngunu-</i>	<i>tangədə</i>	<i>ngunu-</i>	<i>t~</i>	<i>tangədə</i>
1PL	<i>d*ə-</i>	<i>tangədə</i>	<i>d*ə-</i>	<i>t~</i>	<i>tangədə</i>	<i>du-</i>	<i>tangədə</i>	<i>du-</i>	<i>t~</i>	<i>tangədə</i>
2SG	<i>ngi-</i>	<i>tangədə</i>	<i>ngi-</i>	<i>t~</i>	<i>tangədə</i>	<i>ngi-</i>	<i>tangədə</i>	<i>ngi-</i>	<i>t~</i>	<i>tangədə</i>
2DL	<i>i-</i>	<i>tangədə</i>	<i>i-</i>	<i>t~</i>	<i>tangədə</i>	<i>iu-</i>	<i>tangədə</i>	<i>iu-</i>	<i>t~</i>	<i>tangədə</i>
2PL	<i>i-</i>	<i>tangədə</i>	<i>i-</i>	<i>t~</i>	<i>tangədə</i>	<i>inə-</i>	<i>tangədə</i>	<i>inə-</i>	<i>t~</i>	<i>tangədə</i>
3SG.M	<i>a-</i>	<i>tangədə</i>	<i>a-</i>	<i>t~</i>	<i>tangədə</i>	<i>v*ə-</i>	<i>tangədə</i>	<i>v*ə-</i>	<i>t~</i>	<i>tangədə</i>
3SG.F	<i>e-</i>	<i>tangədə</i>	<i>e-</i>	<i>t~</i>	<i>tangədə</i>	<i>i-</i>	<i>tangədə</i>	<i>i-</i>	<i>t~</i>	<i>tangədə</i>
3DL.M	<i>i-</i>	<i>tangədə</i>	<i>i-</i>	<i>t~</i>	<i>tangədə</i>	<i>it-</i>	<i>tangədə</i>	<i>it-</i>	<i>tət~</i>	<i>tangədə</i>
3DL.F	<i>i-</i>	<i>tangədə</i>	<i>i-</i>	<i>t~</i>	<i>tangədə</i>	<i>itə-</i>	<i>tangədə</i>	<i>itə-</i>	<i>t~</i>	<i>tangədə</i>
3PL	<i>ta-</i>	<i>tangədə</i>	<i>ta-</i>	<i>t~</i>	<i>tangədə</i>	<i>tə-</i>	<i>tangədə</i>	<i>tə-</i>	<i>t~</i>	<i>tangədə</i>
3N	<i>i-</i>	<i>tangədə</i>	<i>i-</i>	<i>t~</i>	<i>tangədə</i>	<i>idə-</i>	<i>tangədə</i>	<i>idə-</i>	<i>t~</i>	<i>tangədə</i>

Table A.2: Inflection pattern for *l*-initial verb *lar* ‘try’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>lar</i>	<i>nga-</i>	<i>l~</i>	<i>lar</i>	<i>ngə-</i>	<i>lar</i>	<i>ngə-</i>	<i>l~</i>	<i>lar</i>
1DL	<i>ngu-</i>	<i>lar</i>	<i>ngu-</i>	<i>l~</i>	<i>lar</i>	<i>ngunu-</i>	<i>lar</i>	<i>ngunu-</i>	<i>l~</i>	<i>lar</i>
1PL	<i>d*ə-</i>	<i>lar</i>	<i>d*ə-</i>	<i>l~</i>	<i>lar</i>	<i>du-</i>	<i>lar</i>	<i>du-</i>	<i>l~</i>	<i>lar</i>
2SG	<i>ngi-</i>	<i>lar</i>	<i>ngi-</i>	<i>l~</i>	<i>lar</i>	<i>ngi-</i>	<i>lar</i>	<i>ngi-</i>	<i>l~</i>	<i>lar</i>
2DL	<i>i-</i>	<i>lar</i>	<i>i-</i>	<i>l~</i>	<i>lar</i>	<i>iu-</i>	<i>lar</i>	<i>iu-</i>	<i>l~</i>	<i>lar</i>
2PL	<i>i-</i>	<i>lar</i>	<i>i-</i>	<i>l~</i>	<i>lar</i>	<i>inə-</i>	<i>lar</i>	<i>inə-</i>	<i>l~</i>	<i>lar</i>
3SG.M	<i>a-</i>	<i>lar</i>	<i>a-</i>	<i>l~</i>	<i>lar</i>	<i>v*ə-</i>	<i>lar</i>	<i>v*ə-</i>	<i>l~</i>	<i>lar</i>
3SG.F	<i>e-</i>	<i>lar</i>	<i>e-</i>	<i>l~</i>	<i>lar</i>	<i>i-</i>	<i>lar</i>	<i>i-</i>	<i>l~</i>	<i>lar</i>
3DL.M	<i>i-</i>	<i>lar</i>	<i>i-</i>	<i>l~</i>	<i>lar</i>	<i>it-</i>	<i>lar</i>	<i>it-</i>	<i>ləl~</i>	<i>lar</i>
3DL.F	<i>i-</i>	<i>lar</i>	<i>i-</i>	<i>l~</i>	<i>lar</i>	<i>itə-</i>	<i>lar</i>	<i>itə-</i>	<i>l~</i>	<i>lar</i>
3PL	<i>ta-</i>	<i>lar</i>	<i>ta-</i>	<i>l~</i>	<i>lar</i>	<i>tə-</i>	<i>lar</i>	<i>tə-</i>	<i>l~</i>	<i>lar</i>
3N	<i>i-</i>	<i>lar</i>	<i>i-</i>	<i>l~</i>	<i>lar</i>	<i>idə-</i>	<i>lar</i>	<i>idə-</i>	<i>l~</i>	<i>lar</i>

Table A.3: Inflection pattern for *r*-initial verb *rut* ‘wait’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>rut</i>	<i>nga-</i>	<i>r~</i>	<i>rut</i>	<i>ngə-</i>	<i>rut</i>	<i>ngə-</i>	<i>r~</i>	<i>rut</i>
1DL	<i>ngu-</i>	<i>rut</i>	<i>ngu-</i>	<i>r~</i>	<i>rut</i>	<i>ngunu-</i>	<i>rut</i>	<i>ngunu-</i>	<i>r~</i>	<i>rut</i>
1PL	<i>d*ə-</i>	<i>rut</i>	<i>d*ə-</i>	<i>r~</i>	<i>rut</i>	<i>du-</i>	<i>rut</i>	<i>du-</i>	<i>r~</i>	<i>rut</i>
2SG	<i>ngi-</i>	<i>rut</i>	<i>ngi-</i>	<i>r~</i>	<i>rut</i>	<i>ngi-</i>	<i>rut</i>	<i>ngi-</i>	<i>r~</i>	<i>rut</i>
2DL	<i>i-</i>	<i>rut</i>	<i>i-</i>	<i>r~</i>	<i>rut</i>	<i>iu-</i>	<i>rut</i>	<i>iu-</i>	<i>r~</i>	<i>rut</i>
2PL	<i>i-</i>	<i>rut</i>	<i>i-</i>	<i>r~</i>	<i>rut</i>	<i>inə-</i>	<i>rut</i>	<i>inə-</i>	<i>r~</i>	<i>rut</i>
3SG.M	<i>a-</i>	<i>rut</i>	<i>a-</i>	<i>r~</i>	<i>rut</i>	<i>v*ə-</i>	<i>rut</i>	<i>v*ə-</i>	<i>r~</i>	<i>rut</i>
3SG.F	<i>e-</i>	<i>rut</i>	<i>e-</i>	<i>r~</i>	<i>rut</i>	<i>i-</i>	<i>rut</i>	<i>i-</i>	<i>r~</i>	<i>rut</i>
3DL.M	<i>i-</i>	<i>rut</i>	<i>i-</i>	<i>r~</i>	<i>rut</i>	<i>irə-</i>	<i>rut</i>	<i>it-</i>	<i>rər~</i>	<i>rut</i>
3DL.F	<i>i-</i>	<i>rut</i>	<i>i-</i>	<i>r~</i>	<i>rut</i>	<i>itə-</i>	<i>rut</i>	<i>itə-</i>	<i>r~</i>	<i>rut</i>
3PL	<i>ta-</i>	<i>rut</i>	<i>ta-</i>	<i>r~</i>	<i>rut</i>	<i>tə-</i>	<i>rut</i>	<i>tə-</i>	<i>r~</i>	<i>rut</i>
3N	<i>i-</i>	<i>rut</i>	<i>i-</i>	<i>r~</i>	<i>rut</i>	<i>idə-</i>	<i>rut</i>	<i>idə-</i>	<i>r~</i>	<i>rut</i>

Table A.4: Inflection pattern for *d*-initial verb *dok* ‘kill’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>dok</i>	<i>nga-</i>	<i>də~</i>	<i>dok</i>	<i>ngə-</i>	<i>dok</i>	<i>ngə-</i>	<i>n~</i>	<i>dok</i>
1DL	<i>ngut-</i>	<i>dok</i>	<i>ngu-</i>	<i>tə~</i>	<i>dok</i>	<i>ngunu-</i>	<i>dok</i>	<i>ngunu-</i>	<i>n~</i>	<i>dok</i>
1PL	<i>d*ə-</i>	<i>dok</i>	<i>d*ə-</i>	<i>n~</i>	<i>dok</i>	<i>du-</i>	<i>dok</i>	<i>du-</i>	<i>n~</i>	<i>dok</i>
2SG	<i>ngi-</i>	<i>dok</i>	<i>ngi-</i>	<i>də~</i>	<i>dok</i>	<i>ngi-</i>	<i>dok</i>	<i>ngi-</i>	<i>n~</i>	<i>dok</i>
2DL	<i>it-</i>	<i>dok</i>	<i>i-</i>	<i>tə~</i>	<i>dok</i>	<i>iu-</i>	<i>dok</i>	<i>iu-</i>	<i>n~</i>	<i>dok</i>
2PL	<i>it-</i>	<i>dok</i>	<i>i-</i>	<i>tə~</i>	<i>dok</i>	<i>inə-</i>	<i>dok</i>	<i>inə-</i>	<i>n~</i>	<i>dok</i>
3SG.M	<i>at-</i>	<i>dok</i>	<i>a-</i>	<i>tə~</i>	<i>dok</i>	<i>v*ə-</i>	<i>dok</i>	<i>v*ə-</i>	<i>n~</i>	<i>dok</i>
3SG.F	<i>et-</i>	<i>dok</i>	<i>e-</i>	<i>tə~</i>	<i>dok</i>	<i>i-</i>	<i>dok</i>	<i>i-</i>	<i>n~</i>	<i>dok</i>
3DL.M	<i>it-</i>	<i>dok</i>	<i>i-</i>	<i>tə~</i>	<i>dok</i>	<i>it-</i>	<i>dok</i>	<i>it-</i>	<i>dən~</i>	<i>dok</i>
3DL.F	<i>it-</i>	<i>dok</i>	<i>i-</i>	<i>tə~</i>	<i>dok</i>	<i>itə-</i>	<i>dok</i>	<i>itə-</i>	<i>n~</i>	<i>dok</i>
3PL	<i>tat-</i>	<i>dok</i>	<i>ta-</i>	<i>tə~</i>	<i>dok</i>	<i>tə-</i>	<i>dok</i>	<i>tə-</i>	<i>n~</i>	<i>dok</i>
3N	<i>it-</i>	<i>dok</i>	<i>i-</i>	<i>tə~</i>	<i>dok</i>	<i>idə-</i>	<i>dok</i>	<i>idə-</i>	<i>n~</i>	<i>dok</i>

Table A.5: Inflection pattern for *n*-initial verb *nakən* ‘drink’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>nakən</i>	<i>nga-</i>	<i>nə~</i>	<i>nakən</i>	<i>ngə-</i>	<i>nakən</i>	<i>ngə-</i>	<i>n~</i>	<i>nakən</i>
1DL	<i>ngut-</i>	<i>nakən</i>	<i>ngu-</i>	<i>tə~</i>	<i>nakən</i>	<i>ngunu-</i>	<i>nakən</i>	<i>ngunu-</i>	<i>n~</i>	<i>nakən</i>
1PL	<i>d*ə-</i>	<i>nakən</i>	<i>d*ə-</i>	<i>n~</i>	<i>nakən</i>	<i>du-</i>	<i>nakən</i>	<i>du-</i>	<i>n~</i>	<i>nakən</i>
2SG	<i>ngi-</i>	<i>nakən</i>	<i>ngi-</i>	<i>nə~</i>	<i>nakən</i>	<i>ngi-</i>	<i>nakən</i>	<i>ngi-</i>	<i>n~</i>	<i>nakən</i>
2DL	<i>it-</i>	<i>nakən</i>	<i>i-</i>	<i>tə~</i>	<i>nakən</i>	<i>iu-</i>	<i>nakən</i>	<i>iu-</i>	<i>n~</i>	<i>nakən</i>
2PL	<i>it-</i>	<i>nakən</i>	<i>i-</i>	<i>tə~</i>	<i>nakən</i>	<i>inə-</i>	<i>nakən</i>	<i>inə-</i>	<i>n~</i>	<i>nakən</i>
3SG.M	<i>at-</i>	<i>nakən</i>	<i>a-</i>	<i>tə~</i>	<i>nakən</i>	<i>v*ə-</i>	<i>nakən</i>	<i>v*ə-</i>	<i>n~</i>	<i>nakən</i>
3SG.F	<i>et-</i>	<i>nakən</i>	<i>e-</i>	<i>tə~</i>	<i>nakən</i>	<i>i-</i>	<i>nakən</i>	<i>i-</i>	<i>n~</i>	<i>nakən</i>
3DL.M	<i>it-</i>	<i>nakən</i>	<i>i-</i>	<i>tə~</i>	<i>nakən</i>	<i>it-</i>	<i>nakən</i>	<i>it-</i>	<i>nən~</i>	<i>nakən</i>
3DL.F	<i>it-</i>	<i>nakən</i>	<i>i-</i>	<i>tə~</i>	<i>nakən</i>	<i>itə-</i>	<i>nakən</i>	<i>itə-</i>	<i>n~</i>	<i>nakən</i>
3PL	<i>tat-</i>	<i>nakən</i>	<i>ta-</i>	<i>tə~</i>	<i>nakən</i>	<i>tə-</i>	<i>nakən</i>	<i>tə-</i>	<i>n~</i>	<i>nakən</i>
3N	<i>it-</i>	<i>nakən</i>	<i>i-</i>	<i>tə~</i>	<i>nakən</i>	<i>idə-</i>	<i>nakən</i>	<i>idə-</i>	<i>n~</i>	<i>nakən</i>

Table A.6: Inflection pattern for η -initial verb *ngot* ‘smell’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>ngot</i>	<i>nga-</i>	<i>ngə~</i>	<i>ngot</i>	<i>ngə-</i>	<i>ngot</i>	<i>ngə-</i>	<i>ng~</i>	<i>ngot</i>
1DL	<i>nguk-</i>	<i>ngot</i>	<i>ngu-</i>	<i>kə~</i>	<i>ngot</i>	<i>ngunu-</i>	<i>ngot</i>	<i>ngunu-</i>	<i>ng~</i>	<i>ngot</i>
1PL	<i>d*ə-</i>	<i>ngot</i>	<i>d*ə-</i>	<i>ng~</i>	<i>ngot</i>	<i>du-</i>	<i>ngot</i>	<i>du-</i>	<i>ng~</i>	<i>ngot</i>
2SG	<i>ngi-</i>	<i>ngot</i>	<i>ngi-</i>	<i>ngə~</i>	<i>ngot</i>	<i>ngi-</i>	<i>ngot</i>	<i>ngi-</i>	<i>ng~</i>	<i>ngot</i>
2DL	<i>ik-</i>	<i>ngot</i>	<i>i-</i>	<i>kə~</i>	<i>ngot</i>	<i>iu-</i>	<i>ngot</i>	<i>iu-</i>	<i>ng~</i>	<i>ngot</i>
2PL	<i>ik-</i>	<i>ngot</i>	<i>i-</i>	<i>kə~</i>	<i>ngot</i>	<i>inə-</i>	<i>ngot</i>	<i>inə-</i>	<i>ng~</i>	<i>ngot</i>
3SG.M	<i>ak-</i>	<i>ngot</i>	<i>a-</i>	<i>kə~</i>	<i>ngot</i>	<i>v*ə-</i>	<i>ngot</i>	<i>v*ə-</i>	<i>ng~</i>	<i>ngot</i>
3SG.F	<i>ek-</i>	<i>ngot</i>	<i>e-</i>	<i>kə~</i>	<i>ngot</i>	<i>i-</i>	<i>ngot</i>	<i>i-</i>	<i>ng~</i>	<i>ngot</i>
3DL.M	<i>ik-</i>	<i>ngot</i>	<i>i-</i>	<i>kə~</i>	<i>ngot</i>	<i>ik-</i>	<i>ngot</i>	<i>ik-</i>	<i>ngəng~</i>	<i>ngot</i>
3DL.F	<i>ik-</i>	<i>ngot</i>	<i>i-</i>	<i>kə~</i>	<i>ngot</i>	<i>itə-</i>	<i>ngot</i>	<i>itə-</i>	<i>ng~</i>	<i>ngot</i>
3PL	<i>tak-</i>	<i>ngot</i>	<i>ta-</i>	<i>kə~</i>	<i>ngot</i>	<i>tə-</i>	<i>ngot</i>	<i>tə-</i>	<i>ng~</i>	<i>ngot</i>
3N	<i>ik-</i>	<i>ngot</i>	<i>i-</i>	<i>kə~</i>	<i>ngot</i>	<i>idə-</i>	<i>ngot</i>	<i>idə-</i>	<i>ng~</i>	<i>ngot</i>

Table A.7: Inflection pattern for *b*-initial verb *bunən* ‘climb’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>bunən</i>	<i>nga-</i>	<i>bə~</i>	<i>bunən</i>	<i>ngə-</i>	<i>bunən</i>	<i>ngə-</i>	<i>b(m?)~</i>	<i>bunən</i>
1DL	<i>ngup-</i>	<i>bunən</i>	<i>ngu-</i>	<i>pə~</i>	<i>bunən</i>	<i>ngunu-</i>	<i>bunən</i>	<i>ngunu-</i>	<i>b~</i>	<i>bunən</i>
1PL	<i>d*ə-</i>	<i>bunən</i>	<i>d*ə-</i>	<i>b~</i>	<i>bunən</i>	<i>du-</i>	<i>bunən</i>	<i>du-</i>	<i>b~</i>	<i>bunən</i>
2SG	<i>ngi-</i>	<i>bunən</i>	<i>ngi-</i>	<i>bə~</i>	<i>bunən</i>	<i>ngi-</i>	<i>bunən</i>	<i>ngi-</i>	<i>b~</i>	<i>bunən</i>
2DL	<i>ip-</i>	<i>bunən</i>	<i>i-</i>	<i>pə~</i>	<i>bunən</i>	<i>iu-</i>	<i>bunən</i>	<i>iu-</i>	<i>b~</i>	<i>bunən</i>
2PL	<i>ip-</i>	<i>bunən</i>	<i>i-</i>	<i>pə~</i>	<i>bunən</i>	<i>inə-</i>	<i>bunən</i>	<i>inə-</i>	<i>b~</i>	<i>bunən</i>
3SG.M	<i>ap-</i>	<i>bunən</i>	<i>a-</i>	<i>pə~</i>	<i>bunən</i>	<i>v*ə-</i>	<i>bunən</i>	<i>v*ə-</i>	<i>b~</i>	<i>bunən</i>
3SG.F	<i>ep-</i>	<i>bunən</i>	<i>e-</i>	<i>pə~</i>	<i>bunən</i>	<i>i-</i>	<i>bunən</i>	<i>i-</i>	<i>b~</i>	<i>bunən</i>
3DL.M	<i>ip-</i>	<i>bunən</i>	<i>i-</i>	<i>pə~</i>	<i>bunən</i>	<i>ip-</i>	<i>bunən</i>	<i>ip-</i>	<i>bəb~</i>	<i>bunən</i>
3DL.F	<i>ip-</i>	<i>bunən</i>	<i>i-</i>	<i>pə~</i>	<i>bunən</i>	<i>itə-</i>	<i>bunən</i>	<i>itə-</i>	<i>b~</i>	<i>bunən</i>
3PL	<i>tap-</i>	<i>bunən</i>	<i>ta-</i>	<i>pə~</i>	<i>bunən</i>	<i>tə-</i>	<i>bunən</i>	<i>tə-</i>	<i>b~</i>	<i>bunən</i>
3N	<i>ip-</i>	<i>bunən</i>	<i>i-</i>	<i>pə~</i>	<i>bunən</i>	<i>idə-</i>	<i>bunən</i>	<i>idə-</i>	<i>b~</i>	<i>bunən</i>

Table A.8: Inflection pattern for *g*-initial verb *gup* ‘hunt’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>gup</i>	<i>nga-</i>	<i>gə~</i>	<i>gup</i>	<i>ngə-</i>	<i>gup</i>	<i>ngə-</i>	<i>ng~</i>	<i>gup</i>
1DL	<i>nguk-</i>	<i>gup</i>	<i>ngu-</i>	<i>kə~</i>	<i>gup</i>	<i>ngunu-</i>	<i>gup</i>	<i>ngunu-</i>	<i>ng~</i>	<i>gup</i>
1PL	<i>d*ə-</i>	<i>gup</i>	<i>d*ə-</i>	<i>ng~</i>	<i>gup</i>	<i>du-</i>	<i>gup</i>	<i>du-</i>	<i>ng~</i>	<i>gup</i>
2SG	<i>ngi-</i>	<i>gup</i>	<i>ngi-</i>	<i>gə~</i>	<i>gup</i>	<i>ngi-</i>	<i>gup</i>	<i>ngi-</i>	<i>ng~</i>	<i>gup</i>
2DL	<i>ik-</i>	<i>gup</i>	<i>i-</i>	<i>kə~</i>	<i>gup</i>	<i>iu-</i>	<i>gup</i>	<i>iu-</i>	<i>ng~</i>	<i>gup</i>
2PL	<i>ik-</i>	<i>gup</i>	<i>i-</i>	<i>kə~</i>	<i>gup</i>	<i>inə-</i>	<i>gup</i>	<i>inə-</i>	<i>ng~</i>	<i>gup</i>
3SG.M	<i>ak-</i>	<i>gup</i>	<i>a-</i>	<i>kə~</i>	<i>gup</i>	<i>v*ə-</i>	<i>gup</i>	<i>v*ə-</i>	<i>ng~</i>	<i>gup</i>
3SG.F	<i>ek-</i>	<i>gup</i>	<i>e-</i>	<i>kə~</i>	<i>gup</i>	<i>i-</i>	<i>gup</i>	<i>i-</i>	<i>ng~</i>	<i>gup</i>
3DL.M	<i>ik-</i>	<i>gup</i>	<i>i-</i>	<i>kə~</i>	<i>gup</i>	<i>igə-</i>	<i>gup</i>	<i>i-</i>	<i>gəng~</i>	<i>gup</i>
3DL.F	<i>ik-</i>	<i>gup</i>	<i>i-</i>	<i>kə~</i>	<i>gup</i>	<i>itə-</i>	<i>gup</i>	<i>itə-</i>	<i>ng~</i>	<i>gup</i>
3PL	<i>tak-</i>	<i>gup</i>	<i>ta-</i>	<i>kə~</i>	<i>gup</i>	<i>tə-</i>	<i>gup</i>	<i>tə-</i>	<i>ng~</i>	<i>gup</i>
3N	<i>ik-</i>	<i>gup</i>	<i>i-</i>	<i>kə~</i>	<i>gup</i>	<i>idə-</i>	<i>gup</i>	<i>idə-</i>	<i>ng~</i>	<i>gup</i>

Table A.9: Inflection pattern for *k*-initial verb *kup* ‘stick into’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>kup</i>	<i>nga-</i>	<i>kə~</i>	<i>kup</i>	<i>ngə-</i>	<i>kup</i>	<i>ngə-</i>	<i>k~</i>	<i>kup</i>
1DL	<i>ngu-</i>	<i>kup</i>	<i>ngu-</i>	<i>kə~</i>	<i>kup</i>	<i>ngunu-</i>	<i>kup</i>	<i>ngunu-</i>	<i>k~</i>	<i>kup</i>
1PL	<i>d*ə-</i>	<i>kup</i>	<i>d*ə-</i>	<i>k~</i>	<i>kup</i>	<i>du-</i>	<i>kup</i>	<i>du-</i>	<i>k~</i>	<i>kup</i>
2SG	<i>ngi-</i>	<i>kup</i>	<i>ngi-</i>	<i>kə~</i>	<i>kup</i>	<i>ngi-</i>	<i>kup</i>	<i>ngi-</i>	<i>k~</i>	<i>kup</i>
2DL	<i>i-</i>	<i>kup</i>	<i>i-</i>	<i>kə~</i>	<i>kup</i>	<i>iu-</i>	<i>kup</i>	<i>iu-</i>	<i>k~</i>	<i>kup</i>
2PL	<i>i-</i>	<i>kup</i>	<i>i-</i>	<i>kə~</i>	<i>kup</i>	<i>inə-</i>	<i>kup</i>	<i>inə-</i>	<i>t~</i>	<i>kup</i>
3SG.M	<i>a-</i>	<i>kup</i>	<i>a-</i>	<i>kə~</i>	<i>kup</i>	<i>v*ə-</i>	<i>kup</i>	<i>v*ə-</i>	<i>k~</i>	<i>kup</i>
3SG.F	<i>e-</i>	<i>kup</i>	<i>e-</i>	<i>kə~</i>	<i>kup</i>	<i>i-</i>	<i>kup</i>	<i>i-</i>	<i>k~</i>	<i>kup</i>
3DL.M	<i>i-</i>	<i>kup</i>	<i>i-</i>	<i>kə~</i>	<i>kup</i>	<i>ik-</i>	<i>kup</i>	<i>i-</i>	<i>kək~</i>	<i>kup</i>
3DL.F	<i>i-</i>	<i>kup</i>	<i>i-</i>	<i>kə~</i>	<i>kup</i>	<i>itə-</i>	<i>kup</i>	<i>itə-</i>	<i>k~</i>	<i>kup</i>
3PL	<i>ta-</i>	<i>kup</i>	<i>ta-</i>	<i>kə~</i>	<i>kup</i>	<i>tə-</i>	<i>kup</i>	<i>tə-</i>	<i>k~</i>	<i>kup</i>
3N	<i>i-</i>	<i>kup</i>	<i>i-</i>	<i>kə~</i>	<i>kup</i>	<i>idə-</i>	<i>kup</i>	<i>idə-</i>	<i>k~</i>	<i>kup</i>

Table A.10: Inflection pattern for *v*-initial verb *vən* ‘hit’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>bən</i>	<i>nga-</i>	<i>bə~</i>	<i>vən</i>	<i>ngə-</i>	<i>vən</i>	<i>ngə-</i>	<i>p~</i>	<i>pən</i>
1DL	<i>ngu-</i>	<i>pən</i>	<i>ngu-</i>	<i>pə~</i>	<i>vən</i>	<i>ngunu-</i>	<i>vən</i>	<i>ngunu-</i>	<i>p~</i>	<i>pən</i>
1PL	<i>d*ə-</i>	<i>vən</i>	<i>d*ə-</i>	<i>p~</i>	<i>pən</i>	<i>du-</i>	<i>vən</i>	<i>du-</i>	<i>p~</i>	<i>pən</i>
2SG	<i>ngi-</i>	<i>pən</i>	<i>ngi-</i>	<i>bə~</i>	<i>vən</i>	<i>ngi-</i>	<i>vən</i>	<i>ngi-</i>	<i>p~</i>	<i>pən</i>
2DL	<i>i-</i>	<i>pən</i>	<i>i-</i>	<i>pə~</i>	<i>vən</i>	<i>iu-</i>	<i>vən</i>	<i>iu-</i>	<i>p~</i>	<i>pən</i>
2PL	<i>i-</i>	<i>pən</i>	<i>i-</i>	<i>pə~</i>	<i>vən</i>	<i>inə-</i>	<i>vən</i>	<i>inə-</i>	<i>p~</i>	<i>pən</i>
3SG.M	<i>a-</i>	<i>pən</i>	<i>a-</i>	<i>pə~</i>	<i>vən</i>	<i>v*-</i>	<i>ən</i>	<i>v*ə-</i>	<i>p~</i>	<i>pən</i>
3SG.F	<i>e-</i>	<i>pən</i>	<i>e-</i>	<i>pə~</i>	<i>vən</i>	<i>i-</i>	<i>pən</i>	<i>i-</i>	<i>p~</i>	<i>pən</i>
3DL.M	<i>i-</i>	<i>pən</i>	<i>i-</i>	<i>pə~</i>	<i>vən</i>	<i>ip-</i>	<i>vən</i>	<i>i-</i>	<i>pəp~</i>	<i>pən</i>
3DL.F	<i>i-</i>	<i>pən</i>	<i>i-</i>	<i>pə~</i>	<i>vən</i>	<i>itə-</i>	<i>vən</i>	<i>itə-</i>	<i>p~</i>	<i>pən</i>
3PL	<i>ta-</i>	<i>pən</i>	<i>ta-</i>	<i>pə~</i>	<i>vən</i>	<i>tə-</i>	<i>vən</i>	<i>tə-</i>	<i>p~</i>	<i>pən</i>
3N	<i>i-</i>	<i>pən</i>	<i>i-</i>	<i>pə~</i>	<i>vən</i>	<i>idə-</i>	<i>pən</i>	<i>idə-</i>	<i>p~</i>	<i>pən</i>

Table A.11: Inflection pattern for *v*-initial verb *vi* ‘go, walk’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>bi</i>	<i>nga-</i>	<i>di~</i>	<i>vi</i>	<i>ngə-</i>	<i>vi</i>	<i>ngə-</i>	<i>p~</i>	<i>pi</i>
1DL	<i>ngu-</i>	<i>pi</i>	<i>ngu-</i>	<i>ti~</i>	<i>vi</i>	<i>ngunu-</i>	<i>vi</i>	<i>ngunu-</i>	<i>p~</i>	<i>pi</i>
1PL	<i>də-</i>	<i>vi</i>	<i>də-</i>	<i>p~</i>	<i>pi</i>	<i>du-</i>	<i>vi</i>	<i>du-</i>	<i>p~</i>	<i>pi</i>
2SG	<i>ngi-</i>	<i>bi</i>	<i>ngi-</i>	<i>di~</i>	<i>vi</i>	<i>ngi-</i>	<i>vi</i>	<i>ngi-</i>	<i>p~</i>	<i>pi</i>
2DL	<i>i-</i>	<i>pi</i>	<i>i-</i>	<i>ti~</i>	<i>vi</i>	<i>iu-</i>	<i>vi</i>	<i>iu-</i>	<i>p~</i>	<i>pi</i>
2PL	<i>i-</i>	<i>pi</i>	<i>i-</i>	<i>ti~</i>	<i>vi</i>	<i>inə-</i>	<i>vi</i>	<i>inə-</i>	<i>p~</i>	<i>pi</i>
3SG.M	<i>a-</i>	<i>pi</i>	<i>a-</i>	<i>ti~</i>	<i>vi</i>	<i>v-</i>	<i>i</i>	<i>v*ə-</i>	<i>p~</i>	<i>pi</i>
3SG.F	<i>e-</i>	<i>pi</i>	<i>e-</i>	<i>ti~</i>	<i>vi</i>	<i>i-</i>	<i>vi</i>	<i>i-</i>	<i>p~</i>	<i>pi</i>
3DL.M	<i>i-</i>	<i>pi</i>	<i>i-</i>	<i>ti~</i>	<i>vi</i>	<i>ip-</i>	<i>vi</i>	<i>ip-</i>	<i>pəp~</i>	<i>pi</i>
3DL.F	<i>i-</i>	<i>pi</i>	<i>i-</i>	<i>ti~</i>	<i>vi</i>	<i>itə-</i>	<i>vi</i>	<i>itə-</i>	<i>p~</i>	<i>pi</i>
3PL	<i>ta-</i>	<i>pi</i>	<i>ta-</i>	<i>ti~</i>	<i>vi</i>	<i>tə-</i>	<i>vi</i>	<i>tə-</i>	<i>p~</i>	<i>pi</i>
3N	<i>i-</i>	<i>pi</i>	<i>i-</i>	<i>ti~</i>	<i>vi</i>	<i>idə-</i>	<i>vi</i>	<i>idə-</i>	<i>p~</i>	<i>pi</i>

Table A.12: Inflection pattern for *m*-initial class .iii verb *mə-tor* ‘sit’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>dor</i>	<i>nga-</i>	<i>no~</i>	<i>mətor</i>	<i>ngə-</i>	<i>mətor</i>	<i>ngə-</i>	<i>məto~</i>	<i>mətor</i>
1DL	<i>ngut-</i>	<i>tor</i>	<i>ngut-</i>	<i>no~</i>	<i>mətor</i>	<i>ngunu-</i>	<i>mətor</i>	<i>ngunu-</i>	<i>məto~</i>	<i>mətor</i>
1PL	<i>də-</i>	<i>tor</i>	<i>də-</i>	<i>no~</i>	<i>mətor</i>	<i>du-</i>	<i>mətor</i>	<i>du-</i>	<i>məto~</i>	<i>mətor</i>
2SG	<i>ngi-</i>	<i>dor</i>	<i>ngi-</i>	<i>no~</i>	<i>mətor</i>	<i>ngi-</i>	<i>mətor</i>	<i>ngi-</i>	<i>məto~</i>	<i>mətor</i>
2DL	<i>it-</i>	<i>tor</i>	<i>it-</i>	<i>no~</i>	<i>mətor</i>	<i>iu-</i>	<i>mətor</i>	<i>iu-</i>	<i>məto~</i>	<i>mətor</i>
2PL	<i>it-</i>	<i>tor</i>	<i>it-</i>	<i>no~</i>	<i>mətor</i>	<i>inə-</i>	<i>mətor</i>	<i>inə-</i>	<i>məto~</i>	<i>mətor</i>
3SG.M	<i>at-</i>	<i>tor</i>	<i>at-</i>	<i>no~</i>	<i>mətor</i>	<i>v-</i>	<i>ətor</i>	<i>v*ə-</i>	<i>məto~</i>	<i>mətor</i>
3SG.F	<i>et-</i>	<i>tor</i>	<i>et-</i>	<i>no~</i>	<i>mətor</i>	<i>i-</i>	<i>mətor</i>	<i>i-</i>	<i>məto~</i>	<i>mətor</i>
3DL.M	<i>it-</i>	<i>tor</i>	<i>it-</i>	<i>no~</i>	<i>mətor</i>	<i>ip-</i>	<i>mətor</i>	<i>ip-</i>	<i>məmməto~</i>	<i>mətor</i>
3DL.F	<i>it-</i>	<i>tor</i>	<i>it-</i>	<i>no~</i>	<i>mətor</i>	<i>itə-</i>	<i>mətor</i>	<i>itə-</i>	<i>məto~</i>	<i>mətor</i>
3PL	<i>tat-</i>	<i>tor</i>	<i>tat-</i>	<i>no~</i>	<i>mətor</i>	<i>tə-</i>	<i>mətor</i>	<i>tə-</i>	<i>məto~</i>	<i>mətor</i>
3N	<i>it-</i>	<i>tor</i>	<i>it-</i>	<i>no~</i>	<i>mətor</i>	<i>idə-</i>	<i>mətor</i>	<i>idə-</i>	<i>məto~</i>	<i>mətor</i>

Table A.13: Inflection pattern for *m*-initial class .iii verb *mə-nan* ‘listen’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>nan</i>	<i>nga-</i>	<i>na~</i>	<i>mənan</i>	<i>ngə-</i>	<i>mənan</i>	<i>ngə-</i>	<i>məna~</i>	<i>mənan</i>
1DL	<i>ngut-</i>	<i>nan</i>	<i>ngut-</i>	<i>na~</i>	<i>mənan</i>	<i>ngunu-</i>	<i>mənan</i>	<i>ngunu-</i>	<i>məna~</i>	<i>mənan</i>
1PL	<i>də-</i>	<i>nan</i>	<i>d-</i>	<i>a~</i>	<i>mənan</i>	<i>du-</i>	<i>mənan</i>	<i>du-</i>	<i>məna~</i>	<i>mənan</i>
2SG	<i>ngi-</i>	<i>nan</i>	<i>ngi-</i>	<i>na~</i>	<i>mənan</i>	<i>ngi-</i>	<i>mənan</i>	<i>ngi-</i>	<i>məna~</i>	<i>mənan</i>
2DL	<i>it-</i>	<i>nan</i>	<i>it-</i>	<i>na~</i>	<i>mənan</i>	<i>iu-</i>	<i>mənan</i>	<i>iu-</i>	<i>məna~</i>	<i>mənan</i>
2PL	<i>it-</i>	<i>nan</i>	<i>it-</i>	<i>na~</i>	<i>mənan</i>	<i>inə-</i>	<i>mənan</i>	<i>inə-</i>	<i>məna~</i>	<i>mənan</i>
3SG.M	<i>at-</i>	<i>nan</i>	<i>at-</i>	<i>na~</i>	<i>mənan</i>	<i>v-</i>	<i>ənan</i>	<i>v*ə-</i>	<i>məna~</i>	<i>mənan</i>
3SG.F	<i>et-</i>	<i>nan</i>	<i>et-</i>	<i>na~</i>	<i>mənan</i>	<i>i-</i>	<i>mənan</i>	<i>i-</i>	<i>məna~</i>	<i>mənan</i>
3DL.M	<i>it-</i>	<i>nan</i>	<i>it-</i>	<i>na~</i>	<i>mənan</i>	<i>ip-</i>	<i>mənan</i>	<i>ip-</i>	<i>məmməna~</i>	<i>mənan</i>
3DL.F	<i>it-</i>	<i>nan</i>	<i>it-</i>	<i>na~</i>	<i>mənan</i>	<i>itə-</i>	<i>mənan</i>	<i>itə-</i>	<i>məna~</i>	<i>mənan</i>
3PL	<i>tat-</i>	<i>nan</i>	<i>tat-</i>	<i>na~</i>	<i>mənan</i>	<i>tə-</i>	<i>mənan</i>	<i>tə-</i>	<i>məna~</i>	<i>mənan</i>
3N	<i>it-</i>	<i>nan</i>	<i>it-</i>	<i>na~</i>	<i>mənan</i>	<i>idə-</i>	<i>mənan</i>	<i>idə-</i>	<i>məna~</i>	<i>mənan</i>

Table A.14: Inflection pattern for *m*-initial class .iii verb *məngar* ‘say’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nganə-</i>	<i>ngar</i>	<i>nga-</i>	<i>na~</i>	<i>məngar</i>	<i>ngə-</i>	<i>məngar</i>	<i>ngə-</i>	<i>məngə~</i>	<i>məngar</i>
1DL	<i>ngutə-</i>	<i>ngar</i>	<i>ngut-</i>	<i>na~</i>	<i>məngar</i>	<i>ngunu-</i>	<i>məngar</i>	<i>ngunu-</i>	<i>məngə~</i>	<i>məngar</i>
1PL	<i>d*ə-</i>	<i>ngar</i>	<i>d-</i>	<i>a~</i>	<i>məngar</i>	<i>du-</i>	<i>məngar</i>	<i>du-</i>	<i>məngə~</i>	<i>məngar</i>
2SG	<i>nginə-</i>	<i>ngar</i>	<i>ngi-</i>	<i>na~</i>	<i>məngar</i>	<i>ngi-</i>	<i>məngar</i>	<i>ngi-</i>	<i>məngə~</i>	<i>məngar</i>
2DL	<i>itə-</i>	<i>ngar</i>	<i>it-</i>	<i>na~</i>	<i>məngar</i>	<i>iu-</i>	<i>məngar</i>	<i>iu-</i>	<i>məngə~</i>	<i>məngar</i>
2PL	<i>itə-</i>	<i>ngar</i>	<i>i-</i>	<i>na~</i>	<i>məngar</i>	<i>inə-</i>	<i>məngar</i>	<i>inə-</i>	<i>məngə~</i>	<i>məngar</i>
3SG.M	<i>atə-</i>	<i>ngar</i>	<i>at-</i>	<i>na~</i>	<i>məngar</i>	<i>v*-</i>	<i>əngar</i>	<i>v*ə-</i>	<i>məngə~</i>	<i>məngar</i>
3SG.F	<i>etə-</i>	<i>ngar</i>	<i>et-</i>	<i>na~</i>	<i>məngar</i>	<i>i-</i>	<i>məngar</i>	<i>i-</i>	<i>məngə~</i>	<i>məngar</i>
3DL.M	<i>itə-</i>	<i>ngar</i>	<i>it-</i>	<i>na~</i>	<i>məngar</i>	<i>ip-</i>	<i>məngar</i>	<i>ip-</i>	<i>məngə~</i>	<i>məngar</i>
3DL.F	<i>itə-</i>	<i>ngar</i>	<i>it-</i>	<i>na~</i>	<i>məngar</i>	<i>itə-</i>	<i>məngar</i>	<i>itə-</i>	<i>məngə~</i>	<i>məngar</i>
3PL	<i>tatə-</i>	<i>ngar</i>	<i>tat-</i>	<i>na~</i>	<i>məngar</i>	<i>tə-</i>	<i>məngar</i>	<i>tə-</i>	<i>məngə~</i>	<i>məngar</i>
3N	<i>itə-</i>	<i>ngar</i>	<i>it-</i>	<i>na~</i>	<i>məngar</i>	<i>idə-</i>	<i>məngar</i>	<i>idə-</i>	<i>məngə~</i>	<i>məngar</i>

Table A.15: Irregular inflection pattern for *m*-initial verb class *mat* ‘get’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>at</i>	<i>ngan-</i>	<i>a~</i>	<i>mat</i>	<i>ngə-</i>	<i>mat</i>	<i>ngə-</i>	<i>m~</i>	<i>mat</i>
1DL	<i>ngut-</i>	<i>at</i>	<i>ngut-</i>	<i>a~</i>	<i>mat</i>	<i>ngunu-</i>	<i>mat</i>	<i>ngunu-</i>	<i>m~</i>	<i>mat</i>
1PL	<i>d-</i>	<i>at</i>	<i>d-</i>	<i>a~</i>	<i>mat</i>	<i>du-</i>	<i>mat</i>	<i>du-</i>	<i>m~</i>	<i>mat</i>
2SG	<i>ngin-</i>	<i>at</i>	<i>ngin-</i>	<i>a~</i>	<i>mat</i>	<i>ngi-</i>	<i>mat</i>	<i>ngi-</i>	<i>m~</i>	<i>mat</i>
2DL	<i>it-</i>	<i>at</i>	<i>it-</i>	<i>a~</i>	<i>mat</i>	<i>iu-</i>	<i>mat</i>	<i>iu-</i>	<i>m~</i>	<i>mat</i>
2PL	<i>it-</i>	<i>at</i>	<i>it-</i>	<i>a~</i>	<i>mat</i>	<i>inə-</i>	<i>mat</i>	<i>inə-</i>	<i>m~</i>	<i>mat</i>
3SG.M	<i>at-</i>	<i>at</i>	<i>at-</i>	<i>a~</i>	<i>mat</i>	<i>v*-</i>	<i>at</i>	<i>v*ə-</i>	<i>m~</i>	<i>mat</i>
3SG.F	<i>et-</i>	<i>at</i>	<i>et-</i>	<i>a~</i>	<i>mat</i>	<i>i-</i>	<i>mat</i>	<i>i-</i>	<i>m~</i>	<i>mat</i>
3DL.M	<i>it-</i>	<i>at</i>	<i>it-</i>	<i>a~</i>	<i>mat</i>	<i>ip-</i>	<i>mat</i>	<i>ip-</i>	<i>məm~</i>	<i>mat</i>
3DL.F	<i>it-</i>	<i>at</i>	<i>it-</i>	<i>a~</i>	<i>mat</i>	<i>itə-</i>	<i>mat</i>	<i>itə-</i>	<i>m~</i>	<i>mat</i>
3PL	<i>tat-</i>	<i>at</i>	<i>tat-</i>	<i>a~</i>	<i>mat</i>	<i>tə-</i>	<i>mat</i>	<i>tə-</i>	<i>m~</i>	<i>mat</i>
3N	<i>it-</i>	<i>at</i>	<i>it-</i>	<i>a~</i>	<i>mat</i>	<i>idə-</i>	<i>mat</i>	<i>idə-</i>	<i>m~</i>	<i>mat</i>

Table A.16: Inflection pattern for *m*-initial verb class .i *mikmik* ‘suck’

	NPST.PF		NPST.IMPF			PST.PF		PST.IMPF		
	pers	stem	pers	red	stem	pers	stem	pers	red	stem
1SG	<i>nga-</i>	<i>mikmik</i>	<i>ngan-</i>	<i>i~</i>	<i>mikmik</i>	<i>ngə-</i>	<i>mikmik</i>	<i>ngə-</i>	<i>m~</i>	<i>mikmik</i>
1DL	<i>ngu-</i>	<i>mikmik</i>	<i>ngut-</i>	<i>i~</i>	<i>mikmik</i>	<i>ngunu-</i>	<i>mikmik</i>	<i>ngunu-</i>	<i>m~</i>	<i>mikmik</i>
1PL	<i>d*ə-</i>	<i>mikmik</i>	<i>d*ə-</i>	<i>m~</i>	<i>mikmik</i>	<i>du-</i>	<i>mikmik</i>	<i>du-</i>	<i>m~</i>	<i>mikmik</i>
2SG	<i>ngi-</i>	<i>mikmik</i>	<i>ngin-</i>	<i>i~</i>	<i>mikmik</i>	<i>ngi-</i>	<i>mikmik</i>	<i>ngi-</i>	<i>m~</i>	<i>mikmik</i>
2DL	<i>i-</i>	<i>mikmik</i>	<i>it-</i>	<i>i~</i>	<i>mikmik</i>	<i>iu-</i>	<i>mikmik</i>	<i>iu-</i>	<i>m~</i>	<i>mikmik</i>
2PL	<i>i-</i>	<i>mikmik</i>	<i>it-</i>	<i>i~</i>	<i>mikmik</i>	<i>inə-</i>	<i>mikmik</i>	<i>inə-</i>	<i>m~</i>	<i>mikmik</i>
3SG.M	<i>a-</i>	<i>mikmik</i>	<i>at-</i>	<i>i~</i>	<i>mikmik</i>	<i>v*ə-</i>	<i>mikmik</i>	<i>v*ə-</i>	<i>m~</i>	<i>mikmik</i>
3SG.F	<i>e-</i>	<i>mikmik</i>	<i>et-</i>	<i>i~</i>	<i>mikmik</i>	<i>i-</i>	<i>mikmik</i>	<i>i-</i>	<i>m~</i>	<i>mikmik</i>
3DL.M	<i>i-</i>	<i>mikmik</i>	<i>it-</i>	<i>i~</i>	<i>mikmik</i>	<i>ip-</i>	<i>mikmik</i>	<i>ip-</i>	<i>məm~</i>	<i>mikmik</i>
3DL.F	<i>i-</i>	<i>mikmik</i>	<i>it-</i>	<i>i~</i>	<i>mikmik</i>	<i>itə-</i>	<i>mikmik</i>	<i>itə-</i>	<i>m~</i>	<i>mikmik</i>
3PL	<i>ta-</i>	<i>mikmik</i>	<i>tat-</i>	<i>i~</i>	<i>mikmik</i>	<i>tə-</i>	<i>mikmik</i>	<i>tə-</i>	<i>m~</i>	<i>mikmik</i>
3N	<i>i-</i>	<i>mikmik</i>	<i>it-</i>	<i>i~</i>	<i>mikmik</i>	<i>idə-</i>	<i>mikmik</i>	<i>idə-</i>	<i>m~</i>	<i>mikmik</i>

Appendix B

Table of texts

The following table contains information of all transcribed texts that constitute the main database used in this thesis. The abbreviation for discourse style stand for: narrative (N), expository (E) and procedural (P), conversation (C) respectively. Other types of texts are collected and transcribed as well such as songs and meetings, but are not included in the analysis of this study.

Table B.1: Table of texts

Ref	Speaker full name	Description of text	Type
AK-FH	Alo Karong	Three men went to fish-hunting	N
AL-BT	Augustin Rickie Lour	The Butam people	N
AL-DA		Description of dancing tradition	E
AL-GN		A shining log named Gəna	N
AL-HD		Headdress	E
AL-IP		Independence of PNG	N
AL-L1		Dragon Levator	N
AL-RD		A woman who doesn't know radio	N
AL-RM		Once I made rain in New Ireland	N
AL-SO		Sorcery	N/E
AL-TC		A story about torch	N
AL-TN		Tuaina, Komoi and Malira	P/E
BM-PP	Barbara Mas Avarom	The planting of pitpit	P/E
CK-YE	Christopher Kaili	What I did yesterday	N

Table B.2: Table of texts (continued)

Ref	Speaker full name	Description of text	Type
CM-B1	Carol Malaibe Pao	Our Baining friends 1	N
CM-B2		Our Baining friends 2	N
CM-TP		How to make traps	P/E
DV-BL	David Vøvei Rickie	How to trap birds with birdlime	P/E
DV-HP		Once when I hunted a pig	N
ER-EA	Elias Ratli	Experience in Australia	N
ER-TD		Turtle and duck	N
GK-CC	Geor Kovu	Cassowary and crocodile	N
GV-TF	Gabriella Vinilau	Tropicana fire	N
JK-CB	Joseph Kəvaon	Cannibalism in Tulil history	N
JK-GT		Ghost in Tokukubər	N
JK-P1		Sorcerer Petro 1	N
JK-PP	Joseph Kəvaon	Monster Piupiu	N
JK-SS		Tulil superstition	N
JK-TM		A Tolai man and two Tulils	N
JK-TS		Two sorcerers	N
JN-BL	Joan Nguti	Bad language use	E
JN-KL		Huge eel Kəgora Lok	N
JN-TW		Kubəl and two witches	N
KP-CT	Andrew Kəi Kəpiə	How to cook “Tuaina”	P
KM-BS	Kelly Midəl	How the Bainings came to settle here	N
KM-TH		Tulil history	N
KK-RC	Kapiriel Kinaliu Valir	A story about rice cooking	N
KV-SO	Kornelius Vair	Sorcerers	N/E
LG-VI	Louise Gulua	The origin of Vurar island	N
LM-WT	Lucy Malote	Three men and a witch	N

Table B.3: Table of texts (continued)

Ref	Speaker full name	Description of text	Type
LN-BU	Lazarus Nəngəi Rickie	Raising Buffalo	N/E
LN-SL		Shell, turtle and lizard	N
LN-TO		A monster called Tomomeragap	N
LR-DW	Ludwick Rikie	Dog and wallaby	N
LR-HC		Hornbill and cassowary	N
LR-MK		Two birds: Malip and Kau	N
LR-TF		Tribal fight	N
LR-TH		Tulil history	N
LR-TM		Two moon	N
ML-YE	Mary Lingin	What I did yesterday	N
MP-GW	Michael Pao Titip	Raped by ghost women	N
NK-MA	Nangaia Kaliu	Customs of marriage and bride price	E
PP-PH	Peter Pabeke	White men took photos of Baining	N
PP-RA		A man met a monster called Ravup	N
RN-BT	Rut Nauba	Butterfly	N
RR-DA	Rosalia Rau	We got dad angry	N
SM-DW	Sisilia Makil	Devil woman who ate a kid	N
SV-BE	Sisilia Viru	I burnt my friend's eye	N
SV-ES		A man who ate his son	N
SV-N1		History of Nebaun 1	N
SV-N2		History of Nebaun 2	N
SV-PH		White men took photos of Baining	N
TV-CC	Thomas Voti	The origin of coconut (fish in head)	N
TV-DM		A devil and a man	N
TV-MA		Devil woman's Malay apple tree	N
WL-HT	Wili	Hunting with my father	N

Table B.4: Table of texts (continued)

Ref	Speaker full name	Description of text	Type
WM-AT	Wenzel Mogor	A monster called Aturlour	E
WM-CM		Clan meeting	E
WM-DC		Dancing custom of men in a feast	E
WM-JJ		How to make jungle juice	P
WM-LB		Comparing life before and now	E
WM-LK		A monster called Loka	E
WM-LP		Love potion	P/E
WM-MG		How did I make a garden earlier	E/N
WM-ML		How man and woman make love	P/E
WM-TD		A monster called Tədar	E
GR-EA	Louise Gulua and Maria Rickie	What we did during easter holiday	C

Appendix C

Example texts

C.1 Narratives: Gəna - Augustine ToLour

- (1) *do ava nga-nume be a-pir təgə = von to nga*
now again 1SG.NPST-tell at ART-story one = SG.CLF:DIM SR 1SG.POSS.AL
iaia Martin to-Ur avar vume ngang nə von.
grandpa PN ART.M-PN just 3SG.M.tell 1SG APPL SG.CLF:DIM
'Now I'm going to tell a story that my grandpa Martin Ur told me before.'

- (2) *ngang o nga itən = e Augustine.Rickie.*
1SG TOP 1SG.POSS.AL name = SG.CLF:FEM PN
'My name is Augustine Rickie.'

- (3) *ar bəvon to ngang o idil = a ngang nandi, me ngang*
still before SR 1SG TOP small = SG.CLF:MASC 1SG like.this and 1SG
ngə-mengəp bətm = a ba va mənɡəd = a
1SG.PST-sleep with = 3SG.M in 3SG.M.POSS.AL home = SG.CLF:MASC
nə-m~mu be Neretiret.
LOC-CON~INSIDE at PN
'Long time ago when I was a child like this [tall], I was sleeping with him
in his village there at Neretiret.'

- (4) *doto be vāti tægə=von o go tære=a*
 when at day one=SG.CLF:DIM TOP NSPEC thing=SG.CLF:MASC
viau nā-bo bārānm =udu me go tære=a
 3SG.M.PST.fly LOC-UP over =1PL and NSPEC thing=SG.CLF:MASC
a-bāt o vā-t~tāke, me tære=vānik
 3SG.M-PROXH TOP 3SG.M.PST-IPFV~shine and thing=SG.CLF:DIM
do be ibān o du-t~tot(i) =idā, kori go tæreuk
 here at ground TOP 1PL.PST-IPFV~see =3N NEG NSPEC thing
idā-tārut, be vāti=von non-bāt o bārtām, to
 3N.PST-hide at day=SG.CLF:DIM SG.CLF:DIM-PROXH TOP night SR
go tære=a a-bāt vi.
 NSPEC thing=SG.CLF:MASC 3SG.M-PROXH 3SG.M.PST.go
 ‘When there’s one day something flew up there above us, and the thing was shining, and we saw everything on the ground, nothing could hide, it was at night, when the thing passed.’

- (5) *me go tære=a a-bāt to viau ba*
 and NSPEC thing=SG.CLF:MASC 3SG.M-PROXH SR 3SG.M.PST.fly in
maok=a o pārapārat tāvi bātāpm =a māgāte
 space=SG.CLF:MASC TOP sparkling along all.over =3SG.M.PAT like
kālākālāngār bātāpm =a tor=vāla.
 glittering all.over =PAT log=SG.CLF:SPH
 ‘And that thing flying in the space, all over its body it was like sparkling, like glittering all over the log.’

- (6) *doto vi bārānm =udu o ngang ngā-tir =a*
 when 3SG.M.PST.go over =1PL TOP 1SG 1SG.PST-ask =PAT
nga iaia ngan-e, “iaia, nā-bāt o gār(i) =idā
 1SG.POSS.AL grandpa 1SG-QUOT grandpa LOC-PROXH TOP what =3N
u-bāt?”
 3N-PROXH
 ‘When it passed over us, I asked my grandfather, “grandpa, what’s that?”

- (7) *io nga iaia vatər mat =a mume ngang at-e, “na*
 then 1SG grandpa stand take =PAT tell 1SG HORT 2SG.NPST-listen
ngi-nan, go tər =a a-bət to viau
 NSPEC thing = SG.CLF:MASC 3SG.M-PROXH SR 3SG.M.PST.fly TOP
o ta-t~tak bem =a tat-e Gəna.”
 3PL.NPST-IPFV~call at =PAT 3PL-QUOT PN

‘Then my grandpa started (lit: stand take) telling me, ‘you listen, that thing flew they called it *Gəna*.’

- (8) *io ngang ngə-tir =a ngan-e, ‘do gu Gəna*
 then 1SG 1SG.PST-ask =3SG.M.PAT 1SG-QUOT here which PN
a-vi, gən =a a-vi to mən = do ba
 3SG.M-PROXS brain = SG.CLF:MASC 3SG.M-PROXS SR FROM = here in
du latə?’
 1PL.POSS head

‘then I asked him, “which *Gəna* is this, the brain in our heads?”

- (9) *at-e, “kori, nə-bət o avar go tər =a to*
 3SG.M-QUOT NEG LOC-PROXH TOP just NSPEC thing = SG.CLF:MASC SR
molimoli = ta mən = ba tipur ta-kə~kəbənət = a.’
 people = PL.CLF:HUM FROM = in bush 3PL.NPST-IPFV~work = 3SG.M.PAT
 ‘He said, “no, that is something that people from the bush usually making it.”’

- (10) *ngang ngə-tir =a ngan-e, “gu molimoli = ta*
 1SG 1SG.PST-ask = 3SG.M.PAT 1SG-QUOT which people = PL.CLF:HUM
mən = ba tipur?’
 FROM = in bush

‘I asked him, “which kind of people from the bush?”’

- (11) *io vāngar tuk ngang at-e, “molimoli = ta*
 then 3SG.M.PST.say give 1SG 3SG.M-QUOT people = PL.CLF:HUM
mān = ba tipur o molimoli = ta māgət tang konāng
 FROM = in bush TOP people = PL.CLF:HUM like REFL/RECP only
nə ta mətə udu, me molimoli = ta ta-bət o udu kori
 APPL 3PL like 1PL and people = PL.CLF:HUM 3PL-PROXH TOP 1PL NEG
də-t~toti ta.”
 1PL.NPST-IPFV~see 3PL

‘Then he told me, “people from the bush is just the same like us, and those people, we don’t see them.”’

- (12) *’tədor to tipur = e i-morən ta.’*
 strong SR bush = SG.CLF:FEM 3SG.F.PST-cover 3PL
 ‘[They are] strong because the thick bush cover them.’

- (13) *io ngang ngə-tir = a ngan-e, “me doto kori*
 then 1SG 1SG.PST-ask = 3SG.M.PAT 1SG-QUOT and when NEG
də-t~toti ta o tove to gəri?”
 1PL.NPST-IPFV~see 3PL TOP because SR what

‘Then I asked him, “and if we don’t see them it’s because of what?”’

- (14) *at-e, “avar tədor to laik = a və-tuk ta*
 3SG.M-QUOT just strong SR big = SG.CLF:MASC 3SG.M.PST-give 3PL
n = idə.”
 INSTR = 3N

‘He said, “[It is] the strength (of the people) that god gave to them.”’

- (15) *me do da nga-nume nging be go təre = a*
 and now PURP 1SG.NPST-tell 2SG at NSPEC thing = SG.CLF:MASC
a-bət to ngi-tir dəm = a.
 3SG.M-PROXH SR 2SG.PST-ask for = 3SG.M.PAT

‘And now I want to tell you about that thing you asked about (it).’

- (16) *go tare = a a-bət o tor konəng = bələ*
 NSPEC thing = SG.CLF:MASC 3SG.M-PROXH TOP log only = SG.CLF:SPH
vələ-bət to vələ i-ti~miau.
 SG.CLF:SPH-PROXH SR SG.CLF:SPH 3N.NPST-IPFV~fly
 ‘That thing is just a piece of wood that flies.’

- (17) *me molimoli = ta ta-vi to tador to tipur = e*
 and people = PL.CLF:HUM 3PL-PROXS SR strong SR bush = SG.CLF:FEM
e-bət təpmə ta, doto udu o bə = du-mengəp,
 3SG.F-PROXH with 3PL when 1PL TOP IAM = 1PL.PST-sleep
bərtəm, o ta o ta-ti~vi təkənəbət to udu
 night TOP 3PL TOP 3PL.NPST-IPFV~go 3PL.PST-make SR 1PL
da ta-kə~kəvaon = a a-purpur u-bət to
 PURP 3PL.NPST-IPFV~steal = PAT ART-flower 3N-PROXH SR
i-t~tangatang məgəte kənəbə, me apin, me gu
 3N.PST-IPFV~shine like flower.sp. and flower.sp. and NSPEC
a-purpur u-bət to i-t~tangatang o ta o
 ART-flower 3N-PROXH SR 3N.PST-IPFV~shine TOP 3PL TOP
ta-ta~mat mat = a u-bət o ta-re idə
 3PL.NPST-IPFV~take take = PAT 3N-PROXH TOP 3PL.NPST-carry 3N
nə-m~bo da ta-kə~kəbənət = a tor = vələ
 LOC-CON~UP PURP 3PL.NPST-IPFV~make = PAT log = SG.CLF:SPH
vələ-bət, nə-bo da nang laik idə do nə-p~bo, ba tipur
 SG.CLF:SPH-PROXH LOC-UP on tree big 3N head LOC-EP~UP in bush
laik mənə bərən.
 big back mountain

‘These people who are (covered) with the strength of the bush, when we are sleeping in the night, they come to our place to steal those flowers which shines (yellow; blonde) like kənəbə and apin, and kinds of flowers that shine, they take them, they carry them up there, to make this wood, up there in the head of the big trees up in the big bush in the mountains.’

- (18) *io, doto ta-kəbənət katum n =a tor=vələ*
 then when 3PL.NPST-make all APPL =PAT log=SG.CLF:SPH
vələ-bət ta-vokot ta purpur u-bət
 SG.CLF:SPH-PROXH 3PL.NPST-change 3PL.POSS flower 3N-PROXH
to i-t~təke vəvat bətəpm =a tor=vələ
 SR 3N.NPST-IPFV~shine very with =PAT log=SG.CLF:SPH
vələ-bət, ar ta-kəbənət mək da ta-torən
 SG.CLF:SPH-PROXH still 3PL.NPST-make good PURP 3PL.NPST-cover
mək nə =vələ da kori moli da veal bem =a
 good LOC =SG.CLF:SPH PURP NEG real PURP cover at =PAT
gə=vət be(m) =bələ.
 NSPEC=SG.CLF:SEG at =SG.CLF:SPH

‘When they finish making the wood, they will put the flowers that are shining on the wood, they make it properly so they will cover it well, so that on the wood every piece is covered.’

- (19) *io doto bə= ta-par nə vələ, be vətı=von*
 then when IAM 3PL.NPST-finish APPL SG.CLF:SPH at then
non-bət to ta-par nə vələ, bə= ta-kəgirat
 when IAM= 3PL.NPST-finish LOC SG.CLF:SPH at day=SG.CLF:DIM
tang.
 SG.CLF:DIM-PROXH

‘then when they finish the wood, on that day they will talk to each other about it.’

- (20) *doto bə= təbə~təbartəm təvi o bə= ta-kəgirat tang*
 when IAM= RED~evening gradual TOP IAM= 3PL-talk.to REFL/RECP
tat-e, “tabo, bər udu, məkət o vətı=von da bə=
 3PL-QUOT INTJ set.out 1PL today TOP day=SG.CLF:DIM PURP IAM=
də-lam =a molimoli=ta n =a Gəna.”
 1PL.NPST-show =PAT people=PL.CLF:HUM APPL =PAT PN

‘When the sun is going down (noon - night), they talked to each other they say, ‘you guys, let’s go, today is the day we will show people Gəna.’

- (21) *io doto bə= vər~vərdət bə= vul~vulviok təvi nanbət,*
 then when IAM= RED~dark IAM= RED~dark gradual like.that
o ta o bə= ta-bo be tor=vələ, ga go
 TOP 3PL TOP IAM= 3PL-UP at log=SG.CLF:SPH across NSPEC
nang laik=a vumi to ta-kə~kəbənət
 tree big=SG.CLF:MASC 3SG.M.POSS.eyes SR 3PL.NPST-IPFV~make
=pələ nə-bo ga vumi.
 =SG.CLF:SPH LOC-UP across 3SG.M.POSS.eyes
 ‘When it’s getting dark, they go up where the wood is, get up in the big
 tree, where they make it.’

- (22) *doto bə= ta-tatər tə=be(m) =bələ tat-e, “io,*
 when IAM= 3PL.NPST-stand TO=at =SG.CLF:SPH 3PL-QUOT then
bər udu, bə= də-p~pi, ti [lok ləm=ta
 set.out 1PL IAM= 1PL.NPST-IPFV~go LEST man young=PL.CLF:HUM
]_{NP} *me*
 and
 [*vak ləm=ta*]_{NP} *ta-tengəp, me da*
 woman young=PL.CLF:HUM 3PL.NPST-sleep and PURP
ta-toti udu du tədor to diau təpm =a
 3PL.NPST-see 1PL 1PL.POSS strength SR 1PL.NPST.fly with =PAT
du tədor nə-bo bərənəmə ta.”
 1PL.POSS strength LOC-UP over 3PL
 ‘When they stand next to it they say, “let’s go, in case young men and wo-
 men they sleep, for them to see our strength that we fly with our strength
 over them.”’

- (23) *ta-tatər, ta-taup mat =pələ nanbət o*
 3PL.NPST-stand 3PL.NPST-grab take =SG.CLF:SPH like.that TOP
ta-tiau təpmə vələ, ta-və nə-bo bərodə =vələ,
 3PL.NPST-fly with SG.CLF:SPH 3PL.NSPEC LOC-UP inside =SG.CLF:SPH
me ta-və o nə-bət təvi təkermə =vələ, to
 and 3PL.NSPEC TOP LOC-PROXH along beside =SG.CLF:SPH SR
ta-taup be(m) =bələ, me ta-ti~miau təpmə
 3PL.NPST-grab at =SG.CLF:SPH and 3PL.NPST-IPFV~fly with
vələ nandi bəranm =a məngədə.
 SG.CLF:SPH like.this over =PAT village

‘They will stand, they hold on to the wood, they fly with it, some sitting up there in the middle, some on the side (hanging) that they hold onto the wood, and they are flying with it over villages.’

- (24) *doto ta-pi bəranm =a məngəd=a nə-bət*
 when 3PL.NPST-go over =PAT village=SG.CLF:MASC LOC-PROXH
o kair=a nə-bət ta-tuar bem =a
 TOP noise=SG.CLF:MASC LOC-PROXH 3PL.NPST-shout at =PAT
tor=vələ vələ-bət, ta-t~tak, udu o
 log=SG.CLF:SPH SG.CLF:SPH-PROXH 3PL.NPST-IPFV~call 1PL TOP
du-t~tak, də-t~tak be(m) =bələ dun-e
 1PL.PST-IPFV~call 1PL.NPST-IPFV~call at =SG.CLF:SPH 1PL-QUOT
Gəna, me nə-bo tor konəng =bələ.
 PN and LOC-UP log only =SG.CLF:SPH

When they will move over that village, they (ppl from that village) make noise and shout at this wood, they call, we called, we call it *Gəna*, and up there is just a wood.

- (25) *me doto ta-tiau bərənm =a məngəd=a o*
 and when 3PL.NPST-fly over =PAT village=SG.CLF:MASC TOP
pəka bətəpm =a məngəd=a o məgəte doto
 bright all.over =PAT home=SG.CLF:MASC TOP like when
vənu=a a-t~ton, kori go tərək i-tərut,
 sun=SG.CLF:MASC 3SG.M.NPST-IPFV~look NEG NSPEC thing 3N-hide
təre=vənik u-bət to idə-ba vul=vətək, u-bo ar
 thing=PL.CLF:DIM 3N-PROXH SR 3N-in dark=PL.CLF:SEG 3N-UP still
pəka bətəpm =idə, to tor ko =bələ vələ-bət
 bright with =3N SR log only =SG.CLF:SPH SG.CLF:SPH-PROXH
vələ i-t~təke.
 SG.CLF:SPH 3N.NPST-IPFV~bright

‘And when they will fly over a village, the village will be bright, like when the sun shines, nothing will hide, those things that are in the darkness, these things will be bright, because this wood is bright.’

- (26) *ta-pi* *bərən̄m* = *a* *məŋəd* = *a* *a-və* *o*
 3PL.NPST-go over = PAT home = SG.CLF:MASC 3SG.M-NSPEC TOP
kair = *a*, *ava* *tə = bərən̄m* = *a* *məŋəd* = *a*
 noise = SG.CLF:MASC again TO = over = PAT home = SG.CLF:MASC
a-və *o* *kair* = *a* *ta-tuar* *bem*
 3SG.M-NSPEC TOP noise = SG.CLF:MASC 3PL.NPST-shout at
 = *a* *tat-e*, “*a-bət*”, *ta-t~tak* *mənu*
 = 3SG.M.PAT 3PL-QUOT 3SG.M-PROXH 3PL.NPST-IPFV~call back
 = *a* *tat-e*, “*a-bət*”, *a-bət* *ava* *tə = ba*
 = 3SG.M.PAT 3PL-QUOT 3SG.M-PROXH 3SG.M-PROXH also TO = in
məŋəd = *a* *a-mu* *ava* *ta-tak* *tat-e*,
 village = SG.CLF:MASC 3SG.M-INSIDE also 3PL.NPST-call 3PL-QUOT
 “*a-bət*”, *nə* *von*, *nə* *von*, *nə* *von*,
 3SG.M-PROXH LOC SG.CLF:DIM LOC SG.CLF:DIM LOC SG.CLF:DIM
tə-vi *ta-loktang* *bərən̄m* = *a* *məŋədə* *me*
 3PL.PST-go 3PL.NPST-go.around over = PAT village and
ta-t~tak *konəŋ* *tat-e*, “*a-bət*, *a-bət*,
 3PL.NPST-IPFV~call only 3PL-QUOT 3SG.M-PROXH 3SG.M-PROXH
a-bət.”
 3SG.M-PROXH

‘They will travel over one village, (the village) will be noisy, they (ppl in the villages) will shout at it, “it’s there!” they call at its back “it’s there!”’

- (27) *io* *laik* = *ta* *o* *ta-təŋar* *tuk* *udu* *tat-e*, “*do*
 then big = PL.CLF:HUM TOP 3PL.NPST-say give 1PL 3PL-QUOT here
bə = *du-mukəri*, *bə* = *də-na~mən̄an*, *vədəm*
 IAM = 1PL.PST-listen.carefully IAM = 1PL.NPST-IPFV~listen for
 = *a* *to* *kəruŋ* *bərodəm* = *a* *to* *at-nəvən*.”
 = PAT SR thunder inside = 3SG.M.PAT SR 3PL.NPST-fall
 ‘Then elders will tell us, “now we will listen, (then) we will hear, for it to blast inside when it falls.”’

- (28) *io doto a-loktang mən = do to udu a-loktang*
 then when 3SG.M.NPST-go.around FROM = here SR 1PL 3SG.M.NPST-go.around
nandi təkə = nə-bo bərənəm = a ta-p~bo Bior nə-bo be Vivirən,
 like.this TO = LOC-UP over = PAT 3PL-EP~UP PN LOC-UP at PN
Tomanairik, nanbət, nə-m~mə tə = dova Butəm nandi,
 PN like.that LOC-CON~DOWN TO = at.place.of PN like.this
o tat-e b = it-na~mənən tə = be ta-bo be
 TOP 3PL-QUOT IAM = 3N.NPST-IPFV~listen TO = at 3PL-UP at
Kəinagunən me Ivəre.
 PN and PN

‘Then when it travels around from here belong to us, it travels around like this up to those Tolais at Vivirən, Tomanairik, like that, down there to the place of the Butəm people, they say they will hear to those people up there at Kəinagunən and Ivəre.’

- (29) *doto ta-bo ta-tuar toktok o ta-təngar tat-e,*
 when 3PL-UP 3PL.NPST-shout end TOP 3PL.NPST-say 3PL-QUOT
“bə = də-na~mənən vədəm = a to kərung.”
 IAM = 1PL.NPST-IPFV~listen for = 3SG.M.PAT SR thunder
 ‘When they finish shouting, the elders will say, ‘we will listen for the log to blast.’’

- (30) *io doto kavər kərung bərodəm = a tat-e, ‘io*
 then when just.then thunder inside = 3SG.M.PAT 3PL-QUOT then
Gəna b = a-bo gəvənəm = a urəng = a ba Ravup,
 PN IAM = 3SG.M-UP over = PAT waterfall = SG.CLF:MASC in PN
ba vəvat = a nə-bo ba Ravup.’
 in big = SG.CLF:MASC LOC-UP in PN
 ‘When just then it blast inside they say, ‘this Gəna under the waterfall of (ba) Ravup, in that masalai’s place at (ba) Ravup.’’

- (31) *nə-bət o a-pir bəm = a Gəna.*
 LOC-PROXH TOP ART-story at = PAT PN
 ‘That is the story of Gəna.’

- (32) *me a-vi Gəna o doto a-ti~miau to*
 and 3SG.M-PROXS PN TOP when 3SG.M.NPST-IPFV~fly SR
vul=a o a-t~take mägəte vənu=a.
 night = SG.CLF:MASC TOP 3SG.M.NPST-IPFV~shine like sun = SG.CLF:MASC
 ‘This *Gəna*, when it is flying at night it shines like the sun.’

- (33) *me a-t~take mägəte nə-bət o kəlavəngən=a*
 and 3SG.M-IPFV~shine like LOC-PROXH TOP star = SG.CLF:MASC
at-nəvən mən=be utəm=e nə-m~mə, me
 3SG.M.NPST-fall FROM = at sky = SG.CLF:FEM LOC-CON~DOWN and
kəlavəngən=a o də-t~ton tuk =a o
 star = SG.CLF:MASC TOP 1PL.NPST-IPFV~look give = 3SG.M.PAT TOP
ar nə-bo kup.
 still LOC-UP all
 ‘and it shines like that, it’s like pieces of stars fall from the sky down, and
 pieces of stars, we see it is very high.’

- (34) *me a-vi Gəna o a-ti~vi konəng nə-mə konəng*
 and 3SG.M-PROXS PN TOP 3SG.M-IPFV~go only LOC-DOWN only
ba nangə idə kən, me də-t~tuar bem =a
 in tree 3N.POSS neck and 1PL.NPST-IPFV~shout at = 3SG.M.PAT
me dame bə= ngi-təm ko n =a ngin-e
 and IRR.PURP IAM = 2SG.NPST-know only APPL = 3SG.M.PAT 2SG-QUOT
nə-bo gəri u-p~bo?
 LOC-UP what 3N-EP~UP
 ‘And this *Gəna* moves just over the trees, and we shout at it, you want to
 know what’s that up there?’

- (35) *me nə-bo tor konəng=bələ, iaia vəngar at-e,*
 an LOC-UP log only = SG.CLF:SPH grandpa 3SG.M.PST.say 3SG.M-QUOT
 ‘*nə-bo tor konəng=bələ, to kəra molimoli=ta ta-vi*
 LOC-UP log only = SG.CLF:SPH SR just people = PL.CLF:HUM 3PL-PROXS
mən=ba tipur to tədor to tipur=e bətəpmə ta.”
 FROM = in bush SR strong SR bush = SG.CLF:FEM all.over 3PL
 ‘and up there it’s just a log, grandpa said, “up there it’s just a log, belongs
 to these people from strong bush that this bush is cover them.”’

- (36) *doto molimoli = ta ba mængəd = a ta-te~mengəp*
 when people = PL.CLF:HUM in village = SG.CLF:MASC 3PL.NPST-IPFV~sleep
o ta o lə~lət gatəm nə ta nə-bət
 TOP 3PL TOP IPFV~arrive NSPEC.PL.CLF:HUM LOC 3PL LOC-PROXH
o ta-ta~mat mat = a a-purpur o təkə = nə-bo
 TOP 3PL.NPST-IPFV~get get =PAT ART-flower TOP TO =LOC-UP
ta-vokot idə bətəpm = a tor = vələ vələ-bət.
 3PL.NPST-change 3N all.over =PAT log = SG.CLF:SPH SG.CLF:SPH-PROXH
 ‘When people of that village are sleeping, they continue coming silently,
 they get flowers, go up and change on that wood.’

- (37) *me ta-t~tuk = pələ n = a tədor avar i-to*
 and 3PL.NPST-IPFV~give = SG.CLF:SPH INSTR =PAT strong also 3N-of
ta da vələ i-ti~miau, da ta-lam = a
 3PL PURP SG.CLF:SPH 3N.NPST-IPFV~fly PURP 3PL.NPST-show =PAT
lok ləm = ta me vak ləm = ta do ba
 man young = PL.CLF:HUM and woman young = PL.CLF:HUM here in
mængəd = a, molimolimoli = ta.
 village = SG.CLF:MASC human = PL.CLF:HUM
 ‘And they give strength to the wood, the strength belongs to them for the
 wood to fly, for them to show to the young men and young women here
 at village, human beings.’

- (38) *a-pir idil to iaia vume ngang be Gəna o toktok*
 ART-story small SR grandpa 3SG.M.PST.tell 1SG at PN TOP end
nə-bət, me mək be mənə~mənən.
 LOC-PROXH and thank at GEN~listen
 ‘A little story that grandpa told me about Gəna is finished, and thank you
 for listening.’

- (39) *mək.*
 thank
 ‘Thanks.’

C.2 Procedural: How to make jungle juice - Wenzel Mogor

- (1) *nga-nume bem =a a-longlong to lokuvə da*
 1SG.NPST-tell at =PAT ART-homebrew SR man.PL PURP
ta-m~atme dəm da tə-nakən idə, kori ta-təm.
 3PL.NPST-IPFV~work on PURP 3PL.PST-drink 3N NEG 3PL.NPST-know
 ‘I’m going to tell about homebrew that men made for drinking, (after drink-
 ing) they pass out.’

- (2) *io bə= nga-natər mat =a bokbok.*
 then IAM= 1SG.NPST-stand take =PAT talk
 ‘I’m going to start talking.’

- (3) *u-vi a-longlong to ta-tak bem n =a*
 3N-PROXS ART-homebrew SR 3PL.NPST-call at INSTR =PAT
a-iavə, u-vi o ta-ta~matme dəm n =a
 ART-banana.sp. 3N-PROXS TOP 3PL.NPST-IPFV~work on INSTR =PAT
ləvək.
 banana
 ‘They call this alcohol “aiavə”, they make it from banana.’

- (4) *me ləvək o mətə u-vi a-iavə, a-kina,*
 and banana TOP like 3N-PROXS ART-banana.sp. ART-banana.sp.
ləvək a-kina, me ləvək a-tiai, a-mogi,
 banana ART-banana.sp. and banana ART-banana.sp. ART-banana.sp.
a-maram, ləvək idə to mən~məningau.
 ART-banana.sp. banana 3N SR RED~ripe
 ‘Group of banana’s that can make homebrew, the bananas that are ripe.’

- (5) *io, doto ta-tatər mat =a m~mat idə, ta-pən*
 then when 3PL.NPST-stand take =PAT GEN~take 3N 3PL.NPST-hit
ga ləvək to bə= vəgərət, io ta-tu idə da bulit
 across banana SR IAM = ripe then 3PL.NPST-put 3N PURP sticky.liquid
i-tanəng bərodəm.
 3N-run inside

‘When they start getting them [the bananas], they cut the bananas that are ready to harvest, they will put them so that the drops of the sticky milk will come out of the bananas.’

- (6) *ta-povər =a vərāi=a ta-git =a*
 3PL.NPST-dig =PAT hole=SG.CLF:MASC 3PL.NPST-break.off =PAT
ləvək təkə=nə-mu ba ubək=e io ta-tərop.
 banana TO=LOC-INSIDE in banana.leave then 3PL.NPST-bury
 ‘They will dig a hole, they will take down bananas (from branch) and put into banana leaves, and bury them [in the hole].’

- (7) *io doto mətə ta-tərop idə mægət be a-vokngal io be*
 then when like 3PL.NPST-bury 3N today at ART-tuesday(Tolai) then at
a-tade e-p~bo, ta-tek idə.
 ART-week 3SG.F-EP~UP 3PL.NPST-dig.out 3N
 ‘If they will bury them today at Tuesday, they get them out next Tuesday.’

- (8) *io ta-pbok bə= təpm =idə təkə=nə-mu ba*
 then 3PL.NPST-peel IAM= with =3N TO=LOC-DOWN in
a-pələpun=bədau ba a-dram=bən ba a-ket=pədau.
 ART-bucket=PL.CLF:AUG or ART-tin.drum=SG.CLF:AUG or ART-kettle=PL.CLF:AUG
 ‘so they will peel them (bananas) into buckets or tin drum or kettles.’

- (9) *io ta-tatər mat =a bənakən idə mata a-tade*
 then 3PL.NPST-stand take =PAT turn 3N for(time) ART-week
təgət=e.
 one=SG.CLF:FEM
 ‘then they start stirring them (in the bucket) for one week.’

- (10) *ta-pbānakən idə, ta-pbānakən, ta-pbānakən, ta-pə~vəgarə*
 3PL.NPST-turn 3N 3PL.NPST-turn 3PL.NPST-turn 3PL.NPST-IPFV~cover
təm = a a-dram = bən n = a mətə = vən.
 in.entrance = PAT ART-drum = SG.CLF:AUG INSTR = PAT banana.leave-SG.CLF:AUG
 ‘They stir, they continue stirring, cover the drum with banana leaves.’

- (11) *io a-tade təgət = e bə = kori katum, io bə =*
 then ART-church one = SG.CLF:FEM IAM = NEG all then IAM =
ta-pəvur, ta-pəvur n = idə n = a
 3PL.NPST-squeeze.milk 3PL.NPST-squeeze.milk APPL = 3N INSTR = PAT
purət, ta-pəvur n = a ləvək, mat ko
 coconut.husk 3PL.NPST-squeeze.milk APPL = PAT banana take only
n = a ioi, me bek məgət o ba a-bek me
 APPL = PAT water and string.bag today TOP in ART-string.bag and
bəvon o purt = e.
 before TOP coconut.husk = SG.CLF:FEM

‘so after less than one week, then they milk with “purət” (coconut husk), they milk the banana, only get the water (from the banana), now we use bags but before we use “purət”.’

- (12) *ta-pəvur katum n = idə, io ioi = vəp*
 3PL.NPST-squeeze.milk all APPL 3N then water = SG.CLF:ROUND
i-tor me ta-ta~man = a mətə ləvək moli o
 3N.NPST-sit and 3PL.NPST-IPFV~remove = PAT like banana real TOP
ta-ta~man n = idə.
 3PL.NPST-IPFV~remove APPL = 3N

‘They finish milking them then the (milky) water stayed and they will throw out the (core part of) the banana.’

- (13) *io ioi = vəp ava i-tor mat = a a-tade*
 then water = SG.CLF:ROUND again 3N.NPST-sit take = PAT ART-week
təgət = e ba vəti balakətəria = vənīk.
 one = SG.CLF:FEM in day four = PL.CLF:DIM
 ‘so the water sits there for one week or four days.’

- (14) *io ta-takatə mat idə tə=g =a ro=e,*
 then 3PL.NPST-fetch.water take 3N TO=across =PAT bamboo=SG.CLF:FEM
ba ro=vitəm kilov=ip təkə=nə-bo ta-ti~vi
 in bamboo=DL.CLF:FEM lid=DL.CLF:MASC TO=LOC-UP 3PL.NPST-IPFV~go
tə=bəro tə=be a-kukuk, me a-kukuk a-bət o
 TO=creek TO=at ART-container and ART-container ART-PROXH TOP
avar a-dram=bən ba ges ba a-keg to
 also ART-tin.drum=SG.CLF:AUG in gas in ART-gas.tank SR
ta-loti idə təkə=nə-mu io ta-tangədə.
 3PL.NPST-pour 3N TO=LOC-INSIDE then 3PL.NPST-cook

‘They fetch these water into the bamboo and put the lid on, they take down to the creek, with gas in gas tank, pour the water then cook.’

- (15) *ta-tu a-dram=bən nə-bo bəranm =a turin, io*
 3PL.NPST-put ART-drum=SG.CLF:AUG LOC-UP over =PAT fire then
turin təkə=nə-mə, a-paip təkə=nə-bo, a-paip a-vi
 fire TO=LOC-DOWN ART-pipe TO=LOC-UP ART-pipe 3SG.M-PROXS
o mətə kəbit lok=a da a-tanəng mə=nə-bo
 TOP like rope big=SG.CLF:MASC PURP 3SG.M.NPST-run FROM=LOC-UP
tə=mə(t) vən təkə=nə-mu ba a-botəl=von.
 TO=in.mouth SG.CLF:AUG TO=LOC-INSIDE in ART-bottle=SG.CLF:DIM
 ‘They put drum on top fire, fire underneath, with hose up, hose is like big rope that they run on top of drum goes into the bottle.’

- (16) *nə-mumə bəro be ioi=voi laik=poi,*
 LOC-DOWN.DIST at.creek at water=SG.CLF:DIM big=SG.CLF:FLAT
a-botəl=von o von i-tor nə-mu ba
 ART-bottle=SG.CLF:DIM TOP SG.CLF:DIM 3N.NPST-sit LOC-INSIDE in
ioi.
 water

‘down at the creek at the big river, a botte sits there into the water.’

- (17) *io, bokbok = a nandi io bə = aom = a,*
 then boiled = 3SG.M.PAT like.this then IAM = foam = SG.CLF:MASC
aom = a io bə = ioi i-ta~manəng təkə = nə-mu
 foam = SG.CLF:MASC then IAM = water 3N.NPST-IPFV~run TO = LOC-INSIDE
ba a-botəl = von, təlevon = e, i-ta~manəng,
 in ART-bottle = SG.CLF:DIM sweat = SG.CLF:FEM 3N.NPST-IPFV~run
i-ta~manəng, təkə = nə-mu io tək = pon, io
 3N.NPST-IPFV~run TO = LOC-INSIDE then full = SG.CLF:DIM then
von-bət, to idə-manəng maməni ta-tak be(m)
 SG.CLF:DIM-PROXH SR 3N.PST-run first 3PL.NPST-call at
= bon tat-e nə-bət o von to idə-mat
 = SG.CLF:DIM 3PL-QUOT LOC-PROXH TOP SG.CLF:DIM SR 3N.PST-take
məni, ioi to idə-mat məni, to i-tamang vəvat.
 first water SR 3N.PST-take first SR 3N.NPST-run very
 ‘Then it was boiled, then there is foam, the water runs into the bottle,
 distilled water, it is running and running into it, then it is full, then like
 that thing, the first bottle of distilled water they call it the first one.’

- (18) *von-bət ta-re inə = von, ta-re*
 SG.CLF:DIM-PROXH 3PL.NPST-carry first = SG.CLF:DIM 3PL.NPST-carry
inə = von io da ava idə to i-tanəng nə-p~mə
 first = SG.CLF:DIM then PURP also 3N SR 3N.NPST-run LOC-EP~DOWN
pədəm, me mətə kori go i-tamang io ta-tirəp navonbət
 back and like NEG NSPEC 3N.NPST-run then 3PL.NPST-mix like.that
da i-tamang puikət.
 PURP 3N.NPST-run intense
 ‘They’ll put it (the first bottle) aside, wait for another drop, until its not
 strong any more, then they mix it with the first one to make it really
 strong.’

- (19) *io mə = nə-bət o ta-re idə mə = nə-bət*
 then FROM = LOC-PROXH TOP 3PL.NPST-carry 3N FROM = LOC-PROXH
tə = ba mənəgəd = a ta-tu idə.
 TO = in home = SG.CLF:MASC 3PL.NPST-put 3N
 ‘Then from there they carry it from there to the village, they put it.’

- (20) *io, mæte a-moli=a a-tanəŋ mat =a*
 then like ART-person=SG.CLF:MASC 3SG.M.PST-run take =PAT
va var=ta, io bə= tat-nakən, tat-nakən
 3SG.M.POSS.AL friend =PL.CLF:HUM then IAM= 3PL.NPST-drink
idə, tat-nakən io bə= ta-longlong kup,
 3PL.NPST-drink 3N 3PL.NPST-drink then IAM= 3PL.NPST-drunk
bə= kori ta-təm, ta-tuar kup ba
 all IAM= NEG 3PL.NPST-know 3PL.NPST-know 3PL.NPST-shout
a-rot, vətak u-və o ta-pən-mə tang io
 all in ART-road PL.CLF:SEG 3N-NSPEC TOP 3PL.NPST-hit-APPL
ta-təŋgar tuk =a a-mənə a-polis ta-tanəŋ mat
 REFL/RECP then 3PL.NPST-say give =PAT ART-people ART-police
ta tə=ba rumgat to ta-pə~vən-mə tang.
 3PL.NPST-run take 3PL TO=in jail SR

‘Then, like a man gets his friends together, they drink it, they drink and they got drunk, sometimes they hit each other then they (others) tell the police, they (the police) put them into the jail because they hit each other.’

- (21) *io do a-pir bem =a u-vi a-longlong to*
 then here ART-story at =PAT 3N-prox1 ART-homebrew SR
ta-matme dəm, do ba məŋəd=a o nandi.
 3PL.NPST-work on here in home=SG.CLF:MASC TOP like.this
 ‘So this is the story about homebrew that they make, here at home, is like this.’

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