

*A reference grammar of Puyuma,
an Austronesian language of Taiwan*

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A reference grammar of Puyuma, an Austronesian language of Taiwan

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List of abbreviations

1P	first person plural	LV	locative voice
1S	first person singular	NEG	negator
2P	second person plural	NEU	neutral
2S	second person singular	NMZ	nominaliser
3	third person	NOM	nominative
ACAUS	anticausative	NPRS	non-personal
AV	actor voice	OBL	oblique
CAUS	causative	ORD	ordinal
COL	collective	PASS	passive
COMP	complementiser	PERF	perfective
COP	copular	PJ	projective
CV	conveyance voice	PL	plural
DF	definite	POSS	possessive
DIST	distributive	PR	plurality of relations
DUR	durative	PROG	progressive
ECL	exclusive	PRS	personal
FREQ	frequentative	PSR	possessor
GEN	genitive	PV	patient voice
ID	indefinite	RECIP	reciprocal
IMP	imperative	RED	reduplication
IMPF	imperfective	SG	singular
ICL	inclusive	SUP	superlative
IRR	irrealis	TOP	topic
ITR	intransitive	TR	transitive
LK	linker	VCT	vocative
LOC	locative		

1 *Introduction*

1.1 Goal

The present study investigates the Nanwang dialect of the Puyuma language, spoken by the people in Nanwang and Paoshang Suburbs of Taitung City in southern Taiwan.

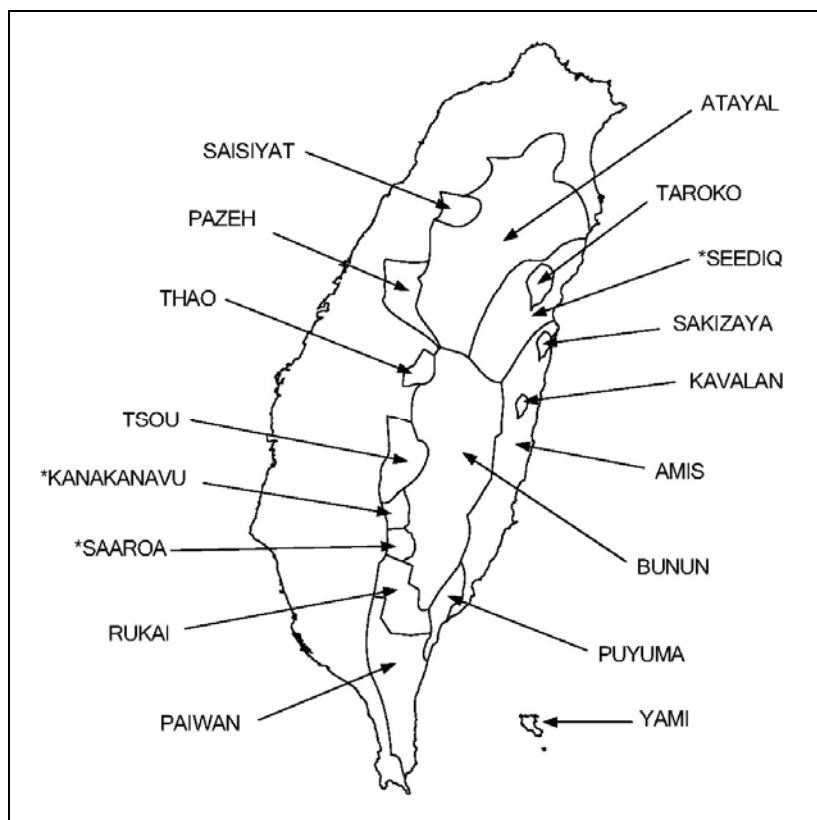
The aim of this grammar is to describe the phonology and morphosyntax of Puyuma. The work is descriptive in nature, and the theoretical framework employed is Basic Linguistic Theory (BLT), following Dixon (1994, 1997) and Dryer (2006). BLT emphasises the need to describe each language in its own terms, rather than imposing on it concepts derived from other languages. Thus, in this study, I abandon traditional terms used by linguists studying Philippine-type languages, such as ‘agent focus’, ‘patient focus’, ‘locative focus’, or ‘instrumental focus’, and replace them with terms such as ‘transitive’ and ‘intransitive’ that are more familiar to most of the world’s linguists.

1.2 About the people and the language

1.2.1 The geographical setting and the speakers

The Puyuma people reside in southeastern Taiwan, in Taitung City and Peinan Township in Taitung County. There are fourteen extant Formosan (Austronesian) languages in Taiwan, but only thirteen indigenous groups are officially recognised by the Taiwanese government.¹ Map 1 shows the distribution of these Formosan languages.

¹ The linguistic situation regarding the Formosan languages is complex. The thirteen groups recognised by the government are Amis, Atayal, Bunun, Paiwan, Rukai, Puyuma, Tsou, Saisiyat, Thao, Kavalan, Sakizaya, Taroko, and Yami. The fourteen extant Formosan languages are Amis, Atayal, Bunun, Paiwan, Rukai, Puyuma, Tsou, Saisiyat, Thao, Kavalan, Seediq, Kanakanavu, Saaroa and Pazeh. Yami belongs politically to Taiwan, but is genetically closer to the Philippine languages (Batanic subgroup). Sakizaya was recognised as an independent group (from Amis) by the government in January 2007. However, most linguists still regard Sakizaya as a dialect of Amis (Joy Wu, pers. comm.). Similarly, while Seediq is still regarded as part of Atayal by the government, Taroko, which is one of Seediq’s dialects, was recognised as an independent group by the government in 2004. Saaroa and Kanakanavu are grouped with Tsou by the government, but they constitute in fact three distinct languages. Pazeh only has one speaker left at the time of writing.



Map 1: The distribution of Formosan languages (from Zeitoun 2007)²

According to my informants, the word *puyuma* means ‘unity, concord’,³ and was originally the autonym of the Nanwang speech community of Taitung City whose dialect is described in this grammar. Thus for the ethnic group itself, ‘Puyuma’ refers to one of the dialects and the people who speak this dialect. Nanwang speakers have coined two new terms, *pinuyumayan* (which excludes people who speak the Nanwang dialect) and *punuyumayan* (including all Puyuma-speaking people) to refer to the ethnic group as a whole. However, the government and other Formosan-language-speaking groups now use ‘Puyuma’ for the entire Puyuma-speaking group. In order not to confuse the reader I use ‘Nanwang’ for the dialect, and the official and generally recognised term ‘Puyuma’ for the language and the ethnic group.

According to statistics published by the Council of Indigenous People of the Government of Taiwan in August 2007, the total Puyuma population is 10,761.⁴ In addition to the majority Han Chinese people, other neighbouring groups include the Amis, Rukai, Bunun, and Paiwan. Although the Puyuma are not large in population in comparison with other ethnic groups,⁵ they dominated eastern Taiwan during the period when the Chin Dynasty and then Japan ruled Taiwan in the 18th and 19th centuries.

2 Languages that are not officially recognised by the government are marked with an asterisk.

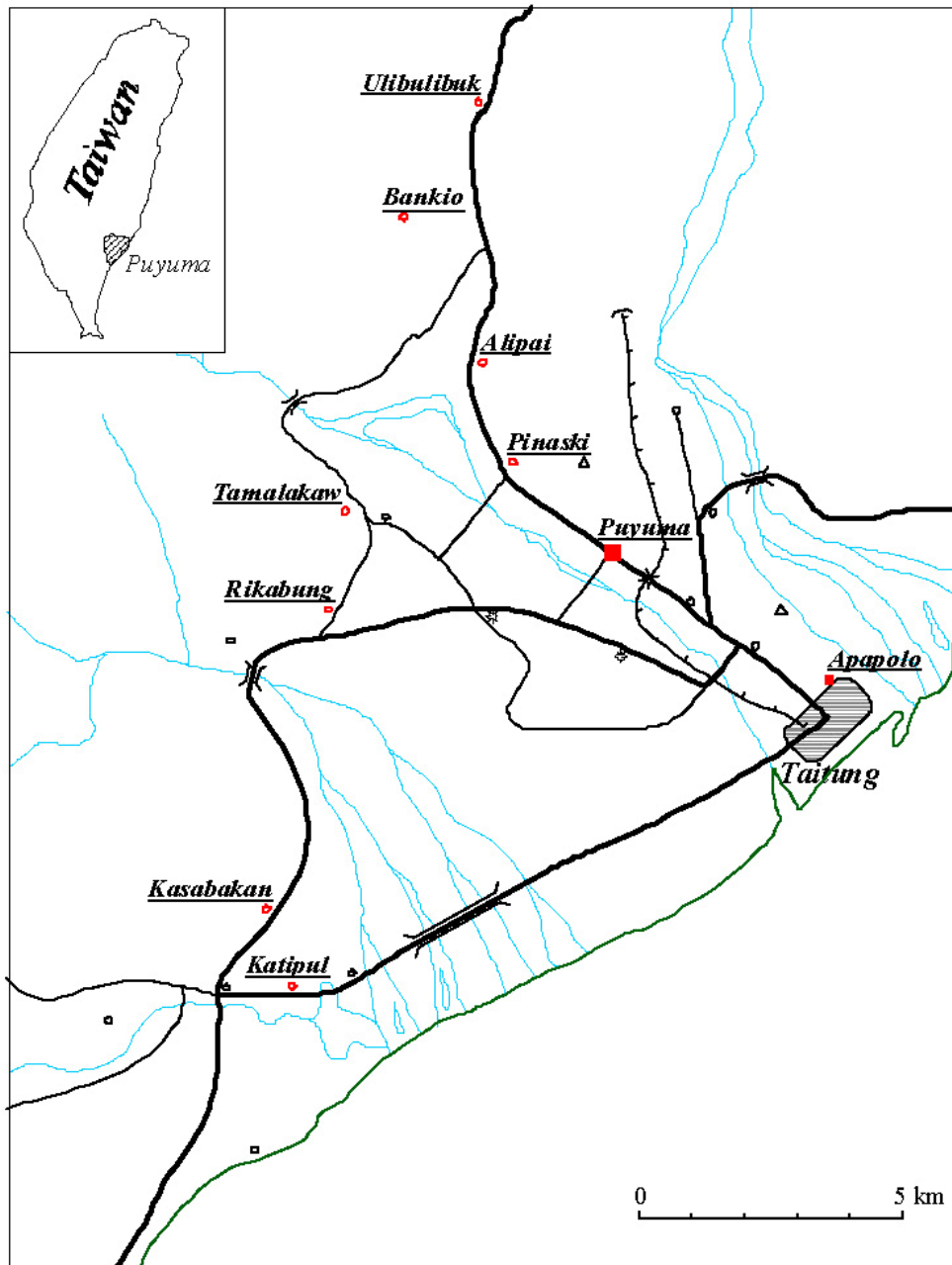
3 Zeitoun and Cauquelin (2006:653–663) show that the word *puyuma* can be analysed as *pu-’uma*, meaning ‘send to the field’.

4 The figure includes those who have migrated to other places. The number of the people who still reside in Taitung area is much smaller; only around 6800.

5 The total population of Formosan ethnic peoples in Taiwan was 481,119 in August 2007. The Amis make up 170,903 of these, Paiwan 82,657, Bunun 48,537, and Rukai 11,326. They are all larger than Puyuma in terms of both population and residential area.

According to Cauquelin (1991b:17), around 1985, the Nanwang dialect was spoken by 1475 persons. Although the ethnic Puyuma population has increased according to the statistics,⁶ the number of Puyuma speakers has probably now fallen to less than 1000.

Traditionally the Puyuma are said to comprise eight villages, known as *pa-fan-she* ('eight aboriginal villages') in Chinese. They are Puyuma (Nanwang), Katipul, Rikabung, Tamalakaw, Kasavakan, Pinaski, Alipai and Ulivilibek. Their locations are shown in Map 2.



Map 2: The location of Puyuma villages (Cauquelin 2004:35)⁷

6 The total population in 1985 was about 6000.

1.2.2 A note on traditional culture and social organisation

The following overview is mostly based on Cauquelin's (1991b, 2004) work and my own observations. The Puyuma and the Amis are the only two Formosan groups that are traditionally matrilineal and matrilocal. Inheritance usually passed to the eldest daughter, and she was responsible for the family. A man went to live in the residence of his wife's family. According to Cauquelin's research, 90% of the population displayed matrilineality before the Japanese came. However, things have changed since the arrival of the Japanese. Nowadays, less than 10% of the population still practise matrilocality, and they are all over 60 years old. Even when men live with wives' families, their children are given the family name of the father's side.

Another well-known feature of the Puyuma was their tradition of military education, which is said to be the main reason that they dominated eastern Taiwan in the 18th and 19th centuries. While women were responsible for taking care of the family and the inheritance and for doing the farming, men were responsible for hunting and protecting the village. Every male had different obligations and training at each phase of his life. Boys entered the *trakuban* 'boys' meeting house' at the age of twelve or thirteen and remained there until eighteen or nineteen. The *trakuban* was divided into six grades, and a boy might be held back from advancing if he was a poor learner. The *trakuban* was like a training centre. Traditionally, the Puyuma boys had to learn how to build such a house, and then built their own *trakuban*. A seniority system⁸ was practiced in the *trakuban*. Corporal punishment was very common, and boys were taught to be absolutely obedient to boys from upper age grades. After years of training in the *trakuban*, the young men had to go through another three years of ascetic life in the *palrakuan* 'young men's meeting house'. They only had one meal a day and wore only a short skirt all year round. During this time, they were not allowed to talk to women and had to do various kinds of hard work to serve the elders, such as cooking, cutting firewood, fetching water, and adding wood to the fire throughout the night. At the end of this time, they were considered adults and were permitted to get married.

Although there are still some *trakuban* and *palrakuan* standing in the villages, nowadays they mainly serve as tourist attractions.

1.2.3 Dialects

As mentioned earlier, the Puyuma formerly lived in eight villages, and each village spoke a different dialect. Thus, the local residents name the different dialects according to the names of the villages.

Ting (1978) compares six varieties in his reconstruction of Proto Puyuma phonology. They are Nanwang, Katipul, Rikavung, Kasavakan, Pinaski, and Ulivelivek. His subgrouping is based on shared innovation and exclusively shared lexical items. His grouping is shown in Figure 1.1.

7 The names of the Puyuma tribes are spelt as 'Kasabakan', 'Ulibulibuk', and 'Rikabung' in the map. But since /b/ has become /v/ in these dialects (cf. §1.2.3), I spell them as 'Kasavakan', 'Ulivelivek', and 'Rikavung' in this work.

8 The seniority system is the tradition of granting privileges and authorities to those who have been in the *trakuban* the longest. They give instructions and commands to the boys from the lower age grades, and if the younger ones are not obedient or do not accomplish the tasks, they will receive punishments from the seniors.

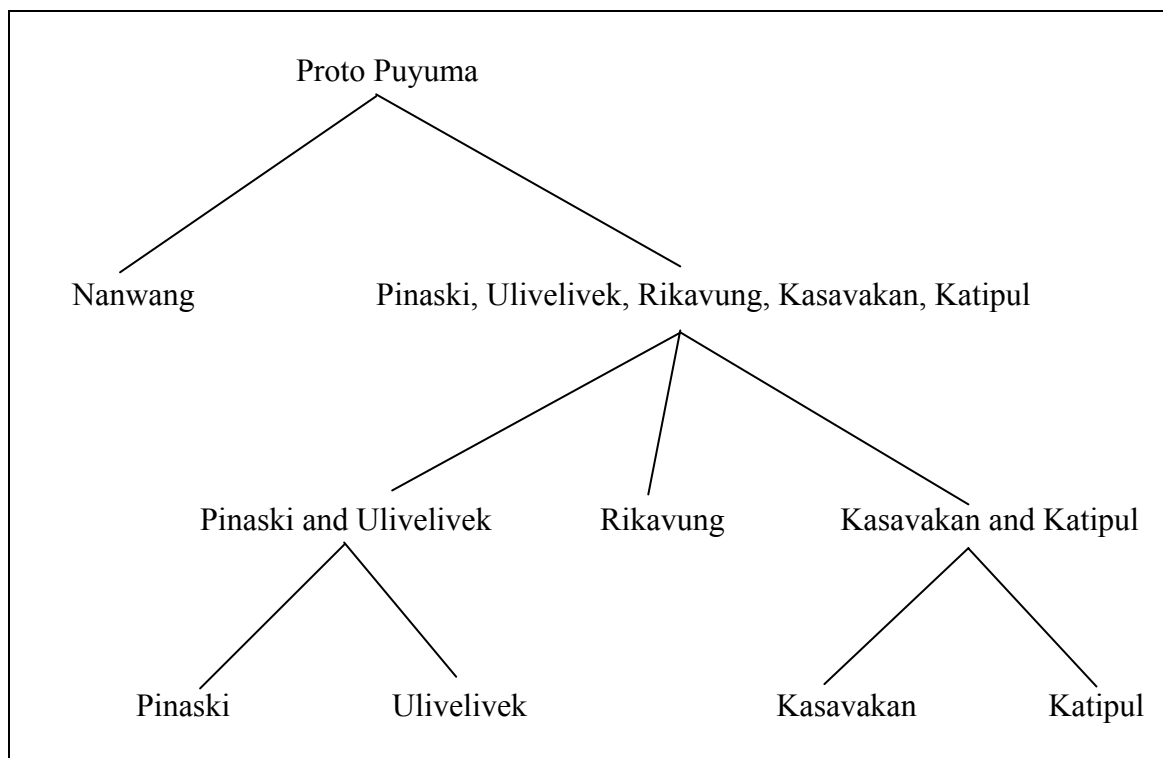


Figure 1.1: The dialects of Puyuma (from Ting 1978)

All dialects except Nanwang belong to a single subgroup, because they share the innovation that voiced stops /b/, /d/, /d̥/ and /g/ have become fricatives (for example, /b/→/v/ in Rikavung, Kasavakan, and Katipul; /b/→/β/ in Pinaski and Ulivelivek; /d/→/ð/, /d̥/→/z/ and /g/→/h/ in all the other dialects). Nanwang dialect is alone in not undergoing this innovation. Ting notes that the other five dialects vary only slightly in their phonetic features. Li (1991) also classifies Puyuma into two varieties: Nanwang and Katipul (which consists of all the dialects other than Nanwang). His subgrouping is also based on the shared innovation discussed by Ting (1978).

Huteson (2005), unlike Ting (1978) and Li (1991), says that the Puyuma dialects are mutually intelligible, with the exception of the Katipul variety. However, he does not provide any linguistic evidence for this statement.

In 2003, four dialects (Nanwang, Katipul, Ulivelivek, and Kasavakan) were recognised at a government-sponsored conference on writing systems for indigenous languages. In the earlier Puyuma language textbooks, three varieties (Nanwang, Katipul, and Ulivelivek) were differentiated. However, no reasons for these classifications were given.

Although there is no agreement about how many dialects there are within Puyuma, linguists all say that the Nanwang dialect is the most conservative. For example, Li (1991) states that the Nanwang dialect preserves the voiced stops, which are weakened to fricatives in the other dialects. Ting's (1978) reconstruction of the phonological system of Proto Puyuma also supports the view that the Nanwang dialect is conservative; the reconstructed system looks almost exactly the same as that of the Nanwang dialect.

1.2.4 Language use

There is a correlation between age and language use/language proficiency. Puyuma people over the age of 65 communicate with each other in Puyuma most of the time. Code-switching between Puyuma and Japanese also happens among people of this age group. Elders communicate with younger generations most often in Mandarin,⁹ even though the elders' Mandarin ability is limited. Puyuma people between 50 to 65 can manage both Puyuma and Mandarin without difficulty. Most of them can also speak Japanese.

For the age group between 30 to 50, language proficiency varies from individual to individual. Some can speak Puyuma fluently, but their lexicon is limited compared with that of the older generation. Some hardly use any Puyuma except for a few lexical items.

Children and adults under 30 rarely know more than a few words of Puyuma. They express little interest in the language and feel Puyuma to be useless outside of Puyuma society.

Since 1998 the government has begun to permit and promote mother tongue courses. These classes became a required component of the elementary and junior high school curricula in 2001. However, despite the favourable attitude toward these classes, few parents speak Puyuma with their children.

1.2.5 Orthography

For more than twenty years before the government's call for a conference on writing systems in 2003,¹⁰ the Roman script had been used in Puyuma communities. Since the 1980s, some Catholic priests and Protestant ministers have been using Roman script in their translations of the scripture and hymn books into Puyuma, and some mother tongue classes have been offered to the communities to teach the Puyuma people how to write their language in Roman script. In the late 1990s, some elementary schools started mother tongue classes, and textbooks were also published in Roman script. During this time, although most speakers used Roman script in their transcription, there was no regulated standard orthography, and different opinions existed among users about the symbols for certain sounds.¹¹

In December 2005, a standard orthography was established by the Council of Indigenous People of the Government of Taiwan. The orthography used in this grammar is slightly different from the standard version used by the government. The differences are discussed in §2.2.1.

Although Puyuma speakers now have a standard writing system for their language, inconsistencies still occur in practice from time to time. The most obvious examples have to do with the glottal stop, schwa, and the glides. More discussion will be provided in §2.2.1.5 and §2.2.1.6.

9 In Papulu, Taiwanese seems to be used more often than Mandarin.

10 This conference and following workshops were held with the aim to set up an official writing system for each Formosan language.

11 For example, the retroflex lateral is written as *l* or *L* by some speakers and written as *ll* by others. The transcription of the glottal stop is inconsistent, and the high vowels are sometimes transcribed as glides.

1.2.6 The position of Puyuma within Austronesian

The current consensus among Austronesian historical linguists is that the Formosan languages fall into a number of different first-order subgroups of Austronesian. What remains under dispute is how many subgroups the Formosan languages comprise.

In an earlier classification, Puyuma was placed in a Paiwanic subgroup. For example, Blust (1977), following Dahl (1973), proposed that Austronesian be divided into four subgroups: Atayalic, Tsouic, Paiwanic, and Malayo-Polynesian. Puyuma was included in the Paiwanic subgroup. Tsuchida (1983) subgrouped the Formosan languages into three groups, based on shared similarities: Atayalic, Northwest Formosan (including Taokas-Babuza, Saisiyat, and Pazeh), and Southern Formosan (including Tsouic, Rukai, and Paiwanic). Paiwanic comprised Amis, Bunun, Puyuma, and Paiwan.

Recently, Blust (1999b) has placed Puyuma in a first-order branch of its own. He proposes ten first-order groups, based mainly on shared phonological innovations: Atayalic (Atayal, Seediq); Northwest Formosan (Saisiyat, Kulon, Pazeh); East Formosan (Basay-Trobiawan, Kavalan, Amis, Siraya); Western Plains (Taokas-Babuza, Papora-Hoanya, Thao); Tsouic (Tsou, Saaroa, Kanakanavu); and Puyuma, Paiwan, Rukai, Bunun, and Malayo-Polynesian. In Ho and Yang's (2000) classification, which is also based on shared phonological innovations, there are six subgroups, and Puyuma and Paiwan are the only single-member groups.

Sagart (2004), using lexical innovations in numerals, proposes that Luilang, Pazeh and Saisiyat are each a primary subgroup of Austronesian (they have not undergone the shared innovation of **pitu* '7'), the other Formosan languages falling into a fourth primary group which he calls 'Pituish' (languages that have **pitu*). Pituish, in turn, consists of a number of languages listed in Figure 1.2 and a 'Walu-Siwaish' subgroup (languages that in addition have **walu* '8', and **siwa* '9'). Within his subgrouping, Puyuma falls into the Walu-Siwaish subgroup.

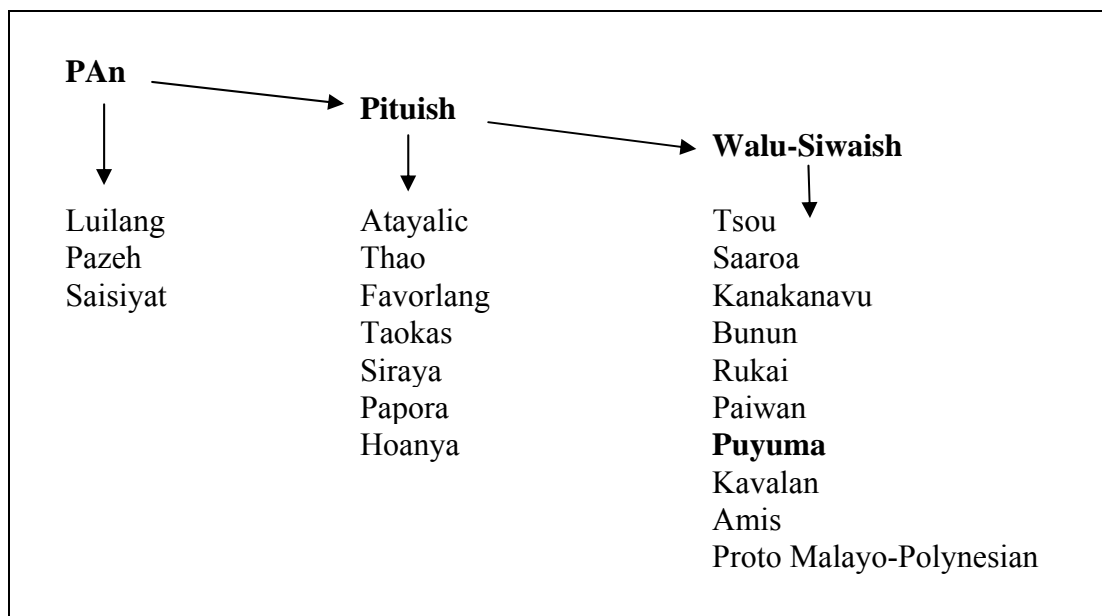


Figure 1.2: Sagart's (2004:421) higher Austronesian phylogeny

1.3 Previous studies

In the linguistic literature, Puyuma has received relatively little attention compared to other Formosan languages. According to Huang (2000a), from 1936 to 1999 there were 16 doctoral and 45 master's theses devoted to the study of 15 Formosan languages.¹² None of these 16 doctoral theses include Puyuma as their research subject. Table 1.1 is a summary of previous studies of different dialects of Puyuma. The length of this list is misleading, as the total content of these studies still falls far short of a reference grammar.

Table 1.1: Previous studies concerning the Puyuma language

Author	Dialect studied	Topic
Ogawa and Asai (1935)	Nanwang, Katipul	Texts and notes
Suenari (1969)	Rikavung	Phonetics
Sprenger (1971)	Katipul	Numerals
Sprenger (1972)	Katipul	Syntax
Ting (1978)	Puyuma (Nanwang), Pinaski, Ulivelivek, Kasavakan, Rikavung, Katipul	Reconstruction of Proto Puyuma phonetic system
Tsuchida (1980)	Tamalakaw	Lexicon, syntax
Lin (1984)	Puyuma (Nanwang)	Phonetics and phonology
Cauquelin (1991a)	Puyuma (Nanwang)	Dictionary
Cauquelin (1991b)	Puyuma (Nanwang)	Grammatical notes
Tsuchida (1995)	Tamalakaw	Syntax
Tan (1997)	Puyuma (Nanwang)	Syntax
Teng (1997)	Puyuma (Nanwang)	Syntax
Huang (2000b)	Puyuma (Nanwang)	Short grammar
Cauquelin (2004)	Puyuma (Nanwang)	Grammatical notes
Teng (2005)	Puyuma (Nanwang)	Syntax
Ross and Teng (2005a)	Puyuma (Nanwang)	Syntax
Ross and Teng (2005b)	Puyuma (Nanwang)	Syntax

The earliest study of Puyuma is Ogawa and Asai's (1935:299–327) work. They collected some legends in Nanwang and Katipul villages and translated them into Japanese. They also listed certain phonological, morphological, and grammatical features, such as case markers, pronouns, and different types of verbs. Suenari's (1969) paper gives an account of the phonological structure of the Rikavung dialect, and he also gives a list of 500 basic lexical items. Sprenger (1971) and (1972) are short papers describing the number systems and construction markers, respectively, of the Katipul dialect. Ting (1978) is a historical paper (see above) which reconstructs the phonological system of Proto Puyuma based on six

12 The fifteen languages include Amis, Atayal, Saisiyat, Pazeh, Seediq, Bunun, Rukai, Tsou, Paiwan, Puyuma, Yami, Kavalan, Kananavu, Saaroa and Favorlang.

dialects of Puyuma. Tsuchida's (1980) work is a sketch in Japanese of the Tamalakaw dialect, together with two texts. He provides a description of case markers, pronouns, and verbal derivations. Later on, Tsuchida published another article on the alienable vs. inalienable distinction in the Tamalakaw dialect (1995). Lin (1984) is a paper in Chinese on the phonetics and phonology of the Nanwang dialect. Cauquelin (1991a) is a Puyuma–French dictionary, with about three thousand entries, containing illustrations of cultural terms. However, it is in French, and thus not easily accessible to people in Taiwan. Cauquelin (1991b:17–76) is a short grammar sketch of the Nanwang dialect. Tan (1997) is a master's thesis on simple sentences in Puyuma. There are various points on which she and I disagree (see §4.5.3.2.2, §5.3.2, §10.4.2, and §12.3.1.3). Teng (1997) is a master's thesis on complex sentences. Both theses are based on elicited data, so many interesting phenomena are missing. Huang (2000b) published a short reference grammar of the Nanwang dialect in Chinese, intended for native speaker use. It is not aimed at a linguist audience. Cauquelin (2004) is an ethnographic study of the Puyuma people and it contains a very short introduction (only nine pages) to the grammar of the Nanwang dialect. Teng (2005) is a short paper on grammatical relations in Puyuma. Ross and Teng (2005a and 2005b) adopt the typologist William Croft's framework (2001, *Radical Construction Grammar*) to describe some aspects of the morphosyntax of Puyuma. Since the late 1990s, several articles on comparative/typological studies of Formosan languages have been published by Huang and Zeitoun and their colleagues, and they have included Puyuma in their studies.¹³

1.4 About this study

1.4.1 Field methods

My field research took place in two stages. The first stage was in 1996–1997 when I was doing my MA thesis. During this period, I worked with several informants in Taipei, and I also took several short trips to Nanwang. The data I collected during this time were for the most part elicited, which gave me a basic understanding of Puyuma structures.

The second stage was from 2001 until now. During this period, I took two three-month field trips and several shorter trips to Nanwang. I stayed with a Puyuma family, and attended a Mandarin-Puyuma bilingual church. The family are well-known for their efforts to preserve Puyuma culture. They run a traditional dancing group, and almost every day they have people of different ages coming to practice traditional dancing. They also offer classrooms for mother tongue classes. Staying with them, I observed how Puyuma is used in the family and in the community. I collected many texts with the help of my informants. Some texts were recorded during community meetings or traditional rituals. My recordings were intended to include as many different genres as possible, but because Puyuma is not very actively spoken in the communities and in the families, it is inevitable that most texts are narratives. I also recorded several sermons, which were preached by the pastors in Mandarin and immediately translated by a translator into Puyuma. However, not much sermon material is used in the study, because there is a lot of Japanese mixed into the translation.

13 For example, Huang et al. (1997a; 1997b; 1999), and Zeitoun et al. (1999).

After I collected text data from different informants, with the help of my major informant Isaw I keyed my data into the computer and transcribed about 6–7 hours of the collected texts. In addition to the natural speech, around 400 verbal stems appearing in the texts were chosen and comprise the basis of the elicited data. The cooccurrence of a given verbal stem with various verbal affixes (i.e. voice, mood, causative, passive, anticausative and reciprocal) was elicited. A list of transcribed texts (26 in total) used in this grammar is given in Appendix I and three selected texts are given in Appendix III.

1.4.2 Methodology and the data used

Discussing the data used in a description, Payne (1997:366–371) points out that both text and elicited data are essential to good linguistic analysis.

In the present study, the analysis is based mostly on the texts I collected and transcribed. I have covered most of the topics listed by Payne (1997:366–371), with the exception of intonation, the lexical inventory and lexical semantics. Several topics, such as voice (subject choice), transitivity, nominalisation, re-encoding of arguments, existential/possessive/locative clauses, and clause combining are dealt with in more detail. Readers may refer to the table of contents for an overview of the organisation of the study.

1.4.3 Informants

The major informants are listed below (in alphabetical order) with their year of birth and sex indicated.

Chen, De-fu	1920	Male
Chen, Guang-rueng (Takamulri)	1938	Male
Cheng, Yu-chiao	1954	Female
Li, Yuan-de	1943	Male
Lin, Hao-xun (Isaw)	1949	Male
Lin, Qing-mei (Akawyan)	1939	Female
Lin, Zhi-cheng (Tuyusi)	1932	Male
Lin, Zhi-mei	1958	Female
Tseng, Xiang-mei	1958	Female
Tseng, Xiou-hua	1938	Female
Wu, Xian-ming	1945	Male
Zhou, Xi-shu	1918	Male

2 *Phonetics and phonology*

2.1 An overview of syllable structure

This chapter begins with a brief overview of Puyuma syllable structure, as this is necessary for the description of the phonemes in §2.2.

A representation of syllable structure is given in Figure 2.1. In the figure, [σ] represents a syllable, which consists of an onset [O] and a rhyme [R]; a rhyme in turn consists of a nucleus [Nuc] and a coda [Coda].

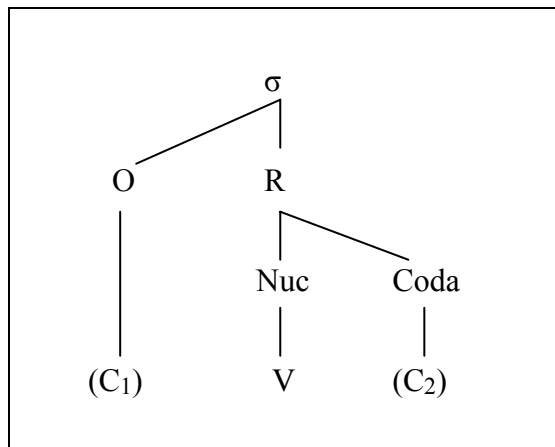


Figure 2.1: Puyuma syllable structure

The minimal syllable in Puyuma thus consists of a vowel, and the possible syllable shapes are V, CV, VC and CVC. Any of the four vowels (§2.2.2) can occur in the nucleus position, and any of the consonants can occur in either the onset or the coda position. In this analysis, each vowel forms a syllable nucleus, and thus vowels in a series always belong to different syllables.

2.2 Phonemic inventory

2.2.1 Consonants

There are 18 consonants in Nanwang Puyuma, and they can all appear as the onset or coda of any syllable. Consonants are listed in Table 2.1. This table also presents the

orthography adopted in this grammar. The retroflexes /ʈ/, /ɖ/, and /ɭ/ are written as *tr*, *dr*, and *lr*, /ŋ/ is written as *ng*, and /ʔ/ is written as ' (an apostrophe).¹

Table 2.1: Consonant phonemes

	bilabial	alveolar	retroflex	palatal	velar	glottal
voiceless stops	p	t	ʈ (<i>tr</i>)		k	ʔ (')
voiced stops	b	d	ɖ (<i>dr</i>)		g	
nasals	m	n			ŋ (<i>ng</i>)	
voiceless fricative		s				
lateral		l	ɭ (<i>lr</i>)			
trill		r				
glides	w			j (<i>y</i>)		

2.2.1.1 Stops

There are nine stop phonemes in the Nanwang dialect. The voiced stops /b/, /d/, /g/, and /ɖ/ are not aspirated. The voiceless stops, other than the glottal stop, are unaspirated before vowels but aspirated in word final position. According to Li (1991:26) and Ting (1978:325–326), only the Nanwang dialect preserves the voiced stops; they have become fricatives in the other dialects. The voiceless retroflex stop /ʈ/ is unique among the Formosan languages; except for the neighbouring Tanan Rukai, which borrowed it from Puyuma,² it only occurs in Puyuma. Examples of stops occurring as onset and as coda are given below.

onset	coda
b <i>balri</i> 'wind', <i>lrabeni</i> 'salty'	<i>areb</i> 'to leak'
d <i>deru</i> 'to cook', <i>idang</i> 'blade'	<i>ngalrad</i> 'name'
g <i>garem</i> 'now', <i>sugay</i> 'to push aside'	<i>mutrerag</i> 'to sprinkle'
dr <i>drenan</i> 'mountain', <i>'idrang</i> 'old'	<i>tulrudr</i> 'to hand over'
p <i>pulang</i> 'to help', <i>trepā</i> 'to focus'	<i>selap</i> 'to sweep', <i>ngapngap</i> 'lick'
t <i>tukudr</i> 'to support', <i>atel</i> 'to drop'	<i>apit</i> 'to arrange', <i>rutrutān</i> 'nipple'
k <i>kuatis</i> 'bad', <i>trekelr</i> 'to drink'	<i>alrak</i> 'to take', <i>tiktik</i> 'hammer'
tr <i>trau</i> 'human being', <i>matrangis</i> 'to cry'	<i>asatr</i> 'high', <i>gutrgutr</i> 'scratch'
' <i>'ak'ak</i> 'crow', <i>sa'adr</i> 'branch'	<i>tra'tra</i> 'lock'

1 The orthography adopted here is the same as the version recently adopted by the government with one exception. In the official version *lr* stands for /l/, and /ɭ/ is written as *l*. Logically speaking we would expect *lr* to stand for the retroflex lateral /ɭ/ instead of /l/. The reason for not adopting the official version in this book is to avoid potential confusion concerning the fact that *lr* stands for a sound that has nothing to do with the curling of the tongue in the official version.

2 The information is from Elizabeth Zeitoun (pers. comm.).

2.2.1.2 Nasals

There are three nasals. Examples showing their distribution are given below.

	onset	coda
m	<i>manay</i> ‘what, who’, <i>rami</i> ‘root’	<i>ayam</i> ‘bird’, <i>amtreg</i> ‘stable’
n	<i>ninik</i> ‘knife’, <i>enay</i> ‘water’	<i>denun</i> ‘summer’
ng	<i>ngisngis</i> ‘beard’, <i>lrangitr</i> ‘sky’	<i>pilang</i> ‘to lead’, <i>sangli</i> ‘snail’

2.2.1.3 Fricative

The only fricative in the Nanwang dialect is a voiceless alveolar fricative, /s/. This is palatalised as [ʃ] before the high vowels /i/ and /u/ and realised as [s] elsewhere. For example:

/siri/ ‘goat’	→	[ʃiri]
/susu/ ‘breast’	→	[ʃuʃu]
/sagar/ ‘like’	→	[sagar]

	onset	coda
s	<i>supeng</i> ‘to kiss’, <i>asal</i> ‘again’	<i>takis</i> ‘to hack’, <i>mesmes</i> ‘to knead’

2.2.1.4 Laterals and trill

There are three liquids in Puyuma; two laterals (/l/ and /ɭ/) and a trill (/r/). Li (1991) reports that there is no clear [l] in Puyuma dialects; instead it is a fricative lateral [ɭ]. He also mentions that the fricative property of [ɭ] is weakened in the Nanwang dialect. According to my own fieldnotes, as well as Lin (1984) and Ting (1978), in the Nanwang dialect there is no frication in the lateral /l/. In other dialects, especially in the Kasavakan and Katipul dialects, the fricative property is very strong.

	onset	coda
l	<i>laman</i> ‘sympathy’, <i>wali</i> ‘teeth’	<i>drekal</i> ‘village’, <i>belbel</i> ‘banana’
lr	<i>lrutung</i> ‘monkey’, <i>bulray</i> ‘beautiful’	<i>bekalr</i> ‘new’
r	<i>redok</i> ‘to arrive’, <i>deru</i> ‘to cook’	<i>takar</i> ‘a stand’, <i>birbir</i> ‘lips’

2.2.1.5 Glides

In terms of their articulation, glides are more like vowels than consonants, since there is no contact of any kind between the articulators. They behave like consonants in that they do not form a syllabic peak and never carry stress. Like the consonants discussed above, in Puyuma the glides can appear as the onset or coda of any syllable. However, in the corpus I have not found any example showing a glide before or after a schwa (§2.2.3). In other words, glides do not occur in a syllable where the syllable nucleus is a schwa.

	onset	coda
w	<i>wari</i> ‘day’, <i>kawang</i> ‘to walk’	<i>daw</i> ‘why’
y	<i>yuyu</i> ‘you’, <i>ulaya</i> ‘exist’	<i>apuy</i> ‘fire’

A number of words which I originally thought contained /j/ or /w/ were later found to contain an underlying /i/ or /u/. From the surface structure, it seems that the high vowels are replaced by a homorganic glide, but in fact there are two steps in the process: first, a glide is inserted, and then the high vowel is deleted. The second step is optional. For example:

Glide insertion		High vowel deletion		
(Obligatory)		(Optional)		
<i>mi-alup</i>	→	[mij <u>al</u> up]	→	[mj <u>al</u> up]
<i>ki-umal</i>	→	[kij <u>u</u> mal]m	→	[kj <u>u</u> mal]
<i>mu-a-timulr</i>	→	[mu <u>w</u> atimu[]]	→	[m <u>w</u> atimu[]]

Glide insertion is also discussed in §2.5.3.1.

2.2.1.6 Minimal pairs for consonant phonemes

/b/ vs /p/	<i>bu'ut</i>	'to stop'
	<i>pu'ut</i>	'wart'
/r/	<i>abak</i>	'to contain'
	<i>alrak</i>	'to take'
/ng/	<i>balrad</i>	'to spread'
	<i>ngalrad</i>	'name'
/w/	<i>bali</i>	'shadow'
	<i>wali</i>	'teeth'
/p/ vs /g/	<i>supay</i>	'grindstone'
	<i>sugay</i>	'to push aside'
/dr/	<i>supeng</i>	'to kiss'
	<i>sudrung</i>	'handle of a tool'
/tr/	<i>asap</i>	'a kind of grass'
	<i>asatr</i>	'to be high'
/n/	<i>sukup</i>	'to disassemble and pile up'
	<i>sukun</i>	'to encircle and suppress'
/ng/	<i>piselr</i>	'to squeeze'
	<i>ngiselr</i>	'tartar'
/r/	<i>apetr</i>	'to put things in order'
	<i>aretr</i>	'to contract'
/t/ vs /d/	<i>tikes</i>	'to shoot'
	<i>dikes</i>	'to hold'
/l/	<i>bati</i>	'to tell'
	<i>bali</i>	'shadow'
/s/	<i>puatel</i>	'to drop off'
	<i>puasel</i>	'grapefruit'
/ng/	<i>pulat</i>	'to use up'
	<i>pulang</i>	'to help'

	/r/	<i>bu'ut</i>	'to stop'
		<i>bu'ur</i>	'thyroid gland'
/d/ vs /dr/		<i>idang</i>	'knife blade'
		<i>'idrang</i>	'to be old'
	/l/	<i>wadi</i>	'younger sibling'
		<i>wali</i>	'teeth'
	/r/	<i>wari</i>	'day'
	/y/	<i>ngalrad</i>	'name'
		<i>ngalray</i>	'saliva'
/tr/ vs /dr/		<i>trekelr</i>	'to drink'
		<i>drekelr</i>	'to choke'
	/lr/	<i>butri</i>	'to close one eye'
		<i>bulri</i>	'wound'
	/l/	<i>asatr</i>	'to be high'
		<i>asal</i>	'again'
	/s/	<i>lrangitr</i>	'sky'
		<i>lrangis</i>	'decorative chain'
	/y/	<i>kutru</i>	'headlouse'
		<i>kuyu</i>	'fox'
/dr/ vs /s/		<i>tengedr</i>	'to invade, to kill'
		<i>tenges</i>	'to bind'
	/k/	<i>alradr</i>	'hedge'
		<i>alrak</i>	'to take'
	/r/	<i>takadr</i>	'container made of bamboo'
		<i>takar</i>	'stand'
	/w/	<i>iradr</i>	'sound made by clearing one's throat'
		<i>iraw</i>	'to glorify'
/k/ vs /l/		<i>atek</i>	'to hack'
		<i>atel</i>	'to drop'
	/lr/	<i>basak</i>	'to carry on the shoulder'
		<i>basalr</i>	'farm'
	/ʔ/	<i>tukudr</i>	'to withstand'
		<i>tu'udr</i>	'bottom of a tree trunk'
	/g/	<i>kiskis</i>	'to scrape'
		<i>gisgis</i>	'to shave'
/g/ vs /p/		<i>salretrag</i>	'to pour out'
		<i>salretrap</i>	'to bump'
/ʔ/ vs /tr/		<i>'erab</i>	'to burp'
		<i>trerab</i>	'to fall'

/m/ vs /l/	<i>mesmes</i>	‘to knead’
	<i>lesles</i>	‘to rub’
/n/ vs /l/	<i>drekan</i>	‘to be wide’
	<i>drekal</i>	‘village’
/s/	<i>lralriyun</i>	‘to revolve the handle’
	<i>lralriyus</i>	‘drill’
/y/	<i>bulran</i>	‘moon’
	<i>bulray</i>	‘to be beautiful’
/ng/ vs /lr/	<i>ngitra’</i>	‘groin’
	<i>lritra’</i>	‘mud’
/s/	<i>iring</i>	‘to slant’
	<i>iris</i>	‘crest’
/y/	<i>ilrang</i>	‘to grind with a grindstone’
	<i>ilray</i>	‘reed’
/l/ vs /lr/	<i>trukul</i>	‘to carry on the back’
	<i>trukulr</i>	‘to pluck off (grasses)’
/r/	<i>dremiyal</i>	‘to cough’
	<i>dremiyar</i>	‘to shine’
/s/	<i>takil</i>	‘small cup’
	<i>takis</i>	‘to slash’
/y/	<i>dawal</i>	‘to inform’
	<i>daway</i>	‘to produce’
/lr/ vs /k/	<i>tulrudr</i>	‘to hand over’
	<i>tukudr</i>	‘to support’
/l/	<i>bulru’</i>	‘a kind of bamboo’
	<i>bulu’</i>	‘to throw’
/s/	<i>pabekalr</i>	‘to make new’
	<i>pabekas</i>	‘to run’
/r/ vs /’/	<i>dudur</i>	‘bone of lower leg’
	<i>dudu’</i>	‘coconut’
/y/	<i>ba’ar</i>	‘roundworm’
	<i>ba’ay</i>	‘kudzu vine’
/s/ vs /y/	<i>beras</i>	‘rice’
	<i>beray</i>	‘to give’
/y/ vs /w/	<i>kubay</i>	‘legumes’
	<i>kubaw</i>	‘warehouse’

The glottal stop does not play a role in differentiating meaning (because there is no minimal pair contrasting /ʔ/ and zero), and it is sometimes missing from the speech of some speakers in younger generations.³ However, for older speakers there are subminimal pairs in which sequences with and without a glottal stop are in contrast. Thus *'erab* ‘to burp’ has initial /ʔ/, but *ekan* ‘to eat’ does not. Intervocally *bu'aw* ‘beans’ has medial /ʔ/ but no consonant intervenes between /u/ and /a/ in *puasel* ‘grapefruit’ (but like vowels are always separated by a glottal stop, e.g. *ba'ar* ‘roundworm’). The word *lrita* ‘mud’ has a final glottal stop, but *ama* ‘father’ does not. I consider the glottal stop a phoneme for morphophonemic reasons.

In Puyuma, there are five intransitive/actor voice affixes,⁴ and three of them **, *me-*, and *m-* are allomorphs (§2.6.1). The contexts for their distribution can be stated as follows:

- * → *m-* / __ [-consonantal]
** → *me-* / __ [+sonorant]
** → ** / elsewhere⁵

Thus, if a verb begins with a glottal stop but we do not consider it a phoneme, we will have an incorrect derivation. Take *'etim* ‘to stew’ as an example. We will derive its intransitive/actor voice form wrongly as **m-etim* instead of the correct form *'etim*. Also, if the verb ends with a glottal stop and we ignore it, we will pronounce its transitive/undergoer voice form wrongly. For instance, *retra'-aw* would be pronounced wrongly as **retra-aw* because of the glide insertion rule (§2.5.3.1). More examples are given in Table 2.2.

Table 2.2: The interaction of the glottal stop and affixation

Intransitive/actor voice affixation	Transitive/undergoer voice affixation
<i>'erab</i> ‘to burp’ → <i>'erab</i> (<i>*m-erab</i>)	<i>retra</i> ‘to give up’ → <i>retra'-aw</i> [rəʔaʔaw] (<i>*retra-aw</i>) [rəʔajaw]
<i>'etim</i> ‘to stew’ → <i>'etim</i> (<i>*m-etim</i>)	<i>padelru</i> ‘lower the price’ → <i>padelru'-aw</i> [padəʔuʔaw] (<i>*padelru-aw</i>) [padəʔujaw]
Compare: <i>ekan</i> ‘to eat’ → <i>m-ekan</i> <i>alrak</i> ‘to take’ → <i>m-alrak</i>	Compare: <i>tama</i> ‘to spit’ → <i>tama-ay</i> [tamajaj] <i>trepā</i> ‘to focus’ → <i>trepā-aw</i> [təpajaw]

There is also circumstantial evidence for the glottal stop phoneme as the glottal stop in Nanwang dialect systematically corresponds to /h/ or /ɤ/ in cognates in other dialects (Li 1991; Ting 1978). For instance:

3 In Nanwang dialect, most speakers are not aware of its existence. In their transcriptions, it is ignored.
4 The terminologies of transitivity and voice are used in parallel until §4.2, where the equivalence between them is explained.
5 In the corpus, I have found no *m*-initial and glide-initial stems that take an actor voice/intransitive marker (**, *me-* or *m-*) or a perfective marker (*<in>*, *ni-*, or *in-*).

English	Nanwang dialect	Other dialects
house	/rumaʔ/	/rumah/; /rumaɤ/
flower	/ʔapuʔ/	/hapuʔ/; /ɤapuʔ/
taro	/buʔir/	/vuhir/; /vuɤir/

2.2.2 Vowels

The Puyuma vowels are shown in Table 2.3.

Table 2.3: Vowel phonemes

	front	central	back
high	i		u
mid		ə (<i>e</i>)	
low		a	

As mentioned in §2.1, any of the four vowels can occur as a nucleus, and each vowel forms a separate syllable nucleus, so that vowels in a series always belong to different syllables. Lin (1984:119) mentions that distribution of /ə/ is restricted. It cannot form a syllable by itself without being accompanied by an onset or a coda and it does not occur in word-initial or word-final position. A glottal stop is inserted automatically before or after the schwa when the schwa occurs in word-initial or word-final position. For instance:

puenay [puənaj] ‘put water’ *enay* [ʔənaj] ‘water’

In my own fieldnotes, the insertion of glottal stop before schwa in the word-initial position (or after schwa in the word-final position) is optional and varies from informant to informant.

The high back rounded vowel /u/ is realised as a mid rounded vowel [o] when the following consonant is a velar nasal:

/u/ → [o] / __ [+velar, +nasal]

Thus, *gung* ‘ox’ is pronounced as [gɔŋ], and *lrutung* ‘monkey’ as [lɔtɔŋ].

Minimal pairs for vowel phonemes are as follows:

/a/ vs /i/	<i>ama</i>	‘father’
	<i>ami</i>	‘year’
/e/	<i>dalrukap</i>	‘bottom surface of the foot’
	<i>dalrukep</i>	‘vulture’
/u/	<i>ba’aw</i>	‘alive’
	<i>bu’aw</i>	‘a kind of bean’
/i/ vs /e/	<i>dinun</i>	‘vat’
	<i>denun</i>	‘summer’
/u/	<i>pilang</i>	‘to lead’
	<i>pulang</i>	‘to help’

/e/ vs /u/	<i>ilre</i>	‘to lick’
	<i>ilru</i>	‘to wipe after defecating’

2.2.3 Phonotactics

This section shows the surface phonotactic combinations in Nanwang Puyuma. Table 2.4 and Table 2.5 are created by looking at Lin’s (1984) material and my own fieldnotes. Combinations marked in grey (both light and dark shades)⁶ are combinations not found in Lin (1984). Lin (1984) reports that the gaps such as /gi/, /etr/, /id/, /ig/, /ag/, and /eg/ might just be an accident. From my field notes, these gaps can indeed be filled in. Examples showing these combinations are *tigir* ‘erect’, *’etr’etr* ‘compress, jostle’, *inulrid* ‘be placed into the coffin’, *trigtrig* ‘shake off’, *tragtrag* ‘pour out’, and *tregtreg* ‘stake’.

As shown in Tables 2.4 and 2.5, most gaps are related to the combinations of the schwa and the glides, or the combinations of the glides with their homorganic high vowels.

Combinations /wu/, /yi/, /uw/, and /iy/ are difficult to detect due to the similar quality of glides and their homorganic high vowels. Examples of /yi/ and /wu/ are clearly attested in those instances where a stem ending with a glide is suffixed with *-i* or *-u*; for example *pu-enay* ‘to water’ < *puenay-i* ‘to water it’ and *trakaw* ‘to steal’ < *trakaw-u* ‘to steal it’.

Table 2.4: Combination of onset consonant and vowel

	<i>p</i>	<i>t</i>	<i>tr</i>	<i>k</i>	<i>’</i>	<i>b</i>	<i>d</i>	<i>dr</i>	<i>g</i>	<i>m</i>	<i>n</i>	<i>ng</i>	<i>s</i>	<i>l</i>	<i>lr</i>	<i>r</i>	<i>w</i>	<i>y</i>		
<i>i</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<i>u</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<i>a</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<i>e</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-

Table 2.5: Combination of vowel and coda consonant

	<i>p</i>	<i>t</i>	<i>tr</i>	<i>k</i>	<i>’</i>	<i>b</i>	<i>d</i>	<i>dr</i>	<i>g</i>	<i>m</i>	<i>n</i>	<i>ng</i>	<i>s</i>	<i>l</i>	<i>lr</i>	<i>r</i>	<i>w</i>	<i>y</i>	
<i>i</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-
<i>u</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+
<i>a</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<i>e</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-

2.3 The syllable

2.3.1 More on syllable structure

Monosyllabic words are mostly grammatical words, which have V, CV, VC, and CVC forms. Monosyllabic words that represent major lexical categories are very rare, and most of

⁶ Combinations that can be filled in from my own fieldnotes are marked in light grey whereas combinations that are still missing from my own notes are marked in dark grey.

them seem to have CVC structure. The possible consonant and vowel arrangements for monosyllabic words are illustrated below.

(1) Monosyllabic words

(C) V (C)		
i	‘topic marker’	V
n a	‘nominative noun phrase marker’	CV
a w	‘coordinator’	VC
k a n	‘oblique noun phrase marker’	CVC
b u t	‘squirrel’	CVC

Polysyllabic words occur with a maximum of two consonants appearing together medially across a syllable boundary. Such clusters always syllabify so that the initial consonant occurs as the coda of one syllable, and the second consonant occurs as the onset of the next. A consonant between two vowels is always analysed as the onset of the second syllable. The possible consonant and vowel arrangements of disyllabic words are illustrated below.

(2) Disyllabic words:

(C) V (C) (C) V (C)		
tr a u	‘person’	CVV
i a b	‘shoulder’	VVC
i n a	‘mother; aunt’	VCV
a p u y	‘fire’	VCVC
s u a n	‘dog’	CVVC
k a w i	‘tree’	CVCV
dr e n a n	‘mountain’	CVCVC
s a ng l i	‘snail’	CVCCV
p a k p a k	‘wing’	CVCCVC

No examples of VV and VCCV are found in the corpus. Words of more than two syllables are quite common in Puyuma. Due to the space limitation, I will only present the C and V arrangement of trisyllabic words.

(3) Trisyllabic words

(C) V (C) (C) V (C) (C) V (C)		
a m u n a	‘but’	VCVCV
a p a ng a n	‘place name’	VCVCVC
w a w a ’ i	‘willing to’	CVCVCV
m u a s a l	‘move’	CVVCVC
k a m a w a n	‘similar to’	CVCVCVC
p e n u k p u k	‘beat (intransitive)’	CVCVCCVC
t i k t i k a y	‘hammer (transitive)’	CVCCVCVC

The first syllable in a trisyllabic word is rarely a closed syllable; only reduplications of monosyllabic words have a coda in the first syllable (i.e. *tiktikay* ‘hammer’).

In the corpus, the maximum number of syllables a word has is eight (*ma.ra.mi.la.ma.la.ma.nan* ‘the most merciful’). Words that are of more than four syllables are always made up of a stem plus one or more affixes or reduplicants. So the word *maramilamalamanan* is analysed as:

mara-mi-lama-laman-an
 SUP-have-RED-mercy-NMZ
 ‘the most merciful’

2.3.2 Medial consonant clusters

Most medial consonant clusters arise through reduplication of monosyllables, e.g. *gerger* ‘bee’; *pakpak* ‘wing’. Although consonant clusters are allowed across a syllable boundary, the two consonants may not be the same. Furthermore, two adjacent oral stops may not be homorganic. Thus, clusters like *-kk-*, *-drdr-*, *-mm-*, *-ss-*, *-rr-*, *-pb-*, *-tdr-*, or *-gk-* are not found. The possible consonant clusters across syllable boundaries are given in Table 2.6. This table was created by looking at the Puyuma words in my own fieldnotes, and also in Cauquelin’s (1991b), Ting’s (1978), Li’s (1991), and Lin’s (1984) materials. The checks in Table 2.6 indicate that the examples with such consonant clusters are found in the corpus. No examples of consonant clusters with two identical phonemes or two homorganic oral stops are found. These unattested combinations are marked in grey.

Table 2.6: Possible consonant clusters across syllable boundaries

		The onset of the following syllable																		
		<i>p</i>	<i>t</i>	<i>tr</i>	<i>k</i>	<i>ʼ</i>	<i>b</i>	<i>d</i>	<i>dr</i>	<i>g</i>	<i>m</i>	<i>n</i>	<i>ng</i>	<i>s</i>	<i>l</i>	<i>lr</i>	<i>r</i>	<i>w</i>	<i>y</i>	
The coda of the previous syllable	<i>p</i>			✓	✓	✓								✓		✓				
	<i>t</i>	✓			✓	✓	✓			✓			✓					✓		
	<i>tr</i>	✓			✓	✓	✓			✓					✓					
	<i>k</i>	✓	✓				✓	✓	✓			✓		✓	✓	✓				
	<i>ʼ</i>																			
	<i>b</i>				✓	✓					✓		✓	✓						
	<i>d</i>												✓						✓	
	<i>dr</i>				✓									✓						
	<i>g</i>			✓								✓								
	<i>m</i>	✓			✓		✓	✓	✓	✓							✓	✓		
	<i>n</i>		✓				✓	✓												
	<i>ng</i>	✓	✓		✓				✓						✓	✓		✓		
	<i>s</i>	✓	✓		✓	✓	✓	✓		✓			✓			✓		✓		
	<i>l</i>		✓	✓	✓		✓							✓						
	<i>lr</i>				✓	✓			✓			✓	✓							
	<i>r</i>	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓	✓					
	<i>w</i>											✓		✓	✓			✓		
	<i>y</i>									✓					✓		✓			

2.3.3 Schwa apicalisation and reduction

When it appears after the sibilant /s/ in an open syllable, the schwa is apicalised.⁷

apicalisation		non-apicalisation	
<i>senay</i>	[sɲaj]	<i>ngiselr</i>	[ŋisəɭ]
<i>semipsip</i>	[sɲmipsip]	<i>masenkin</i>	[masənkin]
<i>selrap</i>	[sɲlap]	<i>benaseng</i>	[bənəsəŋ]
<i>asepan</i>	[asɲpan]		
<i>masemek</i>	[masɲmək]		
<i>benabase</i>	[bənabasɲ]		

Schwa deletion optionally occurs in the penultimate syllable of items with three or more syllables.⁸

<i>inapetran</i>	→	<i>inaptran</i>
<i>penabekas</i>	→	<i>penabkas</i>
<i>tremepa</i>	→	<i>trempa</i>
<i>kameli</i>	→	<i>kamli</i>
<i>temebul</i>	→	<i>tembul</i>
<i>tremekelr</i>	→	<i>tremkelr</i>
<i>drikedran</i>	→	<i>drikdran</i>
<i>liketri</i>	→	<i>liktri</i>

However, if the penultimate syllable is a closed syllable, schwa deletion is prohibited (because it will result in a forbidden CCC consonant cluster).

kasalengseng → **kasalngseng*

2.4 Word stress

2.4.1 General rule for stress assignment

Word stress in Puyuma falls on the last syllable, and is thus non-phonemic. Puyuma word stress is mainly marked by greater intensity, a higher pitch level, and longer duration. The pitch contour of *drikedran* ‘sticky stuff’ is shown in Figure 2.2 and the intensity is shown in Figure 2.3. Figure 2.4 illustrates the pitch and intensity of the phrase *inaba=ku* ‘I am fine’, and it shows that the syllable with the highest pitch level is not the last syllable of *inaba*; on the contrary, the last syllable (*ba*) has the lowest pitch level. In terms of intensity, the last syllable still carries greater intensity than the first two syllables (*i* and *na*). Thus, stress is not equated solely with pitch. In addition to pitch and intensity, duration is another correlate of stress. In Figures 2.2 through 2.4, the duration of the stressed syllable is longer than that of the other syllables.

⁷ Sometimes the schwa becomes an apical vowel after /r/. For instance, *marengay* [marŋaj], *arebu* [arɬbu].

⁸ From my notes, schwa deletion occurs most often (but not always) when the schwa is preceded by a bilabial sound (*p*, *b* or *m*) or a velar stop.

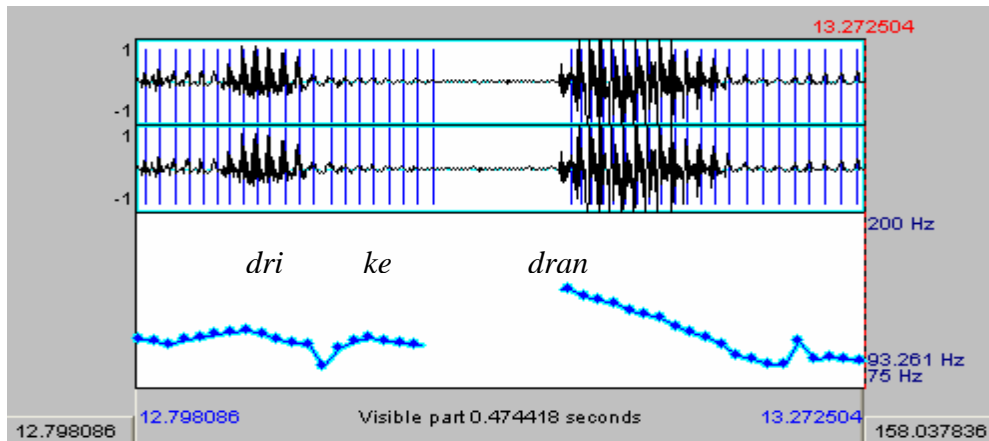


Figure 2.2: Pitch of *dri kedran* ‘sticky stuff’

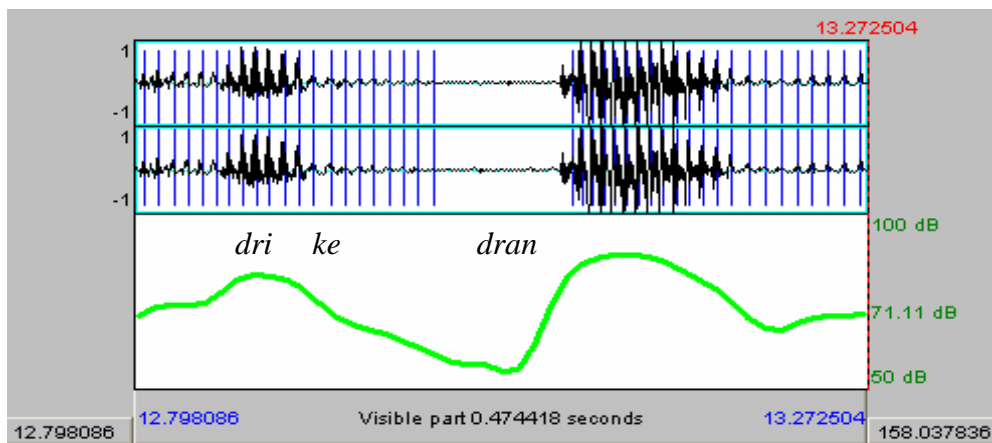


Figure 2.3: Intensity of *dri kedran* ‘sticky stuff’

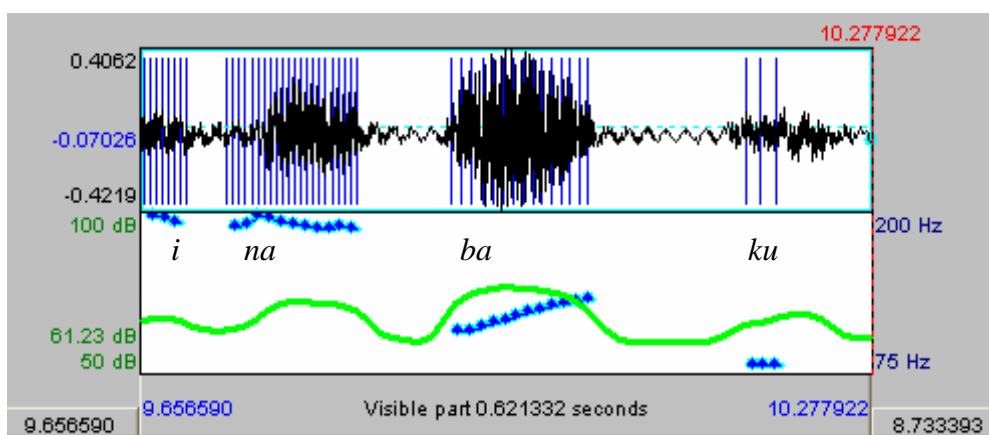


Figure 2.4: Pitch and intensity of *inaba=ku* ‘I am fine’

An affix counts as part of the word in stress assignment, but a clitic does not. Because stress is word-final, stress is diagnostic only for suffixes and enclitics. For example, the stress of *beray* ‘give’ falls on the last syllable; when a suffix is attached to it, the stress shifts to the last syllable of the newly formed word.⁹

beray [bəráj] → *tu=beray-ay* [tubərajáj]
tiktik [tiktík] → *tu=pa-tiktik-anay* [tupatiktikanáj]

When an enclitic element is attached to a host, the default is that stress falls on the host, as shown in Figure 2.4.

inaba [inabá] → *inaba=ku* [inabáku]

2.4.2 Stress shift in interrogative sentences

The stress of the final word in an interrogative sentence is shifted from the last syllable to the penultimate syllable. More discussion is given in §12.3.1.2.

2.5 Morphophonemic rules

Morphophonemic rules concern situations where a morpheme appears in different forms in different phonological environments. The following discussion concerns processes of assimilation, dissimilation and insertion.

2.5.1 Assimilation

There are two types of assimilation and both are concerned with schwa.

2.5.1.1 Vowel harmony

Vowel harmony is a phonological phenomenon where neighbouring vowels assimilate to each other. There are two subtypes: rightward assimilation and leftward assimilation. The first type occurs when the actor voice/intransitive marker is infixes. The schwa /ə/ assimilates to the following vowel. This rule is optional.

Root	Underlying derived form	Vowel assimilation
<i>dirus</i> ‘to swim’	<i>dirus</i> /də́mirus/	[dímirus]
<i>kirim</i> ‘to economise’	<i>kirim</i> /kə́mirim/	[kímirim]
<i>tua-</i> ‘to make’	<i>tua-</i> /tə́mua/	[tumuwa]
<i>puwar</i> ‘to escape’	<i>puar</i> /pə́nuar/	[punuwar]
<i>talam</i> ‘to try’	<i>talam</i> /tə́malam/	[tamalam]

The second type occurs when the schwa in the root is assimilated to the vowel in the prefix. This is also optional.

⁹ The word *drikedran* ‘sticky stuff’ is derived from *drikedr* ‘sticky’ by suffixing *-an*, and as shown in Figures 2.2 and 2.3, the stress of *drikedran* falls on the last syllable, another example of stress shift after suffixation.

Root	Underlying derived form	Vowel assimilation
<i>pesik</i> ‘to separate’	<i>m-u-pesik</i> /mup <u>ə</u> sik/	[mup <u>u</u> sik]
<i>ekan</i> ‘to eat’	<i>m-a-ekan</i> /ma <u>ə</u> kan/	[ma <u>a</u> kan]

2.5.1.2 Rounding assimilation

Unlike vowel harmony, this type of assimilation is triggered by a labial consonant in the neighbouring syllable and forces a schwa vowel to become a rounded vowel. It is also an optional process. The neighbouring labial sound that triggers the assimilation is underlined.

Root	Underlying derived form	Assimilation
<i>ekan</i> ‘to eat’	<i>m-ekan</i> /məkan/	[<u>m</u> ukan]
<i>trepa</i> ‘to aim at’	<i>trepa</i> /t <u>ə</u> məpa/	[t <u>ə</u> mupa]
<i>belrias</i> ‘to turn’	<i>b<en>elrias</i> /bən <u>ə</u> ʝas/	[bən <u>u</u> ʝas]
<i>wadi</i> ‘younger sibling’	<i>mare-wadi</i> /mar <u>ə</u> wadi/	[ma <u>u</u> wadi] ¹⁰

2.5.2 Dissimilation

There is only one instance of dissimilation found in my corpus, which is concerned with the infixation of the actor voice/intransitive . The bilabial nasal sound /m/ becomes /n/ when the infix is affixed to a bilabial stop. For instance:

Root	Dissimilation
<i>ba’aw</i> ‘alive, to save’	<i>b<en>a’aw</i>
<i>pakan</i> ‘to feed’	<i>p<en>akan</i>

Unlike the assimilation described earlier, this rule is obligatory. As described in §2.6.1, there are three allomorphs of , namely , *me-* and *m-*. Which one occurs is determined phonologically. Among them, occurs when the initial sound is an obstruent.

2.5.3 Insertion

2.5.3.1 Glide insertion

In many cases a homorganic glide is inserted when a high vowel is followed by an unlike vowel. For example:

Underlying derived form	Glide insertion
<i>mi-anger</i> /miaŋər/	[mi <u>j</u> aŋər]
<i>ki-umal</i> /kiu <u>mal</u> /	[ki <u>j</u> u <u>mal</u>]
<i>na’u-aw</i> /naʔuaw/	[naʔu <u>w</u> aw]

A glide [j] is also inserted when a stem which ends with /a/ acquires a suffix beginning with /a/. However, this process does not apply in prefixation.

¹⁰ It is not clear why [r] becomes [l] in this example.

Underlying derived form*trepa-a* /təməpaa/*ka-aw* /kaaw/*muka-an* /mukaan/**Glide insertion**

[təməpajə]

[kajaw]

[mukajan]

Compare:

m-a-abak /maabak/

[maabak]

m-a-alrak /maa[ak]/

[maa[ak]

2.5.3.2 Schwa insertion

If a prefix has a coda and is prefixed to a consonant initial stem, a schwa is optionally inserted to avoid creating a consonant cluster. For example:

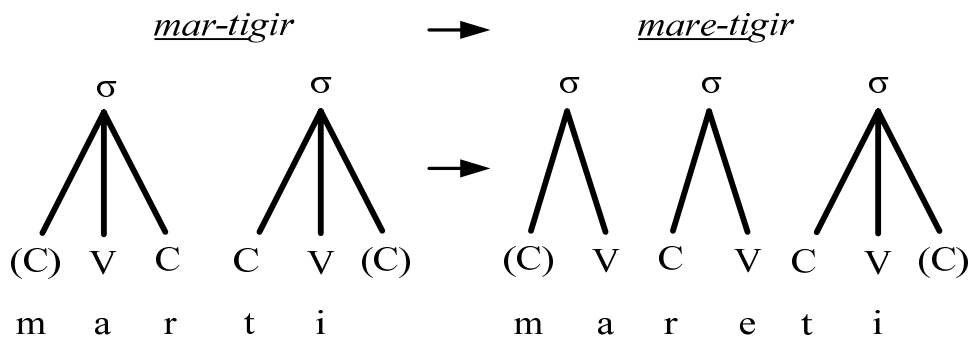
Underlying derived form*mar-kataguin* /markataguin/**Schwa insertion**

[marəkataɡuin]

2.5.4 Resyllabification

Resyllabification happens due to schwa insertion. In schwa insertion, one syllable is added, as in (4).

(4) Schwa insertion

**2.6 Allomorphs of and <in>**

Allomorphs of and <in> are presented in separate sections because they cannot be accounted for by a single morphophonemic rule.

**2.6.1 Allomorphs of **

The actor voice/intransitive marker has three allomorphs: , me-, or m-. The choice of allomorph depends on the initial phoneme of the stem.

(i) For stems beginning with a vowel, m- is prefixed.

Stem*ekan* 'to eat'*alrak* 'to take'**Intransitive form***m-ekan**m-alrak*

- (ii) For stems beginning with a nasal sound or a liquid (*l*, *lr*, *n*, *ng*, or *r*), *me-* is prefixed.

Stem	Intransitive form
<i>na'u</i> 'to see'	<i>me-na'u</i>
<i>languy</i> 'to swim'	<i>me-languy</i>
<i>ngernger</i> 'be angry'	<i>me-ngernger</i>
<i>lradam</i> 'to learn'	<i>me-lradam</i>
<i>retra</i> 'to give up'	<i>me-retra</i>

- (iii) For stems beginning with an obstruent, <*em*> is infix. Note that dissimilation occurs when the initial consonant is a bilabial stop (§2.5.2).

Stem	Intransitive form
<i>tulrudr</i> 'to pass to'	<i>tulrudr</i>
<i>sanan</i> 'to stray'	<i>sanan</i>
<i>deru</i> 'to cook'	<i>deru</i>
<i>bias</i> 'hot'	<i>b<en>ias</i>
<i>pukpuk</i> 'to beat'	<i>p<en>ukpuk</i>

2.6.2 Allomorphs of <*in*>

The perfective marker <*in*> has three allomorphs: <*in*>, *in-* or *ni-*. The choice depends on the initial phoneme of the stem.

- (i) Stems beginning with a vowel are prefixed with *in-*.

Stem	Perfective form
<i>abak</i> 'to pack'	<i>in-abak</i>
<i>urak</i> 'to dance'	<i>in-urak</i>

- (ii) Stems beginning with a nasal sound or a liquid (*l*, *lr*, *n*, *ng*, or *r*) are prefixed with *ni-*.

Stem	Perfective form
<i>ruma</i> 'house'	<i>ni-ruma</i>
<i>lasedr</i> 'to hide'	<i>ni-lasedr</i>
<i>lriputr</i> 'to wrap'	<i>ni-lriputr</i>
<i>rames</i> 'to make salty'	<i>ni-rames</i>

- (iii) Stems beginning with an obstruent are infix with <*in*>.

Stem	Perfective form
<i>trekelr</i> 'to drink'	<i>tr<in>ekelr</i>
<i>balri</i> 'wind'	<i>b<in>alri</i>

3 *Morphology*

3.1 Introduction

This chapter describes the morphological units and word-formation processes of Puyuma. Morphological units are discussed in §3.2. Clitic classes and reduplication are dealt with in §3.3 and §3.4 respectively.

3.2 Morphological units

The morphological units of Puyuma are affixes, roots, stems, clitics and words. A morphological word is made up of one stem and zero or more affixes. A stem is made up of one root and zero or more affixes. Thus roots, stems and morphological words form a hierarchy.

3.2.1 Affixes

An affix is a morpheme that is morphologically and phonologically dependent on its host. Affixes attach to stems (which may themselves be simple, i.e. a root, or complex, i.e. a root-plus-affix combination) to form morphologically complex words.

Puyuma affixes are classified on formal grounds into prefixes, suffixes, infixes and circumfixes. Examples are shown below.

Prefix	<i>paisu</i>	‘money’	<i>mi-paisu</i>	‘have money’
Suffix	<i>asatr</i>	‘high’	<i>asatr-an</i>	‘height’
Infix	<i>beray</i>	‘give’	<i>b<in>eray</i>	‘things given’
Circumfix	<i>ruma</i>	‘house’	<i>sa-ruma’-enan</i>	‘family, relatives’

A list of affixes found in the corpus is given in Appendix II.

3.2.2 Roots

A root consists of a single morpheme, ‘an unanalysable form that expresses the basic lexical content of the word’ (Payne 1997:24). In other words, when all affixes have been removed from a word, what is left is the root.

Puyuma roots can be either free or bound, as shown in Table 3.1.

Table 3.1: Bound and free roots

Bound roots	Free roots
<i>ma-trina</i> ‘big’ (* <i>trina</i>)	<i>kiping</i> ‘clothes’
<i>ka-keser</i> ‘be strong’ (* <i>keser</i>)	<i>suan</i> ‘dog’
<i>ma-rayas</i> ‘often’ (* <i>rayas</i>)	<i>enay</i> ‘water’

Free roots are roots which may occur as simple words in discourse, whereas bound roots do not exist in discourse without an affix. The majority of roots in Puyuma are free.

3.2.3 Stems

A stem can be simple or complex. It consists minimally of a root, but may also consist of a reduplicated root or a root plus one or more affixes. It is the morphological unit that an affix attaches to. Thus, in *pa-ladram* ‘to teach’, the stem the affix *pa-* attaches to is *-ladram*. In *ki-pa-ladram* ‘to acquire as knowledge’, the stem the affix *ki-* attaches to is *pa-ladram*.

3.2.4 Clitics

Like roots and affixes, clitics are simple morphological units. A number of scholars have sought to define criteria for distinguishing clitics from independent words and affixes (Aikhenvald 2002; Klavans 1985; Nevis 2000; Zwicky 1977, 1985; Kroeger 2005; Haspelmath 2002; Anderson 2005; Chang 1999). However, the characteristics of clitics vary to some extent in different languages and even within a single language, and it is difficult to provide a clear crosslinguistic definition. Probably all linguists agree that clitics are linguistic units that have a status intermediate between independent words and affixes, and definitions often say that clitics are morphosyntactically independent (constituents of phrases, not of words) but phonologically bound. The problem is that they are often phonologically less bound than affixes.

The boundedness of a Puyuma clitic is seen only in the fact that it does not normally receive stress, but forms a phonological unit with an item that does, i.e. a phonological word (§2.4.1). However, if focus falls on an enclitic, it may have its own stress. In this instance one could say that it forms a separate phonological word and is therefore not functioning as a clitic.

3.2.5 Words

A morphological word consists of a stem (which may be simple or complex, see above) plus zero or more affixes.

Phonological and morphological words do not necessarily correspond. A phonological word in Puyuma can be defined on two levels. A basic phonological word corresponds with a morphological word. It is the domain for stress assignment (§2.4.1) and of a variety of phonological rules, such as the glide insertion rule (§2.5.3.1) and the vowel harmony rule (§2.5.1.1). An extended phonological word is a basic phonological word plus one or more (unstressed) clitics. A pause never occurs between a basic phonological word and a clitic.

3.3 Clitic classes

There are two classes of clitics in terms of the position in which they occur: proclitics (the genitive bound pronouns) and enclitics (which consist of the nominative bound pronouns, the vocative marker =*a*, and the aspectual markers =*la*, =*driya*, and =*dar*). Examples are given below:

- (1) *tu=alrak-aw na barasa'*
3.GEN=take-PV DF.NOM stone
'They took the stone.'
- (2) *salretrag=**ku** dra enay*
<AV>pour.out=1S.NOM ID.OBL water
'I poured out some water.'
- (3) *sa-sungalr=**mi** kanu, ama=**a***
RED-worship=1P.NOM 2S.OBL father=VCT
'We will worship you, Father.'
- (4) *an ma'idrang=**la** a trau ...*
when old=PERF ID.NOM person
'When a person got old ...'
- (5) *a lalak=**mi=driya***
ID.NOM child=1P.ECL.NOM=IMPF
'We were still children.'

3.3.1 Genitive bound pronouns

A genitive proclitic pronoun is syntactically more dependent on its host than clitics of other classes. It appears obligatorily and functions either as the actor agreement marker in a transitive clause, appearing before the verb, as in (6), or as possessor of a possessed subject NP, as in (7). In (6), the genitive bound pronoun *tu=* agrees with the NP *kan senayan*, and while the full NP is omissible, the clitic *tu=* is obligatory.

- (6) *tu=pa-karun-ay (kan senayan)*
3.GEN=CAUS-work-LV SG.OBL Senayan
'She(/Senayan) made them work.'
- (7) *salraw inaba tu=tranguru'*
very good 3.PSR=head
'He is very smart.' (lit. 'His head is very good.')

Genitive bound pronouns show less mobility than nominative bound pronouns as they are not attached to elements other than the predicate or the subject NP.

As Givón (1976) has pointed out, clitic pronouns often develop into agreement affixes as languages change over time. As a result, we sometimes encounter intermediate forms with mixed properties. This is the case with Puyuma genitive bound pronouns. Here, they are analysed as clitics based on two properties which make them distinct from affixes.

First, a number of phonological rules, e.g. vowel harmony (§2.5.1.1) and glide insertion (§2.5.3.1), apply to affixation but not to cliticisation. Compare the pairs of examples below:

Glide insertion

Affixation*m-u-a-sabak* [muwasabak]AV-go-a-inside
'going inside'*trepa-a* [təməpaja]<AV>aim.at-PJ
'aiming at'**Cliticisation***ku=alrak-aw* [kua|akaw]1S.GEN=take-PV
'I took it.'*ama=a* [amaa]father=VCT
'Father'

Vowel harmony

Affixation*mu-pesik* [mupusik]ACAUS-leave
'come off'**Cliticisation***ku=senay-aw* [kusənajaw]1S.GEN=sing-PV
'I sang it.'

Second, the infixation of and <in> only occurs at the leftmost syllable of a word. That is, or <in> is the last affix added in the word-formation process, as shown in (i) and (ii) below:

(i) **stem***trakaw* 'steal'*tra-trakaw* 'will steal'*tra-tra-trakaw* 'steal (again and again)'** infixation***trakaw* 'steal'*tra-trakaw* 'be stealing'**tra-trakaw***tra-tra-trakaw*(ii) **stem***k-isatr-an* 'place above'*u-k-isatr-an* 'go up'**<in> infixation***k<in>-isatr-an* 'place above'*in-u-k-isatr-an* 'place one has gone up to before'**u-k<in>-isatr-an*

However, the infixation never applies to the genitive bound pronouns, and this shows that the genitive bound pronouns are different from affixes.

tu=s<in>anga 'his product'*tu=s<in>a-sanga* 'product he is making'*tu=s<in>a-sa-sanga* 'product he often made'**t<in>usanga***tu=sa-s<in>anga***tu=sa-sa-s<in>anga***3.3.2 Nominative bound pronouns**

A nominative bound pronoun generally attaches to the predicate (verbal or nominal) in a clause, as shown in (8) and (10). When the clause is negated, with one exception (described below), the bound pronoun is attached to the negator, as in (9) and (11).

- (8) *salretrag=ku dra enay*
 <AV>pour.out=1S.NOM ID.OBL water
 'I poured out water.'

- (9) *adri=ku salretrag dra enay*
 NEG=1S.NOM <AV>pour.out ID.OBL water
 ‘I didn’t pour out water.’
- (10) *a puyuma=ku*
 ID.NOM Puyuma=1S.NOM
 ‘I am a Puyuma.’
- (11) *ameli=ku a puyuma*
 NEG=1S.NOM ID.NOM Puyuma
 ‘I am not a Puyuma.’

In undergoer voice/transitive clauses, a nominative enclitic does not have the freedom to change its position. For instance, in (14) it cannot move to the position after the negator.

- (12) *padrek-u=ku*
 carry.on.back-PV:IMP=1S.NOM
 ‘Carry me on the back.’
- (13) *adri padrek-u=ku*
 NEG carry.on.back-PV:IMP=1S.NOM
 ‘Don’t carry me on the back.’
- (14) **adri=ku padrek-u*

3.3.3 Aspect-marking clitics

There are three aspect-marking enclitics in Puyuma: =*la* denotes a perfective meaning, =*driya* an imperfective meaning, and =*dar* a frequentative meaning (§6.4.2). The aspectual markers usually appear after the predicate or the negator (if there is one) in a clause.

- (15) a. *payas=la mar-belrias*
 right.away=PERF PR-turn
 ‘She returned right away.’
- b. *adri=la makeser mar-belrias m-uka i uma’*
 NEG=PERF strong PR-turn AV-go LOC farm
 ‘She was not strong enough to return to the farm.’
- (16) a. *ma-ulrep=driya ki-anger dratu ka-san-an*
 AV-tired=IMPF <AV>get-thought ID.OBL/3.PSR ka-get.lost-NMZ¹
 ‘She’s still worrying that he might get lost.’
- b. *adri=driya talam me-ranak dra trau*
 NEG=IMPF <AV>try AV-attack ID.OBL person
 ‘It has never tried to attack people.’

When there is both a nominative pronoun and an aspectual marker in a clause, the nominative pronoun is closer to the host. For example:

¹ See §6.6 concerning the morpheme *ka-*.

- (17) *adri=ku=driya talam m-u-isatr dra sasudang*
 NEG=1S.NOM=IMPF <AV>try AV-go-up ID.OBL boat
 ‘I have never got on a boat.’
- (18) *an adru=la i, ka-ra-ruwa=mu=la uringetr*
 when then=PERF TOP ka-RED-can=2P.NOM=PERF brave
 ‘By that time, you would then be brave.’

However, in negative undergoer voice/transitive clauses, where nominative pronouns are never attached to the negator, as shown in (12) to (14), the aspectual marker can encliticise to the negator. The two sentences given below are both acceptable, but the first one is preferred.

- (19) *adri=la tu=pa-drua-i=ku kantu ruma’*
 NEG=PERF 3.GEN=CAUS-come-LV=1S.NOM DF.OBL/3.PSR house
 ‘He didn’t cause me to come to his house.’
- (20) *adri tu=pa-drua-i=ku=la kantu ruma’*
 NEG 3GEN=CAUS-come-LV=1S.NOM=PERF DF.OBL/3.PSR house
 ‘He didn’t cause me to come to his house.’

In addition to the position after the predicate or the negator, the aspectual markers may appear to the right of a phrase (NP or VP) or a clause. Of the various categories of clitics in Puyuma, only aspectual markers have the ability to move around. For instance, in (21a) the host of the perfective marker is the whole clause, and in (22a) and (23a), the host is the SVC. Note that the aspectual markers can move forward to the position after the first predicate, as in (21b), (22b) and (23b).²

- (21) a. *an [m-ekan=ta dra binariyaw]=la i, ...*
 when [AV-eat=1P.ICL.NOM ID.OBL sticky.rice.cake]=PERF TOP
 ‘When we eat sticky rice cakes, ...’
- b. *an m-ekan=ta=la dra binariyaw i*
- (22) a. *[sa<’eru>’eru misasa]=la taytaw*
 [<RED>laugh one]=PERF 3.NEU
 ‘She laughed and laughed by herself.’
- b. *sa<’eru>’eru=la misasa taytaw*
- (23) a. *[m-uka trakaw-a]=dar ma-rengay*
 [AV-go <AV>steal-PJ]=FREQ AV-tell
 ‘He often went to tell people secretly.’
- b. *m-uka=dar trakaw-a ma-rengay*

In an NP that contains more than one small NP (§5.1.1), =*la* may occur after whichever small NP, as in (24a) to (24c). If the NP contains a demonstrative and another small NP, the aspectual marker must not appear after the demonstrative, as shown in (25a) and (25b).

- (24) a. *na sama=la na sayma na dare’ i,*
 DF.NOM left=PERF DF.NOM little DF.NOM dirt TOP

2 The informants are unable to tell if there is a meaning difference between the (a) and (b) lines.

tu=riap-anay pia-timulr
 3.GEN=sprinkle-CV face-south
 ‘The little dirt left, he sprinkled it to the south.’

b. *na sama na sayma=la na dare’ i*

c. *na sama na sayma na dare’ =la i*

(25) a. *idru na walak=la i, ...*
 that.NOM DF.NOM child=PERF TOP
 ‘that child, ...’

b. **idru=la na walak i*

Sometimes, we may encounter more than one aspectual marker in a clause. In (26a) and (26b), =*la* and =*driya* occur after the predicate as well as after the clause. In (27), =*la* appears twice in an SVC.

(26) a. *ma-ruwa=ku=la m-ekan dra sadru=la*
 AV-can=1S.NOM=PERF AV-eat ID.OBL many=PERF
 ‘I could already eat a lot.’

b. *kadrini=mi=driya dra ka-kualreng-an=driya*
 <AV>here=1P.NOM=IMPF ID.OBL ka-sick-NMZ=IMPF
 ‘But we still have some difficulties.’

(27) *mu-kalu-kalu’=ku=la silramu matrina=la*
 ACAUS-RED-?=1S.NOM=PERF speedy big=PERF
 ‘As a result, I grew up very fast.’

3.3.4 Vocative marker =*a*

The vocative marker =*a* appears after a personal noun (§4.3.1.2.3), which is either a personal name or a kin term. It is used when calling someone or to get someone’s attention. The noun marked by the vocative marker =*a* must appear either before or after the main proposition. For instance:

(28) *ulaya a ma-trina niam=bangabang-an ama=a*
 exist ID.NOM AV-big 1P.PSR=busy-NMZ father=VCT
 ‘We have a big event (now) Father.’

(29) *ama=a, pulang-i=mi*
 father=VCT help-LV:IMP=1P.NOM
 ‘Father, help us.’

3.4 Reduplication

Reduplication can be seen as a special kind of affixation. Normally, there is no correlation between the form of an affix and the meaning or function it denotes, but reduplication seems to be more iconic. It is often used to signal plural, distributive, durative, intensive, iterative, or progressive meaning.

In Puyuma, only roots can undergo reduplication,³ and almost all content words are allowed to take some form of reduplication. As well as the verbs, nouns and numerals discussed in this chapter, interrogative words and some demonstratives can undergo reduplication. Examples of interrogatives are: *manay* ‘who; what’ *mana-manay* ‘which one’; *kana isuwa* ‘from where/when’, *kana isuwasuwa* ‘from some generation’. Examples of demonstratives are: *kandrunu* ‘that one (OBL)’, *kandrunudrunu* ‘that kind of (OBL)’.

The distinction between lexicalised reduplication and grammatical reduplication is not always clear.⁴ While some reduplication patterns are typically lexicalised (for example, the fossilised reduplication described in §3.4.1 is an instance of lexicalised reduplication), some function to create a new lexical item as well as to serve grammatical functions. For example *Ca-* reduplication (§3.4.2) can form instrumental nouns and indicate progressive aspect and irrealis mood. In the following discussion, I will mostly adopt Adelaar’s (2000) terminology, as used in his description of Siraya.⁵

3.4.1 Fossilised reduplication

Fossilised reduplication refers to those cases where a stem consists of two identical elements ($C_1V_1C_2-C_1V_1C_2$ or $C_1V_1C_2V_2-C_1V_1C_2V_2(C_3)$). The roots in this category no longer exist as independently meaningful forms, so a single element may never occur alone. There are two patterns of fossilised reduplication: monosyllabic root and disyllabic root.

3.4.1.1 Monosyllabic root reduplication

This type of reduplication is formed by reduplicating a monosyllabic *CVC* root. Three subtypes can be distinguished according to whether the reduplication process involves infixation.

- (i) Simple monosyllabic root reduplication: $C_1V_1C_2-C_1V_1C_2$

Words belonging to this type can be nominal or verbal. The nominal examples include:

<i>mamam</i>	‘duck’
<i>’ak’ak</i>	‘crow’
<i>’ap’ap</i>	‘cobra’
<i>dindin</i>	‘snails’
<i>trabtrab</i>	‘dandruff’
<i>ngisngis</i>	‘beard’
<i>birbir</i>	‘lips’
<i>mudmud</i>	‘the front teeth’

3 Zeitoun and Wu (2006) mention that in several Formosan languages reduplication of affixes is allowed.

4 Lexicalised reduplication derives a new lexical item while grammatical reduplication functions to mark grammatical categories (i.e. aspect and mood).

5 Adelaar (2000) distinguishes five major reduplication types: monosyllabic root reduplication, disyllabic root reduplication, rightward reduplication, first syllable reduplication, and *Ca-* reduplication. Among the five, monosyllabic reduplication is also called lexicalised reduplication. In this grammar, disyllabic root reduplication is defined as a subtype of fossilised reduplication, while Adelaar’s disyllabic root reduplication corresponds to my disyllabic (*CVCV-*) reduplication.

<i>suksuk</i>	‘lock’
<i>belbel</i>	‘banana’
<i>lawlaw</i>	‘lamp’
<i>bangbang</i>	‘box’

From the above examples, it is clear that simple monosyllabic root reduplication yields three semantic classes of noun stems: animate nouns, body parts, and residual nouns. In the case of animate nouns, some seem to imitate the sound of the named animal (e.g. ‘*ak’ak* ‘crow’); they are onomatopoeic words. With body part nouns, they denote those items that are inherently plural (e.g. *ngisngis* ‘beard’). However, nouns that do not belong to the former categories do not always denote entities that are inherently plural in nature (e.g. *belbel* ‘banana’; *lawlaw* ‘lamp’).

Almost all the verbs found in this category have iterative meaning. The event the verb denotes typically consists of repeated subevents. Verbal examples include:

<i>sipsip</i>	‘to lick’
<i>betbet</i>	‘to tie’
<i>pespes</i>	‘to massage’
<i>pukpuk</i>	‘to beat’
<i>sabsab</i>	‘to wash hands’
<i>saksak</i>	‘to seek’
<i>gutrgutr</i>	‘to scratch itchy skin’
<i>ngitngit</i>	‘to bite slowly with the front teeth’
<i>rawraw</i>	‘to stir’
<i>bikbik</i>	‘to shake off’
<i>langlang</i>	‘to bake’
<i>tiktik</i>	‘to hammer at’
<i>taktak</i>	‘to carve’

Adelaar (2000:35) notes that in Siraya, ‘except for *Ca*-reduplication, there are no instances of further (morphological) reduplication on the basis of reduplicated monosyllables’. However, I have found some examples in Puyuma showing that further *CVC*-reduplication based on the reduplicated stem is possible.

(30) *tu=pes-pespes-ay kan ma’idrang kakuwalan*
 3.GEN=RED-massage-LV SG.OBL old Kakuwalan
 ‘The elder Kakuwalan kept massaging him.’

(31) *tu=tak-taktak-aw i m-utu-asulred=la*
 3.GEN=RED-carve-PV TOP AV-become-whipping.top=PERF
 ‘He kept on carving it, and it became a whipping top.’

(ii) <aC> infixation: $C_1\langle aC\rangle VC_2C_1VC_2$

This type adds an <aC> infix to the reduplicated monosyllabic stem, where <aC> consists of the low vowel /a/ and a consonant. According to Adelaar (2000:36), in Siraya the consonant is always either /r/ or /l/. In Puyuma, I have found four variants, three of them liquids: they are /l/, /lr/, /r/, and /g/. There seems to be no rule governing their distribution. The examples are listed below:

<i>g<al>emgem</i>	‘numbness of the tongue’
<i>b<al>etrbetr</i>	‘recurring pains’
<i>t<al>ustus</i>	‘prickle’
<i>s<al>engseng</i>	‘lonely’
<i>tr<al>ebtreb</i>	‘nervous’
<i>b<alr>ang<a>bang</i>	‘comfortable clothes’
<i>b<alr>ukbuk</i>	‘comfortable shoes or pants’
<i>s<alr>iksik</i>	‘high-spirited’
<i>s<ar>ibsib</i>	‘smooth skin’
<i>tr<ar>istris</i>	‘noisy’
<i>tr<ag>agetrag</i>	‘pour out’

Most examples (except the last one) found in this category denote a property or an object with a certain property.

(iii) <a> infixation

Two different patterns are found with <a> infixation: *CVC<a>CVC* or *CV<a>CCVC*. Examples in this category include nominal or verbal expressions. Nominal expressions are given below.

<i>bak<a>bak</i>	‘vegetable garden’
<i>katr<a>katr</i>	‘pants’
<i>kay<a>kay</i>	‘bridge’
<i>ki<a>kip</i>	‘eyelashes’
<i>ku<a>skus</i>	‘collarbone’

Like simple monosyllabic root reduplication, most, but not all, of the nominal examples here denote objects that are usually plural in nature.

Most examples of verbal expressions show iterative meaning. Unlike the nominal examples given above, the verbal pattern is always *CVC<a>CVC*.

<i>gis<a>gis</i>	‘to shave’
<i>ging<a>ging</i>	‘to quake’
<i>bik<a>bik</i>	‘to shake’
<i>lritr<a>lritr</i>	‘to roll on the ground’
<i>bang<a>bang</i>	‘to be busy’

There are several examples showing that the insertion can be schwa /ə/ instead of /a/. It is not clear whether schwa can be deleted in those cases. It is possible that the schwa is inserted to avoid cross-syllable consonant clusters. However, those examples that have /ə/ instead of /a/ do not show iterative meaning.

<i>sal<e>sal</i>	‘thin’
<i>sak<e>sak</i>	‘to take s.th. out in order to search’
<i>sap<e>sap</i>	‘to unfold’

3.4.1.2 Disyllabic root reduplication: C₁V₁C₂V₂-C₁V₁C₂V₂(C₃)

This type of reduplication is formed by reduplicating the last two syllables of a root. In most cases the coda of the last syllable is dropped from the reduplicant, but sometimes it is kept. This type of reduplication formally resembles the CVCV- reduplication discussed in §3.4.3. The difference is that the examples presented here are lexicalised and the unreduplicated roots can never stand alone. Examples in this category are rare and most of them refer to body parts, insects or plants.

<i>kelrekelrengan</i> (* <i>kelreng</i>)	‘small intestines’
<i>kidrukidru</i> (* <i>kidru</i>)	‘armpits’
<i>kelrekelrek</i> (* <i>kelrek</i>)	‘to tickle at the armpit’
<i>drungadrungalan</i> (* <i>drungalr</i>)	‘Lima bean’
<i>kamangkamang</i> (* <i>kamang</i>)	‘big spider’
<i>tipatipayan</i> (* <i>tipay</i>)	‘wild amaranth’

There is a pair of examples in which the stem and the reduplicated form refer to different plants: *kamangul* ‘chilli’, *kamangumangulan* ‘a kind of grass’.

Many family names and place names are also formed by CVCV- reduplication.

<i>sigasigaw</i> ‘personal name’	<i>barubaru</i> ‘family name’
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While the place/personal names discussed in §3.4.3 are easily traced back to their original meanings, the meaning of the roots listed here is lost.

3.4.2 Ca- reduplication⁶

Ca- reduplication is an important word formation process in Puyuma and in other Formosan languages. It has at least five unrelated functions. *Ca-* reduplication is also the only type that can cooccur with another reduplication process. In such cases, *Ca-* reduplication always occupies the leftmost position. For example, *wari* ‘day’, *wa-wari-wari* ‘every day’.

3.4.2.1 Formal subtypes of *Ca-* reduplication

In Puyuma, *Ca-* reduplication has two subpatterns. First, when the root is disyllabic and begins with a consonant, the initial consonant followed by *-a-* is prefixed to the root; when the root is trisyllabic or quadrisyllabic, the consonant of the penultimate syllable is reduplicated.⁷ Examples include: *dukur* ‘to pound’, *da-dukur* ‘will pound’; *tilru* ‘to tie’, *ta-tilru* ‘rope’; *ulrane* ‘fat’, *u-lra-lrane* ‘will be fat’; *dalrekeng* ‘wet’, *da-lra-lrekeng* ‘will be wet’. When there is no onset in the first syllable of a disyllabic root (or in the penultimate

6 The term *Ca-* reduplication was coined and the associated processes first extensively discussed by Blust (1998). *Ca-* reduplication is very productive in many Austronesian languages, and differs from other types of reduplication processes to be discussed in the following sections, which usually relate to only one function or related functions.

7 Although most roots follow the reduplication process described, some exceptions are also found in the corpus. For example: the expected irrealis form for *kurenang* ‘follow’ **ku-ra-renang* does not exist; instead, the irrealis form is *ku<a>renang*. Also, *b<en>a-belrias* is used rather than the expected **b<en>elralrias*.

syllable of a tri- or quadrisyllabic root), *a-* is affixed. If the root is disyllabic, *a-* is prefixed to the root; if the root is trisyllabic or quadrisyllabic, <*a*> is inserted before the penultimate syllable. Examples: *paetreng* ‘long’, *pa<a>etreng* ‘will be long’; *atel* ‘to drop’, *a-atel* ‘will drop’.

Second, for fossilised stems consisting of a reduplicated monosyllabic root with ambisyllabic consonant clusters, the first syllable coda plus *-a* is infixated into the root. Examples: *bak.bak* ‘to unpack’, *ba.ka.ke.bak* ‘will pack’; *pes.pes* ‘to massage’, *pe.sa.se.pes* ‘massaging’. As these examples show, resyllabification occurs during this morphological process. To prevent the reduplicate <*Ca*> from forming a *CVC* syllable with the original coda (**ba.kak.bak*), a schwa is inserted (*ba.ka.ke.bak*). Not all fossilised reduplicated monosyllable stems follow this pattern. Those stems in which the copies of the monosyllable are separated by <*a*> do not take *Ca-* reduplication; instead they are infixated with another <*a*> in the prepenultimate position. For example: *ma-lritralritr* ‘roll’, *ma-lri<a>tralritr* ‘rolling’ (**ma-lri-tra-tralritr*); *bikabik* ‘shake off’, *b<en>i<a>kabik* ‘shaking off’ (**b<en>i-ka-kabik*); *sikasik* ‘set off’, *si<a>kasik* ‘will set off’ (**si<ka>kasik*). There are exceptions to the generalisations, for example: *pukpuk* ‘beat’, *p<en>u<a>kpuk* ‘beating’, but **p<en>uka-kepuk*; *putput* ‘hack’, *p<en>u<a>tput* ‘hacking’, but **penutatepuk*.

3.4.2.2 Semantic subtypes of *Ca-* reduplication

(i) Forming instrumental nouns

Ca- reduplication is one of the morphological processes that derives an instrumental noun (§7.3.2.4) from a verb. Examples are:

<i>tukudr</i> ‘to support’	<i>ta-tukudr</i> ‘pillar’
<i>deru</i> ‘to cook’	<i>da-deru-an</i> ‘cooker’
<i>lriyus</i> ‘to drill’	<i>lra-lriyus</i> ‘drill’
<i>supay</i> ‘to whet’	<i>sa-supay-an</i> ‘whetstone’
<i>lrangetri</i> ‘use a stick to beat a child’	<i>lra-nga-ngetri</i> ‘stick used to beat children’
<i>salpit</i> ‘use a tree branch to beat’	<i>sa-la-lepit</i> ‘the branch used to beat’

(ii) Indicating progressive aspect or irrealis mood

Progressive aspect (§6.4.1.2) and future/irrealis mood (§6.3.1.) are marked by *Ca-* reduplication. Progressive aspect is indicated by *Ca-* reduplication together with a voice marker; future/irrealis mood is marked by *Ca-* reduplication of the verb stem. Some examples are listed below, but for more detailed discussion see §6.3 and §6.4.

stem	progressive	irrealis
<i>kasu</i> ‘to bring’	<i>ka-kasu</i>	<i>ka-kasu</i>
<i>sanga</i> ‘to produce’	<i>sa-sanga</i>	<i>sa-sanga</i>
<i>na’u</i> ‘to see’	<i>me-na-na’u</i>	<i>na-na’u</i>
<i>parekep</i> ‘to constitute’	<i>p<en>a-ra-rekep</i>	<i>pa-ra-rekep</i>
<i>re’ani</i> ‘to reap’	<i>ma-re-’a-’ani</i>	<i>re-’a-’ani</i>

With stative verbs, the notion of inchoativeness is added when the verbs are marked by *Ca-* reduplication.

<i>ma-'idrang</i> 'old'	<i>ma-'a-'idrang</i> 'become older'
<i>litek</i> 'cold'	<i>la-litek</i> 'become colder'
<i>inaba</i> 'good'	<i>i-na-naba</i> 'become better'
<i>aremeng</i> 'dark'	<i>a-ra-remeng</i> 'become darker'
<i>ilemes</i> 'angry'	<i>i-la-lemes</i> 'become angry'

(iii) Marking reciprocity

Although *Ca-* reduplication alone cannot indicate the reciprocal relation, it is one of the elements in the formation. More discussion is provided in §9.3. A few examples follow.

<i>ma-drulrun</i> 'replace'	<i>ma-dra-drulrun</i> 'exchange'
<i>sulud</i> 'to push'	<i>ma-sa-sulud</i> 'to push each other'
<i>pingitr</i> 'to grab'	<i>ma-pa-pingitr</i> 'to grab each other'
<i>kuang</i> 'shoot'	<i>ma-ka-kuang</i> 'to shoot each other'
<i>da'ul</i> 'to inform'	<i>ma-da-da'ul</i> 'to inform each other'
<i>dikes</i> 'to hold'	<i>ma-da-dikes</i> 'to hold together'

(iv) Marking collectivity or plurality

Grammatical number is unmarked in Puyuma, but semantic plurality or collectivity can be signalled by (i) suffixation of *-an*, or (ii) *Ca-* or *CVCV-* (§3.4.3.1) reduplication, or (iii) both *-an* and *Ca-* (or *CVCV-*) reduplication.⁸

<i>lalak</i> 'child/children'	<i>lalak-an</i> 'children'
<i>wari</i> 'day(s)'	<i>wari-an</i> 'days'
<i>basikaw</i> 'bamboo(s)'	<i>basikaw-an</i> 'bamboos'
<i>suan</i> 'dog(s)'	<i>sua-suan</i> 'dogs'
<i>trau</i> 'person(s)'	<i>tra-trau</i> 'everybody'
<i>trau</i> 'person(s)'	<i>tra-trau-an/trau-an</i> 'human being'
<i>wadi</i> 'younger sibling(s)'	<i>wa-wadi-an</i> 'brothers and sisters'
<i>'alri</i> 'male friend(s)'	<i>'alri-'alri-an</i> 'male friends'

(v) Forming ordinal numbers

Ordinal numerals (§4.5.4.3) are mainly derived by prefixing *puka-* to a numeral base. *Ca-* reduplication optionally appears in the derived forms and causes no meaning difference.

<i>drua</i> 'two'	<i>puka-dra-drua</i> 'the second'
	<i>puka-drua</i> 'the second'

8 There seems to be a tendency for human nouns to be formed by *Ca-* plus *-an* and non-human nouns by either *-an* alone or by *CVCV-* reduplication (but *lalakan* 'children' is an exception). I assume *Ca-* plus *-an* is a circumfix, which denotes a collective meaning.

telru ‘three’

puka-ta-telru ‘the third’

puka-telru ‘the third’

Although five functions are listed, some of them are productive (marking progressive/irrealis and instrumental nouns) and some are very restrictive and their occurrence is optional (i.e. ordinal numerals). Historically these semantic subtypes of *Ca-* may (or may not) have been the same morpheme, but synchronically they are homophonous but separate morphemes. This raises a related question regarding the glossing. Because its occurrence is often idiosyncratic, and it often accompanies other morphemes to denote a meaning/function together, in this grammar I gloss according to the form but not the meaning/function.

3.4.2.3 A comparison of the *a-* morphemes

In Puyuma, there exist three distinct *a-* (or <*a*>) morphs; the first one is the allomorph of *Ca-* (§3.4.2.1), the second one occurs in complex stems (which consist of at least a root and an affix) and the third one occurs only in fossilised stems (§3.4.1.1). For the sake of presentation, they are called *a*₋₁, *a*₋₂ and *a*₋₃ for the moment. Their distributions and functions are summarised in Table 3.2.

When we examine these morphs closely, we find that *a*₋₂ and *Ca-* are in complementary distribution and can be treated as allomorphs. We find that *a*₋₂ occurs in stems consisting of *u-*, *ki-*,⁹ or *mi-*, and in fossilised reduplicated-monosyllable stems with <*a*>, and that *Ca-* appears elsewhere. Unlike *a*₋₁, which is determined as an allomorph of *Ca-* by the phonological environment, *Ca-* and *a*₋₂ are morphologically determined allomorphs. So there are two layers: first, *Ca-* (marking progressive and irrealis) and *a*₋₂ attach to different verbal stems as determined by morphology; then within those verbal stems that take *Ca-*, *a*₋₁ appears in certain phonological environments.

In this grammar, *a*₋₁ is glossed as ‘RED’, *a*₋₃ is not treated as a morpheme but part of the root (although in the past it may have been a separate morpheme), and *a*₋₂ is glossed as <*a*> or *a-*. Although *a*₋₁ and *a*₋₂ are in complementary distribution and they are functionally alike, I choose not to gloss *a*₋₂ as ‘RED’ but to keep it as <*a*> because, like *Ca-*, *a*₋₂’s occurrence is often idiosyncratic, and its function varies depending on what morphemes it accompanies. It is thus not realistic to gloss this morpheme on the basis of its function. Furthermore, although *a*₋₂ is an allomorph of *Ca-*, to gloss *a*₋₂ as ‘RED’ is misleading since the onset (if there is one) is never reduplicated, as in the case of *pi-a-kiping* (**pi-ka-kiping*).

9 This is more complicated in the case of verbs derived from *ki-* (§9.6). When *ki-* affixes to a nominal root and denotes the meaning of ‘get something’, *a*₋₂ occurs in its irrealis or progressive form as expected; but when *ki-* affixes to a verbal root and has passive meaning, either *a*₋₂ or *Ca-* reduplication (or *a*₋₁) is acceptable (although *a*₋₂ is preferred). For instance, when *beray* ‘give’ forms a complex stem with *ki-* to derive a new verb *ki-beray* ‘ask, beg’, the irrealis form may be *ki-a-beray* or *ki-ba-beray*.

Table 3.2: A comparison of the three *a*- morphemes

	<i>a</i> -1	<i>a</i> -2	<i>a</i> -3
Distribution	It is the allomorph of <i>Ca</i> -which occurs in the pre-penultimate position when the penultimate syllable does not have an onset	It occurs (i) in a fossilised reduplicated-monosyllable stem with < <i>a</i> > (§3.4.1.1) and (ii) in a complex stem which consists of a verbalising affix and a root. The verbalising affixes it cooccurs with include <i>u-</i> ‘go’, <i>ki-</i> ‘get’, and <i>mi-</i> ‘have’. ¹⁰	It occurs as part of a fossilised root.
Examples	<i>a-araw</i> ‘will rob’ <i>lru<a>alru</i> ‘will imitate’ <i>m-a-uka</i> ‘going’ <i>m-a-elaw</i> ‘fortune-tell’ <i>pa<a>etrenng</i> ‘will be long’	<i>si<a>k<a>sik</i> ‘will set off’ (<i>sik<a>sik</i>) <i>ma-lri<a>tr<a>lritr</i> ‘rolling’ (<i>ma-lritr<a>lritr</i>) <i>m-u-a-sabak</i> ‘going inside’ <i>m-u-a-patrararan</i> ‘going outside’ <i>ki-a-lengaw</i> ‘listening’ <i>ki-a-rami</i> ‘beginning’ <i>mi-a-kiruwan</i> ‘wearing clothes’	<i>gis<a>gis</i> ‘to shave’ <i>ging<a>ging</i> ‘to quake’ <i>bak<a>bak</i> ‘vegetable garden’ <i>kay<a>kay</i> ‘bridge’ <i>ki<a>pkip</i> ‘eyelashes’
Functions	Marking progressive, irrealis, reciprocal, plurality/collectivity, and forming instrumental nouns and numerals.	Marking progressive, irrealis.	It cannot be separated from the stem and has no synchronic function.

3.4.3 Disyllabic (CVCV-) reduplication

3.4.3.1 Form

In disyllabic reduplication the last two syllables of the stem are reduplicated, and the coda is dropped. For instance:

drenan ‘mountain(s)’ → *drena-drenan* ‘mountains’
ragumul ‘fur’ → *ra-gumu-gumul* ‘fluffy’

Adelaar (2000) and L.M. Chang (1998), in their analyses of Siraya and Thao, distinguish two different categories (treated as identical here) according to whether the stem has two syllables or more than two syllables. For those stems with more than two syllables, they

¹⁰ See §6.5.1, §6.5.6 and §6.5.7.

suggest that there is rightward reduplication. Blust (2001:326) also mentions that ‘full reduplication and rightward reduplication are in complementary distribution, because each is restricted to a different segmental template’. Here I argue that the reduplication processes which Adelaar and Chang call rightward reduplication and full reduplication respectively can actually be considered as the same process, for the three reasons given below.

First, the reduplication described here is structurally similar to *Ca*-reduplication, which is clearly not rightward. Both processes reduplicate the penultimate syllable (and the syllable after it). Second, if there is a coda in the last syllable, it does not participate in the reduplication. Third, the same rule accounts for *CVCV*-reduplication in both disyllables and longer words, and there is no need to postulate two reduplication processes to account for stems with two syllables and those with more than two syllables.

The term ‘rightward reduplication’, discussed in §3.4.5, is reserved in the present study for the reduplicative process where the last syllable is reduplicated without dropping the coda.

3.4.3.2 Meaning

Reduplication of this type usually adds the notion of plurality or collectivity to nouns and the notion of repetition or distributedness to active verbs. In most cases of stative verbs, it denotes a more extreme degree of the property denoted by the verb.

Examples of nouns:

<i>drenan</i> ‘mountain’	<i>drena-drenan</i> ‘mountains’
<i>tralrun</i> ‘grass’	<i>tralru-tralrun</i> ‘field’
<i>sa-turik</i> ‘a row’	<i>sa-turi-turik</i> ‘each row’
<i>uma</i> ‘farm’	<i>uma-uma</i> ‘field’
<i>suan</i> ‘dog’	<i>sua-suan</i> ‘many dogs’
<i>bati</i> ‘story; say’	<i>bati-bati-an</i> ‘mythology’
<i>lrima</i> ‘hand’	<i>mataralrima-lrima</i> ‘sign language’
<i>ma-’idrang-an</i> ‘old person’	<i>ma-’idra-’idrang-an</i> ‘old people’
<i>ragumul</i> ‘fur’	<i>ra-gumu-gumul</i> ‘fluffy’
<i>trakuban</i> ‘boy’s meeting house’	<i>tra-kuba-kuban</i> ‘male youth’
<i>lrikudran</i> ‘behind’	<i>lri-kudra-kudran</i> ‘the last’

Examples of dynamic verbs:

<i>turus</i> ‘to follow’	<i>turu-turus</i> ‘to keep following’
<i>kirim</i> ‘to be frugal’	<i>kiri-kirim</i> ‘to count every need’
<i>kurut</i> ‘to count’	<i>kuru-kurut-aw</i> ‘to limit’
<i>ma-rutung</i> ‘to gather’	<i>ma-rutu-rutung</i> ‘to gather repeatedly’
<i>me-na’u</i> ‘to see’	<i>me-na’u-na’u</i> ‘to keep looking’
<i>m-iway</i> ‘to go on hunger strike’	<i>m-iwa-iway</i> ‘to keep on hunger strike’
<i>m-araw</i> ‘to rob’	<i>m-ara-araw</i> ‘to rob again and again’
<i>mu-asal</i> ‘to change’	<i>mu-asa-asal</i> ‘to change again and again’
<i>m-alrup</i> ‘to hunt’	<i>m-alru-alrup</i> ‘to go hunting’

Examples of stative verbs:

<i>ma-ruwa</i> ‘can’	<i>ma-ruwa-ruwa</i> ‘can’
<i>ma-risan</i> ‘same’	<i>ma-risa-risan</i> ‘pretty much the same’
<i>dawil</i> ‘far’	<i>dawi-dawil</i> ‘very far’
<i>asatr</i> ‘tall’	<i>asa-asatr</i> ‘very tall’
<i>mukasa</i> ‘together’	<i>mu-kasa-kasa</i> ‘staying together’
<i>mi-sasa</i> ‘there is one’	<i>mi-sasa-sasa</i> ‘there is only one’
<i>kadruwan</i> ‘many’	<i>ka-druwa-druwan</i> ‘many’

CVCV- reduplication is also used to derive locative nouns from verbs, usually in company with the suffix *-an* (§7.3.2.5). In those cases, the derived noun refers to the location where the named activity is carried out.

<i>dirus</i> ‘to bathe, to swim’	<i>diru-dirus-an</i> ‘swimming pool’
<i>trima</i> ‘to buy’	<i>trima-trima-an</i> ‘market’
<i>trekelr</i> ‘to drink’	<i>treke-trekelr-an</i> ‘place for drinking water’
<i>daway</i> ‘to produce’	<i>dawa-daway-an</i> ‘factory’

CVCV- reduplication can replace *Ca-* reduplication to form reciprocal verbs expressing intensity (§9.3). For example:

<i>ma-pa-pingitr</i> ‘to scratch each other’	<i>ma-pingi-pingitr</i> ‘to fight against each other’
<i>ma-sa-salraw</i> ‘to pass by each other’	<i>ma-salra-salraw</i> ‘to chase each other’

CVCV- reduplication is often used to form place names or personal names. For example *kalikali* (personal name) is from *kali* ‘stream, brook’; *sanusanum* (place name) is from *sanum* ‘tap’.

3.4.4 First syllable reduplication

First syllable reduplication applies mostly to numerals for counting non-human referents¹¹ (§4.5.4.2), although it is not obligatory. However, not all numerals follow the same reduplication pattern. The number ‘six’ takes *Ca-* reduplication, and ‘seven’ and ‘nine’ take CVCV- reduplication. The numbers ‘one’, ‘four’, and ‘eight’ are indeterminate, because the reduplication may be analysed as either *Ca-* or *CV-*. A list of the numerals from one to nine is given for reference.

11 There is only one example not related to counting words in which *CV-* reduplication plus suffix *-an* indicates the meaning of collectivity. In the sentence below the stem for grandparent is *temu-*, which is a bound root, as it never occurs by itself without affixation. The evidence that the form *temumuan* involves reduplication (not ** infixation with vowel assimilation) is the forms *temuu* ‘your grandparent’ and *temutaw* ‘his grandparent’. See also Table 5.1 in §5.3.2.

<i>mi-trungul</i>	<i>dra</i>	<i>te<mu>mu-an</i>	<i>dra</i>	<i>saygu</i>	<i>m-alup</i>
have-lineage	ID.OBL	<RED>-grandparent-COL	ID.OBL	be.good.at	AV-hunt
‘It (the dog) had ancestors that were good at hunting.’					

cardinal number	non-human referent
1: <i>sa</i>	<i>sa-sa-a</i>
2: <i>drua</i>	<i>dru-drua-a</i>
3: <i>telru</i>	<i>te-telru-a</i>
4: <i>pat</i>	<i>pa-pat-a</i>
5: <i>lrima</i>	<i>lu-luwatr-a</i> ¹²
6: <i>nem</i>	<i>na-nem-a</i>
7: <i>pitu</i>	<i>pitu-pitu-a</i>
8: <i>walru</i>	<i>wa-walru-a</i>
9: <i>iwa</i>	<i>iwa-iwa-a</i>

3.4.5 Rightward reduplication

The term ‘rightward reduplication’ is used to refer to cases where the last syllable is reduplicated without dropping the coda. Examples of this type are very rare in the corpus. Semantically, rightward reduplication indicates intensity. For example:

- (32) ***talrugang-gang***
 sturdy-RED
 ‘He is very sturdy.’

3.4.6 Serial reduplication

The term ‘serial reduplication’ was coined by Blust (2001:332) to refer to a reduplicated segment being further reduplicated. There are two subtypes.

3.4.6.1 *Ca-Ca-*

In the first subtype, *Ca-* reduplication is applied twice. In most cases in this category, the derived form is also marked with <*in*> or a voice marker. When the derived form is marked by <*in*> (§7.3.1) and thus a nominal derivation, it denotes a frequentative aspect; when the derived form is verbal, it indicates durative aspect (§6.4.1.3).

<i>bati</i> ‘to say; word’	<i>b<en>a-ba-bati</i> ‘tale; rumour’
<i>kawang</i> ‘to walk’	<i>ka-ka-kawang</i> ‘walking’
<i>senay</i> ‘to sing’	<i>sa-sa-senay</i> ‘singing’
<i>trakaw</i> ‘to steal’	<i>tra-tra-trakaw</i> ‘stealing’
<i>senay</i> ‘to sing’	<i>s<in>a-sa-senay</i> ‘songs often sung’
<i>salrem</i> ‘to plant’	<i>s<in>a-sa-salrem</i> ‘something habitually planted’

12 The word *lrima* ‘five’ is only used to refer to the number five. In counting objects, or in any derivations, the base for five is always *luwatr*.

3.4.6.2 *Ca-CVCV-*

In the second subtype, the last two syllables of the stem are reduplicated and then the new form further undergoes *Ca-* reduplication. It seems only nouns are allowed to undergo this reduplicative process, and examples are rare. It is generally used to mark ‘every one (of a class), all’ or ‘whole’. Examples are:

<i>wari</i> ‘day’	<i>wa-wari-wari</i> ‘every day’
<i>trau</i> ‘person’	<i>tra-trau-trau</i> ‘everyone’
<i>ruma</i> ‘house’	<i>ra-ruma-ruma</i> ‘every house’
<i>dare</i> ‘earth; soil’	<i>da-dare-dare</i> ‘the whole land’
<i>trungul</i> ‘lineage descent’	<i>tra-trungu-trungul</i> ‘connections’

4 *Lexical categories*

4.1 Introduction

This chapter deals with the lexical categories of Puyuma. In Puyuma, there is a basic distinction between two open classes: nouns and verbs. The distinction is defined by various morphological and syntactic features.

A short overview of clause structure is given in §4.2. Section §4.3 discusses the distinction between noun and verb and gives an overview of the subclasses of nouns and verbs. The fact that there is no distinct adjective category is dealt with in §4.4. The closed categories are discussed in §4.5.

In the linguistic literature, several criteria are suggested for identifying different word classes: meaning, distribution, morphological structure, or grammatical function. In Puyuma, morphological and syntactic criteria are used in determining word classes, while semantic criteria are not used to assign individual words to word classes, but to give appropriate labels to word classes that are already defined by morphosyntactic criteria.

4.2 An overview of basic clause structure

In this section I give a very brief overview of Puyuma basic clause structure to provide a context for the discussion of lexical categories in this chapter and to orient the reader until these matters are dealt with in greater detail in Chapter 8.

Puyuma clauses are predicate-initial. A distinction between actor voice (with actor subject) and undergoer voice (with undergoer subject) is made among verbal clauses with both actor and undergoer arguments, as shown in (1)-(4). The undergoer voice has three variants, known as Patient Voice (PV), Locative Voice (LV), Conveyance (Instrumental/Beneficiary) Voice (CV) in conventional Philippinist terminology.

(1) *trakaw dra paisu i isaw*
<AV>steal ID.OBL money SG.NOM Isaw
'Isaw stole money.'

(2) *tu=trakaw-aw na paisu kan isaw*
3.GEN=steal-PV DF.NOM money SG.OBL Isaw
'Isaw stole the money.'

- (3) *tu=trakaw-ay=ku dra paisu kan isaw*
 3.GEN=steal-LV=1S.NOM ID.OBL money SG.OBL Isaw
 ‘Isaw stole money from me.’
- (4) *tu=trakaw-anay i tinataw dra paisu*
 3.GEN=steal-CV SG.NOM his.mother ID.OBL money
 ‘He stole money for his mother.’

Actor voice clauses are intransitive and are marked no differently from other intransitives (these markers are glossed as ‘ITR’ from this point on), but they have a patient in oblique case. Undergoer voice clauses are always transitive, and the actor is obligatorily marked on the verb as a genitive pronominal proclitic (§3.3.1), but the actor NP with which it agrees (if any) is marked as oblique (*kan isaw* in (2) and (3)). Thus Puyuma can be said to have an ergative syntactic organisation. Undergoer voice has three variants, transitive 1, transitive 2, transitive 3, reflecting the affectedness of the undergoer by the event encoded by the verb. These correspond to the conventional Patient, Locative, and Conveyance Voices respectively. Their affixes will be glossed as ‘TR1’, ‘TR2’ and ‘TR3’ from this point on, and I will call the distinction among them ‘undergoer choice’ rather than ‘voice’. I will call voice and undergoer choice together ‘subject choice’. A more detailed description of subject choice is given in §6.2. Issues such as why the conventional terms are inadequate, and the mapping between transitivity and voice, are treated in §8.4.4.

Puyuma has three cases. While pronominal clitics (§4.5.1.1.) make a distinction between nominative (subject and possessor of subject) and genitive (non-subject actor and possessor), free pronouns (§4.5.1.2.) and noun phrase markers (§4.3.1.2.2) distinguish between nominative (subject) and oblique (non-subject actor, possessor, non-subject patient, adjuncts). A summary is given in Table 4.1.

It could be argued that because Genitive and Oblique are in complementary distribution (pronominal clitics are Genitive but noun phrases are Oblique), they should be given the same label. I have chosen not to do this, however, because Oblique NPs have functions that are not shared by Genitive clitics.

Table 4.1: A summary of case marking

	Pronominal clitics	Free pronouns	NP markers
Nominative	✓	✓	✓
Genitive	✓	×	×
Oblique	×	✓	✓

4.3 Distinctions between nouns and verbs

In discussing lexical categories, it is necessary to look at distinctions at the word level (terminal syntactic categories), and at the root level (morphological categories). The first issue is addressed in §4.3.1 and the second is elaborated in §4.3.2.

4.3.1 Word level

4.3.1.1 Two syntactic tests

Since word classes are terminal syntactic categories, syntactic features provide the basic criteria for determining them. Two syntactic tests are utilised in determining whether a word is verbal or nominal. First, while a verbal element is negated by *adri*, a nominal element is negated by *ameli*, as shown below:

- (5) *adri saygu*
NEG able
'She's not able to.'
- (6) *ameli a suan*
NEG ID.NOM dog
'It is not a dog.'
- (7) **ameli saygu*
- (8) **adri a suan*

Second, while both nouns and verbs can be preceded by genitive proclitics,¹ only nouns can cooccur with free possessive pronouns. For example, in (9), *kasu-aw* and *padrek-an* are both procliticised by the genitive clitic *tu=*. While the clitic before *padrek-an* can be replaced by a free form *nantu*, the same replacement before *kasu-aw* is prohibited.

- (9) *tu=kasu-aw tu=padrek-an*
3.GEN=take-TR1 3.PSR=back-NMZ
'She took her backpack.'
- (10) *tu=kasu-aw nantu padrek-an*
3.GEN=take-TR1 NOM/3.PSR back-NMZ
'She took her backpack.'
- (11) **nantu kasu-aw tu=padrek-an*
NOM/3.PSR take-TR1 3.PSR=back-NMZ

4.3.1.2 Nouns

4.3.1.2.1 Syntactic functions and features of nouns

In addition to the cooccurrence restrictions demonstrated by the two syntactic tests, Puyuma nouns have the following syntactic functions and features:

- (i) A noun can be the 'primary information bearing unit'² (PIBU, after Croft 2001: 257–259), of a noun phrase.

1 The proclitic pronouns can either denote a non-subject actor when preceding a verb, or encode the nominative possessor when appearing before a noun. Different categories of personal pronouns and the strategies for glossing are dealt with in §4.5.1.

2 A PIBU is 'the most contentful item that most closely profiles the same kind of thing that the whole constituent profiles' (Croft 2001:257).

- (12) *sadru na asi tu=tr<in>ekelr*
 many DF.NOM milk 3.PSR=<PERF>drink
 ‘The milk she drank was a lot.’

(ii) A noun can appear in a possessive construction denoting the possessum.

- (13) *ta=tilril kana yawan*
 1P.PSR=book DF.OBL chief
 ‘our writing records about chiefs’

Nouns fall into several subclasses in terms of semantic as well as syntactic features. While common nouns, personal nouns and locative nouns are open classes, the other subclasses, such as personal pronouns, temporal nouns, and demonstrative pronouns have limited membership. An open-class noun is always preceded by a noun phrase marker, a personal pronoun or a demonstrative (these elements serving to mark case and definiteness/number); on the other hand, a closed-class noun is never preceded by a noun phrase marker. Because open-class nouns are preceded by a noun phrase marker, I will first give an overview of the noun phrase markers in §4.3.1.2.2. Subcategories of open-class nouns are described in §4.3.1.2.3. Closed classes are treated in §4.5.

4.3.1.2.2 Noun phrase markers

The major function of noun phrase markers is to indicate the case of a given noun, together with class membership (common, personal, locative) and definiteness or number. Table 4.2 is an inventory of the noun phrase markers of Puyuma. The nominative case marks the grammatical subject, while the oblique case marks non-subject arguments. The non-subject arguments include the non-subject actor (which has a genitive bound pronoun cross-reference with the full noun), and the oblique arguments. More discussion about grammatical functions and noun phrase markers is provided in §8.2.

Table 4.2: Noun phrase markers in Puyuma

	Common nouns		Personal nouns		Locations
	indefinite	definite	singular	plural	
Nominative	<i>a</i>	<i>na</i>	<i>i</i>	<i>na</i>	<i>i</i>
Oblique	<i>dra</i>	<i>kana</i>	<i>kan</i>	<i>kana</i>	

4.3.1.2.3 A subcategorisation of open-class nouns

On the basis of their syntactic features, open-class nouns are subcategorised into three classes: personal nouns, locative nouns, and common nouns. Besides being marked by different classes of noun phrase markers (as shown in Table 4.2), these three subclasses are also different in terms of their ability to take modifiers and their being able to be preceded by personal pronouns and demonstratives. A comparison of the three classes of nouns is given in Table 4.3.

Table 4.3: A comparison among the three subclasses of nouns

	Personal	Locative	Common
may be modified by a non-restrictive relative clause	yes	? ³	yes
may be preceded by a demonstrative/deictic expression	no	yes	yes
may be modified by a restrictive relative clause	no	no	yes
may be preceded by a personal pronoun	no	no	yes
may be modified by a numeral	no	no	yes

Because noun phrase structures will be dealt with in detail in Chapter 5, this section only gives an overview.

Personal nouns consist of personal names and some nouns denoting older-generation kin.⁴ Unlike common nouns and locative nouns, the number of a personal noun is obligatorily marked by the noun phrase marker.

- (14) *tu=padrek-aw* *i* *temutaw*
 3.GEN=carry.on.back-TR1 SG.NOM his.grandparent
 ‘He carried his grandmother on back.’
- (15) *tu=pes-pesbes-ay* *kan* *ma’idrang* *kakawalan*
 3.GEN=RED-massage-TR2 SG.OBL old Kakawalan
 ‘The old man Kakawalan kept massaging him.’
- (16) *tu=pu-kiping-ay* *na* *namali* *kay* *baeli*
 3.GEN=CAUS-clothes-TR2 PL.NOM my.father COM my.brother
 ‘They have my father and brother wear the traditional clothes.’

While most older-generation kin terms are treated as personal nouns, younger-generation kin terms, e.g. *wadi* ‘younger sibling’ in (17a), behave differently; they are treated as common nouns.

- (17) a. *nanku* *wadi* *i* *pilay*
 DF.NOM/IS.PSR younger.sibling SG.NOM Pilay
 ‘Pilay is my younger sister.’
- b. *i* *baeli* *i* *senayan*
 SG.NOM my.elder.sibling SG.NOM Senayan
 ‘Senayan is my elder sister.’

3 I have found no example in the corpus showing whether a locative noun can be modified by a non-restrictive relative clause.

4 Older-generation kin that are treated as personal nouns are those marked by inalienable possessive pronouns, discussed in §5.3.2. Note that first person plural kin terms, such as ‘our father’, ‘our grandparents’, are treated as common nouns.

Personal nouns are never preceded by pronouns or demonstratives, as in (18). They cannot be modified by a numeral, as in (19). They can take a relative clause but only the non-restrictive reading is acceptable, as in (20). Relative clauses are described in §5.6.

- (18) a. **nanku senayan*
 NOM/1S.PSR Senayan
 ‘my Senayan’
- b. **idru i senayan*⁵
 that.NOM SG.NOM Senayan
 ‘that Senayan’
- (19) a. **na mia-drua i senayan*
 DF.NOM PRS-two SG.NOM Senayan
 ‘two Senayan’
- b. **na mia-drua i baeli*
 DF.NOM PRS-two SG.NOM my.elder.sibling
 ‘my two elder brothers’
- (20) *tu=padrek-aw=ku kan isaw na bangsar*
 3.GEN=carry.on.back-TR1=1S.NOM SG.OBL Isaw LK handsome
 ‘Isaw, the handsome one, he carried me on his back.’
 ‘*The handsome Isaw carried me on his back.’

Locative nouns consist of nouns denoting place names (21), directions (22), and relational referents (23). Being subject or not, they are always preceded by the noun phrase marker *i*, and they may be a stative location, a goal or a source.⁶ For example, in (21) and (23), *i taihok* and *i nguwayan* are not the subject, and in (22) *i timulr* is the subject, but the noun phrase marker *i* in these examples cannot be replaced with *na* (marking nominative) or *kana* (marking oblique). In (21) and (22) the noun is a stative location, and in (23) it is a goal.

- (21) *m-uka=ku i/*kana taihok*
 ITR-go=1S.NOM LOC/DF.OBL Taipei
 ‘I went to Taipei.’
- (22) *ma-kiteng i/*na timulr*
 ITR-small LOC/DF.NOM south
 ‘The south is small.’
- (23) *ku=atel-anay na paisu i/*kana nguwayan kantaw*
 1S.GEN=throw-TR3 DF.NOM money LOC/DF.OBL front 3.OBL
 ‘I threw the money in front of him.’ (lit. ‘in his front’)

Like personal nouns, locative nouns cannot be followed by a numeral, as in (24) or a relative clause, as in (25), but they can be preceded by a spatial deictic, as in (26).

5 This sentence will be grammatical if it is interpreted as an equational sentence, meaning ‘Senayan is that one’.

6 Locative nouns expressing sources are always preceded by *kemay* ‘from’, with or without *i*, but never **kemay kana*.

- (24) **ma-kiteng i timulr na drua-a*
 ITR-small LOC south LK two-NPRS
 ‘The two souths are small.’
- (25) **m-uka=ku i balrangaw na bulray*
 ITR-go=1S.NOM LOC Taitung LK beautiful
 ‘I went to beautiful Taitung.’
- (26) *m-uka kadri i balrangaw*
 ITR-go here LOC Taitung
 ‘They came here to Taitung.’

Locative nouns cannot be preceded by a personal pronoun, as shown in (27a-c). Directional and space-relational nouns (but not place names: cf. (28b)) may be followed by an oblique-marked NP encoding a possessive relation, as in (23) and (28a).

- (27) a. **nanku nguayan*
 NOM/1S.PSR front
 ‘my front’
- a’. *i nguayan kanku*
 LOC front 1S.OBL
 ‘in front of me’
- b. **nanku timulr*
 NOM/1S.PSR south
 ‘my south’
- b’. *maka-timulr kanku*
 along-south 1S.OBL
 ‘south to me’
- c. **nanku taihok*
 NOM/1S.PSR Taipei
 ‘my Taipei’
- (28) a. *ulaya i isatr kana etu’ na paisu*
 exist LOC above DF.OBL table DF.NOM money
 ‘The money is on (the surface of) the table.’
- b. **ulaya i puyuma kana kanatalr i baeli*
 exist LOC Puyuma DF.NOM island SG.NOM my.elder.sibling
 ‘*My elder brother is the island’s Puyuma.’

Common nouns are nouns other than locative or personal nouns. They may be modified by a numeral (29) or a relative clause (30), and they can be preceded by a demonstrative (31) or a possessor pronoun (32).

- (29) *drua me-nau-a a mia-drua a trau i, ...*
 come ITR-see-PJ ID.NOM PRS-two ID.NOM person TOP
 ‘Two people came to see, ...’

- (30) *tu=alrak-aw na kiping na bulray*
 3.GEN=take-TR1 DF.NOM clothes DF.NOM beautiful
 ‘They took the beautiful clothes.’
- (31) *salraw=ku sagar kandri kana suan*
 very=1S.NOM like this.OBL DF.OBL dog
 ‘I like this dog very much.’
- (32) *bulray nanu kabung*
 beautiful NOM/2S.PSR hat
 ‘Your hat is beautiful’

There is a group of nouns which may be used as either common or locative nouns. These nouns all encode familiar locations, like *ruma* ‘house’, *kalri* ‘river’, *lrangitr* ‘sky’, *ine* ‘sea’, *drekal* ‘village’. For instance, in (33), *lrangitr* ‘sky’ is the subject and is used as a common noun, but in (34), it is used as a locative noun.

- (33) *mi-riwanes na lrangitr*
 have-rainbow DF.NOM sky
 ‘The sky has a rainbow.’
- (34) *ulaya a ariwanes i lrangitr*
 exist ID.NOM rainbow LOC sky
 ‘There is a rainbow in the sky.’

When such nouns are marked by *i*, they cannot be modified by a numeral or a personal pronoun, nor can they take a relative clause. Take *ruma* ‘house’ as an example. In (35) it is used as a common noun, and in (36) it is used as a locative noun.

- (35) a. *ma-trina na ruma’*
 ITR-big DF.NOM house
 ‘The house is big.’
- b. *ma-trina na ruma’ na telru-a*
 ITR-big DF.NOM house DF.NOM three-NPRS
 ‘The three houses are big.’
- c. *ma-trina idri na ruma’ na bulray*
 ITR-big this.NOM DF.NOM house DF.NOM beautiful
 ‘This beautiful house is big.’
- (36) a. *trekelr=ku i ruma’*
 ITR-drink=1S.NOM LOC house
 ‘I drink (wine) at home.’
- b. **trekelr=ku i ruma’ na telru-a*
 ITR-drink=1S.NOM LOC house DF.NOM three-NPRS
- c. **trekelr=ku i ruma’ na bulray*
 ITR-drink=1S.NOM LOC house DF.NOM beautiful

When such nouns are preceded by a personal pronoun, although they encode locations, they are never preceded by *i*. For example:

- (37) a. *trekelr=ta* *kantu* *ruma'*
 <ITR>drink=1P.ICL.NOM DF.OBL/3.PSR house
 'We drank in his house.'
- a'. **trekelr=ta* *i* *kantu* *ruma'*
 <ITR>drink=1P.ICL.NOM LOC DF.OBL/3.PSR house
- b. *ta=pa-drua-aw* *kanta* *ruma'*
 1P.GEN=CAUS-come-TR1 DF.OBL/3.PSR house
 'We made them come to our house.'
- b'. **ta=pa-drua-aw* *i* *kanta* *ruma'*
 1P.GEN=CAUS-come-TR1 LOC DF.OBL/1P.PSR house
 'We made them come to our house.'

Sentences (33) to (36) all illustrate examples with nouns expressing stative locations. When such nouns encode goals, they can be preceded either by *i* or *kana* (oblique noun phrase marker), as in (38a) and (38b).

- (38) a. *adri ua-dalep i/kana ine'*
 NEG go-close LOC/DF.OBL sea
 'Don't go close to the sea.'
- b. *mu-atel=ku i/kana kali*
 ACAUS-fall=1S.NOM LOC/DF.OBL brook
 'I fell into the brook.'

However, when such nouns encode goals after *muka* 'go' and *drua* 'come', they are always preceded by *i*, as in (39).⁷

- (39) *m-uka i/*kana drekal*
 ITR-go LOC/*DF.OBL village
 'He went to the village.'

When such nouns denote a source (which is always introduced by *kemay* 'from'), they can be preceded by a personal pronoun.

- (40) a. *p-u-patrarar=ku kemay i/*kana ruma'*
 CAUS-go-out=1S.NOM from LOC/DF.OBL house
 'I made it go out from the house.'
- b. *p-u-patrarar=ku kemay kanta ruma'*
 CAUS-go-out=1S.NOM from DF.OBL/1P.PSR house
 'I made it go out from our house.'

⁷ However, when goals are denoted by common nouns not encoding familiar locations, these nouns are preceded by *kana* instead of *i*. For instance:

m-uka kana mar-asatr kana tu'utr
 ITR-go DF.OBL more-high DF.OBL pillar
 'They went to the higher pillar.'

4.3.1.3 Verbs

Verbs can be subdivided into several classes in terms of their argument structure, which is to a certain extent signalled by their morphological derivations. It is necessary to distinguish between roots, verbs (i.e. verbal stems), and verb forms. Thus *bias* ‘be hot’ and *b<en>ias* ‘make hot’ are respectively monovalent and bivalent verbs derived from the root *bias*, while *bias-aw* and *b<en>ias* are respectively transitive (patient subject) and intransitive (actor voice) forms of the same verb.

Verbs are classified here on the basis of valency, but a more detailed discussion is given in §10.2.

(i) **Zero-valency or ‘ambient’ verbs** do not take any arguments.

(41) *a<ra>remeng=la*
 <RED>dark=PERF
 ‘It is getting dark.’

(ii) **Monovalent verbs** are always intransitive. Thus they are marked by intransitive affixes and they have only one obligatory argument, the nominative subject. Two classes can be distinguished in terms of the stativity/dynamicity of monovalent verbs. Dynamic verbs fall into several subtypes in terms of different morphological derivations. More discussion of morphological classes of monovalent verbs is provided in §6.5.

(42) *ma-rimek na ruma’*
 ITR-dirty DF.NOM house
 ‘The house is dirty.’ (Stative)

(43) *sa-senay i baeli*
 <ITR>RED-sing SG.NOM my.elder.sibling
 ‘My elder sister is/was singing.’ (Dynamic)

(iii) **Bivalent verbs** usually have both transitive (undergoer voice) and intransitive (actor voice) forms. Transitive forms are marked by one of the transitive suffixes, and they take a genitive agent pronoun proclitic, and a nominative pronoun enclitic or nominative NP.

(44) *tu=adras-aw idru na barasa*
 3.GEN=lift.up-TR1 that.NOM DF.NOM stone
 ‘They lifted up that stone.’

The example above is transitive 1 (patient subject). When such a verb appears in actor voice, as in (45), it is intransitive and has the same marking as a monovalent verb. The patient NP, if any, is in oblique case and is not coreferenced by a verbal clitic.

(45) *m-adras=mi dra lriung*
 ITR-lift.up=1P.NOM ID.OBL pig
 ‘We lifted up a pig.’

Within the bivalent category, there are two subclasses of derived verbs: anticausative (46) and passive (47), described in §9.5 and §9.6 respectively. Here the patient NP is in nominative case and the actor (if any) is in the oblique case, as in (47).

- (46) *mu-trukulr na sa'adr*
 ACAUS-pick DF.NOM branch
 'The branch was picked up by (someone).'
- (47) *ki-sulu-sulud=ku dra trau*
 PASS-RED-push=1S.NOM ID.OBL person
 'I get pushed by others. (I need others to push me.)'

(iv) **Trivalent verbs** take three arguments: an actor, a patient-like (PL) argument and a less-patient-like (LPL) argument. A typical trivalent verb, such as 'give' or 'lend', takes an actor, a beneficiary and a theme. Because there is no patient in a 'give' or a 'lend' construction, I assume that the theme is the patient-like (PL) argument and the beneficiary the less-patient-like (LPL) argument. Trivalent verbs are always transitive and have more than one undergoer voice form.⁸ Which form occurs depends on undergoer (subject) choice, which depends on the definiteness of the PL (theme). When the PL (theme) is indefinite, as in (48), the verb is in TR2 (LV) form and the LPL (beneficiary) is subject; when the PL (theme) is definite, as in (49), the verb is in TR3 (CV) form and the PL is subject. Sentences in (50) are elicited examples which again show that the definiteness of the PL (theme) determines the undergoer (subject) choice.

- (48) *an tu=beray-ay=mu=la dra la'ub ...*
 if 3.GEN=give-TR2=2P.NOM=PERF ID.OBL ladle
 'If she gives you ladles ...'
- (49) *tu=beray-anay na la'ub*
 3.GEN=give-TR3 DF.NOM ladle
 'She gave them the ladle.'
- (50) a. *ku=pabulras-ay dra kabung i lrugi*
 1S.GEN=lend-TR2 ID.OBL hat SG.NOM Lrugi
 'I lent Lrugi a hat.'
- b. *ku=pabulras-anay kan lrugi na kabung*
 1S.GEN=lend-TR3 SG.OBL Lrugi DF.NOM hat
 'I lent the hat to Lrugi.'

4.3.2 Root level

In Puyuma, as in many Austronesian languages, it is not unusual for the same form to be used in both nominal and verbal frames. For instance, in (51), the same form *senay* 'to sing; song' appears twice; the first time it is used as the content word of a verb phrase, and the second time as the content word of a noun phrase. In (52a) and (52b), the same form *temakakesi* 'studying; student' is used as the content word of a verb phrase and a noun phrase respectively.

⁸ I have found no example of *beray* 'give' or *pabulras* 'lend' in the corpus appearing in their intransitive forms. For them to appear in intransitive constructions, they must have an indefinite PL and LPL. However, the circumstances in which one might say 'I've lent a hat to someone', or 'I've given someone a hat' are rare.

- (51) *senay dra senay*
sing.IMP ID.OBL song
'Sing a song!'
- (52) a. *ta<ka>kesi=ku*
<ITR><RED>study=1S.NOM
'I am studying.'
- b. *a ta<ka>kesi=ku*
ID.NOM <ITR><RED>study=1S.NOM
'I am a student.'

Example (52) shows that there exists a mismatch between nouns and verbs, defined morphologically, and the terminal syntactic categories of noun phrases and verb phrases.⁹

The overlap displayed in (51) to (52) is shown in the table below.

Root	Noun	Verb (imperative)	Verb (progressive)
<i>senay</i>	<i>senay</i> 'song'	<i>senay</i> 'to sing'	<i>semasenay</i> 'singing'
<i>takesi</i>	<i>temakakesi</i> 'student'	<i>takesi</i> 'to study'	<i>temakakesi</i> 'studying'

The above table shows that the two roots *senay* and *takesi* can have nominal and verbal derivations. The paradigm raises one issue. Except for roots denoting kinship terms and proper names, open-class roots may have both nominal and verbal derivations. Are these roots pre-categorial as some Austronesian linguists, e.g. Foley (1998), have suggested? The answer for most roots is 'no'.

As was mentioned above, although almost all open-class roots can have both nominal and verbal derivations, we can still categorise these roots. Roots are categorised in terms of morphological markedness in the syntactic slot where they appear. I employ Croft's (2001:84–92) framework of markedness and prototypes to determine the category a root belongs to. If a root can be used in a grammatical slot without any further affixation, it is the prototype of that grammatical category. Take *takesi* as an example. Although *takesi* can be used as content word in both a verb phrase as in (52a) and a noun phrase as in (52b), the root is basically verbal because it cannot be used in a nominal frame without further marking. However it can be used in an imperative verbal construction without any further affixation.

- (53) *takesi i sabak!*
study.IMP LOC inside
'Study inside!'

Likewise, the root *ngalrad* is analysed as nominal, because the root itself can be used in a nominal frame as in (54), but not in a verbal frame without morphological derivation as in (55).

- (54) *tu=ngalrad kan temuu i, amau i kalikali*
3.PSR=name SG.OBL your.grandparent TOP COP SG.NOM Kalikali
'Your grandmother's name is Kalikali.'

9 Himmelmann (forthcoming) describes a parallel mismatch in Tagalog.

- (55) *mi-ngalrad dra matang*
 have-name ID.OBL Matang
 'It is called Matang.'

Similarly, the root *salrem* is analysed as verbal because it appears in the imperative construction without affixation as in (56), but has to take an affix before it can be used in a nominal slot, as in (57).

- (56) *salrem dra bini*
 plant ID.OBL seed
 'Plant a seed!'
- (57) *sadru tu=s<in>alrem-an*
 many 3.PSR=<PERF>plant-NMZ
 'Her plants are many.'

In addition to morphologically free roots, which can be used as a noun or as a verb without derivation, there are a number of bound roots (see also §3.2.2). All bound roots in Puyuma cooccur with either *ma-* or *ka-* when they are used in discourse. That is, they form verbal stems which have to be further affixed before they can be used in nominal frames. For example:

- (58) *ma-'idrang=ku*
 ITR-old=1S.NOM
 'I am old.'
- (59) *sa-senay na ma-'idrang-an*
 <ITR>RED-sing DF.NOM ITR-old-NMZ
 'The old people are singing.'

There are some roots whose category cannot be decided. The difficulty lies in the fact that these roots are used in both nominal and verbal frames without any morphological derivation, as exemplified by the root *senay* in (51). The number of such roots is not large (less than 10 percent of the total) and they are restricted to certain categories. The following are examples of roots that can be used both as nouns and as imperative verbs.

- (i) verbs and their related instrument nouns (or, nouns and the events typically related to them)

<i>tawasi</i>	V	to brush	N	brush
<i>tabukul</i>	V	to catch s.th. with a net	N	net
<i>elaw</i>	V	to practice divination	N	the bamboo used to practice divination
<i>kuang</i>	V	to shoot	N	gun
<i>abak</i>	V	to contain	N	container
<i>kutang</i>	V	to spear	N	spear
<i>dawak</i>	V	to poison	N	poison

- (ii) verbs and their related undergoer nouns

<i>sama</i>	V	to leave s.th.	N	s.th. left
<i>sabung</i>	V	to compensate	N	compensation

(iii) verbs and their related result nouns

<i>'udal</i>	V	to rain	N	rain
<i>senay</i>	V	to sing	N	song
<i>bati</i>	V	to tell	N	tale
<i>buang</i>	V	to make a hole	N	hole
<i>runi</i>	V	to sound	N	sound
<i>palaw</i>	V	to have a skin ulcer	N	a skin ulcer
<i>gingaging</i>	V	to quake	N	earthquake
<i>depa'</i>	V	to step	N	a step

(iv) others (mostly nouns and their related properties, or a body part and the action typically related to it)

<i>lalak</i>	V	young	N	child
<i>kualreng</i>	V	ill	N	illness
<i>padrek</i>	V	to carry on back	N	back

Roots that can be freely used in nominal and verbal frames are therefore pre-categorial.

Roots can be categorised as nominal: (i) if they are never used as verbs, or (ii) if they have to take affixes before being used in a verbal frame. Verbal roots are those that can appear in an imperative construction without any affixation or roots that take more affixes in a nominal frame than when they are used in a verbal slot.

4.4 The absence of adjectives

Adjectives typically denote properties. Unlike verbs or nouns, which seem to be universal, not all languages have an adjectival category. In this grammar, I do not distinguish a class of adjectives, although there is a subclass of verbs which often have the meanings that are associated with adjectives in other languages, such as 'old', 'big', 'cold', and so on. There is no syntactic or morphological evidence for treating these stative verbs as a category distinct from verbs. For instance, there is no morphological difference between *ma-'idrang* 'old' in (60) and *ma-ragan* 'get up' in (61). The two verbs are both marked by the same intransitive marker. Syntactically, both *ma'idrang* and *maragan* function as a predicate, and both of them take a pronominal and an aspectual clitic.

(60) *ma-'idrang*=*ku=la*
 ITR-old=1S.NOM=PERF
 'I'm old.'

(61) *ma-ragan*=*ku=la*
 ITR-get.up=1S.NOM=PERF
 'I've got up.'

Like dynamic verbs, a stative verb also has progressive and irrealis forms (cf. §6.5), as shown below.

Stative	Dynamic
<i>ma-'idrang</i> 'old'	<i>ma-ragan</i> 'get up'
<i>ma-'i-'idrang</i> 'getting old'	<i>ma-ra-ragan</i> 'getting up'
<i>ka-'i-'idrang</i> 'will get old'	<i>ra-ragan</i> 'will get up'

Both stative verbs and dynamic verbs can be used to modify a noun. In many languages of the world, such as English, there is a structural difference between modification by a verb and modification by an adjective, e.g. 'the **old** man' vs. 'the man **who is running**'. In Puyuma, there is no such a distinction, as shown in (62) and (63).

- (62) *k<a>adru=driya nantu lang [na pa-pulang]*
 <a>there=IMPF DF.NOM/3.PSR company DF.NOM RED-help
 'His friends who can help have to be there.'
- (63) *ulaya a lalak [a ma-kesor]*
 exist ID.NOM child ID.NOM ITR-strong
 'There is a strong child.'

However, there is a comparative/superlative prefix *mara-* which can prefix to stative verbs but not to dynamic verbs. For instance, *mara-ma-'idrang* 'older', *mara-ma-kesor* 'stronger', but not **mara-ma-ragan* and **mara-pulang*. However, the presence of a comparative strategy does not distinguish stative verbs as a separate word class, since it is conditioned by the semantic feature of gradability, not stativity (Ross and Teng 2003).

4.5 Closed word classes

Unlike words in open classes, where various kinds of derivational processes are productive, most words in closed classes never undergo derivation and thus have constant forms. The closed classes of Puyuma are personal pronouns, temporal nouns, deictic expressions, numerals, adverbs, tags, topic markers, aspectual markers, conjunctions, and interjections. I deal in detail with deictic expressions and numerals here, as, unlike other closed classes, they are not discussed elsewhere in the grammar.

4.5.1 Personal pronouns

4.5.1.1 Bound pronouns

Bound pronouns are clitics. They make a distinction only between nominative and genitive cases, as shown in Table 4.4. Their morphological status is dealt with in §3.3.

Table 4.4: Puyuma pronominal clitics

Number/person		Singular			Plural			
		1 st	2 nd	3 rd	1 st ICL	1 st ECL	2 nd	3 rd
NOM	Subj.	= <i>ku</i>	= <i>yu</i>	—	= <i>ta</i>	= <i>mi</i>	= <i>mu</i>	—
	Poss of subj.	<i>ku</i> =	<i>nu</i> =	<i>tu</i> =	<i>ta</i> =	<i>niam</i> =	<i>mu</i> =	<i>tu</i> =
GEN		<i>ku</i> =	<i>nu</i> =	<i>tu</i> =	<i>ta</i> =	<i>mi</i> =	<i>mu</i> =	<i>tu</i> =

In the nominative row, there are two categories of bound pronouns: one is enclitic, and denotes the grammatical subject; the other is proclitic, and indicates the possessor of the subject.

From the table we also see that the possessor of subject and the genitive pronouns have the same forms, except for the first person exclusive plural pronouns. However, their distributions are different and thus they are glossed differently. While the possessors, glossed as PSR, procliticise to possessed nominals and indicate that the NP as a whole is the subject, the genitive pronouns procliticise to verbal elements and refer to the non-subject actor. Compare the two proclitic pronouns in (64).

- (64) *ku=rungas-aw* *ku=kiruan*
 1S.GEN=take.off-TR1 1S.PSR=clothes
 ‘I took off my clothes.’

The first *ku*= (1S.GEN) attaches to the verb and denotes the non-subject actor, while the second *ku*= (1S.PSR) attaches to a nominal indicating that the NP is the subject.

Nominative enclitics denote the grammatical subject and are usually encliticised to the first element in a sentence. This first element may be either a nominal predicate, as in (65), or a verb, as in (66).

- (65) *a* *lalak=ku=driya*
 ID.NOM child=1S.NOM=IMPF
 ‘I was still a child.’

- (66) *mu-atel=ku* *dra* *enay*
 ACAUS-fall=1S.NOM ID.OBL water
 ‘I fell into the water.’

4.5.1.2 Free pronouns

Free pronouns are phonologically unbound. Three categories are distinguished: neutral, nominative, and oblique. Nominative and oblique forms are portmanteau words; they consist of noun phrase markers and bound pronouns. The portmanteau forms which are used to indicate the possessor of a noun and simultaneously the case of the whole NP are glossed according to the following strategies: the form *nanku* consists of the nominative noun phrase marker *na* and first person singular pronoun *ku*, and is glossed as NOM/1S.PSR; the form *kanku* consists of *kan* and *ku*, and is glossed as DF.OBL/1S.PSR; the form *draku* consists of *dra* and *ku*, and is glossed as ID.OBL/1S.PSR. The longer forms in the oblique category, i.e. *kananku* or *drananku*, consist of a noun phrase marker and a nominative possessor pronoun (*kan* + *nanku*; *dra* + *nanku*), and are glossed in the same way (i.e. *kananku* DF.OBL/1S.PSR; *drananku* ID.OBL/1S.PSR).

Table 4.5: Puyuma free pronouns

			Singular			Plural			
			1 st	2 nd	3 rd	1 st ICL	1 st ECL	2 nd	3 rd
NOM (Poss of subj)			<i>nanku</i>	<i>nanu</i>	<i>nantu</i>	<i>nanta</i>	<i>naniam</i>	<i>nanemu</i>	<i>nantu</i>
OBL	Poss of non-subj.	DF	<i>kanku</i> <i>kananku</i>	<i>kanu</i> <i>kananu</i>	<i>kantu</i> <i>kanantu</i>	<i>kanta</i> <i>kananta</i>	<i>kaniem</i> <i>kananiem</i>	<i>kanemu</i> <i>kananemu</i>	<i>kantu</i> <i>kanantu</i>
		ID	<i>draku</i> <i>drananku</i>	<i>dranu</i> <i>drananu</i>	<i>dratu</i> <i>dranantu</i>	<i>drata</i> <i>drananta</i>	<i>draniem</i> <i>drananiem</i>	<i>dranemu</i> <i>drananemu</i>	<i>dratu</i> <i>dranantu</i>
	Non-subj.	<i>kanku</i>	<i>kanu</i>	<i>kantaw</i>	<i>kanta</i>	<i>kaniem</i>	<i>kanemu</i>	<i>kantaw</i>	
NEU			<i>kuiku</i>	<i>yuyu</i>	<i>taytaw</i>	<i>taita</i>	<i>mimi</i>	<i>muimu</i>	—

The nominative category indicates the possessor of the subject while the oblique category can either mark the non-subject or the possessor of a non-subject. Neutral pronouns are not used to mark the grammatical status of the participant they refer to in a sentence.

The neutral pronouns usually appear in the topic position, as in (67) or in a copular construction, as in (68).

(67) *taita* *i*, *k<a>adru=ta* *i* *taihok*
 1.ICL.NEU TOP <RED>there=1.ICL.NOM LOC Taipei
 ‘As for us, we are living in Taipei.’

(68) *amau taytaw na sa-senay*
 COP 3S.NEU DF.NOM <ITR>RED-sing
 ‘It is he who was singing.’

The neutral pronouns are also used as a reply to an interrogative sentence starting with *i manay* ‘who’.

(69) Q: *i manay na sa-senay*
 SG.NOM who DF.NOM <ITR>RED-sing
 ‘Who’s singing?’

A: *kuiku*
 1S.NEU
 ‘Me.’

In (70) and (71), two readings can be obtained; in the two sentences neutral pronouns may be used in a reflexive context or they may coreference the genitive pronouns and assume an emphatic meaning.

(70) *ku=na’u-ay kuiku*
 1S.GEN=look-TR2 1S.NEU
 ‘I looked at/looked after myself.’
 ‘I myself looked after it.’

(71) *tu=tusuk-aw taytaw*
 3GEN=spear-TR1 3S.NEU
 ‘He speared himself.’
 ‘He himself speared it.’

Neutral pronouns optionally appear in a verbal construction to denote a third person nominative argument. For instance:

(72) *ku=pabulras-ay dra kabung taytaw*
 1S.GEN=lend-TR2 ID.OBL hat 3S.NEU
 ‘I lent him a hat.’

(73) *sa<'eru>'eru misasa=la taytaw*
 <RED>laugh one=PERF 3S.NEU
 ‘She kept laughing alone.’

Recall that there are no third person nominative enclitics (cf. Table 4.4). When there is no nominative pronoun, a verb is interpreted as having a third person nominative argument. Hence, a neutral pronoun serves as a nominative argument in (72) and (73); the neutral pronoun in both sentences can be deleted without changing the meaning.

The reader may suspect from the above examples that neutral pronouns are actually nominative. However, the third person pronoun *taytaw* in (74) coreferences the genitive bound pronoun *tu=*, refuting this hypothesis.

(74) *tu=pa-'a-'arum-ay nu=kiruan taytaw*
 3.GEN=CAUS-RED-dry-TR2 2S.PSR=clothes 3S.NEU
 ‘He himself is drying your clothes.’

In short, neutral pronouns have three major functions: to affirm identities, to assume an emphatic meaning, or to indicate a reflexive meaning. They are not used to mark the grammatical status of the participant they refer to in a sentence.

The possessor of the subject is represented by a nominative free pronoun.

(75) *tu=retra-anay nantu basak kana ma'idrang-an*
 3.GEN=put.down-TR3 DF.NOM/3.PSR bag DF.OBL old-NMZ
 ‘The elders put down their bags.’

The nominative free pronouns can be replaced by bound pronouns, and thus in the above sentence, *nantu* can be replaced by *tu=*.

The oblique category is the most complex one among the free pronouns; two uses are distinguished. Oblique pronouns denote non-subjects and possessors of non-subjects. Examples showing oblique pronouns denoting non-subjects are given below:

(76) *m-uai=yu mi-kataguin kanku*
 ITR-willing.to=2S.NOM have-spouse 1S.OBL
 ‘Are you willing to marry me?’

(77) *ka-a=ku=driya pa-ka-ladram kanmu*
 <ITR>say-PJ=1S.NOM=IMPF CAUS-ka-know 2P.OBL
 ‘I am speaking to inform you.’

The possessors of non-subjects are further subcategorised into two classes in terms of definiteness of the possessed nouns. For example:

(78) *sagar ku<rena>renang kantu wadi*
 like <RED>follow DF.OBL/3.PSR younger.sibling
 ‘She likes following her brothers.’

- (79) *sagar m-ekan drata b<in>eray dra akan-an*
 like ITR-eat ID.OBL/1P.PSR <PERF>give ID.OBL eat-NMZ
 ‘They like to eat whatever food we have given.’

There are longer forms and shorter forms in this oblique category of pronouns. According to the informants, there is no semantic or pragmatic distinction between the longer and shorter forms, and they are interchangeable.

4.5.2 Temporal nouns

There are only a few temporal nominals in Puyuma, listed below.

<i>adru/adrunu</i>	‘then’
<i>andaman</i>	‘tomorrow; days later’
<i>adaman</i>	‘yesterday; days before’
<i>garem</i>	‘now; today’
<i>garemay</i>	‘later’

Temporal nouns are not preceded by noun phrase markers, but are analysed as nouns instead of adverbs because they may occupy the subject position in a nominal clause (§10.3). For example:

- (80) *nantu ka-si<a>kasik-an andaman*
 DF.NOM/3.PSR ka-<a>set.out-NMZ tomorrow
 ‘Tomorrow is (the day of) their setting out.’

They may also function as the argument of the verb *palu* ‘demarcate’. Compare the following two sentences. The temporal expression *garem* ‘now’ can replace the case-marked nominal element *dra ma’idrang*:

- (81) *palu dra ma-’idrang, adri ma-ladram*
 demarcate ID.OBL ITR-old NEG ITR-know
 ‘(Even) Until they were old, they didn’t understand.’
- (82) *palu garem, adri=ku ma-ladram*
 demarcate now NEG=1S.NOM ITR-know
 ‘Until now, I still don’t understand.’

However, in some cases, these words do not function as arguments but as adjuncts. Unlike common nouns, a temporal noun does not required a preposition in order to form an adjunct. For instance:

- (83) *ka-kuda=mi garem?*
 RED-how=1P.ECL.NOM now
 ‘What should we do now?’

4.5.3 Deictic expressions

4.5.3.1 An overview

The major functions of deictic expressions are to focus the addressee’s attention on objects, persons, or locations in the speech situation, and to refer to linguistic entities in discourse.

In Puyuma, deictic expressions can be subcategorised into four categories in terms of morphosyntactic properties. They are demonstratives (as in (84)), spatial deictics (as in (85)), temporal deictics (as in (86)), and verbal deictics (as in (87)). Of the four, the first three are subclasses of nominals.

- (84) *adri=driya me-redek idru na paisu*
 NEG=IMPF ITR-arrive that.NOM DF.NOM money
 ‘That money has not arrived yet.’ (Pronominal demonstrative)
- (85) *me-redek=ta=la kadri i puyuma*
 ITR-arrive=1P.ICL.NOM=PERF here LOC Puyuma
 ‘We’ve arrived at Puyuma.’ (Locational demonstrative)
- (86) *kemay kadru=la, m-utu-yawan=la*
 from then=PERF ITR-become-chief=PERF
 ‘From then on, he became a chief.’ (Temporal demonstrative)
- (87) *kadrini=mi=driya dra ka-kualreng-an*
 <ITR>here=1P.ECL.NOM=IMPF ID.OBL ka-sick-NMZ
 ‘We still have difficulties.’ (Verbal demonstrative)

The above sentences show that all deictic expressions have a retroflex stop /dr/ followed by a high vowel /i/ or /u/, with /i/ encoding proximal and /u/ distal.

4.5.3.2 Demonstratives

Demonstratives are distinguished in terms of case, number, and degree of distance. Table 4.6 is a summary of demonstratives.

Table 4.6: Demonstratives in Puyuma

		Proximal	Medial	Distal
Nominative	singular	<i>idri, idrini</i>	<i>idru, idrunu</i>	<i>idriyu</i>
	plural	<i>nadri, nadrini</i>	<i>nadru, nadrunu</i>	<i>nadriyu</i>
Oblique	singular	<i>kandri, kandrini</i>	<i>kandru, kandrunu</i>	<i>kandriyu</i>
	plural	<i>kanadri, kanadrini</i>	<i>kanadru, kanadrinu</i>	<i>kanadriyu</i>

A demonstrative may either stand alone as the only small NP within an NP, as in (88) and (89), or it may occur as one of the small NPs within an NP (cf. §5.1.1 and §5.5), as in (90).

- (88) *ba-bati=driya kandru*
 RED-say=IMPF that.OBL
 ‘Say something about that.’
- (89) *amau idru tu=suan*
 COP that.NOM 3.PSR=dog
 ‘His dog is that one.’
- (90) *tu=tubang-aw nadru na trau i, ...*
 3.GEN=answer-TR1 those.NOM DF.NOM person TOP
 ‘He answered those people, ...’

4.5.3.2.1 Case and number

As shown in Table 4.6, the case role of a demonstrative is shown by its form. When a demonstrative is one of several small NPs inside a noun phrase, the demonstrative and the other small NPs are in the same case, as in (91) and (92).

(91) *idri na barasa i, kemay isuwa aw muama kadrini*
 this.NOM DF.NOM stone TOP from where and why here
 ‘This stone, where is it from and why is it here?’

(92) *igelra=ku kandri kana suan dra adri=ku*
 embarrassed=1S.NOM this.OBL DF.OBL dog ID.OBL NEG=1S.NOM
maruwa b<en>a’aw
 can <ITR>save
 ‘I felt embarrassed about this dog that I couldn’t save it.’

Demonstratives are also subcategorised in terms of number. Huang (2000b:103) indicates that only those demonstratives that modify personal noun phrases or denote persons make a distinction in number. Thus, if the NP refers to a person or persons, as in (93) and (94), different demonstratives are used to indicate singular in (93) and plural in (94).

(93) *idru na walak i, tu=padrek-aw i temutaw*
 that.NOM DF.NOM child TOP 3.GEN=carry-TR1 SG.NOM his.grandparent
 ‘The child, he carried his grandmother on back.’

(94) *adri m-ua’i pa-kurenang nadru na lalak*
 NEG ITR-willing CAUS-follow those.NOM DF.NOM child
 ‘Those children were not willing to make her follow.’

On the other hand, for non-personal nouns, the demonstratives in the singular category are used regardless of whether the noun is singular or plural, as shown in (95) and (96).¹⁰ From the context, the nouns in these two sentences *tidrul* ‘wasp’ and *kiaumalan* ‘question’ are plural.

(95) *idru na tidrul=la i, trepa m-ubii kana*
 that.NOM DF.NOM wasp=PERF TOP <ITR>aim.at ITR-fly DF.OBL
idenan
 brightness
 ‘These wasps, they flew to the brightness.’

(96) *saygu tubang kandri kana telru-a ki<a>umal-an*
 able <ITR>answer this.OBL ID.OBL three-NPRS <RED>ask-NMZ
 ‘He was able to answer these three questions.’

However, there are exceptional examples that do not follow the pattern. In (97), *walak* ‘child’ is plural from the context, but a singular demonstrative is used; in (98), where the non-personal noun *suan* ‘dog’ is expected to be modified by a demonstrative in the singular category, a plural demonstrative is used instead.

10 Example (95) is extracted from Text I (40)–(44) in Appendix III. Some wasps were put into a drum before the drum was sealed with paper.

- (97) *idru nantu walak=la i, unian dra a-akan-an*
 that.NOM DF.NOM/3.PSR child=PERF TOP not.exist ID.OBL RED-eat-NMZ
 ‘Those children of hers, they didn’t have food.’
- (98) *naniem suan=la i, kemay i lrikudran,*
 DF.NOM/1P.PSR dog=PERF TOP from LOC behind
tu=ranak-aw nadru na sua-suan
 3.GEN=attack-TR1 those.NOM DF.NOM RED-dog
 ‘Our dog, from behind, it attacked those dogs.’

4.5.3.2.2 Proximal, medial and distal

Three sets of demonstrative pronouns can be distinguished in terms of degree of distance. Those pronouns ending with the high front vowel /i/ indicate proximity to the speaker, and those ending with a high back vowel /u/ indicate distance from the speaker. The demonstratives that end with -(y)u indicate even greater distance from the speaker. According to Huang (2000b:103) and Tan (1997:37) the three-way distinction in Table 4.6 encodes location in relation to person. They assert that the second category (the medial category) is used when the named object is away from the speaker but close to the addressee. But the texts do not support their view. In one of the texts collected, in which both the speaker and the addressee were inside a traditional building and the speaker was explaining the structure and components of this building, the speaker used the medial demonstratives *idru* or *idrunu* to refer to object away from him (he pointed to the object at the same time), regardless of the addressee’s position.¹¹ For instance:

- (99) *idru na trepa kadrini, idrunu i, a*
 that.NOM DF.NOM <ITR>aim.at here that.NOM TOP ID.NOM
baluyabuy ka=ta
baluyabuy <ITR>say=1P.ICL.NOM
 ‘That one that faces here, that one, a *baluyabuy* as we said.’
- (100) *idrini i, nantu kabaratan ka=ta, aw,*
 this.NOM TOP DF.NOM/3.PSR beam <ITR>say=1P.NOM and
idru na piya-kadriyu i, nantu tralra-tralraw
 that.NOM DF.NOM face-there TOP DF.NOM/3.PSR <ITR>RED-circle
 ‘This one, it is its (*baluyabuy*) beam as we said, and that one that faces there, it is its frame.’

In these two sentences, *idriyu* or *nadriyu* would be expected in accordance with Huang’s and Tan’s analysis, because the named objects are away from both the speaker and the addressee (the speaker and the addressee were standing side by side), but the usage of the demonstratives is based solely on the distance from the speaker.

In each category there are both long and short forms. Huang (2000b:103) reports that the long forms are used when the object the demonstrative refers to is one among a group of the same kind, but does not give examples to show how this works. There are in fact examples showing that this analysis is not correct. For instance, in sentence (99), both the short form

¹¹ In fact the addressee was standing by the informant all the time during the recording.

idru and long form *idrunu* are used to refer to the same object. Also, in (101), the long demonstrative pronoun is not used because the noun is one of a group; from context, it refers to the story that the informant has just told.

- (101) *driyama idrini i, taturu kana trau kana adri*
 so this.NOM TOP <ITR>advice DF.OBL person DF.OBL NEG
laman kantu walak
 compassionate DF.OBL/3.PSR child
 ‘So, this story, it is advice to those who are not compassionate to their children.’

From the data collected, it seems that a long form tends to be used when the demonstrative is the only small NP of the NP and a short form tends to be used when there are other small NPs. There are only two examples out of twenty tokens taken from texts in which the long form has another NP following it. On the other hand, most short forms have an NP following them. For example:

- (102) *idrunu i, nanku ruma’*
 that.NOM TOP DF.NOM/1S.PSR house
 ‘That one, it is my house.’
- (103) *idru na bati i, ...*
 that.NOM DF.NOM tale TOP
 ‘That tale, ...’

Puyuma speakers lengthen the high front medial vowel of a demonstrative (e.g. *idri:yu*) in the distal category to emphasise a long distance. The longer the vowel, the longer the distance.

4.5.3.3 Spatial deictics

Like demonstrative pronouns, three classes of spatial deictics are distinguished in terms of the distance of the location they denote. They are *kadri* and *kadrini* ‘here’, *kadru* and *kadrunu* ‘there’, and *kadriyu* ‘further away’.

Spatial deictics do not distinguish case and number. They may be used independently or with another locative NP following them. For example:

- (104) *palu kadri i, ...*
 until here TOP
 ‘When he arrived here, ...’
- (105) *m-inatray kadru tu=k<in>iedreng-an*
 ITR-die there 3.PSR=<PERF>lie-NMZ
 ‘It died there on its bed.’

If there is a locative NP following it, the locative noun phrase marker is sometimes missing. For example:

- (106) *m-u-asal=mi drua kadri i pabulu*
 ITR-go-move=1P.NOM come here LOC Pabulu
 ‘We moved here to Pabulu.’

- (107) *tu=kibulas-aw dra trau kadri pabulu*
 3.GEN=borrow-TR1 ID.OBL person here Pabulu
 ‘It was borrowed by a person from Pabulu.’

4.5.3.4 Temporal deictics

I do not find many temporal deictics in the corpus. From the data I have it seems there are two members of this class: one has the form *adru/adrunu*, the other *kadru/kadrunu*. The second shares the form of the spatial deictics discussed in §4.5.3.3. Both temporal deictics denote a phase of time in the past.

- (108) *adrunu=driya kadri i drekal i, ...*
 then=IMPF here LOC village TOP
 ‘At that time, in the village, ...’
- (109) *kemay kadru=la, ...*
 from then=PERF
 ‘From then on, ...’

4.5.3.5 Verbal deictics

There are several verbal deictics, and they are derived from spatial deictics. One of them, *kadru*, which can be translated as ‘be there’, is very productive in expressing existential/possessive/locative meaning (§10.4.). For instance:

- (110) *adru i, kadru=la na palrakuan na ne-nem-a?*
 then TOP be.there=PERF DF.NOM men’s.house DF.NOM RED-six-NPRS
 ‘At that time, were the six men’s houses already there?’

The other verbal deictics found in the corpus all have the intransitive marker infix, e.g. *kadri*, *kadrini*, *kadru*, and *kadrunu*. These forms are seldom used as a predicate. Only one example was found.

- (111) *kadrini=mi=driya dra kakualrengan*
 <ITR>be.here=1P.ECL.NOM=IMPF ID.OBL difficulty
 ‘We still have difficulties.’

More often, verbal deictics with appear in a modifying construction. It is difficult to give them a clear meaning; they mean vaguely ‘a kind of’. For example:

- (112) *tu=sareteb-aw na kadru na rami*
 3.GEN=cut.off-TR1 DF.NOM <ITR>there DF.NOM root
 ‘He cut off such a kind of root.’
- (113) *uliya a kadru a lringatra*
 exist ID.NOM <ITR>there ID.NOM gourd
 ‘There was such a kind of gourd.’

Verbal deictics may also be used to refer to properties (as in (114) and (115)) or to connect two events (116), or to modify an event (117).¹²

- (114) *pana'an i, adri=la kadri dra asatr-an*
 in.fact TOP NEG=PERF <ITR>here ID.OBL high-NMZ
 'In fact, it is not this high.'
- (115) *asuwa=driyan i, a trakuban i, adri=la*
 when=IMPF TOP ID.NOM boys'.house TOP NEG=PERF
kadrini dra bulray
 <ITR>here ID.OBL beautiful
 'Long ago, a boys' house, it was not this beautiful.'
- (116) *an kadru i, ta=sabung-ay=mu*
 if <ITR>there TOP 1P.ICL.GEN=compensate-TR2=2P.NOM
 'If that is the case, we would compensate you.'
- (117) *an kadrini pa-ra-ragan=ta=driyan i,*
 if <ITR>here CAUS-RED-erect=1P.ICL.NOM=IMPF TOP
puari=ta i, ka-ra-ruwa dra sa-bulran maku
 slow=1P.ICL.NOM TOP ka-RED-can ID.OBL one-moon tag
 'If we build like this, we are slow, maybe it takes a month.'

4.5.3.6 Deictic expressions in discourse

When deictic expressions are used to refer to linguistic entities in discourse, two types may be distinguished: anaphoric demonstratives and discourse deictics. Diessel (1999:19) observes that anaphoric demonstratives are 'coreferential with a noun phrase in the preceding discourse; they keep track of prior participants.' Discourse deictics, on the other hand, are 'used to link two discourse units: the one in which they are embedded and the one to which they refer'.

Let us first look at Puyuma anaphoric demonstratives. In (118) the anaphoric demonstrative *idrunu* 'that' is coreferential with the noun phrase *tu=ruma* 'her house', and in (119) *kandru* 'that' is coreferential with the noun *kana lalak* 'child'.

- (118) *maumau tu=ruma' a mi-a-puran i puyuma,*
 only 3.PSR-house ID.OBL have-a-betelnut LOC Puyuma
na druma=driya i, unian dra mi-a-puran.
 DF.NOM other=IMPF TOP not.exist ID.OBL have-a-betelnut
idrunu i, nanku ruma'
 that.NOM TOP DF.NOM/1S.PSR house
 'Only her (my mother's) house has betelnut trees in Puyuma. The others do not have betelnut trees. That one is my house.'¹³

12 Example (117) looks like a serial verb construction, but this is an unusual example where the nominative clitic attaches to the second verb instead of the first verb.

13 The context of this utterance is that the mother, after leaving Puyuma for a while, was telling her two sons how to identify their grandmother's house when they went back to Puyuma.

- (119) *mu-atel tu=tangtang kandru kana ma'idrang aw maya-maya=driya*
 ACAUS-fall 3.PSR=box that.OBL DF.OBL old and RED-search=IMPF
i, tu=puar-ay=la kana lalak. adri=la paka-lrelrep
 TOP 3.GEN=escape-TR2=PERF DF.OBL child NEG=PERF MOOD-chase
idru na ma'idrang kandru
 that.NOM DF.NOM old that.OBL
 'That old woman's box dropped, and when she was looking for it, the children
 escaped from her. She tried to chase them but couldn't get them.'

Discourse deictics are verbs, and are used to connect two propositions. In (120) *kadru* 'be there' is freely translated as 'this being so'.

- (120) *kadru=la a ngai "tengedr=ta dra unan i,*
 be.there=PERF ID.NOM word <ITR>kill=1P.NOM ID.OBL snake TOP
ma-legi m-u-drekal" kema. kadru aw, me-redek=la
 ITR-taboo ITR-go-village say <ITR>there and ITR-reach=PERF
na ngai i drekal
 DF.NOM word LOC village
 'There was a rumour saying "We killed a snake, and it is a taboo to go into
 the village". This being so, the rumour has reached the village.'

4.5.4 Numerals

4.5.4.1 An overview

The numeral system of Puyuma is complex in terms of its syntactic construction as well its semantic distribution. Basically the system is decimal. Numerals used in serial counting from one to ten are bases for the derivation of numbers above ten. A list of numerals used in serial counting from one to ten is given below. Some numerals used to count numbers above ten are given for reference.

One to ten

<i>sa</i>	'one'	<i>nem</i>	'six'
<i>drua</i>	'two'	<i>pitu</i>	'seven'
<i>telru</i>	'three'	<i>walru</i>	'eight'
<i>pat</i>	'four'	<i>iwa</i>	'nine'
<i>lrima</i>	'five' ¹⁴	<i>pulru</i>	'ten'

Above ten

<i>pulru-sa</i>	'eleven'	<i>drua-pulru</i>	'twenty'
<i>pulru-drua</i>	'twelve'	<i>telru-pulru</i>	'thirty'
<i>pulru-telru</i>	'thirteen'	<i>pat-pulru</i>	'forty'
<i>pulru-pat</i>	'fourteen'	<i>luwatr-pulru</i>	'fifty'
<i>pulru-luwatr</i>	'fifteen'		

14 It seems that *lrima* 'five' is only used to refer to the number five; in counting objects, or in any derivations, the base for five is always *luwatr*.

4.5.4.2 Cardinal numerals

Different strategies are used when cardinal numerals are used to modify personal nouns and non-personal nouns.¹⁵ For non-personal nouns, the base is always suffixed by a non-personal classifier *-a*,¹⁶ and then optionally undergoes CV- or CVCV- reduplication. For example:

- (121) *unian dra pa-pat-a ami dra trakuban*
 not.exist ID.OBL RED-four-NPRS year ID.OBL boys'.house
 'There is no four-year-old boys' house.' (No boys' house would be older than four years)
- (122) *kadru=la na palrakuan na ne-nem-a*
 there=PERF DF.NOM men's.house DF.NOM RED-six-NPRS
 'There are six men's houses already.'
- (123) *tengedr=ku dra pitu-pitu-a dra lrutung*
 <ITR>kill=1S.NOM ID.OBL RED-seven-NPRS ID.OBL monkey
 'I killed seven monkeys.'
- (124) *p-u-patrarán dra telru-a ki<a>umal-an*
 CAUS-go-out ID.OBL three-NPRS <RED>ask-NMZ
 'He gave out three questions.'

Numerals modifying personal nouns are prefixed with the personal classifier *mia-*. For example:

- (125) *mi-walak dra mia-pat dra walak*
 have-child ID.OBL PRS-four ID.OBL child
 'They have four children.'
- (126) *na mia-luwatr i, m-inatray a lalak=driyan*
 DF.NOM PRS-five TOP ITR-die ID.OBL child=IMPF
 'The five (brothers and sisters) died when they were only children.'

Before we discuss the numbers above ten, two points require mention. First, from the above examples, it can be observed that a numeral may or may not cooccur with a further noun phrase. When the numeral coexists with a noun phrase, both the numeral and the noun are marked by the same case. Second, unlike demonstratives (§4.5.3.2), which always precede the noun phrase, the order of the numeral and modified noun is not restricted. Sometimes a numeral can occur after the noun it modifies, as shown in (122).

The expressions for numbers above ten show a number of complexities. First, cardinal numerals are different from the numerals used in serial counting. Special bases are used for some numbers above twenty, but they are all prefixed by the same affix *maka-*. Numbers in the left hand column use different bases, but numbers in the right hand column use the normal numeral bases.

15 According to Li (2006), most Formosan languages make such a distinction.

16 Except for *sa* 'one', which sometimes precliticises to the noun it modifies without suffixing *-a*. For example: *sa-elung* 'a bundle', *sa-bulran* 'one month'.

<i>muketrep</i>	‘ten’	<i>makanemen</i>	‘sixty’
<i>makabetraan</i>	‘twenty’	<i>makapitu</i>	‘seventy’
<i>makatelrun</i>	‘thirty’	<i>makawalru</i>	‘eighty’
<i>makapetel</i>	‘forty’	<i>makaiwa</i>	‘ninety’
<i>makaluwatr</i>	‘fifty’		

Again, some informants make a distinction between personal and non-personal modification. The formula for numerals (above ten) used to modify non-personal nouns can be written as:

TENS + *mi-sama* ‘have-remain’ + *dra* + (RED-)UNITS-classifier

For instance:

<i>muketrep mi-sama dra sa-a</i>	‘eleven’
<i>muketrep mi-sama dra drua-a</i>	‘twelve’
<i>makabetraan mi-sama dra walru-walru-a</i>	‘twenty-eight’
<i>makatelun mi-sama dra na-nem-a</i>	‘thirty-six’

Some examples are given below:

- (127) *an muketrep mi-sama mi-ka-drua dra drua-a*
 when ten have-remain have-ka-two ID.OBL two-NPRS

tu=ami i, ...

3.PSR=year TOP

‘When they are twelve years old, ...’

(‘Twelve’ can be literally translated as ‘ten and for the second number that remains two’.)

- (128) *na muketrep mi-sama dra walru-walru-a tu=ami*
 DF.NOM ten have-remain ID.OBL RED-eight-NPRS 3.PSR=year

kana babayan i, ...

ID.OBL female TOP

‘The girls that are eighteen years old, ...’

When modifying personal nouns, a different strategy is used. The formula can be written as:

TENS + *kara*-UNITS + *dra* + *sama*

For instance:

<i>muketrep kara-sa dra sama</i>	‘eleven’
<i>muketrep kara-drua dra sama</i>	‘twelve’
<i>makapitu kara-telru dra sama</i>	‘seventy-three’

For example:

- (129) *ulaya a muketrep kara-sa dra sama a trau-an*
 exist ID.NOM ten kara-one ID.OBL remain ID.NOM person-COL
 ‘There are eleven people.’ (lit. ‘The persons remained are ten and one.’)

Some informants use the same strategy to modify both personal and non-personal nouns. For example:

- (130) *muketrep mi-sama dra ne-nem-a dra walak*
 ten have-remain ID.OBL RED-six-NPRS ID.OBL child
 ‘sixteen children’
- (131) *muketrep mi-sama dra ne-nem-a dra gung*
 ten have-remain ID.OBL RED-six-NPRS ID.OBL ox
 ‘sixteen oxen’

When counting how many times an event occurs, *par-* is prefixed to the base. For example:

- (132) *karuwa=mi=la kilengaw dra par-telrun,¹⁷ par-luwatr*
 can=1P.NOM=PERF listen ID.OBL *par*-three *par*-five
 ‘We could have listened three times, or five times.’

4.5.4.3 Ordinal numerals

To form ordinal numerals, *puka-* is prefixed to the cardinal numeral, with the exception of *palibak* ‘first’. Sometimes, the stem is *Ca-* reduplicated (§3.4.2). For example:

- (133) *drua=la m-u-sabak-a kana puka-ta-telru wa-dunun-an*
 come=PERF ITR-go-inside-PJ DF.OBL ORD-RED-three go-phase-NMZ
 ‘They went to the third phase.’
- (134) *puka-telru i, a babayan*
 ORD-three TOP ID.NOM female
 ‘The third one is a girl.’

For the ordinal numerals from twelve to nineteen, *puka-* is prefixed to the numbers two to nine, but not the tens. For example:

- (135) *muketrep puka-enem na tilril*
 ten ORD-six DF.NOM book
 ‘lesson sixteen; the sixteenth lesson’

4.5.5 Adverbs

Adverbs modify the predicate or the whole clause. Only three adverbs appear in my corpus, but they occur frequently in discourse. Unlike other categories, whose members all share certain morphosyntactic features, the adverbs discussed here share no such characteristics. The following list gives an overview of the forms and functions of these words.

<i>daw</i>	‘why’	Interrogative adverb
<i>ala</i>	‘maybe’	Epistemic adverb
<i>ela</i>	‘rashly’	Manner adverb

17 It is not clear why in this case *telru* ‘three’ becomes *telrun*.

daw ‘why’ and *ala* ‘maybe’ appear sentence-initially, like verbs, but there are several features distinguishing them from verbs. First, they do not attract clitics, and they are morphologically invariable.

- (136) *daw ma-ladram=ku dra kemay isuwa*
 why ITR-know=1S.NOM ID.OBL from where
 ‘Why would I know where it is from?’
- (137) **daw=ku ma-ladram dra kemay isuwa*
- (138) *ala mar-adalep=ta=driyan kana sanasan*
 maybe RECIP-close=1P.ICL.NOM=IMPF DF.OBL Green.Island
 ‘Maybe we were still close to Green Island.’
- (139) **ala=ta mar-adale=driyan kana sanasan*

Second, the verb following them can be transitive or intransitive, while a verb following another verb is always intransitive (§13.2.2.1).

- (140) *daw nu=tarama-aw*
 why 2S.GEN=bully-TR1
 ‘Why did you bully him?’
- (141) *ala tu=pa-dawak-ay*
 maybe 3.GEN=CAUS-poison-TR2
 ‘Maybe he was poisoned.’

The epistemic adverb *ala* often cooccurs with the tag *nay* (§4.5.6) in discourse. For example:

- (142) *ala kuda nay i, na mu-sama=la i,*
 maybe <ITR>how or TOP DF.NOM ACAUS-leave=PERF TOP
sasaya=la idru na suan
 one=PERF that.NOM DF.NOM dog
 ‘Maybe something happened, what is left is that dog only.’

The possibility of *daw* and *ala* being clitics or prefixes is rejected because (i) they themselves form a phonological unit and they have stress, and (ii) there is often a pause between them and the elements after them.

The manner adverb *ela* ‘rashly’¹⁸ expresses the actor’s attitude toward something. It usually appears either in the final position or after the predicate it modifies, as shown in the following sentences.

- (143) *adri=ta sa-sanga ela*
 NEG=1P.ICL.NOM RED<ITR>-build rashly
 ‘We are not building rashly.’
- (144) *adri=ta m-u-a-kasa-kasa ela m-iedreng*
 NEG=1P.ICL.NOM ITR-go-a-RED-together rashly ITR-sleep
 ‘We will not get together rashly to sleep.’

18 The word *ela* has a rising intonation, and unlike most words, whose stress falls on the final position, *ela* is stressed on the first syllable.

A major reason why there are so few items in the adverb category is that in Puyuma concepts expressing ‘adverbial meanings’, such as quickly, slowly, seriously, very, often, etc. are typically expressed by verbs. They usually form a serial verb construction with the verb denoting the action (§13.4.3). For example:

- (145) *puraket=ta* *sanga*
 diligently=1P.ICL.NOM <ITR>build
 ‘We built diligently.’

4.5.6 Tags

Two tags are found in my corpus. The tag *nay* often cooccurs with the epistemic adverb *ala* ‘maybe’ to mark uncertainty (§4.5.5). It appears clause-finally and has a rising intonation.

- (146) *ala piya-lraudr nay, piya-timulr, ala piya-ami*
 maybe face-east or face-south maybe face-north
 ‘Maybe face the east, face the south, or face the north.’

The tag *maku* also appears in clause-final position and has a rising intonation. Its function is to help the speaker to draw the addressee’s attention and agreement to the proposition, as indicated in the following sentences.

- (147) *ma-ulrid=ta daway, maku?*
 ITR-don’t.know=1P.NOM <ITR>make tag
ku<a>renang=ta dra saygu dra ma’idrang
 <a>follow=1P.ICL.NOM ID.OBL can ID.OBL old
 ‘We didn’t know how to build (a boys’ house), did we? We followed those old people who know how to build.’
- (148) *adri=ku karuwa m-u-isatr, maku? aw, ti=pa-karun-ay*
 NEG=1S.NOM can ITR-go-up tag and 1S.GEN=CAUS-work-TR2
i baeli
 SG.NOM my.older.sibling
 ‘I cannot get up, can I? So I’ll ask my brother to do the work (for me).’
- (149) *mara-asatr na pasara’adr, maku? aw tu=alrak-aw*
 more-high DF.NOM Pasara’adr tag and 3.GEN=take-TR3
 ‘The Pasara’adr family are in a higher position, aren’t they, and so they took it.’

4.5.7 Topic markers

In this grammar, the term ‘topic’ is used in the sense in which Vallduví (1992:47–48) uses ‘link’: it tells the addressee what the new information in the sentence relates to; it usually marks a discourse entity that is not mentioned in the immediately preceding discourse.

There are two topic markers, *i* and *mu*. They are always followed by a pause, as demonstrated below.

- (150) *na sasaya tu=pa’uayan i, ta=ketreng-aw*
 DF.NOM one 3.PSR=custom TOP 1P.ICL.GEN=bring-TR1
 ‘Another custom, we bring them out.’

- (151) *idri na barasa mu, a redean*
 this.NOM DF.NOM stone TOP ID.NOM foundation
 ‘The stone, it is a foundation.’

It is not clear what the difference is between these two markers. Another interesting fact about these two markers is that in the recently edited Puyuma textbooks, *i* appears only in Nanwang dialect, while *mu* is used in other dialects.

There are many structural units that can be topicalised, including a temporal adjunct, a locative adjunct, or an adverbial clause. However, with regard to arguments, only core arguments can be topicalised. Examples (152) and (153) show temporal and locative adjuncts being topicalised. Topicalisation of arguments is described in §8.4.1.3, and topicalisation of adverbial clauses is dealt with in Chapter 15.

- (152) *asuwa=driyan i, ulaya a saya a drekal*
 when=IMPF TOP exist ID.OBL one ID.OBL village
 ‘Long ago, there was a village.’
- (153) *i sabak kana patrungrungan i, puka-i dra tidrul*
 LOC inside DF.OBL drum TOP put-TR2.IMP ID.OBL wasp
 ‘Inside the drum, put some wasps.’

4.5.8 Aspectual markers

There are three aspectual markers in Puyuma: the perfective marker =*la*, the imperfective marker =*driya*, and the frequentative marker =*dar*. Examples are given below:

- (154) *tu=alrak-aw=la mi-kataguin kana yawan*
 3GEN=take-TR1=PERF have-spouse DF.OBL chieftain
 ‘She was taken to marry to the chieftain.’
- (155) *ma-ulrep=driya ki-anger dratu ka-sanan-an*
 ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR ka-stray-NMZ
 ‘She’s still worrying that he might get lost.’
- (156) *drua=dar i takesi-an m-aya-a kanku*
 come=FREQ LOC study-NMZ ITR-look-PJ 1S.OBL
 ‘It often came to the school to look for me.’

The morphological status of these aspectual markers is discussed in §3.3.3. Their syntactic function of marking aspect is described in §6.4.2.

4.5.9 Conjunctions

Conjunctions conjoin elements of the same grammatical type. Conjunctions found in Puyuma are:

<i>aw</i>	‘and/then’	conjoins noun phrases and clauses
<i>kan/an/ane</i> ¹⁹	‘when/if’	conjoins clauses
<i>amuna</i>	‘but’	conjoins clauses

19 These three forms are free variations.

<i>driyama</i>	‘so’	conjoins clauses
<i>laba</i>	‘so that’	conjoins clauses

The conjunctions *aw*, *amuna*, and *driyama* are placed between the elements they conjoin, while the *kan/an/ane* is usually placed within the first of the elements it conjoins.

- (157) *mara-asatr na pasara’adr aw tu=alrak-aw na barasa*
 more-high Pl.NOM Pasara’adr and 3.GEN=take-TR1 DF.NOM stone
 ‘The Pasara’dr family were higher (in terms of social status), so they took the stone.’
- (158) *karuwa=ta=driyan sanga dra abak-an dra*
 can=1P.NOM=IMPF <ITR>produce ID.OBL contain-NMZ ID.OBL
tinalek aw dra irupan
 rice and ID.OBL dish
 ‘We can also produce containers for rice and food.’
- (159) *ane adalep=ta=la dra basibasi*
 when near=1P.NOM=PERF ID.OBL monkey.hunting.festival
adri m-uai m-ekan na lrutung
 NEG ITR-willing.to ITR-eat DF.NOM monkey
 ‘When the monkey-hunting festival is coming, the monkeys are not willing to eat.’
- (160) *salraw unian dra akan-an, driyama=la na*
 very not.exist ID.OBL eat-NMZ so=PERF DF.NOM
sa-drekal-an i, kiri-kirim dra akan-an
 whole-village TOP <ITR>RED-economise ID.OBL eat-NMZ
 ‘They were very short of food, so the whole village economised on food.’

Conjunctions can be further subcategorised as coordinators and subordinators. Of the four conjunctions listed above, only *aw* ‘and’ is used in coordination. More discussion of subordination/coordination and the use of these conjunctions is provided in Chapter 15 and Chapter 16.

4.5.10 Interjections

Interjections are uninflectable words that function as equivalents of entire sentences, especially of exclamatory sentences. They express an attitude toward a proposition or an event. In Puyuma they are prosodically distinctive. They always have a rising intonation and are always followed by a pause. Some examples are given below.

<i>ta!</i>	exclamation expressing the speaker’s not knowing the event in the earlier proposition
<i>iwua!</i>	exclamation showing the speaker’s surprise
<i>i!</i>	exclamation expressing the speaker’s doubt
<i>ah!</i>	exclamation showing the speaker’s sudden realisation of something

5 *Noun phrase structure*

5.1 An outline of noun phrase structure

This chapter describes noun phrase (NP) structures. An NP typically functions as an argument of a verb or as a nonverbal predicate. Because Puyuma NP structures are unusual and are somewhat different from other Philippine-type languages,¹ I first use rewrite rules and tree diagrams to present them.

5.1.1 Common NPs

The rewrite rules of Puyuma common NPs are given together here for the reader's reference. In these rules and in the following discussion, 'NP' is used to refer to the whole NP construction, which may consist of a number of structures for which I have coined the term 'small NPs'. A small NP is referred to as 'np': it consists of a demonstrative (Dem) or of a noun phrase marker (Nmkr) encoding case plus an XP (content expression).

$$(i) \quad \mathbf{NP} \rightarrow \mathbf{np}, (\mathbf{np})^{*2}$$

$$(ii) \quad \mathbf{np} \rightarrow \left\{ \begin{array}{l} \mathbf{Nmkr} + \mathbf{XP} \\ \mathbf{Dem} \end{array} \right\}$$

$$(iii) \quad \mathbf{XP} \rightarrow \left\{ \begin{array}{l} \mathbf{N} + \\ \mathbf{Num} + \left[\left[\mathbf{NP}_{\text{OBL}} \right] \right] \\ \mathbf{VP}_{\text{ITR}} \end{array} \right\}$$

1 Kroeger's (1993) work on Tagalog and Tang's (2006) on Paiwan and Atayal are the only pieces of work known to me which use tree diagrams to present the NP structure of the Philippine-type languages. Puyuma NP structure is different from Tagalog, Paiwan and Atayal, so I do not adopt Kroeger's and Tang's analyses in my study.

2 The asterisk in Rule (i) indicates that a (large) NP consists of one or more small NPs, labelled 'np'. There is logically no restriction on the number of small NPs within one NP, but in the corpus I have found no NP that consists of more than three small NPs. Other abbreviations are: Nmkr '(case-marking) noun phrase marker', Dem 'demonstrative', and Num 'numeral'.

$$(iv) \quad \mathbf{NP}_{\text{OBL}} \rightarrow \left\{ \begin{array}{l} \mathbf{Nmkr}_{\text{OBL}} + \mathbf{XP} \\ \mathbf{Dem}_{\text{OBL}} \end{array} \right\}$$

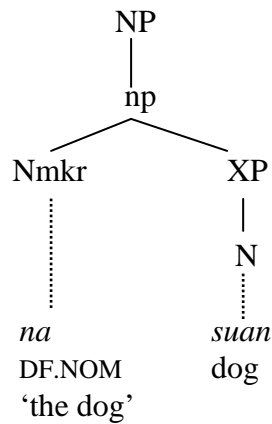
$$(v) \quad \mathbf{VP}_{\text{ITR}} \rightarrow (\text{NEG} +) \mathbf{V}_{\text{ITR}}^* (+ \mathbf{NP}_{\text{OBL}})$$

In the remainder of this section I will present the rewrite rules with a commentary and examples.

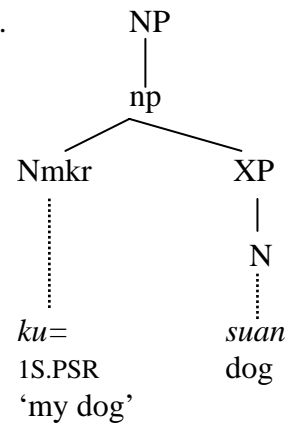
Rule (i): $\mathbf{NP} \rightarrow \mathbf{np}, (\mathbf{np})^*$

An NP consists of one or more than one small NPs, as shown in (1) and (2).

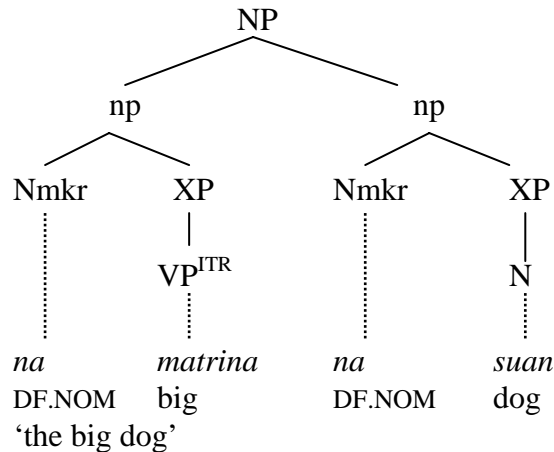
(1) a.



(1) b.



(2)



$$\mathbf{Rule (ii):} \quad \mathbf{np} \rightarrow \left\{ \begin{array}{l} \mathbf{Nmkr} + \mathbf{XP} \\ \mathbf{Dem} \end{array} \right\}$$

A small NP may be a case-marked demonstrative (§4.5.3.2), or it may consist of a (case-marked) Nmkr and an XP. A demonstrative may either stand alone as in (3), or occur with another small NP as in (4).

- (3) *sagar=ku kandru*
 like=1S.NOM those.OBL
 ‘I like those.’

- (4)
-
- nadrunu na malru-wadi na ma'inayan*
 those.NOM DF.NOM RECIP-sibling DF.NOM male
 ‘those brothers’

Three things need to be explained. First, the order among small NPs is not fixed, with one exception — the demonstrative must occur initially. The order of other small NPs is flexible. Thus possible orders in (2) are *na matrina na suan* or *na suan na matrina*, and in (4) are *nadrunu na malruwadi na ma'inayan* or *nadrunu na ma'inayan na malruwadi*.

Second, because of the flat structure seen in (2) and (4), there is no morphosyntactic signal of the head. However, a ‘primary information bearing unit’ (PIBU, after Croft 2001:257–259) can often be identified on the basis of meaning. A PIBU is ‘the most contentful item that most closely profiles the same kind of thing that the whole constituent profiles’. It is the noun that denotes the class of the referent of the NP. For instance, in (2), *na matrina na suan* ‘the big dog’, *suan* ‘dog’, the PIBU, denotes the kind of referent to which ‘*na matrina na suan*’ belongs. On the other hand *matrina* ‘big’ is a modifier, in the functional sense that it more precisely specifies a particular referent of the NP (Croft 2003:187). However, not all NPs have a PIBU. In (5), the NP refers to a group of people, but there is no noun denoting people.

- (5) *arii na mi-trepa sanga*
 fast DF.NOM have-focus <ITR>make
 ‘Those who have professional skill in doing this are fast.’

Third, there is case agreement among the small NPs within an NP, as shown by the twofold occurrence of the nominative noun phrase marker *na* in (2), the threefold occurrence of the nominative noun phrase marker *na* in (4), the threefold occurrence of the oblique noun phrase marker *dra* (6a), and the twofold occurrence of the nominative noun phrase marker *a* in (6b).

- (6) a. *me-na'u=ku dra matrina dra utreutrem dra suan*
 ITR-see=1S.NOM ID.OBL big ID.OBL black ID.OBL dog
 ‘I saw a big black dog.’

- b. *amau a drenan a ma-kiteng*
 COP ID.NOM mountain ID.NOM ITR-small
 ‘It was a small mountain.’

Among the Philippine-type languages known to me, this is a unique feature of Puyuma NPs. In other Philippine-type languages, only the first instance has an NP marker and others are introduced by a linker, as showing in the following Paiwan and Tagalog examples.

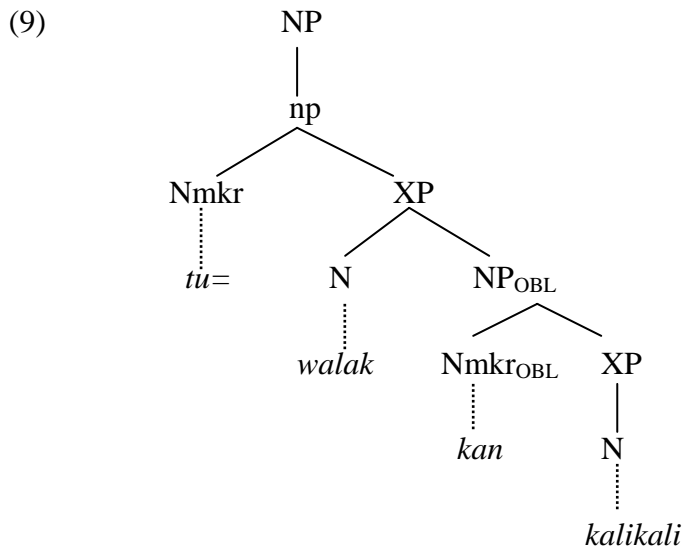
(7) **Paiwan** (Chang, H.C. 2006:160)

- a. *pu-alak tua macidil a vavayan*
 give.birth-child OBL one LK female
 ‘She gave birth to one daughter.’
- b. *manu maran a icu a vavayan*
 Intej exactly NOM this LK female
 ‘Then it turned out to be exactly this girl.’

(8) **Tagalog** (Kroeger 1993:182–183)

- a. *Kaya=ng bumili si=Manuel ng=bago=ng kotse*
 able=LK AV.buy NOM=Manuel GEN=new=LK car
 ‘Manuel is able to buy a new car.’
- b. *Hindi kaya=ng bayaran ni=Maria ang=bago=ng kotse*
 not able=LK DV.pay GEN=Maria NOM=new=LK car
 ‘Maria cannot pay for the new car.’

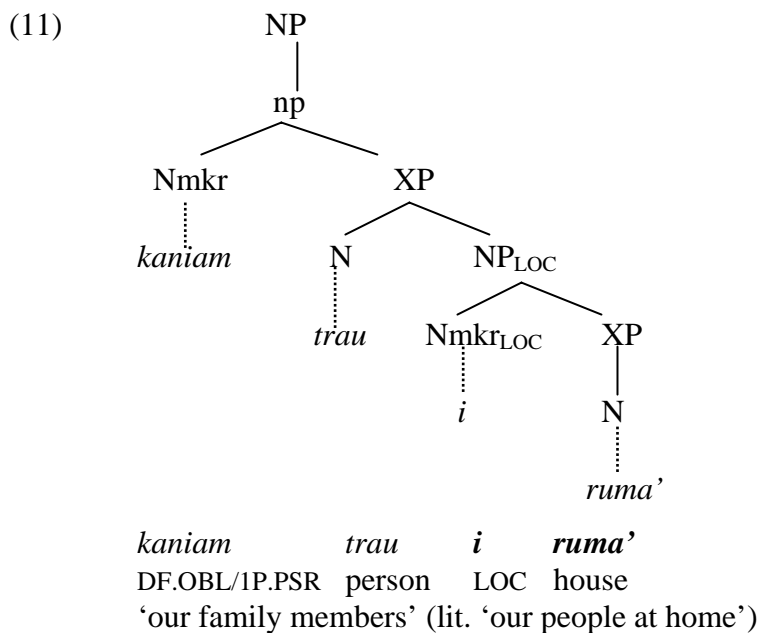
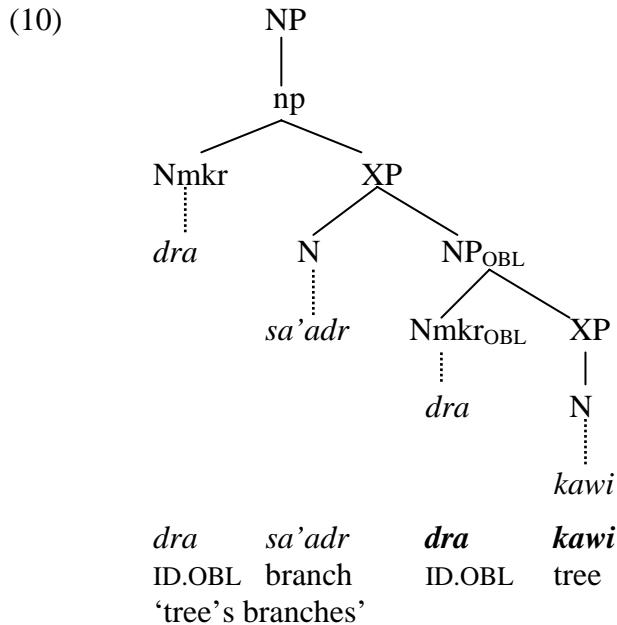
A Nmkr may be either a noun phrase marker, as in (4), or a possessor pronoun, as in (1b) and (9). In addition to marking the possessive relation, the possessor pronoun also marks the case of the element following it (§4.5.1.1). Thus, *tu=* is a possessor pronoun functioning as Nmkr in (9).

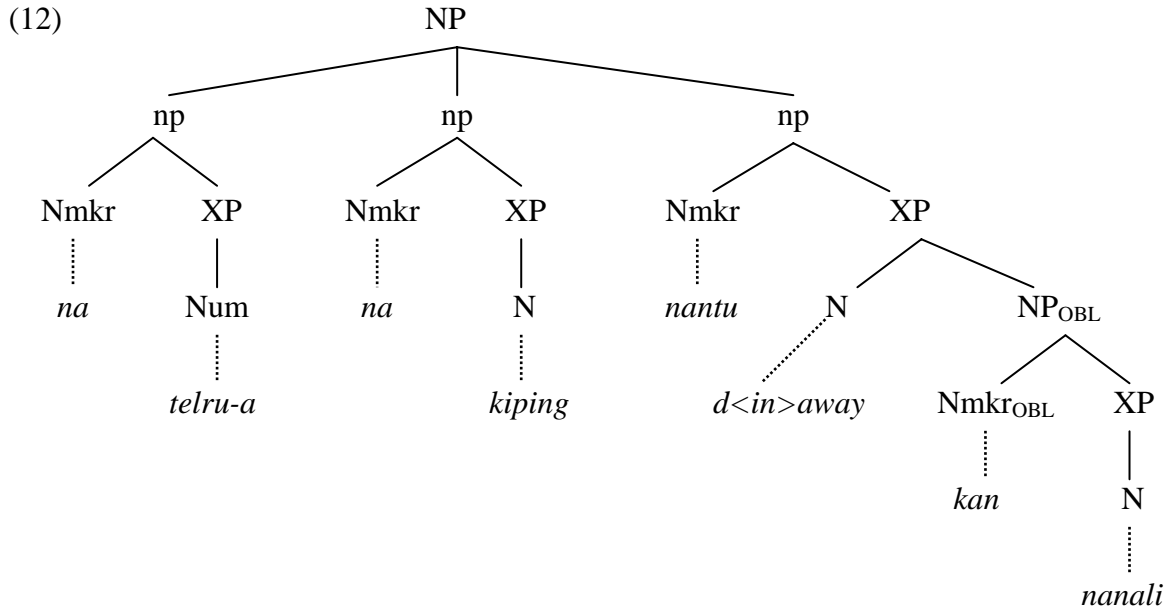


tu=walak kan kalikali
 3.PSR=child SG.OBL Kalikali
 ‘Kalikali’s child’

$$\text{Rule (iii): } \mathbf{XP} \rightarrow \left\{ \begin{array}{l} \mathbf{N} + \\ \mathbf{Num} + \left\{ \left\{ \begin{array}{l} \mathbf{NP}_{\text{OBL}} \\ \mathbf{NP}_{\text{LOC}} \end{array} \right\} \right\} \\ \mathbf{VP}_{\text{ITR}} \end{array} \right\}$$

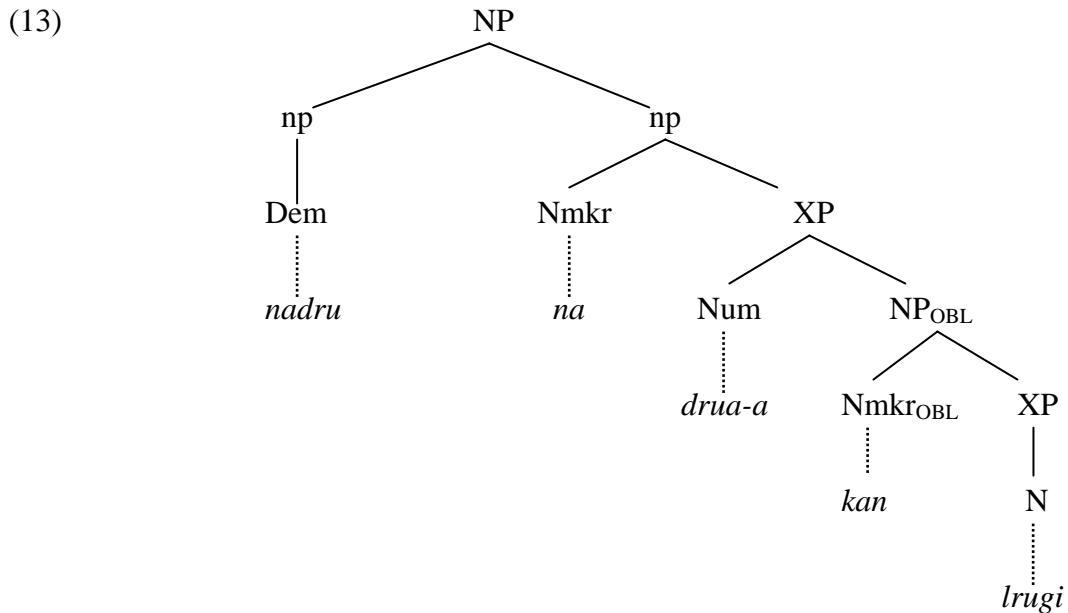
An XP may be either a noun, a numeral, or an intransitive verbal phrase. If it is a noun or a numeral, it is optionally followed by an oblique-marked or a locative-marked NP. In (10) and (11) the XP is a noun and is followed (in bold) by an oblique-marked NP (encoding the possessor) and a locative-marked NP, respectively. In (12), the first XP is a numeral. Note that the possessor may be encoded by an oblique-marked NP alone (*dra kawī* in (10); this marks the possessor as indefinite), or by a possessor pronoun alone (*ku=* in (1b)), or by both a possessor pronoun and an oblique-marked NP (*tu=* and *kan kalikali* in (9)).





na telru-a na kiping nantu d<in>away
 DF.NOM three-NPRS DF.NOM clothes DF.NOM/3.PSR <PERF>make
kan nanali
 SG.OBL my.mother
 ‘the three pieces of clothing that my mother made’

Sentences (13) and (14) are instances where an XP consists of a numeral followed by an oblique-marked NP and a locative NP respectively.



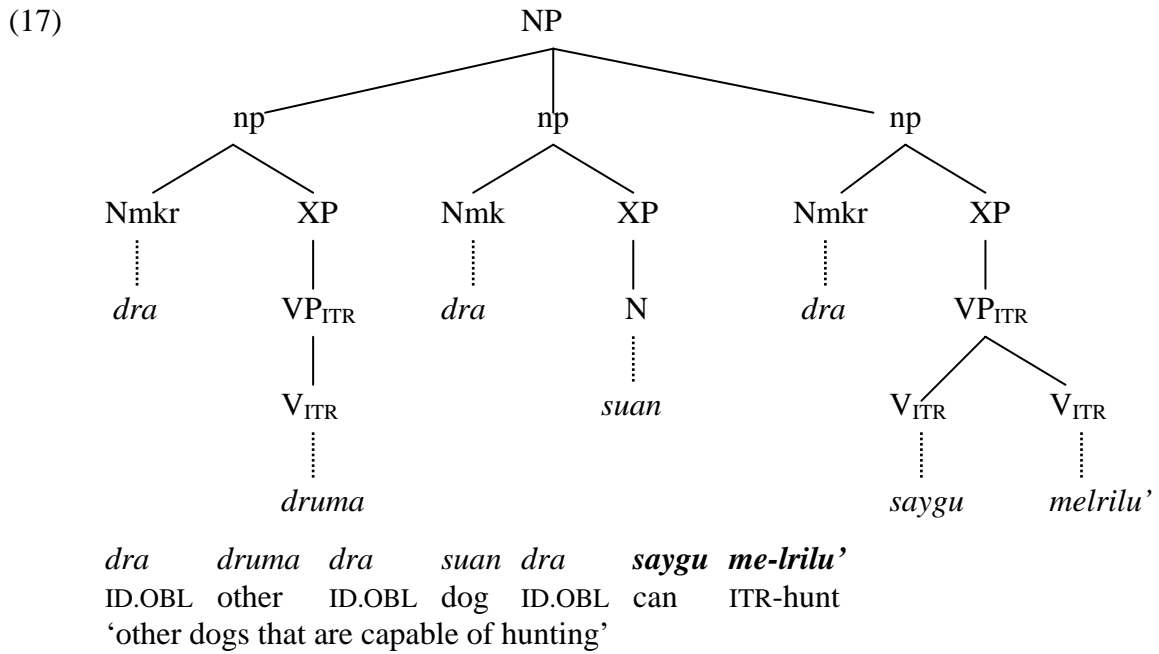
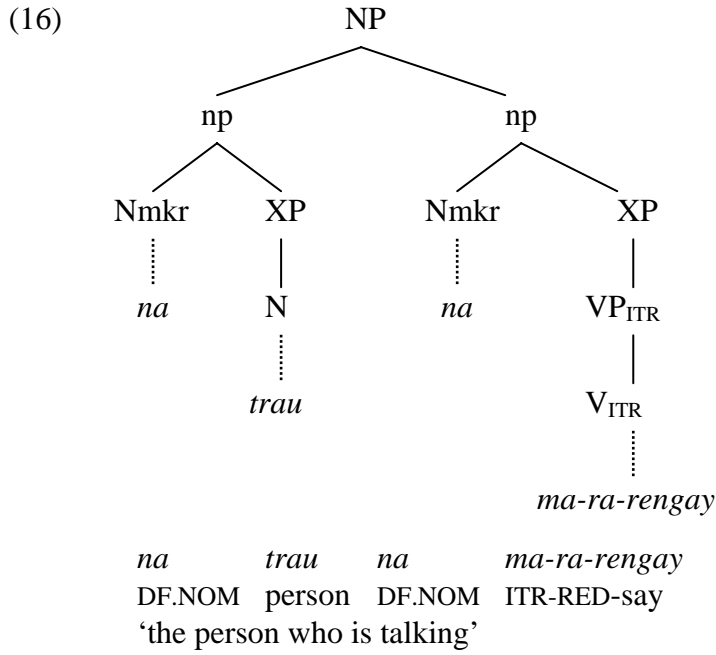
nadru na drua-a kan lrugi
 those.NOM DF.NOM two-NPRS SG.OBL Lrugi
 ‘those two of Lrugi’s’

- (14) *nadru na mia-drua i lrikudran*
 those.NOM DF.NOM PRS-two LOC behind
 ‘those two behind’

A noun in an XP can be a morphologically simple noun or a nominalised verb. For instance, in (12), N in the second XP is a morphologically simple noun *kiping* ‘clothes’, whereas N in the third XP is a nominalised verb *d<in>away* ‘having been made’. The NP_{OBL} of a nominalised verb XP (Rule iii) may either express the actor (*kan nanali* in (12)) or the patient (*kana walak* in (15)) of the event denoted by the nominalised verb. Functionally, a nominalisation with an infix <in> is used when a transitive (undergoer voice) clause (§4.2 and §8.4.4) serves as a modifier, i.e. as a relative clause (§5.6). The subject (the undergoer) of the clause is relativised, and the actor may be encoded in the same way as a possessor, as in (12), or may remain unexpressed when the actor is third person, as *na in-abak-an kana walak* in (15).

- (15)
-
- na in-abak-an kana walak na padrakan*
 DF.NOM PERF-pack-NMZ DF.OBL child DF.NOM package
 ‘the package that the child was packed into’
 OR: (‘the package that she packed the child into’)

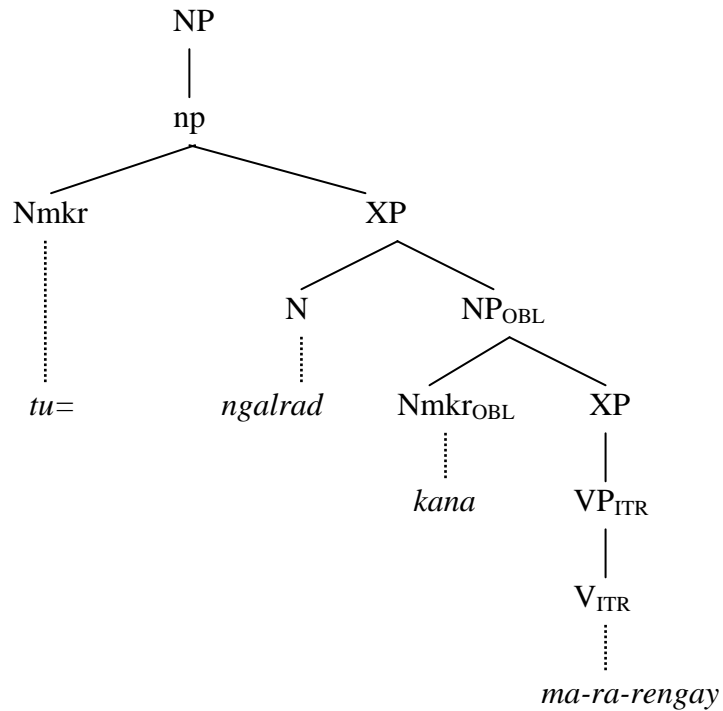
Instead of a noun or a numeral, an XP can alternatively consist of an actor voice/intransitive VP, as shown in (16) and (17). An intransitive VP occurs when an actor voice/intransitive clause serves as a modifier (relative clause). The actor voice/intransitive VP in (17) is a serial verb construction, described in Chapter 13.



Rule (iv): NP_{OBL} → { Nmkr_{OBL} + XP }
 { Dem_{OBL} }

An oblique-marked NP may consist of an oblique Nmkr plus an XP, as in (18), or it can be an oblique-marked demonstrative, as in (19).

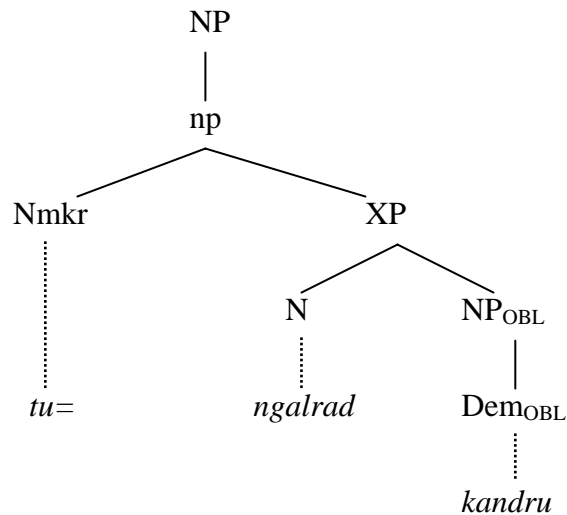
(18)



tu=ngalrad kana ma-ra-rengay
 3.PSR=name DF.OBL ITR-RED-talk
 'the name of (the one) who is talking'

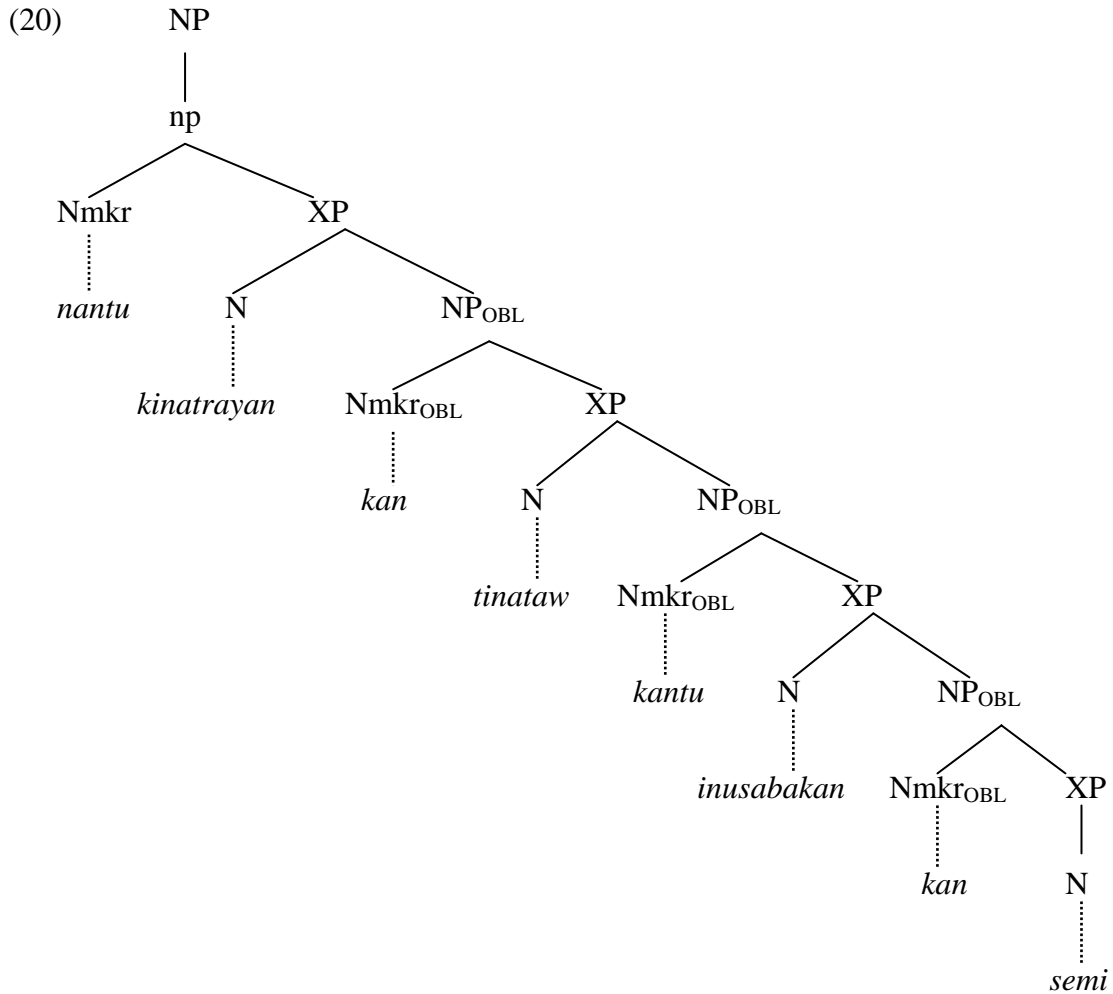
In (18), the XP under NP_{OBL} is an actor voice/intransitive verb *mararengay* 'talking'. The same slot could be filled by a numeral, e.g. *miadrúa* 'two', and then the clause would become *tu=ngalrad kana miadrúa* 'the names of the two (persons)'. Or, it could be filled by a noun, e.g. *walak* 'child', and the clause would become *tu=ngalrad kana walak* 'the child's name'.

(19)



tu=ngalrad kandru
 3.PSR=name those.OBL
 'those (things', people's) names'

Example (20) shows how Rule (iii) and (iv) lead to recursion of XP and NP_{OBL} (expressing the possessive relations).



nantu *k-inatray-an* *kan* *tinataw* *kantu*
 DF.NOM/3.PSR ka-die-NMZ SG.OBL their.mother DF.OBL/3.PSR
in-u-sabak *kan* *semi*
 PERF-go-inside SG.OBL Semi
 ‘the death of the mother of the household which Semi married into’

(v) $VP_{ITR} \rightarrow (NEG +) V_{ITR}^* (+ NP_{OBL})$

A VP_{ITR} may consist of one intransitive verb, or more than one intransitive verb (forming a serial verb construction as in (17)). It may have a negator or an NP_{OBL} encoding the undergoer of the VP_{ITR}, as shown in (21).

(21) *idri* {*na* *adri* *kiberay* *dra* *bini*} ...
 this.NOM DF.NOM NEG get ID.OBL seed
 ‘This person, who didn’t get seeds ...’

Again, the ordering of the small NPs within one large NP is not fixed.

5.1.2 The functional extension of *na* as a linker

In §5.1.1 we have seen examples showing case agreement among the small NPs within an NP. However, I have found some examples which contradict this assertion. For instance:

(22) *taita na pa-la-ladram kanadri na telru-a-ami ...*
 1P.NEU LK CAUS-RED-teach these.OBL LK three-NPRS-year
 ‘We, who teach these third graders ...’

(23) *m-uka ma-rengay-a kanadru na kur-dikes=driya kandru*
 ITR-go ITR-tell-PJ those.OBL LK get-hold=IMPF that.OBL
kana kiakarunan
 DF.OBL job
 ‘He went to tell those people who got hold of that job.’

In (22) and (23), we would expect *kana* to occur instead of *na*. In such NPs, only the first Nmkr (or Dem) marks the case relation, and *na* no longer serves the function of marking case.

There are two possible analyses to account for the re-occurrence of an identical Nmkr in (2), (4) and (6) on the one hand, and the occurrence of a distinct linker *na* in (22) and (23) on the other. Does the absence of a distinct linker represent the normal situation, such that a functional extension of *na* as a linker in some NPs is an innovation, or are Nmkr-like forms occurring in the linker slot in fact linkers which sometimes agree in form with the Nmkr, as in (2), (4) and (6)? In other words, which is the innovation, what happens in (2), (4) and (6), or what happens in (22) and (23)?

There are two reasons for analysing what happened in (22) and (23), i.e. functional extension of *na* as a linker, as an innovation.

First, the situations where *na* functions as a linker are restricted. When the NP is indefinite (marked by *dra* or *a*), *na* is not acceptable. Compare (6), repeated here as (24), with (25). If *na* as a linker is the norm, we would expect the sentences in (25) to be grammatical.

(24) a. *me-na'u=ku dra matrina dra utreutrem dra suan*
 ITR-see=1S.NOM ID.OBL big ID.OBL black ID.OBL dog
 ‘I saw a big black dog.’

b. *amau a drenan a ma-kiteng*
 COP ID.NOM mountain ID.NOM ITR-small
 ‘It was a small mountain.’

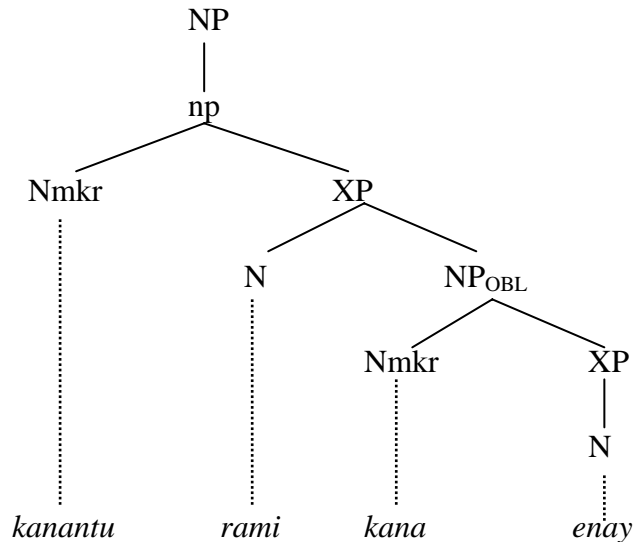
(25) a. **me-na'u=ku dra matrina na utreutrem na suan*
 ITR-see=1S.NOM ID.OBL big LK black LK dog
 ‘I saw a big black dog.’

b. **amau a drenan na ma-kiteng*
 COP ID.NOM mountain LK ITR-small
 ‘It was a small mountain.’

Second, as mentioned earlier *na* functions as a linker in situations where the expected Nmkr of the non-initial small NPs is *kana*. Recall that in Rewrite Rule (iv) an NP_{OBL} is also marked by an oblique noun phrase marker. For example, in (26), the NP consists of two

parts, both introduced by an oblique Nmkr. At first glance it seems that the NP consists of two small NPs, but from the gloss given *kana enay* is not a small NP, but an NP_{OBL}, which expresses a possessive relationship, not a modifying relation.

- (26) *m-uka=la kanantu rami kana enay*
 ITR-go=PERF DF.OBL/3PSR root DF.OBL water
 ‘They went to the fountain-head of the river.’



It is likely that in order to avoid possible ambiguity, when the NP is oblique, the non-initial small NPs are marked by *na* instead of *kana*, as is the case in (22) and (23).³

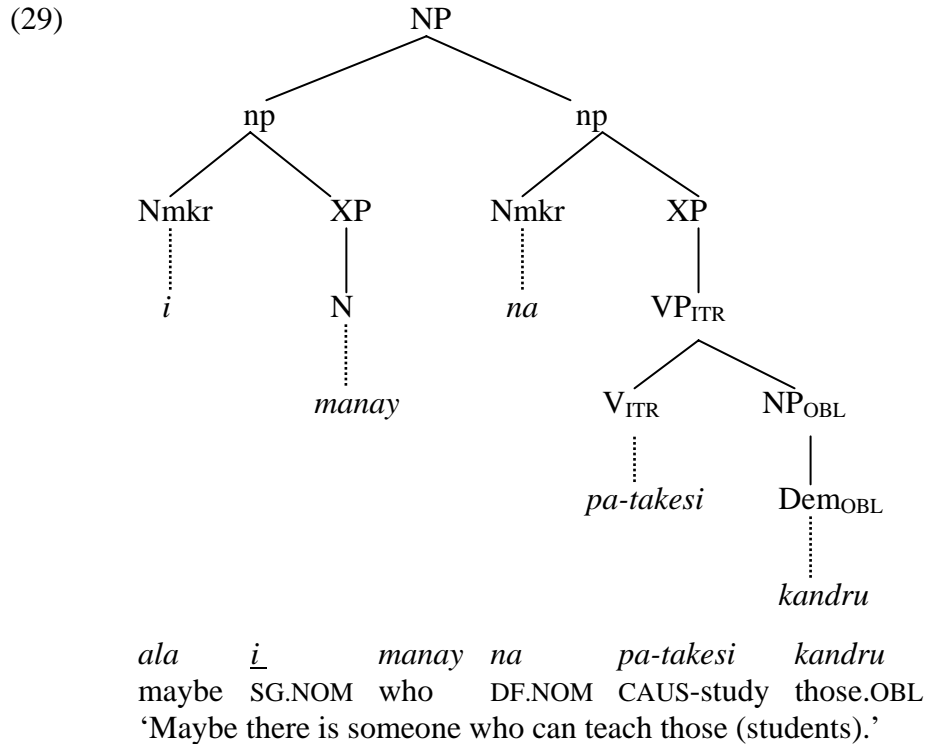
5.1.3 Personal NPs

The structure of a personal noun phrase is more restricted than that of a common noun phrase. A personal noun phrase is one which begins with a personal noun phrase marker (§4.3.1.2.2) or is a personal pronoun (§4.5.1). An NP that has a personal noun as its PIBU never takes a modifier other than a non-restrictive relative clause, as (27) and (28) show.

- (27) a. *ta-takesi i senayan*
 <ITR>RED-study SG.NOM Senayan
 ‘Senayan is studying.’
- b. **ta-takesi i senayan na bulray*
 <ITR>RED-study SG.NOM Senayan DF.NOM beautiful
 ‘The beautiful Senayan is studying.’
- (28) *taita na tara-puyuma*
 1P.NEU DF.NOM <ITR>speak-Puyuma
 ‘we, who speak Puyuma’

³ Note also that among all the NP markers, only *kana* consists of two syllables. Another possibility is that the first syllable of *kana* is dropped in those cases where we have a distinct form for the linker.

However, the interrogative word *manay*⁴ ‘who’ (29) may take a modifier other than a numeral or a demonstrative. In (29), the interrogative word *manay* is marked by *i* (indicating personal nominative singular), but the modifier is marked by *na*, not *i*. If *manay* is marked by *kan* (personal oblique singular), the modifier is still marked by *na*. This suggests that *na* in these cases functions as a linker, as in (22) and (23) above.



5.1.4 Locative NPs

The rewrite rules of locative NPs are given in (vi) to (viii).

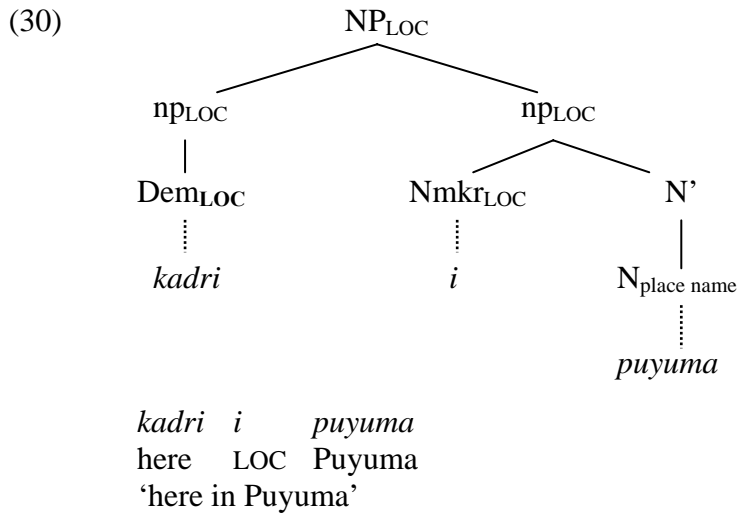
$$(vi) \quad \mathbf{NP}_{\text{LOC}} \rightarrow \mathbf{np}_{\text{LOC}} (+\mathbf{np}_{\text{LOC}})$$

$$(vii) \quad \mathbf{np}_{\text{LOC}} \rightarrow \left\{ \begin{array}{l} \mathbf{Nmkr}_{\text{LOC}} + \mathbf{N}'_{\text{LOC}} \\ \mathbf{Dem}_{\text{LOC}} \end{array} \right\}$$

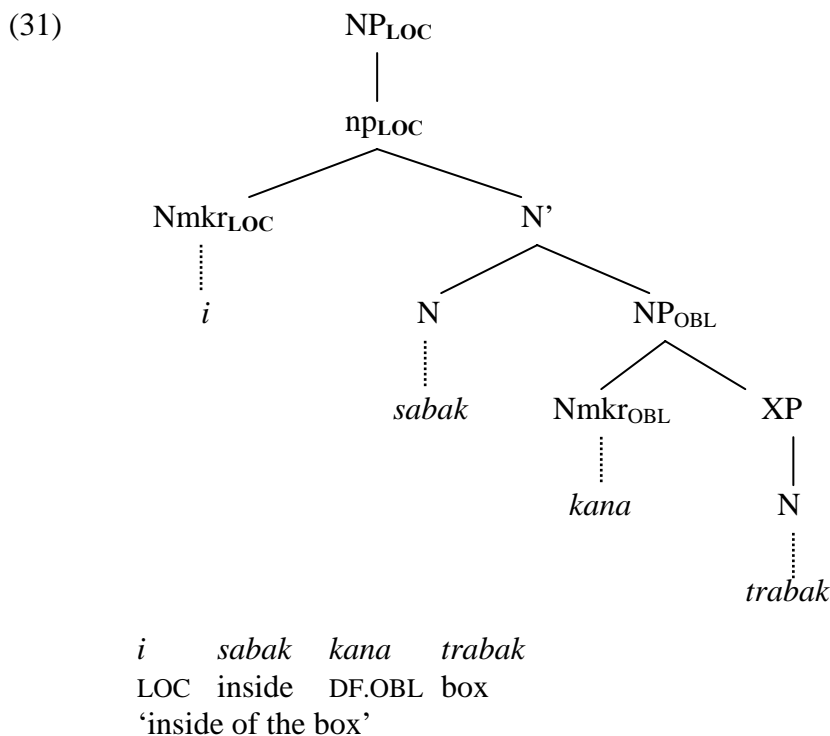
$$(viii) \quad \mathbf{N}'_{\text{LOC}} \rightarrow \left\{ \begin{array}{l} \mathbf{N}_{\text{place name}} \\ \mathbf{N} + \mathbf{NP}_{\text{OBL}} \end{array} \right\}$$

4 When *manay* means ‘who’, it may be preceded by one of the singular personal NP markers *i* NOM or *kan* OBL. On the other hand, when *manay* means ‘what’, it may be preceded by one of the indefinite common NP markers *a* or *dra*. There is no distinction of number for *manay* ‘who’, and no definite/indefinite distinction for *manay* ‘what’.

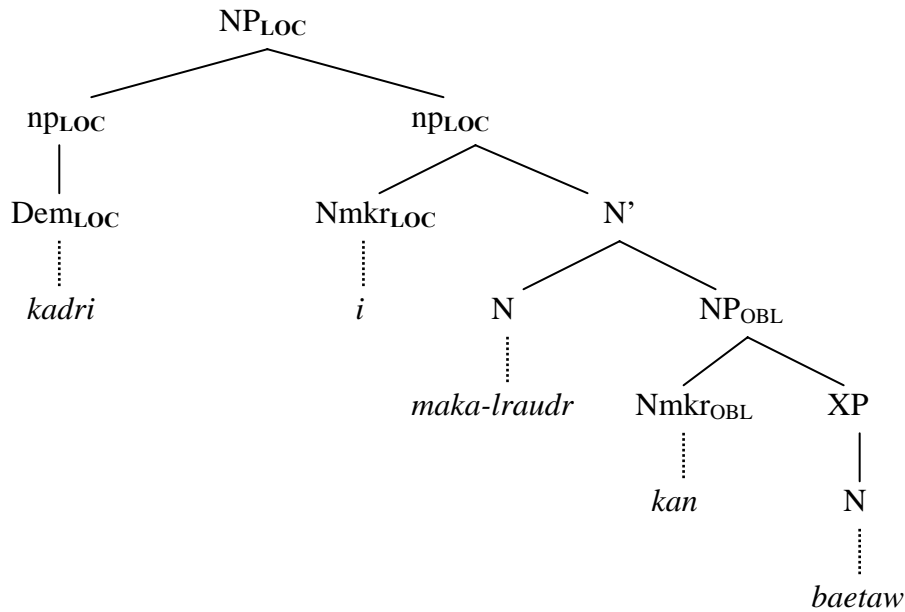
A locative NP other than a spatial deictic is introduced by the locative noun phrase marker *i*. As in a common NP, there may be more than one small NP, here np_{LOC} , but np_{LOC} is restricted to a spatial deictic (§4.5.3.3) or a phrase introduced by *i*, as in (30). As noted in the previous chapter, the noun introduced by *i* is a place name (e.g. *i puyuma* ‘in Puyuma’), or a noun denoting a familiar location (e.g. *i ruma* ‘at home’), a direction (e.g. *i draya* ‘in the west’), or relational referent (e.g. *i sabak* ‘inside’). A place name introduced by *i* can only cooccur with a demonstrative, as in (30). Note that the spatial deictic must again be the first small np_{LOC} in the NP_{LOC} .



Only a locative noun with a directional or relational referent may take a possessor (oblique) NP, as in (31) and (32). A place name cannot take a possessor NP. Example (32) shows a locative NP with both a spatial deictic and a possessor.



(32)



kadri i maka-lraudr kan baetaw
 here LOC side-east SG.OBL his.older.sibling
 'here to the east of his brother'

5.2 Case, definiteness, and plurality

The case and definiteness of a noun are signalled either by a possessive pronoun or by a noun phrase marker preceding the noun. Puyuma distinguishes three cases: nominative, genitive, and oblique (§4.2 and §8.2). The noun phrase marker also indicates whether the noun phrase is common or personal. Full paradigms of noun phrase markers and personal pronouns respectively are given and discussed in §4.3.1.2.2 and §4.5.1.

Number is specified by the noun phrase marker only in a personal proper noun phrase. Consider:

(33) *mu-lrelrep dra kualreng-an i nanali*
 ACAUS-chase ID.OBL difficult-NMZ SG.NOM my.mother
 'My mother was infected with a disease.'

(34) *tu=pu-kiping-ay na namali kay baeli*
 3.GEN=CAUS-clothes-TR2 PL.NOM my.father and my.older.sibling
 'They have my father and my brother wear (traditional) clothes.'

(35) *tu=karat-aw=ku dra yabereng*
 3.GEN=bite-TR1=1S.NOM ID.OBL ant
 'I was bitten by an ant/by ants.'

In common noun phrases, grammatical number is unmarked, as in (35), but semantic plurality can be signalled by reduplication (§3.4.3.2), as in (36), by suffixation of *-an* (37), or by both (38).

(36) *tu=lasadr-aw=dar i tralru-tralrun*
 3.GEN=hide-TR1=FREQ LOC RED-grass
 'She hid it in the field.'

- (37) *ma-la-lemes nadru na lalak-an*
 ITR-RED-disappear those.NOM DF.NOM child-COL
 ‘Those children were going to disappear.’
- (38) *sadru ku=’ali-’ali-an*
 many 1S.PSR=RED-male.friend-COL
 ‘I have a lot of friends.’ (lit. ‘My friends are many.’)

5.3 Possessive constructions

Possessive constructions are constructions in which one referent is marked as possessing another referent. In some instances the semantic relationship between the two referents is not strictly one of possession, and so the discussion is not restricted to the semantic relationship of possession or ownership. Part-whole and kinship relations also fall into the domain of the possessive construction.

A possessive relationship can be signalled within an NP or predicatively within a clause. This section is concerned with possession signalled within an NP. Predicative possession is discussed in §10.4.4.

In possession signalled within an NP, there is a distinction between alienable and inalienable possession. Semantically, alienable possession is the kind of possession which can be terminated; for example, one’s possession of one’s goods is typically transferable to someone else. Inalienable possession is the kind of possession that cannot be terminated. Languages that make a formal distinction between alienable and inalienable possession often include both kinship terms and body part terms within the inalienable class, but in Puyuma the inalienable possession construction is only used for kinship relations.

A possessive construction typically contains two elements: a possessor and a possessed item, referred to here as the possessum. In the following discussion, I will first explore alienable possession, divided according to the coding of the possessor. Inalienable possession and distributive possession are discussed in the succeeding sections.

5.3.1 The coding of the possessor

I divide alienable possession into two types according to the encoding of the possessor. Basically, the possessor can either be coded as a pronoun (Nmkr) or as an NP_{OBL}.

5.3.1.1 The possessor is encoded as a pronoun

If the possessor is a pronoun, it can be manifested as either a bound or a free form (§4.5.1). In addition to indicating the person and number of the possessor, the pronoun also carries the information carried by the noun phrase marker of a common NP, i.e. case and definiteness of the whole phrase. A bound form possessor is always nominative, as in (39b), whereas a free form possessor can be either nominative (39a) or oblique (40).

- (39) a. *nantu ngalrad*
 DF.NOM/3.PSR name
 ‘his/her/their name(s)’

- b. *tu=ngalrad*
 3.PSR=name
 ‘his/her/their name(s)’
- (40) *kanta ruma’*
 DF.OBL/1P.PSR house
 ‘our house’

5.3.1.2 The possessor is encoded as a personal or common noun

If the possessor is manifested as an NP_{OBL} (cf. Rewrite Rule (iv)), the possessor follows the possessum. Usually, the possessor is manifested twice; as a pronoun in the Nmkr slot, and as an NP_{OBL} following the possessum, as in (41) and (42). Sometimes, a third-person possessor only occurs once as an NP_{OBL}, as in (43); this is only possible when both the possessum and the possessor are indefinite.

- (41) *tu=tiyal kana unan*
 3.PSR=belly DF.OBL snake
 ‘the snake’s belly’
- (42) *tu=walak kan kalikali*
 3.PSR=child SG.OBL Kalikali
 ‘Kalikali’s child’
- (43) *dra sa’adr dra kawi*
 ID.OBL branch ID.OBL tree
 ‘branches of trees’

The pronoun (Nmkr) before the possessum carries the case of the possessum, and the NP_{OBL} after the possessum is always oblique.

When the possessum is a location noun, it is not preceded by a pronoun, but by the locative noun phrase marker *i*, as in (44) and (45).

- (44) *i sabak kana trabak*
 LOC inside DF.OBL box
 ‘inside the box; the box’s interior’
- (45) *na dalran i nguayan kanmu ruma’*
 DF.NOM road LOC front DF.OBL/2P.PSR house
 ‘The road in front of your house’

5.3.2 Inalienable possession

Tsuchida (1995:795) reports that Puyuma is the only Formosan language that makes a distinction between alienable and inalienable possession. He finds that in Tamalakaw Puyuma there is a set of genitive pronouns used to designate kinship terms, or a body part word when it is used in a ‘figurative’ or metaphoric sense. For example:

- (46) Tamalakaw Puyuma (Tsuchida 1995:797–798)
nangnu zazek a lalak-u ziya mu,
 your.NOM body LK young-2S.NOM still TOP

Hawlay ziya i matra-li
 here.exist still LOC eye-my
 ‘Your figure in your youth still lies in my eyes.’
 (‘I still remember you when you were young.’)

Unlike Tamalakaw Puyuma, which has a full set of pronouns designating inalienable possession, the Nanwang dialect has only a partial set, which only occurs with the few noun roots shown below (pronouns shown in bold face).

Table 5.1: Inalienable possession in Nanwang Puyuma

	first singular	second singular/plural	third singular/plural
grandparent	<i>mul⁵</i>	<i>temuu</i>	<i>temutaw</i>
father	<i>namali</i>	<i>temama</i>	<i>temamataw</i>
mother	<i>nanali</i>	<i>taina</i>	<i>tinataw</i>
older sibling	<i>baeli</i>	<i>baeu</i>	<i>baetaw</i>

For the sake of convenience, I will call these special pronouns inalienable possessive pronouns to distinguish them from other sets of possessive pronouns. Inalienable possessive pronouns only cooccur with certain kinship terms (a subcategory of personal noun).

When we compare the inalienable possessive pronouns in Tamalakaw Puyuma with those in Nanwang Puyuma, the paradigm of inalienable possessive pronouns in Nanwang Puyuma is irregular in several ways. First, the bases to which the inalienable possessive pronouns are attached have irregular forms. Take the category ‘mother’ above as an example: the bases for the three persons are different, and the second person form has no inalienable pronoun attached. Second, these inalienable pronouns only cooccur with nouns denoting older-generation kin. Younger-generation kin terms have the possessive pronouns that denote common nouns. Compare:

(47) *tu=wadi na babayan*
 3.PSR=younger.sibling DF.NOM female
 ‘their younger sister’

(48) *tu=ruma’ kan temutaw*
 3.PSR=house SG.OBL their.grandparent
 ‘their grandmother’s house’

Third, there are no first person plural inalienable pronouns. That is, for expressions such as ‘our father’ or ‘our grandparent’, there is no inalienable pronoun, as shown in (49).

(49) *ta=te<muwa>muwan*
 1P.PSR=<RED>grandparent
 ‘our grandparents (ancestors)’

5 Tsuchida (1995:799–802) points out that the first person singular genitive form *-li* in Puyuma is very peculiar. While *u* and *taw* show some resemblance to the common pronouns *nu/=yu*, *mu/=mu*, or *nantaw*, *-li* looks totally different from *ku/=ku*. However, this same form *-li* also occurs in Rukai (cf. Zeitoun 1997a, 2007), which is spoken to the west and the south of Puyuma. There is no genitive form **-ku* observed in any Rukai dialect, and Tsuchida assumes that *-li* is a borrowing from Rukai. The origin of this set of pronouns, and especially the first person singular pronoun *-li*, deserves more investigation.

Tan (1997:36) and Huang (2000b:98) both claim that this set of inalienable pronouns only marks singular possessor referents,⁶ but from the example in (50) it is clear that for third person plural and singular the same form is used. Furthermore, in (51), from the context, the mother was talking to her two sons, so the pronoun *-u* refers to the plural ‘your’.

- (50) *asuwa=driya i, uliya kadru-a a malru-wadi.*
 when=IMPF TOP exist live-PJ ID.NOM RECIP-younger.sibling
i temamataw i, m-uka i tralrun
 SG.NOM their.father TOP ITR-go LOC grass
 ‘A long time ago, there were two brothers. Their father, he went to the field (hunting).’
- (51) *tu=ruma’ kan temuu*
 3.PSR=house SG.OBL your.grandparent
 ‘your grandmother’s house.’

Like many Austronesian languages, Puyuma uses the same words, *mu* or *temuwan*, to denote both grandparent and grandchild. When one of these words is used to refer to a grandparent an inalienable possessive pronoun is used, but when it is used to indicate a grandchild a common pronoun is used. For instance:

- (52) *amau tu=temuwan=yu*
 COP 3.PSR=grandchild=2S.NOM
 ‘You are her grandson.’
- (53) *m-uka=mu m-uturangi-a kan temuu i, ...*
 ITR-go=2P.NOM ITR-visit-PJ SG.OBL your.grandparent TOP
 ‘When you go to visit your grandmother, ...’

Unlike the common pronouns, which also carry case and definiteness information, a pronoun of this category does not indicate the case role of the head noun it is attached to. For instance:

- (54) *a-uka=ku me-na’u-a kan muli*
 RED-go=1S.NOM ITR-see-PJ SG.OBL my.grandparent
 ‘I am going to visit my grandmother.’

5.3.3 Distributive possession

A special set of pronouns is used to indicate distributive possession. However, there are not many examples in the corpus, so the description here is somewhat preliminary. This set of pronouns only has plural forms. For the second person, there are apparently alternant forms. The distributive possessive pronouns are:

<i>karanangtanta</i>	‘each of our own, our respective’
<i>karanangnemu/karanangmuymu</i>	‘each of your (pl.) own, your respective’
<i>karanangtantaw</i>	‘each of their own, their respective’

6 Some informants also made the same claim when I was eliciting forms.

These pronouns incorporate elements that look similar to common pronouns, such as *ta*, *nemu*, *muymu*, and *taw*, but they are treated as single morphemes here because **karanangtan* and **karanang* do not occur independently. Some examples showing their usage are given below:

- (55) *an mulralriaban i, ameli na karanangtantaw*
 when sea.worship TOP NEG.COP DF.NOM DIST:their
na palrakuan
 DF.NOM men's.house
 'When doing sea worship, don't their various men's houses do it separately?'
 (lit. 'When doing sea worship, isn't it their respective men's houses?')
- (56) *an p<en>iya=ta leibai⁷ i, m-uberek=ta*
 when <ITR>finish=1P.NOM service TOP ITR-return=1P.NOM
karanangtanta ruma'
 DIST.our house
 'After we finished the church service, we went back to our respective homes.'

It is not clear whether this set of pronouns can denote the case of the noun phrase in which they occur. In (55), a noun phrase marker precedes the NP, but in (56), there is no noun phrase marker.

5.4 NPs with a numeral or a quantifier

Numerals can either precede or follow the PIBU they modify, and there is also case concord between the numeral and the PIBU. In such cases, the numeral and the PIBU are small NPs within one big NP.

- (57) *mi-walak dra mia-pat dra walak*
 have-child ID.OBL PRS-four ID.OBL child
 'She has four children.'
- (58) *mi-suan=mi dra suan dra sa-a*
 have-dog=1P.NOM ID.OBL dog ID.OBL one-NPRS
 'We had a dog.'

As shown in the above sentences, the numeral and the noun it modifies are often marked for the same case. There are instances in which the noun phrase marker between the numeral and the PIBU occurs optionally. For instance, in (59) the second *dra* is optional. When the second *dra* is omitted, the order is fixed: the numeral must precede the PIBU.

- (59) *p-u-patrraran dra telru-a (dra) ki<a>umal-an*
 CAUS-go-out ID.OBL three-NPRS ID.OBL <RED>ask-NMZ
 'He gave out three questions.'

The omission of the second noun phrase marker is obligatory when the PIBU is *ami* 'year' or *wari-an* 'day'.

7 The word *leibai* is a borrowing from Taiwanese and is used as a verb in this sentence.

- (60) *adri m-a-uka dra lu-luwatr-a ami*
 NEG ITR-RED-go ID.OBL RED-five-NPRS year
 ‘It won’t last for five years.’

Wider discussion of numerals is found in §4.5.4.

Quantifiers such as ‘some’ and ‘many’ are stative verbs in Puyuma. They can function as a verbal predicate, as in (61), or as a small NP within a big NP, as in (62) and (63).

- (61) *sayma na paisu*
 little DF.NOM money
 ‘The money is little.’
- (62) *sama na sayma na dare’ i,*
 be.left DF.NOM little DF.NOM earth TOP
 ‘Little land is left.’
- (63) *pabuwa=la dra manay dra sadru*
 capable=PERF ID.OBL what ID.OBL many
 ‘She’s capable of a lot of things.’

The word *peniya*⁸ ‘all’ is a floating quantifier. Unlike other quantifiers, it is not preceded by a noun phrase marker, as in (64) and (65).

- (64) *karuwa tubang na lalak peniya*
 can <ITR>answer DF.NOM child all
 ‘All the children can answer.’
- (65) *ta=kan-aw=la peniya na kuraw*
 1P.GEN=eat-TR1=PERF all DF.NOM fish
 ‘We have eaten all the fish.’

When the utterance consists of only an NP with *peniya* as a reply to a question, *peniya* always follows the PIBU, as in (66).

- (66) *a basikaw peniya*
 ID.NOM bamboo all
 ‘all bamboos’

5.5 NPs with a demonstrative

A demonstrative (§4.5.3.2) can be used independently as the only small NP within an NP or it may occur as one of the small NPs within an NP. When a demonstrative appears as one of the small NPs, it carries the same case as the PIBU, and it is always the first small NP of the NP. For example:

8 The word *peniya* is also used in serial verb constructions (§13.4.2) denoting the termination of an action. For example:

p<en>iya=ku=la ma-rengay
 <ITR>finish=1S.NOM=PERF ITR-tell
 ‘I’ve finished my talk.’

- (67) *nadru na mia-drua na malru-wadi*
 those.NOM DF.NOM PRS-two DF.NOM RECIP-sibling
 ‘those two brothers’

When a PIBU cooccurs with a demonstrative and a numeral, the last element (either the small NP denoting the PIBU or the small NP denoting the numeral) is almost always marked by the nominative marker *na*, regardless of whether the NP is marked for nominative or oblique case. Thus:

- (68) *igelra=ku=dar kandri kana dru-drua-a*
 embarrassed=1S.NOM=FREQ these.OBL DF.OBL RED-two-NPRS
*na/*kana suan*
 DF.NOM/*DF.OBL dog
 ‘I often felt embarrassed over these two dogs.’

Some informants accept *na* to mark all the lexical elements after the demonstrative. For instance:

- (69) *kandru na mia-drua na malru-wadi*
 those.OBL DF.NOM PRS-two DF.NOM RECIP.sibling
 ‘those two brothers’

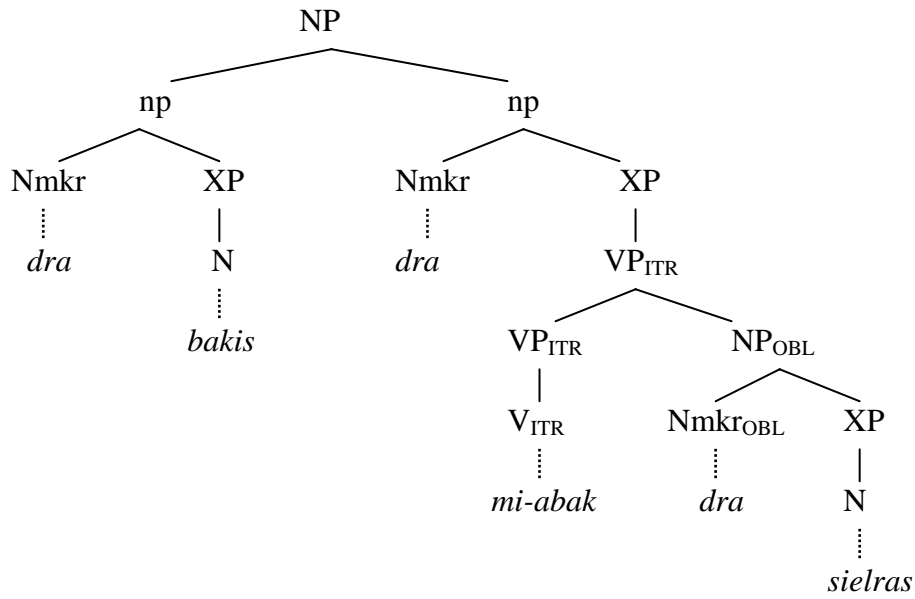
In examples such as (68) and (69), *na* is grammaticalised as a linker and it loses its ability to mark case/definiteness. See also §5.1.2.

5.6 Relative clauses

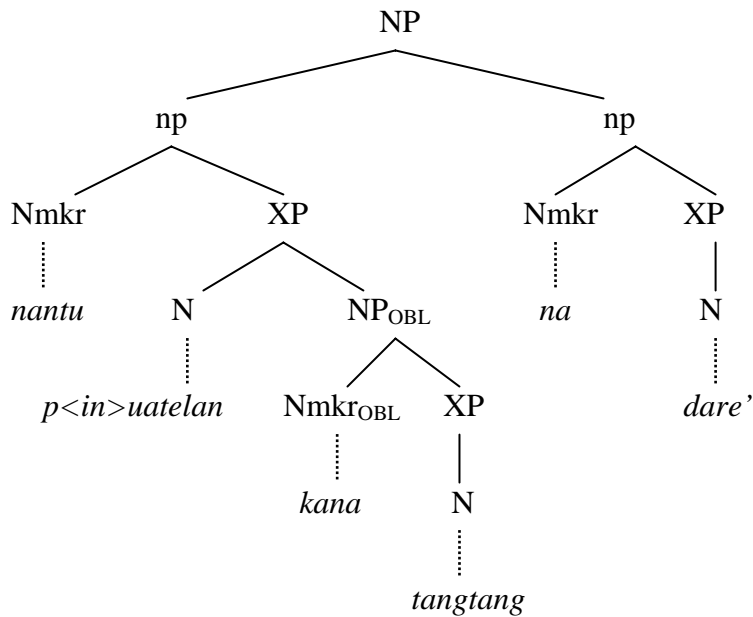
5.6.1 An overview

Recall from §5.1.1 that a common NP consists of one or more small NPs (nps), and each small NP in turn consists of a Nmkr and an XP (Rule ii). An XP may be a noun (which may be morphologically simple or a deverbal noun) or a numeral. An XP is optionally followed by a locative or an oblique NP, or the XP may be an actor voice/intransitive verb phrase. This section discusses the constructions in which the XP is an actor voice/intransitive verb phrase, as in (70), or a deverbal noun, as in (71).

- (70) *tu=pa-tiuatiu-ay ku=tranguru' dra bakis*
 3.GEN=CAUS-hang-TR2 1S.PSR=head ID.OBL basket
 {*dra mi-abak dra sielras*}
 ID.OBL have-pack ID.OBL sand
 ‘He (the doctor) hung on my head a basket which contained some sand.’



- (71) {*nantu* *p<in>uatel-an* *kana* *tangtang*} *na*
 DF.NOM/3.PSR <PERF>drop-NMZ DF.OBL box DF.NOM
dare' *i*, *mi-ngalrad=la* *dra* *matang* *ka*
 soil TOP have-name=PERF ID.OBL Matang <ITR>say
 'The soil (place) in which the box was dropped, people said it got the name Matang.'



The glosses given in (70) and (71) show that the parallel meaning in English is expressed via a relative clause. I call these Puyuma constructions 'relative clauses', but the reader should note that my use of the term 'relative clause' (RC) is broader than its English-related use.

In English, attributive constructions and relative clauses are structurally different, but this distinction does not occur in Puyuma. That is, ‘the good person’ and ‘the person who is talking’ are encoded by the same structure in Puyuma, as in (72). In (72a), *inaba* is a stative actor voice/intransitive verb, and (73) is an example of *inaba* used as a verbal predicate.

- (72) a. *na inaba na trau*
 DF.NOM good DF.NOM person
 ‘the good person’
- b. *na ma-ra-rengay na trau*
 DF.NOM ITR-RED-tell DF.NOM person
 ‘the person who is talking’
- (73) *inaba na trau*
 good DF.NOM person
 ‘The person is good.’

A Puyuma RC is thus a small NP, but has the internal structure of a verb phrase (nominalised or not), and is marked by the same noun phrase marker as the PIBU.

The following sentences show the case agreement between RCs and PIBUs.

- (74) *na trau na pu<a>raket i, puraket sanga*
 DF.NOM person DF.NOM <a>careful TOP careful <ITR>make
 ‘The people who are careful, they make (the spears) carefully.’
- (75) *amau a drenan a ma-kiteng ka*
 COP ID.NOM mountain ID.NOM ITR-small <ITR>say
 ‘It was said that it was a mountain that was small.’
- (76) *ta=tusuk-aw kana derederan kana mi-a-kutang*
 1P.GEN=spear-TR1 DF.OBL spear DF.OBL have-a-spike
 ‘We speared them with the *derederan* spear which has a spike (on top).’
- (77) *ku<a>renang=ta dra saygu dra ma'idrang*
 <a>follow=1P.ICL.NOM ID.OBL be.good.at ID.OBL old
 ‘We were following those old people who were good at it.’

The deletion of either one of the two case markers in either sentence will cause ungrammaticality, as shown in (78) and (79).

- (78) **ta=tusuk-aw kana derederan mi-a-kutang*
 1P.ICL=spear-TR1 DF.OBL spear have-a-spike
 ‘We speared them with the *derederan* spear which has a spike (on top).’
- (79) **ku<a>renang=ta saygu dra ma'idrang*
 <a>follow=1P.ICL.NOM be.good.at ID.OBL old
 ‘We were following those old people who were good at it.’

Sometimes the noun phrase markers preceding the modifier and PIBU may not be identical. In such cases, as noted in §5.1.2, the case role of the NP is indicated by the first small NP (by its noun phrase marker or genitive pronoun), and the rest of the small NPs are marked by *na*.

- (80) *ala i manay na pa-takesi kandru*
 maybe SG.NOM who DF.NOM CAUS-teach that.OBL
 ‘Maybe there is someone who can teach that.’
- (81) **ala i manay i pa-takesi kandru*
 maybe SG.NOM who SG.NOM CAUS-teach that/these.OBL

5.6.2 Types of relative clauses

Crosslinguistically three types of RCs can be distinguished in terms of the relative position of the PIBU and the RC: postnominal external RCs, prenominal external RCs, and internal RCs.⁹ Puyuma has postnominal external and prenominal external RCs. In some cases, there is no PIBU. In the following examples, the PIBU is underlined, and the RC is indicated by brackets.

Postnominal external RCs:

- (82) *m-atek dra basikaw {dra belrakas}*
 ITR-chop ID.OBL bamboo ID.OBL long
 ‘He chopped a/some long bamboo/bamboos.’
- (83) *kurenang=la dra trau {dra mi-ruma}=la}*
 follow=PERF ID.OBL person ID.OBL have-house=PERF
 ‘One (can) keep up with those who have families.’

Prenominal external RCs:

- (84) *m-uka {kana mar-asatr} kana tu’utr*
 ITR-go DF.OBL more-high DF.OBL pillar
 ‘They went to the higher pillar.’
- (85) *{na sama} {na sayma} na dare*
 DF.NOM rest DF.NOM little DF.NOM soil
i, tu=riap-anay pia-timulr i, mutu-kekeng
 TOP 3.GEN=spray-TR3 face-south TOP become-plain
 ‘The rest of the little soil, it was sprayed to the south, and it became a plain.’

RCs without a PIBU

- (86) *arii {na mi-trepa sanga}*
 fast DF.NOM have-focus <ITR>make
 ‘Those who have professional skill in doing this are fast.’

9 Keenan (1985:143–144) notes that there is a tendency across languages to favour postnominal RCs, and postnominal RCs are almost the only type attested in verb-initial languages. However, he also mentions that Tagalog and possibly other Philippine languages have both prenominal and postnominal RCs. Dryer (1992:86) also says that ‘Rel N order is more common among OV languages than it is among VO languages, and conversely for N Rel order’.

- (87) *kiumal=ta {dra mi-alup} {dra mi-a-kelep kadrini}*
 ask=1P.NOM ID.OBL have-hunt ID.OBL have-a-nest here
 ‘We asked (some spirits) who live here, who make their rounds here.’

A PIBU may be modified by more than one RC, as in (85). If there is more than one RC, the order of the RCs and the PIBU is free; all possible orders are acceptable.

- (88) *na suan na matrina na utreutrem*
 DF.NOM dog DF.NOM big DF.NOM black
 ‘the big black dog(s)’
- (89) *na matrina na utreutrem na suan*
- (90) *na matrina na suan na utreutrem*

5.6.3 Formation strategy

Semantically, there are two roles played by the PIBU; one in the matrix clause, and the other in the RC. I will adopt Keenan’s (1985) terminology and use NP_{rel} to refer to the position in the RC, and to use NP_{mtx} to refer to the position in the matrix clause. For example, in ‘I beat the man who stole my bike’ NP_{rel} is in the agent position, and NP_{mtx} is in the patient position.

Keenan (1985:146-154) noted that four ways of presenting NP_{rel} occur across languages: as a personal pronoun, a special pronominal form peculiar to RCs, a full NP, or a gap. In Puyuma, NP_{rel} is always a gap, but two different RC strategies are utilised according to whether the NP_{rel} is an actor or not. If the NP_{rel} has the role of actor, then the RC is manifested as a finite clause; if not, then the RC is a nominalised clause.

- (91) **Actor**
ane kirtrebung=ta dra ma'idrang-an {dra ma-sangal
 when meet=1P.ICL.NOM ID.OBL old-NMZ ID.OBL ITR-carry
dra basak} ...
 ID.OBL sack
 ‘When we meet **old people** who carry packages on their shoulders ...’
- (92) **Patient**
ala amuna sadru {tu=tr<in>ekelr-an} na asi
 maybe because many 3.PSR=<PERF>drink-NMZ DF.NOM milk
 ‘Maybe because the **milk** he drank is a lot.’
- (93) **Instrument**
tu=lasedr-aw=dar i tralru-tralrun {nantu
 3GEN=hide-TR1=FREQ LOC RED-grass NOM/3.PSR
in-abak-an kana walak} na padrekan
 PERF-pack-NMZ DF.OBL child DF.NOM backpack
 ‘She often hid the **backpack** in which she packed the child in the field.’

(94) **Location**

{*nantu* *p*<in>*uatel-an kana tangtang*} *na*
 DF.NOM/3.PSR <PERF>drop-NMZ DF.OBL box DF.NOM

dare' *i, mi-ngalrad=la dra matang k**a*
 soil TOP have-name=PERF ID.OBL Matang <ITR>say

'The **soil (place)** where the box was dropped, people said it got the name Matang.'

Of the four sentences (91) to (94), only the RC in (91) is manifested as a finite clause. In this sentence, NP_{rel} is the actor of the RC. In the other three sentences the RCs are all nominalisations.

An argument of the nominalised verb other than the NP_{rel} is manifested as a possessor, i.e. as a possessor pronoun, cliticised or free, and sometimes as an NP_{OBL}. Thus the actor in (92) is encoded as a possessor clitic (*tu=*), the actor in (93) as a free possessor pronoun (*nantu*) and the theme/patient as an NP_{OBL} (*kana walak*), and the patient/theme in (94) as both a free possessor pronoun (*nantu*) and an NP_{OBL} (*kana tangtang*).

5.6.4 Non-restrictive relative clauses

The RCs discussed in this chapter so far have been restrictive, i.e. an RC functions to delimit the reference of the PIBU by specifying the role of the referent of that PIBU in the situation described by the RC. While a restrictive relative clause assists the addressee to identify the referent, a non-restrictive RC is parenthetical or foregrounded. The two are syntactically alike in Puyuma, but with four differences. The first is phonological: there is a clear pause after the antecedent in non-restrictive RCs, but not in restrictive RCs. The others are not categorical: in most cases the antecedent of the non-restrictive RC is either a free pronoun, as in (95) and (96), or a demonstrative denoting a human referent, as in (97). Furthermore, a non-restrictive RC has to be marked with *na*, no matter what case the PIBU carries. Unlike restrictive RCs, the order of the PIBU and the non-restrictive RC is fixed; the PIBU always precedes the non-restrictive RC.

(95) *an ma-ruwa=ta ki-ma-drayar taita {na t**ara-puyuma*
 when ITR-can=1P.NOM get-ITR-discuss 1P.NEU LK <ITR>speaK-Puyuma

na paseket} i, ala ma-ladram kilengaw
 DF.NOM clear TOP maybe ITR-know listen

'If we, those who speak Puyuma clearly, can converse, maybe they can understand (Puyuma).'

(96) *drua=ku ki-a-edek-a kanmu {na ulaya kadri trakuban}*
 come=1S.NOM get-a-bless-PJ 2P.OBL LK exist here boys'.house
 'I came to ask for blessings from you, who live here in the boys' house.'

(97) *idri {na adri kiberay kan tayban dra bini} ...*
 this.NOM LK NEG get SG.OBL Tayban ID.OBL seed
 'This person, who didn't get seeds from Tayban ...'

Note that in sentence (96), although the antecedent is in oblique case, the relative clause still begins with *na* in its use as a linker (cf. §5.1.2).

5.7 Coordinate NPs

A fuller discussion of NP coordination is provided in §16.3.1.

Two strategies are employed in coordinate NPs: the *kay* strategy is used to coordinate two personal nouns, and the *aw* strategy is used to coordinate all kinds of NPs. When *kay* is used, the whole complex NP is marked for plural case and number, but when *aw* is used, each individual noun must be marked separately for case.

- (97) *ma-ruwa-ruwa=ta kire-etreb kadri kana babayaan?*
 ITR-RED-can=1P.NOM get-object.of.courtship here DF.OBL servant
ka nadru na sabayan kay kakubaw
 <ITR>say those.NOM PL.NOM Sabayan KAY Kakubaw
 ‘‘How can we find a spouse here among the servants?’’ Sabayan and
 Kakubaw said.’
- (98) *i namali aw i baeli*
 SG.NOM my.father and SG.NOM my.older.sibling
 ‘my father and my elder brother’

6 *Subject choice, mood and aspect*

6.1 Introduction

This chapter discusses the categories of mood and aspect, and how they interact with subject choice in Puyuma. It has been shown by many linguists, for example, Reid (1992), Zeitoun and Huang (1997), Zeitoun et al. (1996), Ross (1995), and Himmelmann (2005), that aspect and mood interact closely with the subject choice ('voice') system in Philippine-type languages. Similarly, in Puyuma, the three named categories are closely linked. It is impossible to separate a formative denoting subject choice from one denoting mood/aspect. That is, the formatives discussed in this chapter represent a combination of these categories. Different classes of verbs have different derivational processes to manifest these categories.

Within the domain of tense/aspect/mood, Puyuma is a 'mood-prominent language' in Bhat's (1999) terminology. Puyuma speakers tend to view aspectual and temporal notions in terms of mood category. There is a basic distinction between indicative (unmarked mood) and non-indicative, and within the indicative category a further distinction between realis and irrealis. There is no separate verbal morphology marking tense distinctions (e.g. the temporal future/non-future distinction is manifested by the irrealis/realis dichotomy), and many aspectual notions are expressed via aspectual clitics, while most mood categories are grammaticalised and expressed by verbal morphology. Table 6.1 gives a brief overview of the verbal morphology of subject choice, mood and aspect.

Table 6.1: Verbal morphology of subject choice, mood, and aspect

		ITR (AV)	TR1 (PV)	TR2 (LV)	TR3 (CV)	
Indicative	Realis	Unmk	<i>M-V</i> ¹	<i>V-aw</i>	<i>V-ay</i>	<i>V-anay</i>
		PROG	<i>M-Ca-V</i>	<i>Ca-V-aw</i>	<i>Ca-V-ay</i>	<i>Ca-V-anay</i>
		DUR	<i>M-Ca-Ca-V</i>	<i>Ca-Ca-V-aw</i>	<i>Ca-Ca-V-ay</i>	<i>Ca-Ca-V-anay</i>
	Irrealis	<i>Ca-V</i>	<i>Ca-V-i</i>		<i>Ca-V-an</i>	
Non-indicative	Imperative	<i>V</i>	<i>V-u</i>	<i>V-i</i>	<i>V-an</i>	
	Hortative	<i>M-V-a</i>	—	—	—	

1 The capital *M* here represents various alternants, including , me-, m-, ma- and a zero affix, whose occurrence depends on both phonological environments (§2.6.1) and semantics. The capital *V* here represents the verb stem.

Table 6.1 presents only those categories that are manifested by verbal morphology. Other modal/aspectual categories that are not expressed by verbal morphology (e.g. some aspectual notions are manifested by clitics) or do not encode subject choice alternations (e.g. some mood categories are expressed by pronouns or affixes and do not show subject choice alternations) will be discussed in the relevant sections. Aspectual clitics are discussed in §6.4.2; the modal formatives *ti=* and *paka-* are discussed in §6.3.2.2 and §6.3.2.3, respectively.

I describe the subject choice system in §6.2. The categories of mood and aspect are described in §6.3 and §6.4 respectively. Intransitive verbs divide into seven classes, in each of which the verbal derivations are manifested differently. An account of these different classes of verbs in terms of their verbal derivations is presented in §6.5, which is followed by a description of the functions of *ka-* in §6.6.

6.2 Subject choice

Like many Philippine-type languages, Puyuma makes what seems to be a four-way distinction in subject choice. For the moment I will again use the terms actor voice (AV), patient voice (PV), locative voice (LV), and conveyance voice (CV), because the semantic role of the subject is important in the discussion. But I will show in §8.4.4 that PV, LV and CV are all transitive, whilst AV is intransitive. The voices are illustrated in the following elicited sentences:

- (1) *trakaw dra paisu i isaw*
 <AV>steal ID.OBL money SG.NOM Isaw
 ‘Isaw stole money.’
- (2) *tu=trakaw-aw na paisu kan isaw*
 3.GEN=steal-PV DF.NOM money SG.OBL Isaw
 ‘Isaw stole the money.’
- (3) *tu=trakaw-ay=ku dra paisu kan isaw*
 3.GEN=steal-LV=1S.NOM ID.OBL money SG.OBL Isaw
 ‘Isaw stole money from me.’
- (4) *tu=trakaw-anay i tinataw dra paisu*
 3.GEN=steal-CV SG.NOM his.mother ID.OBL money
 ‘He stole money for his mother.’

It is often claimed by Austronesianists, e.g. Schachter (1987), French (1988), Zeitoun and Huang (1997), Himmelmann (2002, 2005), among others, that in a Philippine-type voice system, the semantic role of the subject (nominative argument) is indicated by an affix on the verb. Thus, AV signals that the subject is actor, PV indicates that the subject is patient, LV signals that the subject is location, and CV indicates that the subject is the conveyed theme. However, some studies (e.g. Ross and Teng 2005a; Yeh 2004) reveal that there is no one-to-one correspondence between the different undergoer-voice (i.e. PV/LV/CV) affixes² and the semantic role of the subject that a given affix marks.

2 Note that patient voice, locative voice, and conveyance voice are often called non-actor voices or NAV by Formosanists.

The semantic role of the subject with each undergoer-voice affix is variable. For instance, the subject of the verb taking the LV suffix *-ay* can be a patient (5), a source (6), a goal/location (7), or a causee (8).

- (5) *tu=salpit-ay=ku*
3.GEN=flog-LV=1S.NOM
'He flogged me.'
- (6) *tu=trakaw-ay=ku dra paisu*
3.GEN=steal-LV=1S.NOM ID.OBL money
'He stole money from me.'
- (7) *tu=u-sabak-ay nanta drekal*
3.GEN=go-inside-LV DF.NOM/IP.PSR village
'They invaded our village.'
- (8) *tu=pasisi-ay=ku pa-karun*
3.GEN=force-LV=1S.NOM CAUS-work
'She forced me to work.'

Likewise, the subject of the verb taking the CV suffix *-anay* can be a beneficiary (9), a goal (10), an instrument (11), a conveyed theme (12)–(13), or something whose semantic role is difficult to decide, as in (14) and (15).

- (9) *nu=ba'itr-anay=ku dra tralrun?*
2S.GEN=burn-CV=1S.NOM ID.OBL grass
'Have you burned some grass for me?'
- (10) *tu=tara-payran-anay=ta tubang*
3.GEN=speak-Taiwanese-CV=1P.ICL.NOM <AV>answer
'They answered us in Taiwanese.'
- (11) *ta=lriputr-anay na bira' dra kuraw*
1P.ICL.GEN=wrap-CV DF.NOM leaf ID.OBL fish
'We wrapped fish with the leaf.'
- (12) *an tu=balri-anay na trakuban i, mu-trereb*
when 3.GEN=wind-CV DF.NOM boys'.house TOP ACAUS-fell
'When the boys' house was blown by wind, it fell.'
- (13) *tu=atel-anay na ma'idrang-an i drena-drenan*
3.GEN=throw-CV DF.NOM old-NMZ LOC RED-mountain
'They threw the old person out into the mountains.'
- (14) *ku=lukluk-anay na kinsas*
1S.GEN=wrestle-CV DF.NOM policeman
'I wrestled with the policeman.'
- (15) *tu=trukul-anay tu=drakur*
3.GEN=carry.on.back-CV 3.PSR=back
'He hunched his back.'

The above examples show that the voice affix does not correlate strongly with the semantic role of patient, locative, or conveyed theme.

There exist asymmetries between AV clauses on the one hand and PV/LV/CV (undergoer voice) clauses on the other. The asymmetries can be observed in the following facts. First, in the morphology, while the undergoer voice markers are suffixes (i.e. *-aw*, *-ay*, *-anay*), the AV markers are either prefixes or infixes (i.e. **, *m-*, *me-*, *ma-*). Second, AV verbs and undergoer voice verbs have different argument structures. While AV verbs have a subject and optionally an oblique argument, there is always a genitive pronoun procliticised to a undergoer voice verb.

Ross (2006) points out that among undergoer voice clauses, there is a need for a further distinction between the two-argument PV clause and the three-argument LV/CV clauses in Philippine-type languages. However, in Puyuma, LV and CV clauses may have two arguments, as in (5), (7), (8), (14) and (15), or three arguments, as in (6), (9) and (11).

The choice among the two-argument PV, LV, and CV is to a great extent related to the degree to which the participant is affected by the action denoted by the verb. For instance, the subject of verbs in a PV clause is generally permanently/severely affected by the action, whereas the subject of verbs in a LV clause is less affected, and the subject of verbs in a CV clause is the least affected. For example, *selap* ‘to sweep’ has both PV and LV forms, exemplified in (16) and (17). The subject *na tilril* ‘the book’ is swept away in (16), but is only swept on the surface in (17).

(16) *ku=selap-aw=la na tilril*
 1S.GEN=sweep-PV=PERF DF.NOM book
 ‘I’ve swept the books away.’

(17) *ku=selap-ay na tilril*
 1S.GEN=sweep-LV DF.NOM book
 ‘I swept (dust) off the book.’

The three-argument LV and CV clauses are applicative-like, as they promote an adjunct into undergoer position, which in Puyuma means subject position. The patient of LV or CV typically remains but is oblique. For instance, in a PV sentence like (18), *bira* ‘leaf’ is an instrumental adjunct, but in the CV sentence (19), it is promoted to the subject position and marked nominative. Similarly, in (20), *isaw* denotes the location and is an adjunct, and in (21) is promoted to the subject position.

(18) *ku=lriputr-aw na kuraw dra bira*
 1S.GEN=wrap-PV DF.NOM fish ID.OBL leaf
 ‘I wrapped the fish with leaves.’

(19) *ku=lriputr-anay dra kuraw na bira*
 1S.GEN=wrap-CV ID.OBL fish DF.NOM leaf
 ‘I wrapped fish with the leaves.’

(20) *ku=trakaw-aw na paisu kan isaw*
 1S.GEN=steal-PV DF.NOM money SG.OBL Isaw
 ‘I stole the money from Isaw.’

(21) *ku=trakaw-ay dra paisu i isaw*
 1S.GEN=steal-LV ID.OBL money SG.OBL Isaw
 ‘I stole money from Isaw.’

The patient, *kuraw* ‘fish’ and *paisu* ‘money’, is marked oblique in (19) and (21) respectively. However, this does not mean they have the same syntactic status as that of the oblique-marked adjuncts *bira* ‘leaf’ in (18) and *isaw* in (20). Oblique-marked patients are required by verbal valency, and their definiteness will affect the choice of subject. A comparison between oblique-marked patients (PL^{OBL}) and other adjuncts is made in §8.4.1.6.

6.3 Mood

Table 6.1 shows that there is a distinction between indicative and non-indicative mood in Puyuma. The indicative mood is used to affirm, deny, or inquire about a factual statement. On the other hand, non-indicative mood is used to make a command, a request, or a suggestion.

In §6.3.1, I first investigate the subcategories of indicative mood, and then in §6.3.2, several subcategories of non-indicative mood are explored.

6.3.1 Indicative category

The most important distinction within the indicative mood category is between realis and irrealis. We mentioned earlier that mood and aspect closely interact with subject choice (‘voice’) in many Formosan languages. Take the verb *trakaw* ‘steal’ as an instance:

		ITR (AV)	TR1 (PV)	TR2 (LV)	TR3 (CV)
Realis	Unmk	<i>trakaw</i>	<i>trakaw-aw</i>	<i>trakaw-ay</i>	<i>trakaw-anay</i>
	PROG	<i>tra-trakaw</i>	<i>tra-trakaw-aw</i>	<i>tra-trakaw-ay</i>	<i>tra-trakaw-anay</i>
	DUR	<i>tra-tra-trakaw</i>	<i>tra-tra-trakaw-aw</i>	<i>tra-tra-trakaw-ay</i>	<i>tra-tra-trakaw-anay</i>
Irrealis		<i>tra-trakaw</i>	<i>tra-trakaw-i</i>		<i>tra-trakaw-an</i>

As the above paradigm shows, a four-way distinction is made for events in the realis mood, but those in the irrealis mood exhibit only a three-way distinction.

Another difference between the two classes is in their forms. In realis mood the intransitive is marked by the infix **, but in the irrealis it is zero-marked.

An event in the realis mood must have happened or still be happening. Subcategories of morphological aspect are discussed in §6.4.1. An event in the irrealis mood is one that has not happened yet. Because of this, irrealis mood is most often used to convey a future implication. For instance:

(22) *tu=tra-trakaw-i idru na palridrin*
 3.GEN=RED-steal-TR2 that.NOM DF.NOM car
 ‘He will steal that car.’

(23) *tu=ba-bulu-an na barasa kana kali*
 3.GEN=RED-throw-TR3 DF.NOM stone DF.OBL river
 ‘He will throw the stone into the river.’

The irrealis mood in the examples above not only gives us the future implication; it also denotes intention and desire.

Irrealis mood can also have non-future reference. In the following two examples, it is used in counterfactual contexts:

- (24) *an me-na'u=ku kantaw adru i, adri=ku ra-rengay*
 when ITR-see=1S.NOM 3S.OBL then TOP NEG=1S.NOM RED-tell
 'If I had seen her at that time, I wouldn't have told him.'
- (25) *pana'an i, a-uka i tayhok i pilay adaman*
 true TOP RED-go LOC Taipei SG.NOM Pilay yesterday
 'Pilay should have gone to Taipei yesterday (but she didn't).'

6.3.2 Non-indicative mood

Two categories of non-indicative mood are distinguished: imperative and hortative. Imperatives are discussed in §12.2. Hortatives are usually associated with projective verb forms, and thus they are discussed together in §6.3.2.1. In addition to these two categories, I examine the usage of the special first person genitive pronoun *ti=* in §6.3.2.2 and the use of *paka-* in §6.3.2.3.

6.3.2.1 Hortative mood and the projective marker *-a*

Projective verb forms are derived by suffixing *-a* to an intransitive verbal stem. They have two basic functions. Firstly, they are used to express hortative mood, as in (26) and (27).

- (26) *mare-babulras-a=ta*
 RECIP-borrow-PJ=1P.ICL.NOM
 'Let's exchange!'
- (27) *trekelr-a=ta*
 <ITR>drink-PJ=1P.ICL.NOM
 'Let's drink!'

Secondly, verbs following motion verbs in SVCs (§13.4.4.2), such as 'come' and 'go' also take this verb form, as in the following sentences:

- (28) *drua-drua me-na'u-a a trau*
 RED-come ITR-see-PJ ID.NOM person
 'Many people came to see.'
- (29) *ala m-uka kurapet-a nadru na samaya na drekal*
 maybe ITR-go unite-PJ those.NOM DF.NOM some DF.NOM village
 'Maybe this portion of the villages went and united together.'

6.3.2.2 The pronominal clitic *ti=*

In addition to the basic genitive pronominal proclitics (§4.5.1.1), there is one more genitive enclitic, *ti=*, which is used to code desiderative mood. It is only used for those events where the agent is first person singular.

- (30) *ti=pa-karun-ay i baeli i nanshio*
 1S.GEN=CAUS-work-TR2 SG.NOM my.older.sibling SG.NOM Nanshio
 'I (want to/will) ask my older brother Nanshio to work.'

- (31) *ti=kilengetr-aw=driya ka*
 1S.GEN=confirm-TR1=IMPF <ITR>say
 ‘He said, “I want to confirm it”.’

From the above examples we see that *ti=* denotes a strong sense of volition. It is procliticised to a realis verb form even though the meaning is clearly irrealis. Another peculiar feature of *ti=* is that when it does cooccur with an irrealis verb form, most informants do not accept the verb with any transitive marker, which means it violates our generalisation that transitive verbs are always marked by one of the transitive suffixes. For example:

- (32) *an pameli=yu m-asal i, ti=ka-dra-dreki=yu*
 if wrong=2S.NOM ITR-again TOP 1S.GEN=*ka*-RED-scold=2S.NOM
 ‘If you do it wrong again, I will scold you.’
- (33) *adri ti=ta-tengedr=yu dranu b<in>a-betra’-an*
 NEG 1S.GEN=RED-punish=2S.NOM ID.OBL/2S.PSR <PERF>RED-fake-NMZ
 ‘I won’t punish you for your lies.’

For some informants, the forms in (32) and (33) and the expected form *ti=ka-dra-dreki-i=yu* and *ti=ta-tengedr-i=yu* are both acceptable, but they cannot identify any difference between them. More research is needed to pin down the function and meaning of *ti=* more exactly.

6.3.2.3 *paka*-³

The prefix *paka-* attaches to dynamic verbs, and only appears in the negative construction, indicating that the actor has a strong intention to do something but is unable to accomplish the action. For example:

- (34) *adri=la paka-lrelrep idru na ma’idrang*
 NEG=PERF MOOD-chase that.NOM DF.NOM old
 ‘The old person wanted to chase (them), but was not able to.’
- (35) *adri paka-tenges dra kawi*
 NEG MOOD-bind ID.OBL timber
 ‘He wanted but was unable to bind the timber.’

6.4 Aspect

Aspect may be signalled by aspectual clitics or by verbal morphology in Puyuma. There are three aspectual clitics, =*la* (marking perfective), =*driya* (marking imperfective), and =*dar* (marking frequentative). With regard to verbal morphology, indicative verb forms consisting only of the verbal stem plus a subject-choice affix (-*M*- intransitive, suffixes marking transitive verbs) are unmarked for aspect. On the other hand, indicative forms in Table 6.1 which have *Ca-* reduplication (§3.4.2) or *a-* affixation (§3.4.2.3 and §6.5) are typically used to indicate progressive aspect. Verb forms with serial reduplication (*Ca-Ca-*

3 In §9.2.1, a form *paka-* is analysed as a bimorphemic element *pa-ka-* used in causative construction. The affix *paka-* discussed here is distinct from but homophonous with the causative marker.

5 The word *kurenang* has the same form *kuarenang* for irrealis and progressive. In this sentence, we can tell it is irrealis from the appearance of *aru* ‘will’.

reduplication, §3.4.6.1) are typically used to express durative aspect. A voice-marked stem with *Ca-* reduplication is referred to as the progressive form, and a voice-marked stem with serial reduplication is referred to as the durative form, each according to its typical use for dynamic verbs.

6.4.1 Morphological aspect

The following table gives a paradigm of the realis forms of the verb *trakaw* ‘to steal’.

		ITR (AV)	TR1 (PV)	TR2 (LV)	TR3 (CV)
Realis	Unmarked	<i>trakaw</i>	<i>trakaw-aw</i>	<i>trakaw-ay</i>	<i>trakaw-anay</i>
	PROG	<i>tra-trakaw</i>	<i>tra-trakaw-aw</i>	<i>tra-trakaw-ay</i>	<i>tra-trakaw-anay</i>
	DUR	<i>tra-tra-trakaw</i>	<i>tra-tra-trakaw-aw</i>	<i>tra-tra-trakaw-ay</i>	<i>tra-tra-trakaw-anay</i>

6.4.1.1 Unmarked forms

Verbs unmarked for aspect are formed with a verbal stem plus a subject-choice affix. In clauses with an atelic verb, the unmarked form can have two temporal readings in the absence of an aspectual marker or temporal adjunct. For example, (36) and (37) can be interpreted as present or past.

- (36) *ma-kiteng i pilay*
 ITR-small SG.NOM Pilay
 ‘Pilay is/was small.’

- (37) *ma-tengadraw i nanali*
 ITR-sit SG.NOM my.mother
 ‘My mother is/was seated.’

Ambiguity seldom occurs, because we usually get the appropriate reading from either the context or from a temporal adjunct or an aspectual marker. However, when an event is designated by a telic verb, and there is no temporal adjunct or aspectual marker, it must be interpreted as past. For instance:

- (38) *me-na’u dra unan i uma’*
 ITR-see ID.OBL snake LOC farm
 ‘He saw a snake on the farm.’

- (39) *tu=adras-aw tu=d<in>adukur dra trau*
 3.GEN=lift-TR1 3.PSR=<PERF>pound ID.OBL person
 ‘He lifted (the rice cake) that others pounded.’

6.4.1.2 Verb forms typically used in progressive aspect

Verb forms in this category are formed by a verbal stem carrying a subject-choice affix plus *Ca-* reduplication (or *a-* affixation). This construction typically marks progressive aspect in the usual sense, as in (40) to (42).

- (40) *sa-senay i walegan*
 <ITR>RED-sing SG.NOM Walegan
 ‘Walegan is/was singing.’
- (41) *tu=la-laudr-aw na tilril kandriu kana walak*
 3.GEN=RED-float-TR1 DF.NOM book there DF.OBL child
 ‘The children are/were floating the books there.’
- (42) *m-u-a-ruma’=mi i, ...*
 ITR-go-a-home=1P.NOM TOP
 ‘When we were going home, ...’

Stative verbs in progressive forms are used to indicate change of state. Compare (43) with (44) and (45) with (46).

- (43) *aremeng=la*
 dark=PERF
 ‘It’s dark already.’
- (44) *a<ra>remeng=la*
 <RED>dark=PERF
 ‘It’s getting dark already.’
- (45) *kadru=mi i balrangaw*
 there=1P.ECL.NOM LOC Taitung
 ‘We live in Taitung.’ (Taitung is our permanent residence.)
- (46) *k<a>adru=mi i balrangaw*
 <a>live=1P.ECL.NOM LOC Taitung
 ‘We are living in Taitung (for the time being).’

Sentence (43) simply indicates the state of being dark, but when the same verb is in the progressive form, it implies a change of state, as in (44). Likewise, sentence (45) describes a stative and permanent fact, and sentence (46) implies that the state may be subject to change.

Verbs in progressive form can also be used to express habitual meaning, as illustrated by the different possible readings in (47) and (48).

- (47) *p<en>u<a>kpuk dra walak*
 <ITR><a>beat ID.OBL child
 ‘He is/was beating a child.’
 ‘He has the habit of beating children.’
- (48) *m-a-ekan dra kuraw*
 ITR-RED-eat ID.OBL fish
 ‘He is/was eating fish.’
 ‘He has the habit of eating fish.’

To get an appropriate reading, we have to rely on the context of utterance. In addition, the habitual sense can be realised by time adjuncts, such as ‘every day’ or by the verb *marayas* ‘often’. In this case, the morphological marking is optional. For example:

- (49) *me-nga-ngara=ku kanku walak kana wa-wari-wari*
 ITR-RED-wait=1S.NOM DF.OBL/1S.PSR child DF.OBL RED-RED-day
 ‘I wait/waited for my child every day.’
- (50) *me-ngara=ku kanku walak kana wa-wari-wari*
 ITR-wait=1S.NOM DF.OBL/1S.PSR child DF.OBL RED-RED-day
 ‘I wait/waited for my child every day.’

6.4.1.3 Verb forms typically used in durative aspect

Verb forms in this category are formed by a stem undergoing serial reduplication (§3.4.6), e.g. *sa-sa-senay* < *senay* ‘sing’. This construction typically encodes a process continuing for an appreciable time.

- (51) *tra-tra-trekelr=ku dra eraw*
 <ITR>RED-RED-drink=1S.NOM ID.OBL wine
 ‘I have been drinking wine (for a long time).’
- (52) *me-ra-ra-retra’=ku dra tilril*
 ITR-RED-RED-put.down=1S.NOM ID.OBL book
 ‘I have been putting books in order (for a long time).’

With events expressing actions that are difficult to extend for a long time, it is infelicitous to use a durative form, as in (53) and (54).

- (53) **tra-tra-trekelr=ku dra puatremel*
 <ITR>RED-RED-drink=1S.NOM ID.OBL medicine
 ‘I have been keeping on taking medicine.’
- (54) **me-ra-ra-retra’=ku dra kiakarunan*
 ITR-RED-RED-put.down=1S.NOM ID.OBL job
 ‘I have been keeping on taking breaks (lit. putting down jobs).’

Stative verbs can appear in the durative form with the meaning ‘getting X-er and X-er’.

- (55) *me-ra-ra-retra’ tu=dradrek*
 ITR-RED-RED-put.down 3.PSR=body
 ‘His health is getting worse and worse.’

6.4.2 Aspectual notions expressed by clitics

The morphological status and lexical category of the aspectual markers =*la*, =*driya*, and =*dar* are described in §3.3.3 and §4.5.8. This section is concerned mainly with their aspect-marking functions.

6.4.2.1 =*la*

The enclitic =*la* usually appears after the predicate or the negator (if there is one) and typically marks perfective aspect, as shown in (56) and (57).

(56) *nu=selap-ay=la na ki<a>edreng-an?*
 2S.GEN=sweep-TR2=PERF DF.NOM get<a>bed-NMZ
 ‘Have you swept the room?’

(57) *m-uberek=la na trau*
 ITR-return=PERF DF.NOM person
 ‘The person has returned.’

In the sentences above, the perfective meaning comes from the marker =*la*, and according to the informant, =*la* occurs obligatorily if there is a perfective indication. However, =*la* is not restricted to occurring with telic verbs.

The appearance of =*la* does not always indicate the termination of an action. When =*la* follows an atelic or stative verb, it denotes a change of state, meaning ‘become X’, where ‘X’ refers to the stative meaning the verb denotes. For instance, compare the following two sentences:

(58) *bulray na ruma’*
 beautiful DF.NOM house
 ‘The house is clean.’

(59) *bulray=la na ruma’*
 beautiful=PERF DF.NOM house
 ‘The house has become clean.’

Furthermore, =*la* can also appear in irrealis clauses (60), in clauses with progressive (61) or durative (62) verb forms, or in imperative clauses (63).

(60) *aru ku<a>renang=mi=la⁵ dra trau*
 will <a>follow=1P.ECL.NOM=PERF ID.OBL person
 ‘We will (be able to) catch up with others.’

(61) *an m-a-ekan=la nadru na sariapan i,*
 when ITR<RED>eat=PERF those.NOM DF.NOM colleague TOP
tu=kasu-aw tu=padrekan
 3.GEN=take-TR1 3.PSR=basket
 ‘When those colleagues were eating, she took her basket with her.’

(62) *an ki<lenga>lengaw=ta=la kana temararamaw ...*
 when <RED>listen=1P.NOM=PERF DF.OBL shaman
 ‘When we were listening to the shamans ...’

(63) *an tu=pa-trekelr-ay=mu draku la’ub*
 when 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL/1S.PSR ladle
i, trekelr=la
 TOP drink=PERF
 ‘If she makes you drink water with my ladle, drink it.’

The enclitic =*la* can also appear after nominal predicates, as in (64).

(64) *a bulrabulrayan=la na walak*
 ID.NOM lady=PERF DF.NOM child
 ‘The child became a lady.’

6.4.2.2 =*driya*

Like =*la* the clitic =*driya*, glossed ‘imperfective’, usually appears after the negator (if there is one) or the predicate, and its uses make it comparable to English ‘still’. However, most of these uses are associated with events that are not affirmative realis. In the corpus it occurs most often in a negative construction, indicating that the event has not yet occurred. For example:

- (65) *an adri=driya ma-ladram i, sagar m-ekan drata*
 when NEG=IMPF ITR-know TOP like ITR-eat ID.OBL/1P.PSR
b<in>eray dra akan-an i, m-ekan
 <PERF>give ID.OBL eat-NMZ TOP ITR-eat
 ‘When they still hadn’t realised, and because they liked to eat what we gave them to eat, they ate.’

In addition to ‘not yet’, this combination, *adri* plus =*driya*, can also express the meaning ‘never’, but in this case the stress of the main verb will shift from the last syllable to the penult. Compare the following two sentences. In (66) this construction expresses the meaning of ‘not yet’, but in (67) the meaning of ‘never’.

- (66) *adri=ku=driya talám m-u-isatr dra sasudang*
 NEG=1S.NOM=IMPF <ITR>try ITR-go-up ID.OBL boat
 ‘I have not got on a boat.’
- (67) *adri=ku=driya tálam m-u-isatr dra sasudang*
 ‘I’ve never got on a boat.’

The clitic =*driya* also often appears after a projective verb form, as in (68). In (69), =*driya* occurs in an imperative clause. In these two sentences, =*driya* adds a politer flavour to the requests (§12.2.2).

- (68) *ka-a=ku=driya pa-ka-ladram kanmu*
 <ITR>say-PJ=1S.NOM=IMPF CAUS-ka-know 2S.OBL
 ‘Let me say (this) to inform you.’
- (69) *beray-i=driya dranu ni-ranger-an idru*
 give-TR2=IMPF ID.OBL/2S.PSR PERF-thought-NMZ that.NOM
na kur-dikes kandri kana ki-a-karun-an
 DF.NOM be.together-hold this.OBL DF.OBL get-a-work-NMZ
 ‘Give your thought to that person who is responsible for this business.’

The clitic =*driya* can also appear in an irrealis clause (70). It indicates the action has not yet happened but will happen soon.

- (70) *aru p-u-a-isatr=driya kadri i sanasan i, ...*
 will CAUS-go-a-up=IMPF here LOC Sanansan TOP
 ‘When they were about to land on Sanansan, ...’

When =*driya* occurs after a progressive (71) or durative (72) verb form, the clause is often an adverbial clause (Chapter 15) which is manifested as a topic, and provides a temporal frame or a condition for the event in the main clause to take place.

- (71) *an pa<ra>ragan=ta=driya i, ...*
 when <RED>build=1P.NOM=IMPF TOP
 ‘When we are still building (a youth house), ...’
- (72) *an m-u-ami-ami=mi=driya i, kadru i danawlrenges*
 when ITR-go-RED-north=1P.NOM=IMPF TOP there SG.NOM Danawlrenges
 ‘Whenever we go north, Danawlrenges is there.’

The clitic =*driya* can also follow a predicate nominal phrase to indicate that the status is persistent. For example:

- (73) *a lalak=mi=driya*
 ID.NOM child=1P.ECL.NOM=IMPF
 ‘We were still children.’

Finally, =*driya* cooccurs with *asua* ‘when’ to form a fixed expression meaning ‘a long time ago’, which is frequently used as an opening in story-telling. For example:

- (74) *asua=driyan⁶ i, uliya kadru a malru-wadi*
 when=IMPF TOP exist there ID.NOM RECIP-younger.sibling
 ‘A long time ago, there were two brothers.’

6.4.2.3 =*dar*

The third aspectual clitic, =*dar*, glossed ‘frequentative’, mostly occurs after the predicate and is used to portray events repeated on different occasions. There are not many examples in the corpus. In (75) =*dar* occurs in a realis clause unmarked for aspect; in (76) it appears after a progressive verb form.

- (75) *drua=dar i takesi-an m-aya-a kanku*
 come=FREQ LOC study-NMZ ITR-find-PJ 1S.OBL
 ‘It (the dog) often came to the school to find me.’
- (76) *m-u-a-sabak=dar a ma’inayan*
 ITR-go-a-inside=FREQ ID.NOM male
 ‘A man often came in.’

6.5 Morphological classes of intransitive verbs

Transitive verb formation is regular across all morphological classes (cf. Table 6.1): one of the transitive/affixes is attached to the verb form used in the imperative construction.

Intransitive verbs are subclassified into seven categories on the basis of the morphological processes they undergo. Examples are shown in the seven tables below. *Ca*-reduplication and its allomorph *a*- behave to a great extent predictably in all seven classes. The category durative is not presented in the tables as it is predictable from the progressive category. If a given verb undergoes *Ca*-reduplication for expressing progressive, then applying *Ca*-reduplication twice is used in the durative; if a verb is affixed with *a*- in the progressive category, then it is doubled in the durative.

6 The marker =*driyan* is an allomorph of =*driya*. The allomorphic distribution needs further research.

6.5.1 Intransitive verbs with and its allomorphs in the realis

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>kasu</i> 'bring' <i>drimutr</i> 'catch'	<i>kasu</i> <i>drimutr</i>	<i>ka-kasu</i> <i>dra-drimutr</i>	<i>ka-kasu</i> <i>dra-drimutr</i>	<i>kasu</i> <i>drimutr</i>
<i>bu'utr</i> 'stop' <i>pilang</i> 'bring'	<i>b<en>u'utr</i> <i>p<en>ilang</i>	<i>b<en>a-bu'utr</i> <i>p<en>a-pilang</i>	<i>ba-bu'utr</i> <i>pa-pilang</i>	<i>bu'utr</i> <i>pilang</i>
<i>reput</i> 'cut' <i>na'u</i> 'see'	<i>me-reput</i> <i>me-na'u</i>	<i>me-ra-reput</i> <i>me-na-na'u</i>	<i>ra-reput</i> <i>na-na'u</i>	<i>reput</i> <i>na'u</i>
<i>alrak</i> 'take'	<i>m-alrak</i>	<i>m-a-alrak</i>	<i>a-alrak</i>	<i>alrak</i>
<i>u-sabak</i> 'get in' <i>u-ngesal</i> 'start'	<i>m-u-sabak</i> <i>m-u-ngesal</i>	<i>m-u-a-sabak</i> <i>m-u-a-ngesal</i>	<i>u-a-sabak</i> <i>u-a-ngesal</i>	<i>u-sabak</i> <i>u-ngesal</i>

The distribution of and its allomorphs is phonologically determined (§2.6.1.) as can be observed from the five subclasses of verbs shown in the table above. Notice that the stems of the last two verbs in the table consist of two morphemes: *u-* 'go' and a location noun (*sabak* 'inside', *ngesal* 'starting point'); morphologically they resemble those stems beginning with vowels like *alrak*, but *a-* is inserted after *u-*.

6.5.2 Intransitive verbs with no affix other than *Ca-* reduplication

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>beray</i> 'give' <i>pulang</i> 'help' <i>kurenang</i> 'follow'	<i>beray</i> <i>pulang</i> <i>kurenang</i>	<i>ba-beray</i> <i>pa-pulang</i> <i>ku<a>renang</i>	<i>ba-beray</i> <i>pa-pulang</i> <i>ku<a>renang</i>	<i>beray</i> <i>pulang</i> <i>kurenang</i>

6.5.3 Intransitive verbs with realis *ma-*

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>rengay</i> 'tell' <i>re'ani</i> 'harvest'	<i>ma-rengay</i> <i>ma-re'ani</i>	<i>ma-ra-rengay</i> <i>ma-re<'a>'ani</i>	<i>ra-rengay</i> <i>re<'a>'ani</i>	<i>rengay</i> <i>re'ani</i>

6.5.4 Intransitive verbs with no realis affix and irrealis/imperative *ka-*

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>saeru</i> 'laugh' <i>aremeng</i> 'dark' <i>inaba</i> 'good'	<i>saeru</i> <i>aremeng</i> <i>inaba</i>	<i>sa<a>eru</i> <i>a<ra>remeng</i> <i>i<na>naba</i>	<i>ka-sa<a>eru</i> <i>k-a<ra>remeng</i> <i>ka-i<na>naba</i>	<i>ka-saeru</i> <i>k-aremeng</i> <i>ka-inaba</i>

The function of *ka-* is discussed in §6.6.

6.5.5 Intransitive verbs with realis *ma-* and irrealis/imperative *ka-*

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>-dreki</i> ‘scold’	<i>ma-dreki</i>	<i>ma-dra-dreki</i>	<i>ka-dra-dreki</i>	<i>ka-dreki</i>
<i>-trangis</i> ‘cry’	<i>ma-trangis</i>	<i>ma-tra-trangis</i>	<i>ka-tra-trangis</i>	<i>ka-trangis</i>
<i>-ruwa</i> ‘can’	<i>ma-ruwa</i>	<i>ma-ra-ruwa</i>	<i>ka-ra-ruwa</i>	<i>ka-ruwa</i>

This class of verbs consists of those that have bound roots (§3.2.2).

6.5.6 Denominal intransitive verbs taking realis *mi-* and irrealis/imperative *pi-*

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>walak</i> ‘child’ <i>mi-walak</i> ‘have children’	<i>mi-walak</i>	<i>mi-a-walak</i>	<i>pi-a-walak</i>	<i>pi-walak</i>
<i>kiping</i> ‘clothes’ <i>mi-kiping</i> ‘wear clothes’	<i>mi-kiping</i>	<i>mi-a-kiping</i>	<i>pi-a-kiping</i>	<i>pi-kiping</i>

This class of verbs shows an alternation between *mi-* and *pi-*, and takes *a-* rather than *Ca-* reduplication.

6.5.7 Intransitive verbs derived with *ki-*

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>lengaw</i> ‘sound’ <i>ki-lengaw</i> ‘listen’	<i>ki-lengaw</i>	<i>ki-a-lengaw</i>	<i>ki-a-lengaw</i>	<i>ki-lengaw</i>
<i>umal</i> ‘question’ <i>ki-umal</i> ‘ask’	<i>ki-umal</i>	<i>ki-a-umal</i>	<i>ki-a-umal</i>	<i>ki-umal</i>
<i>beray</i> ‘give’ <i>ki-beray</i> ‘beg’	<i>ki-beray</i>	<i>ki-a-beray</i>	<i>ki-a-beray</i>	<i>ki-beray</i>
<i>tulrudr</i> ‘pass’ <i>ki-tulrudr</i> ‘receive’	<i>ki-tulrudr</i>	<i>ki-a-tulrudr</i>	<i>ki-a-tulrudr</i>	<i>ki-tulrudr</i>

This category of verbs has two subdivisions: denominal and deverbal. The two subcategories have different syntactic features, discussed in §9.6.

6.5.8 Summary of morphological classes of intransitive verbs

Table 6.2 is a summary of the seven morphological classes of intransitive verbs.

Table 6.2: Morphological classes of intransitive verbs

Stem	Realis		Irrealis	Imperative
	Unmarked	Progressive		
<i>kasu</i> ‘bring’	<i>kasu</i>	<i>ka-kasu</i>	<i>ka-kasu</i>	<i>kasu</i>
<i>beray</i> ‘give’	<i>beray</i>	<i>ba-beray</i>	<i>ba-beray</i>	<i>beray</i>
<i>rengay</i> ‘tell’	<i>ma-rengay</i>	<i>ma-ra-rengay</i>	<i>ra-rengay</i>	<i>rengay</i>
<i>aremeng</i> ‘dark’	<i>aremeng</i>	<i>a<ra>remeng</i>	<i>k-a<ra>remeng</i>	<i>k-aremeng</i>
<i>-dreki</i> ‘scold’	<i>ma-dreki</i>	<i>ma-dra-dreki</i>	<i>ka-dra-dreki</i>	<i>ka-dreki</i>
<i>kiping</i> ‘clothes’	<i>mi-kiping</i>	<i>mi-a-kiping</i>	<i>pi-a-kiping</i>	<i>pi-kiping</i>
<i>mi-kiping</i> ‘wear clothes’				
<i>lengaw</i> ‘sound’	<i>ki-lengaw</i>	<i>ki-a-lengaw</i>	<i>ki-a-lengaw</i>	<i>ki-lengaw</i>
<i>ki-lengaw</i> ‘listen’				

6.6 A note on *ka-*⁷

The uses of the prefix *ka-* have attracted the attention of linguists studying Formosan languages. A summary of the earlier analyses⁸ of this prefix is given in Zeitoun and Huang (2000:393). Zeitoun and Huang (2000) and Zeitoun (2000) argue that in Rukai and other Formosan languages the prefix *ka-* indicates stativity. They demonstrate that dynamic and stative verbs exhibit different morphological alternations and that *ka-* is the non-realis counterpart of realis stative *ma-* and \emptyset . They claim that ‘both *ma-* and *ka-* are stem-forming affixes that appear on stative verbs: *ka-* occurs exclusively in nonfinite verb stems, *ma-* (and $\sim\emptyset$) in finite verb stems.’

In Puyuma, the occurrence of *ka-* seems not to be as predictable as in Zeitoun and Huang’s data. As they have demonstrated, *ka-* appears only in imperative, causative, reciprocal, irrealis, and transitive constructions. The complication in Puyuma lies in two facts. First, dynamic and stative verbs do not always differ in their morphological alternations, and second, verbs that have *ma-* derivation in intransitive forms can be subcategorised into two groups, and only one of them follows the patterns demonstrated in Zeitoun and Huang (2000).

To begin with, contrary to Zeitoun and Huang’s claim that *ka-* is used to mark stativity in nonfinite constructions, in Puyuma it is not unusual for *ka-* to cooccur with verbs that are semantically dynamic. These verbs either have *ma-* or zero in the realis intransitive form. For instance:

- (77) a. *ka-dra-dratikul*
ka-RED-fight
‘They might fight.’
- b. *ma-dratikul*
ITR-fight
‘They fought.’

7 Blust (2003b) suggests that there are several **ka-* prefixes in PAN and PMP, which mark an inchoative verb/adjective, a stative in negative constructions, past time, accompanied action, abstract nouns of quality, the manner in which an action is carried out, and past participle/achieved state.

8 The prefix *ka-* is treated as inchoative by Li (1973), Starosta (1974), Ferrell (1982), and Yeh (2000b), and is analysed as an ‘activising’ prefix by Chang and Tsao (1995).

- (78) a. *tu=ka-saeru-ay=ku*
3.GEN=*ka*-laugh-TR2=1S.NOM
'He laughed at me.'
- b. *saeru*
laugh
'He laughed.'
- (79) a. *adri ka-dra-dreki-i=ku*
NEG *ka*-RED-scold-TR2=1S.NOM
'Don't scold me.'
- b. *ma-dra-dreki*
ITR-RED-scold
'He's scolding.'

Semantically speaking, the above verbs *-dratikul* 'fight', *-dreki* 'scold' and *saeru* 'laugh' are dynamic, but they have the morphological patterns that are expected (on Zeitoun and Huang's observations of other Formosan languages) on more stative verbs like *-'itrilr* 'stingy' and *-biring* 'jealous' in the following examples.

- (80) *salraw ma-'itrilr*
very ITR-stingy
'They are very stingy.'
- (81) *tu=ka-'itrilr-aw i tayban*
3.GEN=*ka*-stingy-TR1 SG.NOM Tayban
'They were mean to Tayban.'
- (82) *ma-biring*
ITR-jealous
'He is jealous.'
- (83) *tu=ka-biring-aw=ku*
3GEN=*ka*-jealous-TR1=1S.NOM
'He is jealous of me.'

On the other hand, some semantically more stative verbs pattern morphologically like dynamic verbs. For example, some semantically stative verbs, such as *litek* 'cold' and *dalrekeng* 'wet', are not marked by *ka-* in constructions where we might expect it to occur. For instance:

- (84) *litek=la na irupan*
cold=PERF DF.NOM dish
'The dish has become cool.'
- (85) *litek-u na irupan*
cold-TR1 DF.NOM dish
'Cool down the dish.'
- (86) *dalrekeng ku=kiruan*
wet 1S.PSR=clothes
'My clothes are wet.'
- (87) *adri ku=dalrekeng-i nu=kiruan*
NEG 1S.GEN=wet-TR2 2S.PSR=clothes
'I didn't wet your clothes.'

Furthermore, with some verbs, *ka-* is used in certain constructions but is missing in some situations when we expect it to appear. For example, we expect the verb *riksis* 'dirty' to be a stative verb, and thus to be prefixed by *ka-* in constructions such as causatives, transitives or

reciprocals. However, as shown below, *ka-* is used in imperative transitives but not in declarative transitives.⁹

- (88) *riksis na ruma'*
dirty DF.NOM house
'The house is dirty.'
- (89) *adri ka-riksis-i*
NEG ka-dirty-TR2
'Don't make it dirty.'
- (90) *adri ku=riksis-i na ruma'*
NEG 1S.GEN=dirty-TR2 DF.NOM house
'I didn't make the house dirty.'

Another fact that causes difficulty in predicting the occurrence of *ka-* is that the stems prefixed with the intransitive stative *ma-* or zero can be subcategorised into two groups which cut across the categories in §6.5.4 and §6.5.5. In the first group, each stem has only one intransitive form (monovalent), as in §6.5.4 and §6.5.5. In the second group, each stem can form two intransitives, one with *ma-* or zero as in §6.5.4 and §6.5.5, which is monovalent, and the other with an allomorph of <*em*>, which is bivalent, thus patterning with the verbs in §6.5.1.

Stems in the first group are prefixed with *ka-* in forms other than the realis intransitive. For example:

Stem	Realis	Irrealis/Imperative
<i>-remeng</i> 'silent'	<i>ma-remeng</i>	<i>ka-ra-remeng/ka-remeng</i>
<i>-sepel</i> 'upset'	<i>ma-sepel</i>	<i>ka-sa-sepel/ka-sepel</i>
<i>-keser</i> 'strong'	<i>ma-keser</i>	<i>ka-ka-keser/ka-keser</i>
<i>bulray</i> 'beautiful'	<i>bulray</i>	<i>ka-ba-bu;ray/ka-bulray</i>
<i>sadru</i> 'many'	<i>sadru</i>	<i>ka-sa-sadru/ka-sadru</i>
<i>sabelraw</i> 'hungry'	<i>sabelraw</i>	<i>ka-sa<ba>belraw/ka-sabelraw</i>

(91) *ka-remeng*
ka-silent
'Keep quiet!' (Intransitive imperative)

(92) *ka-sadru-i nu=ni-anger-an*
ka-many-TR2:IMP 2S.PSR=PERF-thought-NMZ
'Put more expressions.' (Transitive imperative)

(93) *pa-ka-sa-sadru tu=ulrep-an drananiem trau i sabak*
CAUS-ka-RED-many 3.PSR=tired-NMZ ID.OBL/1P.PSR person LOC inside
'It added more hardship to our family.' (Causative)

9 An examiner suggested that a potentive category (cf. Himmelmann 2004, 2006) could explain the irregular occurrence of *ka-*, but what happens in Puyuma is not similar to Tagalog. In Tagalog potentive verbs have a full paradigm of derivations (AV, PV, LV, CV, perfective/non-realis), but in Puyuma *ka-* never occurs in a realis actor voice construction. However I do not exclude the possibility that what is fully developed as a potentive in Tagalog is partially developed in Puyuma. More research is needed on this issue.

- (94) *ka-sa<ba>belraw=yu*
ka-<RED>hungry=2S.NOM
 ‘You might be hungry.’ (Irrealis)
- (95) *ka-sa-sepel i tinataw*
ka-RED-upset SG.NOM his.mother
 ‘His mother will be upset.’ (Irrealis)

In the second group, two different intransitive verbs are derived. A list of some examples is given below:

Stem	Monovalent	Bivalent
<i>ba’aw</i>	<i>ba’aw</i> ‘alive’	<i>b<en>a’aw</i> ‘save’
<i>bias</i>	<i>bias</i> ‘hot’	<i>b<en>ias</i> ‘make hot’
<i>deru</i>	<i>ma-deru</i> ‘cooked’	<i>deru</i> ‘cook’
<i>sede’</i>	<i>ma-sede’</i> ‘absent’	<i>sede’</i> ‘resign’
<i>bu’utr</i>	<i>ma-bu’utr</i> ‘extinguished’	<i>b<en>u’utr</i> ‘stop’
<i>ba’itr</i>	<i>ma-ba’itr</i> ‘burned’	<i>b<en>a’itr</i> ‘burn’
<i>bikbik</i>	<i>ma-bikbik</i> ‘float’	<i>b<en>ikbik</i> ‘wave’
<i>binga’</i>	<i>ma-binga’</i> ‘troublesome’	<i>b<en>inga’</i> ‘bother’

Stems in this category are not prefixed with *ka-* in transitive forms. For example, for the stem *sede’* ‘absent, resign’, there are no such forms as **ka-sede’-aw* or **ka-sede’-ay*, but only *sede’-aw* or *sede’-ay*. However, *ka-* appears in reciprocal and causative forms. For example:

- (96) *mar-ka-ba’itr a ruma’ a sadru*
 RECIP-*ka*-burn ID.NOM house ID.NOM many
 ‘It (the fire) burned many houses.’
- (97) *pa-ka-binga’=ta dra trau*
 CAUS-*ka*-trouble=1P.NOM ID.OBL person
 ‘We caused others trouble.’

Descriptions of the roles of *ka-* in a causative construction and in a reciprocal construction are given in §9.2.1.1 and §9.3.3 respectively.

7 *Transcategorial operations*

7.1 Introduction

This chapter discusses morphological operations that change the grammatical category of a word. In Chapter 4, we saw that Puyuma open word classes consist of nouns and verbs, and §4.3 discussed the distinction between nouns and verbs at two different levels: root level and word level. A nominal word may be derived from a nominal or a verbal root, and so may a verbal word. The morphological operations discussed in this chapter can be demonstrated by the following figure: any arrow that connects a noun at a higher level with a verb at a lower level describes a verbalising process; any arrow that connects a verb at a higher level with a noun at a lower level describes a nominalising process.

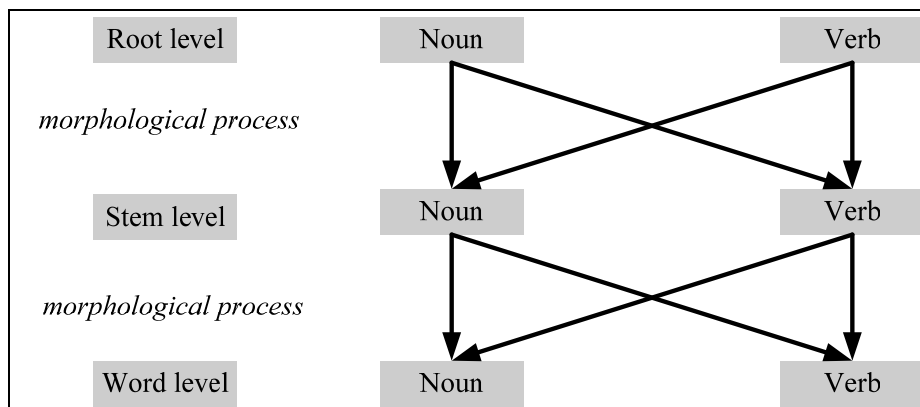


Figure 7.1: Transcategorial operations

The following example demonstrates the formation process of the word *pinungalrad*. In this case, there are two derivational steps: first a noun is converted to a verb, then the verb is converted to a noun.

- (1) *nantu* *p<in>u-atel-an* *kana* *tangtang* *i*,
 DF.NOM/3.PSR <PERF>CAUS-fall-NMZ DF.OBL lime TOP
- tu=p<in>u-ngalrad* *dra* *matang*
 3.PSR=<PERF>CAUS-name ID.OBL Matang
 ‘(The place) where the lime was dropped, is called Matang.’

Root	Stem	Word
<i>ngalrad</i> (N) 'name'	→ <i>pu-ngalrad</i> (V) 'to give a name'	→ <i>p<in>u-ngalrad</i> (N) 'the name given'

Note that there may be more than one intermediate or stem level between the root level and the word level. For example:

Root	Stem	Stem	Stem	Word
<i>isatr</i> (N) 'up'	→ <i>k-isatr-an</i> ¹ (N) 'place above'	→ <i>u-kisatran</i> (V) 'go on top of'	→ <i>p-ukisatran</i> (V) 'lift up'	→ <i>p<in>ukisatran</i> (N) 'things being lifted up'

Verbalising formatives differ from nominalising formatives in several respects: first, verbalising formatives outnumber nominalising formatives; second, while there is usually one-to-one correspondence between form and function for verbalising formatives, the formatives used in nominalisation usually serve more than one function. For example, the verbaliser *mi-* in *mi-paisu* 'have money' or *mi-kiping* 'wear clothes' is only attached to nouns and indicates the possession of the element it attaches to, but the formative *Ca*-reduplication can function as a nominaliser in *ta-tilru* 'rope' or as a formative expressing irrealis 'will tie'.

The most common verbalising affixes will be described in §7.2, and nominalisation in §7.3.

7.2 Verbalisation

Verbalisation is an operation that makes a non-verbal element 'verb-like'. Payne (1997:94–95) points out that the most common type of verbalisation makes a possessive verb out of a noun. For example, the Puyuma prefix *mi-* attaches to a noun to derive a verb meaning 'to have N'. In the following examples the verbalising prefixes appear in the left column and examples of derived verbs on the right.

<i>ki-</i> 'to get'	<i>ki-'aputr</i> 'to pick flowers' <i>ki-kuraw</i> 'to fish'
<i>kur-</i> 'to expose to, be together'	<i>kur-kadaw</i> 'to bask in the sun' <i>kur-'udal</i> 'to get wet in the rain' <i>kur-padrek</i> 'to ride, to get on someone's back'
<i>mi-</i> 'to have; to wear'	<i>mi-kataguin</i> 'to have a spouse' <i>mi-kiping</i> 'to wear clothes'
<i>m-utu-</i> 'to become'	<i>mutu-drenan</i> 'to become a mountain' <i>mutu-yawan</i> 'to become a leader'
<i>ma-tara-</i> 'to bring; to carry' 'to cultivate'	<i>ma-tara-kamutr</i> 'to bring a knife' <i>ma-tara-uma</i> 'to farm'
<i>m-u-</i> 'to go'	<i>m-u-sabak</i> 'to go inside' <i>m-u-ami</i> 'to go north'

1 The circumfix *k--an* is an allomorph of *ki--an*, which attaches to a locative noun to derive a new locative noun.

<i>m-uri-</i> ‘to mix with’	<i>m-uri-’udal-an</i> ‘to be in the rain’
<i>pa-</i> ‘to cause to have’	<i>pa-susu</i> ‘to breast-feed’
	<i>pa-kadaw</i> ‘to bask in the sun’
<i>pia-</i> ‘to face’	<i>pia-lraudr</i> ‘to face to the east’
	<i>pia-timulr</i> ‘to face to the south’
<i>para-</i> ‘to be fond of’	<i>para-abay</i> ‘to be fond of rice cake’
	<i>para-babayan</i> ‘to be fond of women’
<i>tara-</i> ‘to speak a language’	<i>tara-puyuma</i> ‘to speak Puyuma’
	<i>tara-balaka</i> ‘to speak a foreign language’
<i>tua-</i> ‘to make’	<i>tua-abay</i> ‘to make rice cake’
	<i>tua-eraw</i> ‘to make wine’
<i>tinu-</i> ‘to imitate’	<i>tinu-yawan</i> ‘to imitate a chief’
	<i>tinu-ma’idrang</i> ‘to imitate an elder’

The derived verbs listed above are those used in intransitive clauses (§8.4.3 and §10.2.3). When such verbs are used in transitive clauses, a transitive marker is suffixed. For example:

- (2) *tara-payran=ku*
 <ITR>use-Taiwanese=1S.NOM
 ‘I speak Taiwanese.’
- (3) *tu=tara-payran-anay=ta* *tubang*
 3.GEN=use-Taiwanese-TR3=1P.NOM <ITR>answer
 ‘They answered us in Taiwanese.’
- (4) *adri m-utu-trau* *paseket*
 NEG ITR-become-person seriously
 ‘He has not become a man completely.’
- (5) *ta=p-utu-yawan-aw* *i* *lrugi*
 1P.GEN=CAUS-become-chief-TR1 SG.NOM Lrugi
 ‘We made Lrugi become the chief.’

7.3 Nominalisation

Nominalisation forms a nominal element from a non-nominal element. Recall that in §4.3.1.1 two syntactic tests were employed to determine whether a word is verbal or nominal, and the typical characteristics of nouns and verbs were identified. The two syntactic tests (negation and the cooccurrence of a possessive free pronoun) are essential in determining the status of <*in*>, which is both a verbal and a nominal perfective formative in many Philippine-type languages but which occurs exclusively in nominals in Puyuma, whilst maintaining its perfective function.

A distinction can be made between lexicalised nominalisations and gerundive nominalisations. The difference between these two processes is evident in that gerundive nominals are productive, may have an argument NP licensed by the valency of the stem, and

are negated like a verbal construction, whereas lexicalised nominalisations are not productive and are negated like a nominal construction.

In the following sections, the status of *<in>* as a nominal perfective marker is treated in §7.3.1. The major types of lexical nominalisation, based on the semantic relationship between the derived noun and the verbal event, are described in §7.3.2, followed by a summary of the major types in §7.3.3. §7.3.4 presents some less productive nominalising affixes, and finally §7.3.5 treats gerundive nominals.

7.3.1 The status of *<in>*

The morpheme *<in>* (or its allomorph *ni-*) is infix or prefixed to verbs to indicate perfective aspect in many Formosan languages. However, in Puyuma, although *<in>* still retains its function of marking perfective aspect, words formed with *<in>* are nominal; they never attract a subject pronoun like verbs do, and they can collocate with the free possessive pronouns like prototypical nouns. Sentences (6) and (7) show that, in a verbal construction, when the subject is not third person, a nominative enclitic pronoun is obligatorily attached to the verbal predicate. However, words infixed with *<in>* cannot take a nominative pronoun enclitic like verbs do, as shown in (8).

- (6) *trakaw=yu dra paisu*
 <ITR>steal=2S.NOM ID.OBL money
 ‘You stole money.’
- (7) *tu=trakaw-ay=yu dra paisu*
 3.GEN=steal-TR2=2S.NOM ID.OBL money
 ‘He stole money from you.’
- (8) a. **tr<in>akaw=yu dra paisu*
 <PERF>steal=2S.NOM ID.OBL money
- b. **tu=tr<in>akaw=yu*
 3.GEN=<PERF>steal=2S.NOM

On the other hand, while words infixed with *<in>* can be preceded by a clitic pronoun (9), or a free pronoun (10) like nouns can (11), verbs are never preceded by free pronouns (12).

- (9) *ku=tr<in>ima na tilril*
 1S.PSR=<PERF>buy DF.NOM book
 ‘The book is my buying.’ (= ‘This is the book I bought.’)
- (10) *nanku tr<in>ima na tilril*
 NOM/1S.PSR <PERF>buy DF.NOM book
 ‘The book is my buying.’
- (11) *nanku tilril*
 ‘my book’
- (12) a. **nanku trima dra tilril*
 NOM/1S.PSR <ITR>buy ID.OBL book
- b. **nanku trakaw-ay*
 NOM/1S.PSR steal-TR2

In §4.5.1.1 I mention that a proclitic pronoun can refer either to the non-subject actor or to the possessor of the entity it attaches to. Thus, a sentence like (9) can be possibly interpreted as a verb plus a noun, and <in> can be analysed as a perfective undergoer voice marker attaching to verbs. However, in the reading given in (9), it is a classifying sentence (see also §10.3.2); *ku=tr<in>ima* in (9) corresponds to *nanku tr<in>ima* in (10), and it is better analysed as ‘my buying’, not ‘I bought’. Further investigation shows that elements infixed with <in> are optionally suffixed with the nominaliser *-an* when the derived noun denotes the patient of the event.

- (13) *nanku/ku=tr<in>ima-an na tilril*
 DF.NOM/1S.PSR=<PERF>buy-NMZ DF.NOM book
 ‘The book is my buying.’

According to my informants, the presence of *-an* in the above examples does not change the meaning. See also §7.3.2.3.

As shown in §4.3.1.1, in Puyuma different negators are used for nominal and verbal predicates. Compare the following two sentences:

- (14) *adri=ku ma-ladram dratu ngai*
 NEG=1S.NOM ITR-know ID.OBL/3.PSR language
 ‘I don’t know their language.’
- (15) *ameli nantu ni-ladra-ladram ta=ngai*
 NEG NOM/3.PSR PERF-RED-know 1P.PSR=language
 ‘Our language is not something they’ve learned.’

A gerundive nominal is negated by *adri* instead of *ameli*, as shown below. Gerundive nominals are treated in §7.3.5.

- (16) *wa-alrak dra patrungtrungan dra adri=driya*
 go-take ID.OBL drum ID.OBL NEG=IMPF
b<in>arekep-an dra kulritr
 <PERF>assemble-NMZ ID.OBL skin
 ‘Go get a drum that has not been assembled with a skin.’

7.3.2 Types of lexical nominalisation

Following Comrie and Thompson (1985:349), I subdivide lexical nominalisation in terms of the functions of the nouns resulting from the nominalising operations. The derived noun may be the name of the activity or state designated by the verb, or it may refer to the agent, patient, location, instrument or time of the activity or state. The categories discussed in the following sections include: action/state nouns, person-denoting nouns, patient nouns, instrumental nouns, locative nouns, and temporal nouns. Note that this classification is semantically based, and the same formation process may be applied to derive different categories of nouns. Hence, it is possible that the same derived form can belong to two semantic categories of noun. For example, *ka-lra-lrinay-an* (< *ma-lrinay* ‘amuse’) may mean ‘toy’ or ‘time for fun’.

7.3.2.1 Action/state nouns

Action and state nouns are formed from action verbs and denote the act, the occurrence, or the quality of that verb. Some examples are given in Table 7.1.

Table 7.1: Action nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>karun</i>	<i>ki-karun/ki-karun</i> ‘work’	<i>ki<a>karun-an</i> ‘job’	<a> ² + -an
<i>u-uma</i>	<i>m-u-uma/u-uma</i> ‘go to farm’	<i>u-a-uma-an</i> ‘farming’	<a> + -an
<i>raip</i>	<i>me-raip/raip</i> ‘sow’	<i>raip-an</i> ‘sowing’	-an
<i>dreki</i>	<i>ma-dreki/ka-dreki</i> ‘condemn’	<i>dreki-an</i> ‘condemnation’	-an
<i>sangalr</i>	<i>sangalr/sangalr</i> ‘rejoice’	<i>sangalr-an</i> ‘appreciation’	-an
<i>engadr</i>	<i>m-engadr/engadr</i> ‘breathe’	<i>angadr</i> ‘breath’	stem modification

Table 7.1 shows three major formation processes. In the first type, the morpheme *-an* is suffixed to the progressive/irrealis verb form. In the second type, *-an* is suffixed to the root form or the realis intransitive form. In the third type, the stem is modified. The corpus does not contain many examples of the third type, and it is possible that *angadr* results from schwa deletion (i.e. *a-engadr* → *angadr*).

Note that the formation process used with a particular verb seems to be somewhat predictable. As the table above suggests, there is a tendency for the more dynamic verbs to use the progressive/irrealis verb form suffixed with *-an*; with the more stative verbs, *-an* is suffixed to the root. However, the example *raip-an* ‘sowing’ in Table 7.1 is contrary to this generalisation. Furthermore, when *-an* is suffixed to stative verbs, it is sometimes suffixed to a root without an intransitive marker (e.g. *dreki-an* ‘condemnation’), and sometimes to the intransitive form of the verb (e.g. *sangalr-an* ‘appreciation’).

Examples of their usages are given below:

- (17) a. *ki<a>karun=yu isuwa?*
 <a>work=2S.NOM where
 ‘Where are you working?’
- b. *ulaya ku=ki<a>karun-an*
 exist 1S.PSR=<a>work-NMZ
 ‘I have a job.’ (lit. ‘My job exists.’)
- (18) a. *muama=ta ma-dreki kannu*
 why=1P.NOM ITR-condemn 2S.OBL
 ‘Why should we condemn you?’
- b. *unian dra dreki-an kandru kana suan*
 not.exist ID.OBL condemn-NMZ that.OBL DF.OBL dog
 ‘She did not have any condemnation towards that dog.’

2 For *ki-* verbs, progressive and irrealis constructions are manifested by the same form. Thus, *ki<a>karun* can be interpreted as progressive or irrealis. See also §6.5.

Table 7.2: State nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>asatr</i>	<i>asatr/ka-asatr</i> ‘high’	<i>asatr-an</i> ‘height’	<i>-an</i>
<i>bulray</i>	<i>bulray/ka-bulray</i> ‘beautiful’	<i>bulray-an</i> ‘beauty’	<i>-an</i>
<i>kualreng</i>	<i>kualreng/ka-kualreng</i> ‘difficult, sick’	<i>ka-kualreng-an</i> ‘difficulty’	<i>ka- + -an</i>
<i>sanan</i>	<i>ma-sanan/ka-sanan</i> ‘lost’	<i>ka-sanan-an</i> ‘being lost’	<i>ka- + -an</i>
<i>igela</i>	<i>igela/k-igela</i> ‘ashamed’	<i>ki<a>gela-an</i> ‘shame’	<i>k- + <a> + -an</i>
<i>-inatray</i>	<i>m-inatray/k-inatray</i> ‘die’	<i>ki<a>natray-an</i> ‘imminent death’	<i>k- <a> + -an</i>

Basically, verbs in this category are stative verbs and show an alternation between *ma-/∅* (in realis intransitive construction) and *ka-* (elsewhere). The alternation of *ma-/∅* and *ka-* was described in §6.6.

From the examples given in Table 7.2, we see that some state nouns are formed by suffixing *-an* to the root, and some are formed by suffixing *-an* to the *ka-* form. The choice is lexically determined. Note also that some state nouns are derived from the progressive/irrealis form. For example:

- (19) a. *igela=ku*
ashamed=1S.NOM
‘I am embarrassed.’
- b. *a k-i<a>gela-an idri*
ID.NOM *k-<a>*ashamed-NMZ this.NOM
‘This is a shame.’
- (20) a. *m-inatray=la na suan*
ITR-die=PERF DF.NOM dog
‘The dog has died.’
- b. *ala dratu k-i<a>natray-an ...*
maybe ID.OBL/3.PSR *ka-<a>*die-NMZ
‘Maybe because of its imminent death ...’

7.3.2.2 Person-denoting nouns

‘Person-denoting noun’ is used here as a cover term to refer to nouns denoting the persons that carry out the action denoted by the verb and those that possess the property denoted by the verb. Some examples are given below.

Table 7.3: Person-denoting nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>takesi</i>	<i>takesi/takesi</i> ‘study’	<i>ta-kakesi</i> ‘student’	PROG. form
<i>kedreng</i>	<i>kedreng/kedreng</i> ‘pull’	<i>ka-kedreng</i> ‘leader’	PROG. form
<i>bangsar</i>	<i>bangsar/ka-bangsar</i> ‘handsome’	<i>bangsar-an</i> ‘young man’	<i>-an</i>
<i>-’idrang</i>	<i>ma-’idrang/ka-’idrang</i> ‘old’	<i>ma-’idrang-an</i> ‘old person’	<i>-an</i>
<i>bulray</i>	<i>bulray/ka-bulray</i> ‘beautiful’	<i>bulra-bulray-an</i> ‘young woman’	CVCV- + <i>-an</i>

We see from the examples in Table 7.3 that there are two main ways of forming person-denoting nouns, which correspond respectively to the stativity or dynamicity of the original verbal root. For the more dynamic roots, the derived nouns have the same form as those used in progressive construction; for the more stative roots, the nouns are formed by suffixing *-an*. Examples of person-denoting nouns derived from stative verbs are shown below.

- (21) a. *bulray idri na ruma*
 beautiful this.NOM DF.NOM house
 ‘This house is beautiful.’
- b. *a bulra-bulray-an=la na walak*
 ID.NOM RED-beautiful-NMZ=PERF DF.NOM child
 ‘The child became a young woman.’

Person-denoting nouns derived from dynamic verbs can be further divided into two semantic categories; one refers to agents who perform characteristic activities, and the other to agents who perform particular acts. For example, words ending with *-er/-or* in English belong to the first category. ‘Teacher’ refers to someone who teaches professionally, not to someone who happens to teach somebody something perhaps for the first or the only time.

In Puyuma, some verbs make a distinction between the two categories through different morphosyntactic processes. Agents of characteristic activities and agents of specific acts are manifested by different structures. ‘The one who washes clothes for a living’ in Puyuma is given in (22), while ‘the one who happens to wash clothes on this particular occasion’ is in (23).

- (22) *a mi-trepa b<en>a-base i pilay*
 ID.NOM have-share RED-ITR-wash SG.NOM Pilay
 ‘Pilay makes a living by washing clothes.’
 (lit. ‘Pilay is a person with the duty of washing clothes.’)

- (23) *sagar=ku kana b<en>a-base*
 like =1S.NOM DF.OBL <ITR>RED-wash
 ‘I like the (one/ones who is/are) washing clothes.’

From these examples, we see that agents of characteristic activities are usually manifested with the help of the verb *mi-trepa* ‘have a share’, whereas agents of specific acts are more like the nominalised elements we are talking about here. However, further investigation shows that agents of specific acts have the structure of a relative clause. Compare:

- (24) *sa-salpit=ku*
 <ITR>RED-beat=1S.NOM
 ‘I am beating.’
- (25) *indang=ku kana trau {kana sa-salpit }*
 afraid=1S.NOM DF.OBL person DF.OBL <ITR>RED-beat
 ‘I am afraid of the person who is beating (somebody).’
- (26) *indang=ku {kana sa-salpit }*
 ‘I am afraid of the beater.’
 ‘I am afraid of the one who is beating.’

In (25), *kana sa-salpit* is a relative clause modifying the PIBU *kana trau*. But when the PIBU *kana trau* is omitted, as given in (26), we cannot differentiate between a noun and a relative clause, because in some situations, a progressive aspect verb can refer to the agent of a characteristic activity as well (which we might expect to be expressed with the *mi-trepa* ‘have a share’ construction, as described above). So:

- (27) *ta<ka>kesi=ku*
 <ITR><RED>study=1S.NOM
 ‘I am studying.’
- (28) *a ta<ka>kesi=ku*
 ID.NOM <ITR><RED>study=1S.NOM
 ‘I am a student.’

We find that the distinction between expressions of agents of characteristic activities and of agents of specific acts is lexically determined, as summarised in Table 7.4.

Table 7.4: Formation of agentive nouns

Verbal stem	Agent of characteristic activities	Agent of specific acts
<i>base</i> ‘wash’	<i>mi-trepa benase</i> ‘person making a living by washing clothes’	<i>benabase</i> ‘the one who is washing clothes’
<i>maresiuk</i> ‘cook’	<i>mi-trepa maresiuk</i> ‘chef’	<i>mararesiuk</i> ‘the one who is cooking’
<i>takesi</i> ‘study’	<i>temakakesi</i> ‘student’, ‘the one who is studying’	

7.3.2.3 Patient nouns

Patient nouns designate the patient of an action. Nouns in this category are often formed by affixing *-an*, with or without an affixation of <in> or *Ca-* reduplication. Examples found in this category are all derived from a dynamic verbal stem.

Patient nouns can be subdivided into four categories in terms of mood/aspect distinctions. Those suffixed only with *-an* have a meaning that is unmarked in aspect and mood, such as *akan-an* ‘food’, *kiomal-an* ‘question’. Those infix with *<in>* indicate a perfective meaning, for example *ni-ekan-an* ‘food eaten’. The suffix *-an* in patient nouns is omissible if the infix *<in>* is also present. Nouns that have undergone *Ca-* reduplication denote an irrealis meaning, for instance *da-dirus-an* ‘things that are going to be washed’. Sometimes, we find *Ca-* reduplication and *<in>* cooccur to derive a new noun. In these cases, there is often an imperfective or frequentative meaning. For example: *d<in>a-daway-an* ‘half-done product’; *s<in>a-sa-senay* ‘songs often sung’. Some examples and their formation processes are given below.

Table 7.5: Patient nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>ekan</i>	<i>m-ekan/ekan</i> ‘eat’	<i>akan-an</i> ‘food’	<i>-an</i> , stem modification
		<i>ni-ekan(-an)</i> ‘food having been eaten’	<i><in></i> + <i>-an</i>
		<i>a-akan-an</i> ‘food going to be eaten’	<i>Ca-</i> + <i>-an</i>
<i>daway</i>	<i>daway/daway</i> ‘produce’	<i>d<in>away(-an)</i> ‘product’	<i><in></i> + <i>-an</i>
		<i>d<in>a-daway(-an)</i> ‘semi-product’	<i>Ca-</i> + <i><in></i> + <i>-an</i>
<i>rengay</i>	<i>ma-rengay/rengay</i> ‘say’	<i>ni-rengay-an</i> ‘things said’	<i><in></i> + <i>-an</i>
		<i>ra-rengay-an</i> ‘things to be said’	<i>Ca-</i> + <i>-an</i>
<i>senay</i>	<i>senay/senay</i> ‘sing’	<i>s<in>enay-an</i> ‘songs sung’	<i><in></i> + <i>-an</i>
		<i>sa-senay-an</i> ‘songs to be sung’	<i>Ca-</i> + <i>-an</i>
		<i>s<in>a-sa-senay</i> ‘songs often sung’	<i>Ca-</i> + <i><in></i> + <i>Ca-</i>

Examples of their use follow:

- (29) a. *ulaya ku=ra-rengay-an a saya*
 exist 1S.PSR=RED-say-NMZ ID.NOM one
 ‘I have one thing to say.’
- b. *idri ku=ni-rengay-an i, ...*
 this.NOM 1S.PSR =PERF-say-NMZ TOP
 ‘This, what I have said, ...’

7.3.2.4 Instrumental nouns

Most instrumental nouns are formed by affixing *-an* or *Ca-* reduplication, or both. Note that *<in>* is never used as a formative in this category.

Table 7.6: Instrumental nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>-lrinay</i>	<i>ma-lrinay/ka-lrinay</i> ‘amuse’	<i>ka-lra-lrinay-an</i> ‘toy’	<i>ka-</i> + <i>Ca-</i> + <i>-an</i>
<i>traba</i>	<i>traba/traba</i> ‘roast’	<i>tra-traba-an</i> ‘grill’	<i>Ca-</i> + <i>-an</i>
<i>litek</i>	<i>pa-litek/pa-litek</i> ‘make cold’	<i>pa-la-litek-an</i> ‘cooler; air conditioner’	<i>Ca-</i> + <i>-an</i>
<i>sarekudr</i>	<i>sarekudr/sarekudr</i> ‘support’	<i>sarekudr-an</i> ‘a walking stick’	<i>-an</i>
<i>aleb</i>	<i>aleb/aleb</i> ‘close’	<i>aleb-an</i> ‘door’	<i>-an</i>
<i>tilru’</i>	<i>tilru’/tilru’</i> ‘tie’	<i>ta-tilru’</i> ‘rope’	<i>Ca-</i>
<i>tukudr</i>	<i>tukudr/tukudr</i> ‘withstand’	<i>ta-tukudr</i> ‘pillar’	<i>Ca-</i>

There are also a number of instrumental nouns which have the same form as their verbal root, such as: *tawasi* ‘a brush, to brush’, *kuang* ‘a gun, to shoot’, *tabukul* ‘a fish-net, to fish’. For example:

- (30) *tawasi dra kiping*
brush ID.OBL clothes
‘Brush the clothes!’
- (31) *trima’=ku dra tawasi*
<ITR>buy=1S.NOM ID.OBL brush
‘I bought a brush.’

Instrumental nouns of this type are not discussed here because it is not clear if there is nominalisation involved. Recall that roots can be nominal, verbal, or pre-categorial, and examples such as *tawasi*, *kuang*, and *tabukul* are pre-categorial roots (see also §4.3.2).

7.3.2.5 Locative nouns

Locative nouns are created from verbs to indicate the place where the action takes place. Although the presence of *-an* does not guarantee that the given element will denote the meaning of location, locative nouns mostly end with the suffix *-an*, with only one exceptional example found in the corpus (*marayas* ‘flat’ > *marayarayas* ‘plain’). Basically, four types of locative noun can be distinguished: those only suffixed with *-an*, those taking *Ca-* reduplication (or <a> infixation), those taking *CVCV-* reduplication, and those having the <in> infix.

Table 7.7: Locative nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>alup</i>	<i>alup/alup</i> ‘hunt’	<i>alup-an</i> ‘hunting place’	<i>-an</i>
<i>takesi</i>	<i>takesi/takesi</i> ‘study’	<i>takesi-an</i> ‘school’	<i>-an</i>
<i>dirus</i>	<i>dirus/dirus</i> ‘wash; play with water’	<i>da-dirus-an</i> ‘bathroom’ <i>diru-dirus-an</i> ‘swimming pool’	<i>Ca-</i> + <i>-an</i> <i>CVCV-</i> + <i>-an</i>
<i>daway</i>	<i>daway/daway</i> ‘produce’	<i>dawa-daway-an</i> ‘studio; factory’	<i>CVCV-</i> + <i>-an</i>
<i>-lrinay</i>	<i>ma-lrinay/ka-lrinay</i> ‘amuse’	<i>ka-lrina-lrinay-an</i> ‘amusement park’	<i>ka-</i> + <i>CVCV-</i> + <i>-an</i>
<i>palu</i>	<i>palu/palu</i> ‘demarcate’	<i>pa-palu-an</i> ‘boundary’	<i>Ca-</i> + <i>-an</i>
<i>bekas</i>	<i>bekas/ka-bekas</i> ‘run’	<i>k<in>a-bekas-an</i> ‘path having been run’	<i>ka-</i> + <i><in></i> + <i>-an</i>
<i>-edreng</i>	<i>m-iedreng/k-iedreng</i> ‘sleep’	<i>k-i<a>edreng-an</i> ‘bed’ <i>k<in>iedreng-an</i> ‘place slept at before’	<i>Ca-</i> + <i>-an</i> <i>k-</i> + <i><in></i> + <i>-an</i>
<i>-rayas</i>	<i>ma-rayas</i> ‘flat’	<i>ma-raya-rayas</i> ‘plain’	<i>CVCV-</i>

As the examples above show, locative nouns formed by the first three processes all suggest places characterised by certain events, but the formation processes are unpredictable, although *CVCV-* reduplication with *-an* seems to be the most productive one from the corpus. On the other hand, locative nouns formed by *<in>* (with *-an*) do not refer to places typically associated with the named event; they can refer to any place where the named action has taken place. Compare the following two sentences. In (32), the locative noun is derived from *m-iedreng* ‘lie down; sleep’ by using the irrealis form suffixed with *-an*; in (33), the locative noun is derived from *takesi* ‘study’. Both of the examples denote a location that is typically associated with the named action.

(32) *unian=ku i k-i<a>edreng-an*
not.exist=1S.NOM LOC <a>sleep-NMZ
‘I wasn’t in bed.’

(33) *drua=dar i takesi-an m-aya-a kanku*
come=FREQ LOC study-NMZ ITR-find-PJ 1S.OBL
‘It often came to school to find me.’

On the other hand, in (34) and (35), the locative nouns are derived from *kadru* ‘be there’ and *m-iedreng* ‘lie down, sleep’ respectively, and they can denote any place where the named action has previously taken place.

(34) *m-uka tungu-tungur-a dratu k<in>adru-an*
ITR-go <ITR>RED-pop.in.and.look-PJ ID.OBL/3.PSR <PERF>there-NMZ
‘It popped in and looked at the place where it used to live.’

- (35) *tu=kasu-aw kantu k-<in>iedreng-an*
 3.GEN=bring-TR1 DF.OBL/3.PSR <PERF>k-sleep-NMZ
 ‘He brought it back to where it slept before.’

There is a further distinction between locative nouns formed by <in> and all other types. While locative nouns without <in> are usually preceded by *i*, locative nouns with <in> are never preceded by the noun phrase marker *i*. They are usually preceded by a genitive pronoun referring to a discourse participant and are sometimes preceded by *na* or *dra*. This suggests that the two types of locative nouns, with or without <in>, are syntactically different. Those with <in> are in fact nominalised RCs without a PIBU (§5.6.3).

7.3.2.6 Temporal nouns

Temporal nouns are formed from verbs to denote the time an action takes place. Not many examples are found in the text corpus, but elicited data show that their formation processes are similar to those of patient nouns: a distinction between unmarked, perfective, and irrealis can be made. These nouns are never formed by suffixing *-an* alone. Temporal nouns that are unmarked for aspect/mood always contain a circumfix *ka--an* ‘a period of time’, regardless of whether the verb is dynamic or stative, as shown in the first three examples (*sangalr*, *salrem*, and *bulray*) in Table 7.8. Dynamic temporal nouns (e.g. *berek* and *redék* in Table 7.8) formed by *Ca-* (with *-an*) reduplication have an irrealis reading, whereas those formed with <in> (with *-an*) have a perfective reading.

Table 7.8: Temporal nouns

Root	Intransitive/Imperative	Derived noun	Formatives
<i>sangalr</i>	<i>sangalr/sangalr</i> ‘rejoice’	<i>ka-sangalr-an</i> ‘time to rejoice’	<i>ka-</i> + <i>-an</i>
<i>salrem</i>	<i>salrem/salrem</i> ‘sow’	<i>ka-salrem-an</i> ‘time to sow’	<i>ka-</i> + <i>-an</i>
<i>bulray</i>	<i>bulray/ka-bulray</i> ‘beautiful’	<i>ka-bulray-an</i> ‘time of being beautiful’	<i>ka-</i> + <i>-an</i>
<i>berek</i>	<i>ma-berek/berek</i> ‘leave’	<i>ba-berek-an</i> ‘time to leave’ <i>b<in>erek-an</i> ‘time left’	<i>Ca-</i> + <i>-an</i> <in> + <i>-an</i>
<i>redék</i>	<i>ma-redék/redék</i> ‘arrive’	<i>ra-redék-an</i> ‘time to arrive’ <i>ni-redék-an</i> ‘time arrived’	<i>Ca-</i> + <i>-an</i> <in> + <i>-an</i>
<i>-sikasik</i>	<i>ma-sikasik/ka-sikasik</i> ‘start off’	<i>ka-si<a>kasik-an</i> ‘time to start off’ <i>k<in>a-sikasik-an</i> ‘time started off’	<i>ka-</i> + <a> + <i>-an</i> <i>ka-</i> + <in> + <i>-an</i>

Examples (36) and (37) illustrate the use of realis/irrealis distinction.

- (36) *nanku ba-berek-an=la garem*
 DF.NOM/1S.PSR RED-leave-NMZ=PERF now
 ‘Now, it’s about time for my departure.’

- (37) *nanku* *b<in>erek-an* *adaman*
 DF.NOM/1S.PSR <PERF>leave-NMZ yesterday
 ‘Yesterday was the day of my departure.’

7.3.3 A summary of lexical nominalisation

Examples such as those given in §7.3.2 show that several formatives among the nominalising morphemes are related to the mood/aspect formatives discussed in Chapter 6. The formatives used in nominalisation are summarised in Table 7.9. ‘D’ and ‘S’ in Table 7.9 represent ‘Dynamic’ and ‘Stative’ respectively. Such a distinction is made in order to see if the distinction is crucial in the formation process. However, the table shows there is no obvious correspondence between dynamicity/stativity and the formation processes.

Table 7.9: Types of lexical nominalisation

	ACT	STAT	AGT (D)	AGT (S)	PAT (D)	INS T(D)	INS T(S)	LOC (D)	LOC (S)	TEM P (D)	TEMP (S)
<i>-an</i>	✓	✓		✓	✓	✓		✓			
<i>ka--an</i>		✓								✓	✓
<i>Ca- + -an</i>	✓	✓			✓	✓		✓	✓	✓	
<i>ka-Ca- + -an</i>							✓				✓
<i><in> + -an</i>					✓				✓	✓	
<i>ka-<in> -an</i>								✓			✓
<i>CVCV--an</i>				✓							
<i>ka-CVCV--an</i>									✓		
<i>Ca-</i>						✓					
<i>Ca-<in>-an</i>					✓						
<i>Ca-<in>Ca-</i>					✓						
<i>CVCV-</i>									✓		
PROG. form			✓								

Except for patient nouns, nouns can be derived from both dynamic and stative verbal roots. In the patient nouns category, *-an* is omissible if *<in>* is present. For other categories of derived noun, *-an* must be present.

Some of the formatives used in nominalisation are also used in verbal constructions. These formatives have similar functions in both constructions. For example, *Ca-* reduplication is used to denote irrealis and progressive meaning, whereas *CVCV-* reduplication is used to mark repetitive aspect in patient, locative, and temporal nouns. The more peculiar formatives are those which contain *<in>* in conjunction with reduplication. From the table we can see that these formatives basically occur in patient nouns and denote perfective (marked by *<in>* alone), imperfective (marked by *<in>* plus *Ca-*) or frequentative (marked by *<in>* plus *CaCa-*) aspect. Recall from §6.4.2 that in verbal constructions, the same aspectual categories, perfective, imperfective and frequentative, are not signalled by verbal morphology but are expressed by aspectual clitics *=la*, *=driya* and *=dar* respectively. Thus, nominalisations express aspectual and modal categories by morphology alone while in verbal constructions some categories are expressed by morphology and some by clitics. Table 7.10 is a summary of aspect/mood categories distinguished in nominalisation.

Table 7.10: Aspect and mood in nominalisation

Realis					Irrealis
unmarked	perfective	imperfective	iterative	frequentative	
∅	<in>	Ca-<in>	CVCV-	Ca-<in>-Ca-	Ca-

7.3.4 Some other nominalising affixes

In addition to the noun-deriving processes discussed in §7.3.2 (which basically utilise the nominaliser *-an* combined with other aspect/mood formatives), there are several other nominalising affixes which are less productive.

7.3.4.1 *ika-*

The prefix *ika-* is often accompanied by *Ca-* reduplication to denote the meaning of ‘the shape of, the build-up of’, and it can be affixed to both dynamic and stative verbs. For instance:

- (38) *drua ki-pa-ladram-a a lalak kanantu ika-ta-tigir*
 come get-CAUS-know-PJ ID.NOM child DF.OBL/3.PSR *ika*-RED-build.up

kana trakuban
 DF.OBL boys’.house

‘A child came to ask about the construction of the boys’ meeting house.’

- (39) *pakumau dratu ika-u<lra>lrane kana tralrun*
 confirm ID.OBL/3.PSR *ika*-<RED>fat DF.OBL grass
 ‘They checked the grass’ growth.’

7.3.4.2 *ya-*

This prefix is related to the expression of possession, and it usually cooccurs with a possessive pronouns, as shown below:

- (40) *sadru nu=ya-beray*
 many 2S.PSR=*ya*-give
 ‘What you give is a lot.’

The nominaliser *ya-* is only attached to a dynamic verb root, and in such cases the meaning of the derived noun is very similar to that of the patient nouns discussed earlier. However, the translations of (40) and (41) indicate a difference in aspect: (40) is unmarked/indefinite and (41) is perfect/completion.

- (41) *sadru nu=b<in>eray*
 many 2S.PSR =<PERF>give
 ‘What you’ve given is a lot.’

7.3.4.3 *si--an*

This circumfix forms a locative noun. There is only one example in the corpus. *si-druma-an* ‘other places; nonlocal’ < *druma* ‘other’. Compare (42) and (43).

- (42) *tu=luluy-aw dra druma dra suan i nanali*
 3.GEN=chase-TR1 ID.OBL other ID.OBL dog SG.NOM my.mother
 ‘Other dogs chased after my mother.’
- (43) *adri=ta=driya me-na’u i si-druma-an*
 NEG=1P.NOM=IMPF ITR-see LOC *si-other-an*
 ‘We haven’t seen (this) in other places.’

7.3.5 Gerundive nominals

Some derived nominals exhibit different morphosyntactic properties from typical nouns and appear to be syntactically derived rather than lexically derived. Gerundive nominals and lexical nominalisation take the same formatives to express different aspectual/modal meaning (see Table 7.10). A gerundive nominal is affixed with *-an* and optionally with one of the aspectual/modal formatives given in Table 7.10. When <*in*> is present, *-an* is optional. Consider the following sentences.

- (44) *kadru ku=k<in>a-sagar-an dra suan*
 <ITR>there 1S.PSR=<PERF>*ka-like-NMZ* ID.OBL dog
 ‘My loving of dogs is like that.’
- (45) *tu=pasisi-ay kan pilay dra tra-truak-an dra suan*
 3.GEN=force-TR2 SG.OBL Pilay ID.OBL RED-kill-NMZ ID.OBL dog
 ‘Pilay forced him to kill dogs.’

In the above sentences, the derived nouns *k<in>a-sagar-an* and *tra-truak-an* take arguments, and they seem to possess both nominal and verbal properties. They are very similar to an English gerundive nominal as demonstrated in the following sentences.

- (46) a. *He killed the dog.*
 b. *His killing the dog annoyed us.*

Several linguists working on Formosan languages (Rau 2002; Tang 2002; Zeitoun 2002a) have also observed that a distinction between lexical and clausal (or syntactic) nominalisation can be made in terms of the different morphosyntactic properties they exhibit, even though they use the same formatives, such as <*in*>, *Ca-* reduplication, *CVCV-*reduplication, and *-an*. According to Comrie and Thompson (1985:391–393) a clausal nominal is a construction with no lexically derived noun. Clausal or syntactic nominals discussed by Rau (2002) and Tang (2002) seem to resemble Comrie and Thompson’s ‘action nominals’, which I call ‘gerundive nominals’ in the present study.

Comrie and Thompson (1985:358–391) define ‘action nominal’ as a noun phrase ‘which contains, in addition to a noun derived from a verb, one or more reflexes of a proposition or predicate’. In Puyuma, it is not always easy to make such a distinction, but in some cases there are clues showing whether a given construction is a lexical nominalisation or a gerundive nominal. First, as shown in (44) and (45), some nominals can take arguments and are therefore evidently gerundive. However, when there is no argument present, we often

cannot tell whether a given construction is a lexical nominal or a gerundive nominal. Second, as I mentioned in §4.3.3.1, different negators are used to negate a nominal and a verbal element in Puyuma. The negator *adri* is used with gerundive nominals, showing that they are verbal constructions.

- (47) *wa-alrak dra patrungtrungan dra adri=driya*
 go-take ID.OBL drum ID.OBL NEG=IMPF
b<in>arekep-an³ dra kulritr
 <PERF>assemble-NMZ ID.OBL skin
 ‘Go get a drum that has not been assembled with a skin.’

A third clue is that gerundive nominals can be followed by an intransitive verb to form a serial verb construction. For example:

- (48) *kirami=ku=la dra kiakarunan draku*
 <ITR>start=1S.NOM=PERF ID.OBL job ID.OBL/1S.PSR
ka-ruwa-an kikarun
 ka-can-NMZ work
 ‘I started a job that I’m able to do.’

Genitive pronouns are used by Rau (2002), Tang (2002), and Zeitoun (2002a) as a diagnostic for distinguishing gerundive nominals from lexical nominals, but they are not valid evidence in Puyuma, because gerundive nominals, like lexical nominals, are not necessarily preceded by genitive pronouns; see (45).

Gerundive nominals typically function as an RC or a small NP which modifies the PIBU (§5.1.1 and §5.6.3), as in (47) and (48), or complementation (§14.2.2), as in (44) and (45). For instance, in (48), the gerundive nominal *draku ka-ruwa-an kikarun* is a small NP, modifying the PIBU *kiakarunan* ‘job’, which is a lexically derived nominal. A gerundive nominal functions as an RC only when the PIBU is the undergoer of the event denoted by the RC. If the PIBU is the actor of the event, the RC is manifested as a full clause with a finite verb.

3 There is no genitive pronoun preceding the gerundive nominal here, but I have no explanation for this. It seems to me that when the actor is not known, gerundive nominals can occur without the genitive pronoun, whose function is to denote the actor of the nominal. One more example is given below:

p<in>u-ngalrad dra kuma
 <PERF>CAUS-name ID.OBL Kuma
 ‘Its being named Kuma ...’

8

Transitivity

8.1 Introduction

This chapter discusses transitivity and argument structures in Puyuma. The transitivity status of a verb refers to the number of core arguments the given verb takes, excluding oblique arguments. Thus an intransitive verb takes one core argument, a transitive verb takes two core arguments, and an ambient verb takes no core argument. Because the maximal number of core arguments a verb can take is two, there are no ditransitive verbs in Puyuma.

Transitivity and argument structures are closely related to subject choice. Like many Philippine-type languages, Puyuma has a ‘symmetrical voice’ system, which is defined by Himmelmann (2005:113) as one that has at least two voice alternations marked on the verb, neither of the which is clearly the basic form.¹ For instance, in Puyuma, the verb *trukulr* ‘pick off’ carries an actor voice (ITR) affix in (1) and an undergoer voice (TR1) affix -aw in (2).² The two verb forms *trukulr* and *trukulr-aw* are thus equally marked morphologically.

- (1) *trukulr=ku dra sa’adr*
<ITR>pick=1S.NOM ID.OBL branch
‘I picked off (some) tree-branches.’
- (2) *ku=trukulr-aw na sa’adr*
1S.GEN=pick-TR1 DF.NOM branch
‘I picked off the tree-branches.’

Until now I have simply assumed that an actor voice clause is intransitive, but it is a matter of controversy whether an actor voice clause that has two arguments (one the subject, marked nominative, and the other marked oblique) is transitive or intransitive, and this question in turn relates to how we define core and oblique arguments. To be exact, the question is whether the oblique-marked argument in an actor voice clause (e.g. *sa’adr* ‘branch’ in (1)) is a core argument or not.

1 Himmelmann’s (2005) use of ‘symmetrical voice’ is different from Foley’s (1998) and Arka’s (2003); while Himmelmann’s ‘symmetrical voice’ refers only to morphological markedness, Foley’s and Arka’s use of the term implies that both actor voice and undergoer voice clauses are transitive.

2 Although the main issue in this chapter is whether the actor voice is transitive or intransitive, I continue to gloss it ‘ITR’ for the sake of consistency. I have shown in §6.2 that TR1, TR2 and TR3 are variants of a single transitive (undergoer voice) construction. Here I will show that the actor voice is intransitive.

In (1) *sa'adr* 'branch' is an argument required by the semantics of the verb *tremukulr* 'pick', so it is not an adjunct. However, it is oblique-marked. If *sa'adr* is analysed as an oblique argument, then this clause is intransitive (the only core argument is =*ku* 'I'); if it is analysed as a core argument, then this clause is transitive (with two core arguments =*ku* and *sa'adr*).

Although there has been a great quantity of research focusing on the peculiarity of the Philippine-type voice systems, including whether the system is accusatively or ergatively aligned,³ and how the notion of 'subject' can be appropriately applied to these languages,⁴ there is relatively little discussion about how to decide whether a given argument is core or not in the study of Austronesian languages.⁵

This chapter will deal with the issues of transitivity and ergativity by looking at the syntactic status — core or oblique — of various arguments in both actor voice and undergoer voice (including TR1, TR2 and TR3) constructions. I will make a distinction between transitivity and valency. Valency is defined as the number of arguments required by the verb, including both core and oblique arguments. It thus differs from transitivity, which is determined by the number of core arguments only. Four types of verbs can be distinguished on the basis of valency: zero-valent, monovalent, bivalent and trivalent. See also §4.3.1.3 and §10.2.

The organisation of this chapter is as follows: in §8.2, the case marking of nouns and pronouns is explored, and in §8.3 a preliminary account of verbal clause patterns is given, followed by a discussion of the core-oblique distinction and transitivity in §8.4. Finally, the ergative properties of Puyuma are discussed in §8.5.

8.2 Case marking

Puyuma makes a three-way case-marking distinction among verbal arguments: nominative, marking the grammatical subject; genitive, marking the non-subject actor; and oblique, marking other arguments.

An argument may be a pronoun or a full NP. Table 8.1 summarises how each argument can be manifested.

3 For instance: De Guzman (1988), Starosta (1997; 1998; 1999), Liao (2002; 2004), Reid and Liao (2004), Wang (2004) and Wu (2006) proposed an ergative analysis; Foley (1998) suggests that these languages have a symmetrical voice system, Y.L. Chang (1997) says that they have a split ergative system, and Shibatani (1988) claims that they have a fluid voice system.

4 Among them are Schachter (1977), Shibatani (1988), and Kroeger (1993). See Himmelmann (2005) for a summary of related discussions.

5 There are a few exceptions: for example, Kroeger (1993) was one of the first to make this issue explicit; Chang and Tsai (2001) and Y.L. Chang (2004) use control as a major means to distinguish between a core argument and a peripheral argument in several Formosan languages; Arka (2003, 200f) assesses the core status of NPs in Balinese and several other Indonesian languages by looking at the syntactic properties of the NPs; H.C. Chang (2006) applies Arka's methodology in her study of the core/oblique status of Paiwan NPs.

Table 8.1: The manifestation of arguments

	Subject	Non-subject Actor	Others
Pronoun	pronominal clitic (NOM)	pronominal clitic (GEN)	free pronoun (OBL)
Full NP	NP marker (NOM)	NP marker (OBL)	NP marker (OBL)
	possessor (NOM)	possessor (OBL)	possessor (OBL)

As shown above, the case of an argument may be indicated by a pronominal clitic (§4.5.1.1), a free pronoun (§4.5.1.2), or a noun phrase marker (§4.3.1.2.2). The subject of a clause is encoded as nominative. It may be (i) the only argument of a monovalent verb (which might be an actor or an undergoer), as in (3) and (4); or (ii) the actor of a bivalent verb when the patient is indefinite, as in (5); or (iii) the definite undergoer of a bivalent verb, as in (6). The subject may be manifested as a pronominal clitic, as in (5), or a noun phrase preceded by a noun phrase marker, as in (4) and (6), or a noun phrase preceded by a possessor pronoun (bound or free),⁶ as in (3).

- (3) *drua nantu lalak*
 come DF.NOM/3.PSR child
 ‘**Her child** came.’
- (4) *ma-ba’itr na patraka*
 ITR-burn DF.NOM meat
 ‘**The meat** was burnt.’
- (5) *traka-trakaw=ku dra akan-an*
 <ITR>RED-steal=1S.NOM ID.OBL eat-NMZ
 ‘**I** stole food repeatedly.’
- (6) *ku=trekab-aw na basikaw*
 1S.GEN=cut.open-TR1 DF.NOM bamboo
 ‘I cut the **bamboo** open.’

As (6) illustrates, the non-subject actor of a bivalent verb is encoded by a genitive proclitic pronoun, which is obligatory, i.e. it functions as an agreement marker. If there is a coreferential actor NP, this is marked as *oblique*, as in (7), as there are no genitive-marked full NPs. The actor NP can be an NP preceded by a noun phrase marker, as in (7), or an NP preceded by a possessor pronoun (free), as in (8).

- (7) *tu=pes-pespes-ay kan kakawalan*
 3.GEN=RED-massage-TR2 SG.OBL Kakawalan
 ‘**Kakawalan** kept massaging him.’ (Non-subject actor)
- (8) *tu=pes-pespes-ay kantu walak*
 3.GEN=RED-massage-TR2 DF.OBL/3.PSR child
 ‘Her child kept massaging her.’

6 The free pronoun *nantu* in (3) can be replaced by a bound pronoun *tu=*.

An oblique NP may be (i) the non-subject actor of a bivalent verb (coreferenced by a *genitive* proclitic pronoun on the verb), as in (7); or (ii), the indefinite patient required by the valency of a bivalent verb, as in (9); or (iii) an adjunct, as in (10) and (11). It can be manifested as a free oblique pronoun, as in (11), or as an NP preceded by an oblique noun phrase marker, as in (9) and (10), or as an NP preceded by an oblique possessor pronoun, as in (8).

- (9) *tu=trakaw-anay dra paisu i tinataw*
 3.GEN=steal-TR3 ID.OBL money SG.NOM his.mother
 ‘He stole **money** for his mother.’ (Indefinite patient)
- (10) *tu=pa-langlang-anay kana apuy⁷*
 3.GEN=CAUS-dry-TR3 DF.OBL fire
 ‘They made it dry **with the fire**.’ (Adjunct)
- (11) *tu=trakaw-aw na paisu kanku*
 3.GEN=steal-TR1 DF.NOM money 1S.OBL
 ‘He stole the money from me.’

The three types of argument illustrated above, namely the non-subject actor of a bivalent verb, the indefinite patient required by the valency of a bivalent verb, and an adjunct, have different syntactic behaviours, although they are all preceded by an oblique noun phrase marker. Their status as core or oblique is discussed in §8.4.

8.3 Verbal clause patterns and arguments

The four subject choices in Puyuma are described in §6.2. Examples are repeated here in (12) to (15).

- (12) *trakaw dra paisu i isaw*
 <ITR>steal ID.OBL money SG.NOM Isaw
 ‘Isaw stole money.’
- (13) *tu=trakaw-aw na paisu kan isaw*
 3.GEN=steal-TR1 DF.NOM money SG.OBL Isaw
 ‘Isaw stole the money.’
- (14) *tu=trakaw-ay=ku dra paisu kan isaw*
 3GEN=steal-TR2=1S.NOM ID.OBL money SG.OBL Isaw
 ‘Isaw stole money from me.’
- (15) *tu=trakaw-anay i tinataw dra paisu*
 3.GEN=steal-TR3 SG.NOM his.mother ID.OBL money
 ‘He stole money for his mother.’

7 We might expect the instrument *apuy* ‘fire’ to be the subject since the verb is in TR3 (CV) form, but here the subject is the thing being made dry, which is not overtly expressed in this sentence.

The order of the NPs in the templates below is flexible, and all free NPs can be omitted. If no nominative free NP is present, the sentence is interpreted as having a covert third person subject argument; however, the absence of an oblique free NP does not force a particular interpretation.

An actor voice verb takes a subject (nominative) argument and optionally an oblique argument, as in (16a) and (16b).

- (16) a. $V^{AV} (NP^{NOM})$
tra-trekelr=mi
 <ITR>RED-drink=1P.NOM
 ‘We were drinking.’
- b. $V^{AV} (NP^{OBL}) (NP^{NOM})$
p<en>angutr dra dare na mar-kataguin
 <ITR>grab ID.OBL soil DF.NOM RECIP-spouse
 ‘The couple grabbed some soil.’

A genitive pronoun proclitic occurs obligatorily with an UV verb, marking the actor. The proclitic is coreferential with an oblique-marked actor NP,⁸ as shown in (17a) and (17b). An undergoer voice verb also takes a subject (nominative) undergoer NP and, if it is TR2 or TR3, an oblique patient NP.

- (17) a. $Pron_i^{GEN}=V^{UV} (NP^{NOM}) (NP_i^{OBL})$
tu=ka-aw=ku kan nanali
 3.GEN=tell-TR1=1S.NOM SG.OBL my.mother
 ‘My mother told me.’
- b. $Pron_i^{GEN}=V^{UV} (NP^{NOM}) (NP_j^{OBL}) (NP_i^{OBL})$
tu=trakaw-ay=ku dra paisu kan isaw
 3.GEN=steal-TR2=1S.NOM ID.OBL money SG.OBL Isaw
 ‘Isaw stole money from me.’

Arguments are categorised in terms of the argument structure of the verb, and the case marking and semantic role of the arguments. From the perspective of semantic role, arguments are divided into three categories.

the actor (ACT), in one-, two- and three-participant clauses, e.g. =*mi* in (16a), *na markataguin* in (16b), *kan nanali* in (17a) and *kan isaw* in (17b);

the patient-like undergoer argument (PL), in two- and three-participant clauses, e.g. *dra dare*’ in (16b), =*ku* in (17a) and *dra paisu* in (17b);

the less-patient-like undergoer argument (LPL), in a three-participant clause, e.g. =*ku* in (17b).

ACT and PL in turn have two possible case markings in different constructions, as shown in Table 8.2.

8 Puyuma and Tsou (cf. S. Huang 2002) are the only two examples among Formosan languages that have a proclitic coreferential with an oblique-marked actor NP.

Table 8.2: A mapping of clause types and role/case of arguments

		ACT	PL	LPL
One participant clause	AV	NOM	—	—
Two participant clause	AV	NOM	OBL	—
	UV	GEN (OBL)	NOM	—
Three participant clause	AV	NOM	OBL	(adjunct)
	UV: TR1	GEN (OBL)	NOM	(adjunct)
	UV: TR2, TR3	GEN (OBL)	OBL	NOM

Recall that in §6.2, a distinction between actor and undergoer voice was made with regard to two-participant clauses; however, for three-participant clauses, there is a need to distinguish among undergoer voice clauses between TR1 clauses on the one hand and TR2/TR3 clauses on the other. Three-participant TR2 and TR3 clauses are applicative-like, since an adjunct is promoted to the subject position.

The Actor is marked nominative in an actor voice clause, like =*mi* in (16a) and *na markataguin* in (16b), and genitive in a UV clause (optionally with a coreferential oblique-marked NP), like *tu=* (which agrees with *kan tinataw*) in (17a).

The PL is marked nominative in a TR1 clause, like =*ku* in (17a), but oblique in an actor voice clause (*dra dare'* in (16b)) or a three-participant TR2/TR3 clause (*dra paisu* in (17b)).

The LPL is marked nominative in a three-participant TR2/TR3 clause, like =*ku* in (17b). It is an argument not required by the verbal valency, but which is promoted to the subject position in a three-participant TR2/TR3 clause and thus becomes an argument (the subject) in these clauses. The adjunct is shown in parentheses in Table 8.2 because it is not an argument of the verb. It is, however, the source of the nominative LPL.

Five categories of arguments are thus distinguished: ACT^{NOM}, ACT^{GEN}, PL^{NOM}, PL^{OBL}, and LPL^{NOM}. A mapping of the voice constructions and the five argument encodings is given in Table 8.2. An account of their syntactic behaviours is given in §8.4.1.

8.4 Transitivity and the syntactic status of the arguments

In §8.4.1 several syntactic diagnostics are applied in order to examine the syntactic status of the five categories of arguments. The transitivity of actor and undergoer clauses is dealt with in §8.4.2, and the occurrence of definite oblique PLs in actor voice clauses is treated in §8.4.3. This is followed by a discussion of the mapping between voice and transitivity in §8.4.4.

8.4.1 The syntactic status of the five argument encodings

In the discussion below, I use five diagnostics to examine the syntactic status of the five argument encodings listed in §8.3. They are:

1. coreferencing clitics on the verb
2. control in SVCs
3. topicalisation
4. modification by a floating quantifier
5. raising from complement clauses

An argument that is able to trigger or participate in one or more of these processes is, in Van Valin and LaPolla's terminology (1997:274–285), a 'privileged syntactic argument' (PSA). Van Valin and LaPolla point out that PSA is not a category across the whole grammar; it is defined by the individual construction. These behavioural properties are usually used only to test subjecthood in the literature (see Himmelmann 2005 for a summary and discussion), but they are used here, following Arka (2005), to test for core syntactic status.

8.4.1.1 Coreferencing clitics on the verb

In Puyuma, verbal clitics single out the special status of certain arguments. There may or may not also be a coreferential NP. On this basis, we can say that the genitive proclitic, which refers to a non-subject actor (ACT^{GEN}), and the nominative enclitic, which refers to the subject (ACT^{NOM} , PL^{NOM} , and LPL^{NOM}), are core arguments. The nouns *buwang* 'hole', *walak* 'child', and *paisu* 'money' in (18), (19) and (20) respectively are all marked for oblique case. In (19) *walak* is coreferenced by a genitive bound pronoun and is a core argument (ACT^{GEN}). The nouns *buwang* in (18), an adjunct, and *paisu* in (20), a PL^{OBL} , are not coreferenced by a bound pronoun and are by this criterion not core.

- (18) *tu=lasedr-aw kana buwang i temutaw*
 3.GEN=hide-TR1 DF.OBL hole SG.NOM his.grandparent
 'He hid his grandmother in the hole.'
- (19) *tu=padrek-aw i temutaw kana walak*
 3.GEN=carry.on.back-TR1 SG.NOM his.grandparent DF.OBL child
 'The child carried his grandmother on his back.'
- (20) *tu=trakaw-anay dra paisu i tinataw*
 3.GEN=steal-TR3 ID.OBL money SG.NOM his.mother
 'He stole money for his mother.'

There is a small complication with the verbal clitic test, as there is no third-person nominative enclitic. However, as first- and second-person nominative enclitics occur and the status of a third-person nominative NP is otherwise identical to a first or second person nominative, this is not a problem. For instance:

- (21) a. *sagar=ku dra suan*
 like=1S.NOM ID.OBL dog
 'I like dogs.'
- b. *sagar dra suan*
 like ID.OBL dog
 'S/he/They like dogs.'

8.4.1.2 Control in serial verb constructions

Another diagnostic for corehood is argument sharing in serial verb constructions (§13.2.1). This is the syntactic process whereby one argument of the first verb is coreferential with the deleted subject of the second verb.

Only ACT^{NOM}, ACT^{GEN}, and PL^{NOM} are controllers, as shown in (22), (23) and (24) respectively. In (22) =*ku* is the subject, and in (23) *tu*= is the non-subject actor, but each of them is coreferential with the deleted subject of the second verb.

(22) *kurudung=ku miedreng kana tutui*
lean.against=1S.NOM sleep DF.OBL puppy
'I leant against the puppy to sleep.'

(23) *tu=lrugas-aw me-na'u*
3.GEN=lift.up-TR1 ITR-see
'He lifted it up to see.'

(24) *tu=bau-bau-i-aw=ku m-uka i takesi-an*
3.GEN=RED-push-TR1=1S.NOM ITR-go LOC study-NMZ
'She kept pushing me to go to school.'

PL^{OBL} and LPL^{NOM} cannot be controllers, as shown in (25) and (26).⁹

(25) *ma-tara-padrek=ku_i dra walak_i; me-languy_{i/*j}*
ITR-take-carry.on.back=1S.NOM ID.OBL child ITR-swim
'I carried a child on my back swimming.'

(26) *tu_i=trakaw-ay=ku_i dra paisu trima'_{i/*j} dra kiping*
3GEN=steal-TR2=1S.NOM ID.OBL money <ITR>buy ID.OBL clothes
'She stole money from me to buy clothes.'

8.4.1.3 Topicalisation

Another useful diagnostic is topicalisation, i.e. fronting with the topic-marker *i*. In Puyuma, there are many structural units that can be topicalised, including a temporal adjunct, a locative adjunct, or a whole clause denoting the reason, cause, time, and so on, i.e. a clausal adjunct (§4.5.7). However, with regard to arguments, only arguments denoting the subject (ACT^{NOM}, PL^{NOM}, and LPL^{NOM}) or the non-subject actor (ACT^{GEN}) can be put in topic position. For instance, in (27b), the argument in the topic position, *dradrungaw*, is ACT^{NOM}. In (28b), *driketran* 'sticky rice' is PL^{NOM}. In (29b), *bira* 'leaf' is LPL^{NOM}.

(27) a. *adri mi-kataguin i dradrungaw*
NEG have-spouse SG.NOM Dradrungaw
'Dradrungaw didn't have a spouse.'

b. *i dradrungaw i, adri mi-kataguin*
SG.NOM Dradrungaw TOP NEG have-spouse
'Dradrungaw, she didn't have a spouse.'

(28) a. *ta=ilrang-aw dra enay na driketr-an*
1P.GEN=grind-TR1 ID.OBL water DF.NOM sticky-NMZ
'We grind the sticky rice with water.'

9 LPL^{NOM} cannot be a controller in this particular example, but I do not exclude the possibility that it can be a controller when there is an appropriate context, e.g. 'she stole money **for me** to buy clothes.'

- b. *na drikedr-an i, ta=ilrang-aw dra enay*
 DF.NOM sticky-NMZ TOP 1P.GEN=grind-TR1 ID.OBL water
 ‘The sticky rice, we grind it with water.’
- (29) a. *ta=lriputr-anay dra kuraw na bira’*
 1P.GEN=wrap-TR3 ID.OBL fish DF.NOM leaf
 ‘We wrapped fish with the leaves.’
- b. *na bira’ i, ta=lriputr-anay dra kuraw*
 DF.NOM leaf TOP 1P.GEN=wrap=TR3 ID.OBL fish
 ‘The leaves, we use them to wrap fish.’

In (30a), ACT^{GEN} can be topicalised, but there is always a genitive proclitic in the main clause. When it is put in the topic position, it is marked nominative, as in (30b).

- (30) a. *tu=padrek-aw i temutaw kana walak*
 3GEN=carry-TR1 SG.NOM his.grandparent DF.OBL child
 ‘The child carried his grandmother on his back.’
- b. *idru na walak i, tu=padrek-aw i*
 that.NOM DF.NOM child TOP 3GEN=carry-TR1 SG.NOM
temutaw
 his.grandparent
 ‘That child, he carried his grandmother on his back.’

PL^{OBL} may not be topicalised, as shown in (31b).

- (31) a. *trikelr dra sa’adr*
 <ITR>pick ID.OBL branch
 ‘She picked up some branches.’
- b. **na/dra sa’adr i, trikelr*
 DF.NOM/ID.OBL branch TOP <ITR>pick

8.4.1.4 Floating quantifier

The next diagnostic for testing corehood modification is the floating quantifier *peniya*.¹⁰ Nominative arguments, ACT^{NOM}, PL^{NOM}, and LPL^{NOM}, can be modified by *peniya* ‘all’.

- (32) *karuwa tubang na lalak peniya*
 can <ITR>answer DF.NOM child all
 ‘All the children can answer.’
- (33) *ta=kan-aw=la peniya na kuraw*
 1P.GEN=eat-TR1=PERF all DF.NOM fish
 ‘We have eaten all the fish.’

10 The word *p<en>iya* has two meanings: it means ‘finish’ when it occurs as V1 of an SVC (§13.4.2), and it means ‘all’ in other situations.

- (34) *tu=lriputr-anay na bira' peniya dra kuraw*
 3GEN=wrap-TR3 DF.NOM leaf all ID.OBL fish
 'She used all the leaves to wrap fish.'

If the clause includes both ACT^{GEN} (expressed by an oblique-marked NP and coreferenced by a genitive clitic) and PL^{NOM}, two readings are possible, i.e. *peniya* can modify either argument.

- (35) *tu=kan-aw na kuraw kana lalak peniya*
 3GEN=eat-TR1 DF.NOM fish DF.OBL child all
 'All of the children ate the fish.'
 'The children ate all of the fish.'

PL^{OBL} and adjuncts are not modified by *peniya*. In (36), *peniya* modifies *bira'* 'leaf' (LPL^{NOM}), not *kuraw* 'fish' (PL^{OBL}).

- (36) *tu=lriputr-anay na bira' peniya dra kuraw*
 3GEN=wrap-TR3 DF.NOM leaf all ID.OBL fish
 'She wrapped fish with all of the leaves.'
 '*She wrapped all of the fish with leaves.'

8.4.1.5 Raising from a complement clause

The next syntactic diagnostic is whether it is possible to raise the argument from a complement clause to the matrix clause. All the argument encodings except PL^{OBL} may be raised out of a complement clause. In the following examples, complement clauses are indicated by brackets, and the argument raised is underlined. Raising is illustrated in the (b) example in each instance. In (37b) ACT^{NOM} is raised, in (38b) ACT^{GEN}, in (39b) PL^{NOM}, and in (40b) LPL^{NOM}.

- (37) a. *ma-ladram=ku [dra m-ekan dra kuraw i pilay]*
 ITR-know=1S.NOM COMP ITR-eat ID.OBL fish SG.NOM Pilay
 'I know that Pilay eats fish.'
- b. *ma-ladram=ku kan pilay [dra m-ekan dra kuraw]*
 ITR-know=1S.NOM SG.OBL Pilay COMP ITR-eat ID.OBL fish
 'I know that Pilay eats fish.'
- (38) a. *ma-ladram=ku [dra tu_i=lriputr-aw=la na*
 ITR-know=1S.NOM COMP 3.GEN=wrap-TR1=PERF DF.NOM
kuraw kan nanali;]
 fish SG.OBL my.mother
 'I know that my mother has wrapped the fish.'
- b. *ma-ladram=ku kan nanali [dra*
 ITR-know=1S.NOM SG.OBL my.mother COMP
tu=lriputr-aw=la na kuraw]
 3.GEN=wrap-TR1=PERF DF.NOM fish
 'I know that my mother has wrapped the fish.'

- (39) a. *ma-ladram=ku* [*dra tu=lriputr-aw na kuraw*
 ITR-know=1S.NOM COMP 3.GEN=wrap-TR1 DF.NOM fish
dra bira'
 ID.OBL leaf
 'I know that the fish was wrapped in a leaf.'
- b. *ma-ladram=ku kana kuraw* [*dra tu=lriputr-aw*
 ITR-know=1S.NOM DF.OBL fish COMP 3.GEN=wrap-TR1
dra bira'
 ID.OBL leaf
 'I know that the fish was wrapped in a leaf.'
- (40) a. *ma-ladram=ku* [*dra tu=lriputr-anay dra kuraw na bira'*
 ITR-know=1S.NOM COMP 3.GEN=wrap-TR3 ID.OBL fish DF.NOM leaf
 'I know that the leaf was used to wrap fish.'
- b. *ma-ladram=ku kana bira'* [*dra tu=lriputr-anay dra kuraw*
 ITR-know=1S.NOM DF.OBL leaf COMP 3.GEN=wrap-TR3 ID.OBL fish
 'I know that the leaf was used to wrap fish.'

In (41) an PL^{OBL} may not be raised to the matrix clause.

- (41) a. *ma-ladram=ku* [*dra tu=lriputr-anay dra kuraw*
 ITR-know=1S.NOM COMP 3.GEN=wrap-TR3 ID.OBL fish
na bira'
 DF.NOM leaf
 'I know that the leaf was used to wrap fish.'
- b. **ma-ladram=ku dra kuraw* [*dra tu=lriputr-anay na bira'*]

The result of the five syntactic tests is summarised in Table 8.3.

Table 8.3: Morphosyntactic properties of argument encodings

	ACT		PL		LPL
	NOM	GEN	NOM	OBL	NOM
clitic on verbs	✓	✓	✓	×	✓
control in SVCs	✓	✓	✓	×	?
topicalisation	✓	✓	✓	×	✓
being modified by <i>peniya</i>	✓	✓	✓	×	✓
raised from complement	✓	✓	✓	×	✓

Table 8.3 shows that an oblique-marked PL cannot launch any of the syntactic processes. This means that, of the five argument encodings, PL^{OBL} can be regarded as non-core, whilst the other four encodings are core arguments.

8.4.1.6 PL^{OBL} vs adjunct

Should a PL^{OBL} be treated as an adjunct? No, for the following two reasons. First, while a PL is required by verbal valency, an adjunct is not. Second, the definiteness of a PL will force a subject-choice alternation, while the definiteness of an adjunct will not.

The patient (PL) of an actor voice clause or a three-argument TR2/TR3 clause is indefinite, as shown in (42) and (43).

- (42) a. *an trekelr=ta dra eraw i, ...*
 when <ITR>drink=1P.NOM ID.OBL wine TOP
 ‘When we drink **wine**, ...’
- b. **an trekelr=ta kana eraw i*
 when <ITR>drink=1P.NOM DF.OBL wine TOP
- (43) a. *tu=kiwitr-ay i temamataw dra patraka*
 3.GEN=grab-TR2 SG.NOM their.father ID.OBL meat
 ‘They grabbed **meat** from their father.’
- b. **tu=kiwitr-ay i temamataw kana patraka*
 3.GEN=grab-TR2 SG.NOM their.father DF.OBL meat

If there is a definite patient, it must be the subject of the clause and thus will cause a subject-choice alternation: from ITR to TR1, as shown in comparison of (42) and (44); or from TR2/TR3 to TR1, as shown in comparison of (43) and (45).

- (44) *ta=trekelr-aw na eraw*
 1P.GEN=drink-TR1 DF.NOM wine
 ‘We drank the wine.’
- (45) *tu=kiwitr-aw na patraka*
 3.GEN=grab-TR1 DF.NOM meat
 ‘They grabbed the meat.’

On the other hand, the definiteness of an adjunct does not cause a subject-choice alternation. For example, in the following sentences, *trabak* ‘box’ and *tatilru* ‘string’ can be either definite or indefinite.

- (46) *tu=abak-aw na bulra-bulray-an kana/dra trabak*
 3.GEN=pack-TR1 ID.NOM RED-beautiful-NMZ DF.OBL/ID.OBL box
 ‘They packed the girl into **the/a box**.’
- (47) *tu=betbet-aw kana/dra tatilru na trabak*
 3.GEN=tie-TR1 ID.OBL/ID.OBL string DF.NOM box
 ‘They tied the box **with (the) string**.’

Based on the two facts that a PL is required by verbal valency and its definiteness will force a subject-choice alternation, we can say that a PL^{OBL} is syntactically different from an adjunct.

8.4.2 Transitivity

Different points of view about transitivity in Philippine-type languages are held by different linguists. Some linguists, e.g. Starosta (1997; 1999) with regard to Philippine-type

languages in general, assert that undergoer voice sentences are transitive while actor voice sentences are intransitive. Others, e.g. Kroeger (1993) with regard to Tagalog, suggest that both actor voice and undergoer voice sentences are transitive.

Ross (2002) points out that the matter of transitivity can be viewed from two angles: semantics and morphosyntax. In the following section, I will look at how Puyuma sentences can be analysed from these two perspectives.

8.4.2.1 Semantic transitivity

From a semantic perspective, a prototypical transitive clause is one which has an agentive participant and a patient participant whose referent is significantly affected by the action denoted by the verb. In Puyuma the undergoer voice construction is clearly transitive in this sense.

Among studies of semantic transitivity, Hopper and Thompson's (1980:251–253) work is the most influential. They show that if a language distinguishes between transitive and intransitive constructions, there are certain semantic features which are more likely to be associated with the transitive construction, while their absence is more likely to be associated with the intransitive.

Among these features, individuation of O is the most relevant factor when we look at the Puyuma sentences. Individuation of O refers to properties such as being proper, human/animate, concrete, singular, count, and referential/definite (as opposed to common, inanimate, abstract, plural, mass, and non-referential/indefinite). As was mentioned in 8.4.1, in Puyuma texts a definite PL in an independent clause will be chosen to be the subject, and the sentence will be manifested as UV. This confirms Hopper and Thompson's observation. For example:

(48) *puka=ku dra 'aputr*
 add=1S.NOM ID.OBL flower
 'I added some flowers.'

(49) *ku=puka-ay na 'aputr dra pakering*
 1S.GEN=add-TR2 DF.NOM flower ID.OBL hook
 'I added some hooks to the wreath.'

8.4.2.2 Morphosyntactic transitivity

From a morphosyntactic point of view, a sentence is transitive if it has at least two core arguments. We are now in a position to re-examine the syntactic templates presented in §8.3 with regard to their transitivity. We have seen in §8.4.1 that nominative and genitive arguments (ACT^{NOM} , PL^{NOM} , LPL^{NOM} , and ACT^{GEN}) are core because they are syntactically privileged arguments: they participate in the syntactic operations. Accordingly, the UV templates in (51) are transitive, because there is always a nominative-marked (PL^{NOM} or LPL^{NOM}) and a genitive (ACT^{GEN}) argument. The actor voice templates in (50), on the other hand, are intransitive. Example (50a) has only a nominative argument and is thus intransitive. The oblique argument in (50b) is PL^{OBL} and therefore non-core, leaving just the nominative as a core argument, so (50b) is also intransitive.

- (50) a. $V^{AV} (NP^{NOM})$
ma-'itrilr=yu
 ITR-stingy=2P.NOM
 'You are stingy.'
- b. $V^{AV} (NP^{OBL}) (NP^{NOM})$
p<en>angutr dra dare' na mar-kataguin
 <ITR>grab ID.OBL soil DF.NOM RECIP-spouse
 'The couple grabbed some soil.'
- (51) a. $Pron_i^{GEN}=V^{UV} (NP^{NOM}) (NP_i^{OBL})$
tu=ka-aw=ku i nanali
 3.GEN=tell-TR1=1S.NOM SG.NOM my.mother
 'My mother told me.'
- b. $Pron_i^{GEN}=V^{UV} (NP^{NOM}) (NP_j^{OBL}) (NP_i^{OBL})$
tu=trakaw-ay=ku dra paisu kan isaw
 3.GEN=steal-TR2=1S.NOM ID.OBL money SG.OBL Isaw
 'Isaw stole money from me.'

The subtypes that have an oblique-marked patient are exemplified in (50b) and (51b). We saw in §8.4.1 that oblique-marked patients belong to the argument structure of the verb, i.e. the patient is required by verbal valency, and they are not adjuncts. For this reason, the transitivity of these sentences is not as straightforward as those shown in (50a) and (51a) because of the seemingly intermediate status of the oblique-marked patient. In Dixon's (1994:120-124) terminology the templates in (50b) and (51b) are respectively an 'extended intransitive construction' and an 'extended transitive construction'. The 'extension' in each construction is required by the argument structure of the verb, but does not behave as a core argument in any syntactic construction.

8.4.3 Instances where there is a definite oblique PL

I wrote in §8.4.1.6 that the PL of an actor voice clause is indefinite. However, there are a few instances in the corpus where the PL of an actor voice clause is definite. These exceptional cases fall into four categories. First, the constraint that a definite PL must be subject only applies in circumstances where a bivalent verb can appear in undergoer voice form. When a non-initial verb of an SVC or the verb of an RC is forced by its construction into the actor voice form, the PL may be definite. The second verb of an SVC must be an actor voice verb (§13.2.2.1) and as a result it breaks the constraint. Similarly, in a relative clause where the NP_{rel} is the actor, the RC must be an actor voice clause (§5.6.3), which in turn may cause a situation where the oblique PL in an AV clause is definite.

Second, there are some verbs that have no corresponding transitive forms and always appear in intransitive forms. For example, for the verbs *masepel* 'disappoint' and *sarepa* 'satisfy' there are no such forms as *sepal-aw*, *sepal-ay*, *ka-sepel-aw* or *ka-sepel-ay*, and no *sarepa-aw*, *sarepa-ay*, *ka-sarepa-aw* or *ka-sarepa-ay*.

(52) a. *sarepa=ku kantu ngai*
 satisfy=1S.NOM DF.OBL/3.PSR word
 ‘I am satisfied with his words.’

b. **ku=sarepa-ay nantu ngai*

In addition, there are certain verbs that have different meanings in their actor and undergoer voice forms. These verbs include verbs denoting perception ((53) to (54)), cognition ((55) to (56)), and psychological states ((57) to (60)). In other words, the semantics of these actor voice verbs are different from their corresponding undergoer voice forms (e.g. ‘see’ vs ‘watch over’ in (53); ‘hear’ vs ‘listen to’ in (54); ‘know’ vs ‘recognise’ in (55)).

(53) a. *me-na’u=ku kana sinsi i dalran*
 ITR-see=1S.NOM DF.OBL teacher LOC road
 ‘I saw the teacher on the street.’

b. *ku=na’u-ay na sinsi (*i dalran)*
 1S.GEN=see-TR2 DF.NOM teacher
 ‘I watched over (took care of) the teacher.’
 ‘*I watched over the teacher on the street.’

(54) a. *kilengaw=ta kantu senay kana sinsi*
 hear=1S.NOM DF.OBL/3.PSR song DF.OBL teacher
 ‘We heard the teacher’s song.’

b. *an tu=turu-ay=yu kana sinsi i, kilengaw-i*
 when 3GEN=exhort-TR2=2S.NOM DF.OBL teacher TOP hear-TR2.IMP
 ‘When the teacher is exhorting you, listen (to him).’

c. *kilengaw=ku kana hikoki*
 hear=1S.NOM DF.OBL plane
 ‘I heard the plane.’

d. **ku=kilengaw-ay na hikoki*
 ‘*I listened to the plane.’

(55) a. *ma-ladram=yu kandru na trau?*
 ITR-know=1S.NOM that.OBL LK person
 ‘Do you know the person?’

b. *tu=ka-ladram-ay=ku kan pilay*
 3GEN=ka-know-TR2=1S.NOM SG.OBL Pilay
 ‘Pilay recognised me.’

(56) a. *ma-ulrid=ku kanu ngai*
 ITR-don’t.know=1S.NOM DF.OBL/2S.PSR word
 ‘I don’t understand your words.’

b. *nu=ka-ulrid-ay=ku*
 2S.GEN=ka-don’t.know-TR2=1S.NOM
 ‘You didn’t inform me.’

- (57) a. *masupeng=ku kan nanali*
miss=1S.NOM SG.OBL my.mother
'I miss my mother.'
- b. *ku=supeng-ay i nanali*
1S.GEN=kiss-TR2 SG.NOM my.mother
'I kissed my mother.'
- (58) a. *igela=ku kanu*
embarrassed=1S.NOM 2S.OBL
'I felt embarrassed (toward you).'
- b. *ku=k-igela-ay=yu*
1S.GEN=*ka*-respect-TR2=2S.NOM
'I respect you.'
- (59) a. *sagar=ku kanu*
like=1S.NOM 2S.OBL
'I like you.' (without any specific reason)
- b. *ku=*ka*-sagar-aw=yu*
1S.GEN=*ka*-like-TR1=2S.NOM
'I cosset you.' (because of a specific reason)
- (60) a. *indang=ku kanu*
afraid=1S.NOM 2S.OBL
'I am afraid of you.' (without a specific reason)
- b. **indang=ku kana kakuwalrengan*
afraid=1S.NOM DF.OBL disease
'I'm afraid of the disease.'
- c. *ku=k-indang-ay ina kakuwalrengan*
1S.GEN=*ka*-afraid-TR2 DF.NOM disease
'I'm afraid of the disease.'

Although the actor voice verbs exemplified in (53) to (60) allow a definite oblique PL, these clauses are nevertheless intransitive because there is only one core argument. In (61a) the oblique-marked PL *sinsi* 'teacher' of the perception verb *kilengaw* 'hear' cannot be the controller of *senay* 'sing'. Only when the PL *sinsi* is the subject, as in (61b), can it be the controller. Similarly, in (62a) the oblique-marked PL *isaw* of the psych verb *indang* 'fear' cannot be the controller of *m-u-dalep* 'go near'; in (64b) the controller of *ki-dalep* 'being approached' is =*ku* not *isaw*.

- (61) a. **kilengaw=ku kana sinsi senay*
hear=1S.NOM DF.OBL teacher <ITR>sing
'I heard the teacher sing.'
- b. *ku=kilengaw-ay na sinsi senay*
1S.GEN=hear-TR2 DF.NOM teacher <ITR>sing
'I listened to the teacher's singing.'

- (62) a. **indang=ku kan isaw m-u-dalep*
 afraid=1S.NOM SG.OBL Isaw ITR-go-near
 ‘I am afraid of Isaw’s approaching.’
- b. *indang=ku kan isaw ki-dalep*
 afraid=1S.NOM SG.OBL Isaw PASS-near
 ‘I am afraid of being approached by Isaw.’
 (Note: The controller of *kidalep* is =*ku*.)

Recall that in raising constructions (§8.4.1.5) an argument that is raised from a complement clause may be marked oblique in the main clause, as illustrated in (63).

- (63) a. *ma-ladram=ku [dra m-ekan dra kuraw i pilay]*
 ITR-know=1S.NOM COMP ITR-eat ID.OBL fish SG.NOM Pilay
 ‘I know that Pilay eats fish.’
- b. *ma-ladram=ku kan pilay [dra m-ekan dra kuraw]*
 ITR-know=1S.NOM SG.OBL Pilay COMP ITR-eat ID.OBL fish
 ‘I know that Pilay eats fish.’

In (63b) *pilay* is an instance of definite oblique-marked PL, because the verb *maladram* ‘know’ does not have a (same-meaning) transitive form, as shown in (55).

Examples in (64) show that if the raised argument is definite, the complement-taking verb appears in its transitive form.

- (64) a. *me-na’u=ku [dra tu=tra-trakaw-aw na kuraw]*
 ITR-see=1S.NOM COMP 3.GEN=RED-steal-TR1 DF.NOM fish
kan isaw]
 SG.OBL Isaw
 ‘I saw Isaw stealing the fish.’
- b. *ku=na’u-ay i isaw [dra tu=tra-trakaw-aw]*
 1S.GEN=see-TR2 SG.NOM Isaw COMP 3.GEN=RED-steal-TR1
na kuraw]
 DF.NOM fish
 ‘I saw Isaw stealing the fish.’

The last situation where we may encounter a definite oblique PL occurs in a special genre (prayers). For instance, in one of the texts given in Appendix 3 (Part of a prayer), when the speaker is praying to God she used the transitive forms to say ‘I pray to you’, ‘I worship/bow down to you’, etc. There are several restrictions in such instances: first, the mood is hortative/desiderative, and second, the actor must be the first person and the PL must be the second person, as in (65a) and (65b). If the definite PL is not the second person, as in (65c), it will be the subject.

- (65) a. *sa-sungalr=mi kanu* (OR: *sungalr-a=mi kanu*)
 RED-bow=1P.ECL.NOM 2S.OBL
 ‘We will bow down to you.’ OR: ‘We will worship you.’
- b. **ku=sungalr-aw=yu*
 1S.GEN=bow-TR1=2S.NOM
 ‘We bowed to you.’

- c. *ta=sungalr-aw idri na ma'idrang*
 1P.ICL.GEN=bow-TR1 this.NOM DF.NOM old
 'We bowed to the elder.'

8.4.4 The mapping between transitivity and voice in Puyuma

Having demonstrated that actor voice sentences are intransitive and undergoer voice sentences are transitive, I will show why the morphemes that are traditionally glossed as 'focus' markers or 'voice' markers are better glossed as marking transitivity in Puyuma.

- (66) *salretrag=ku dra enay*
 <AV>pour.out=1S.NOM ID.OBL water
 <ITR>pour.out=1S.NOM ID.OBL water
 'I poured out some water.'
- (67) *ku=salretrag-aw na enay i babulru'*
 1S.GEN=pour.out-PV DF.NOM water LOC yard
 1S.GEN=pour.out-TR1 DF.NOM water LOC yard
 'I poured out the water in the yard.'
- (68) *ku=salretrag-ay dra enay nu=tranguru'*
 1S.GEN=pour.out-LV ID.OBL water 2S.PSR=head
 1S.GEN=pour.out-TR2 D.OBL water 2S.PSR=head
 'I poured some water on your head.'
- (69) *ku=salretrag-anay=la na enay*
 1S.GEN=pour.out-CV=PERF DF.NOM water
 1S.GEN=pour.out-TR3=PERF DF.NOM water
 'I have poured out the water.'

The second set of glosses in (66)–(69) is introduced in Ross and Teng (2005a), and has been adopted in this grammar wherever the voice glosses are not required for reasons of presentation. The reasons for preferring the second set are explained below.

First, there is very often a mismatch between the gloss of the voice (the Philippinists' 'focus') affix and the semantic role of the subject that the affix indicates (§6.2). Traditionally, verbs marked by the *M-* morpheme are glossed as actor voice, regardless of whether the nominative argument is the actor or not. Compare:

- (70) *m-atel i drenan idri na walak*
 ITR-throw LOC mountain this.NOM DF.NOM child
 'The child threw (something) away in the mountains.'
- (71) *ma-atel ku=paisu*
 ITR-throw 1S.PSR =money
 'My money was gone (disappeared).'
- (72) *ma-'itrihr=yu*
 ITR-stingy=2P.NOM
 'You are stingy.'

In the above sentences, the semantic roles of the nominative NP are very different. In (70), the nominative NP is the actor, while in (71) and (72) the nominative NP is not, and to

gloss the marker *ma-* as actor voice is strange. On the other hand, the three sentences are all intransitive. Glossing *M-* morphemes as intransitive captures this fact.

As I show in §6.2, the semantic role of the nominative argument in each undergoer voice construction covers a great range of variation. The choice among three undergoer voice markers is to a great extent related to the degree to which the subject participant is affected by the action denoted by the verb. This fact can also be observed in irrealis and negative constructions (§6.3.1 and §11.2). The terms ‘patient voice’, ‘locative voice’ and ‘conveyance voice’ are simply inappropriate to Puyuma.

8.5 Ergativity

‘Ergative’ is used here in Dixon’s (1994) sense of a linguistic feature which marks the sole argument of an intransitive clause (S, hereafter) and the undergoer argument of a transitive clause (O, hereafter) in the same way.

In a canonical intransitive sentence, S is marked as nominative. In a canonical transitive sentence, O is marked as nominative while A is marked differently (as genitive). In this regard, Puyuma is syntactically ergative. However, the reader should note that Puyuma verb forms are not ergatively aligned. If they were, then the antipassive (actor voice) verb would be marked differently from the intransitive, but this is not the case. Antipassive verbs have the same marking as intransitive verbs. Thus verbal morphology is accusatively aligned in Puyuma.

Croft (2001:155) proposes a Subject Construction Hierarchy, shown in (73), which defines ‘an implicational scale such that for any construction on the scale, if the construction patterns ergatively, then all the constructions to the right of it on the scale also pattern ergatively; if the construction patterns accusatively, then all the constructions to the left of it on the scale also pattern accusatively’.

(73) The Subject Construction Hierarchy

coordination < purposive < relativisation < verb agreement < case marking

We have seen that Puyuma patterns ergatively in case marking and verb agreement. Relative clauses (§5.6) pattern accusatively, as one construction (full clause, as in (74a)–(74b)) is used when A or S is relativised, and a different strategy (gerund, as in (74c)) is used when an O is relativised.

- (74) a. *k<a>adru=driya nantu lang [na aru 'a-'adras*
 <a>there=IMPF DF.NOM/3.PSR company DF.NOM will RED-lift.up
kantaw]
 3.OBL
 ‘There is his friend who will lift him up.’
- b. *tu=alrak-aw na sababa [na salraw drekan]*
 3.GEN=take-TR1 DF.NOM cloth DF.NOM very wide
 ‘He took the cloth which was very wide.’
- c. *m-uka kururus-a kana gelritr [kantu*
 ITR-go <ITR>drag-PJ DF.OBL thorn DF.OBL/3.PSR

t<in>a'ta'-an kantu 'alri'alrian]
 <PERF>spread-NMZ DF.OBL/3.PSR male.friend

'He went dragging the thorns which were spread out by his friends.'

Serial verb constructions including purposive clauses also pattern accusatively in Puyuma (see §13.2.2.1). In short, Puyuma independent clauses are morphosyntactically ergative, but complex constructions display accusativity.

9 *Re-encoding of arguments*

9.1 Introduction

This chapter deals with five operations that re-encode core arguments. These operations are: causative, reciprocal, reflexive, anticausative, and passive constructions.¹ In the literature these operations are commonly described as valency-changing. Because ‘valency’ refers to the number of all arguments (core or non-core) in this grammar and this chapter concerns only the coding of core arguments, I choose to avoid using ‘valency-changing’ here.

A causative construction (§9.2) introduces a new argument, a causer. The causee becomes the undergoer/PL, and the undergoer of the caused event the LPL (§8.3) of the causative verb. In reciprocal constructions (§9.3) the undergoers are at the same time the actors, and the undergoer argument vanishes. Reflexive constructions (§9.4) in Puyuma utilise a body part or a neutral pronoun (with the same number and person as the actor) to manifest the undergoer; they are structurally the same as ordinary transitive clauses. In the anticausative (§9.5) and the passive (§9.6) constructions, the undergoer remains as a core argument, but the actor is demoted to the oblique position. Table 9.1 provides a summary of these operations and the corresponding encodings of arguments.²

9.2 Causative constructions

In many languages of the world, if the caused event is intransitive, the causative becomes transitive; if the caused event is transitive, the causative counterpart becomes ditransitive. Because Puyuma only allows two core slots, the causative counterpart of a transitive verb remains transitive (not ditransitive) and the definiteness of the causee is important in determining subject choice (§9.2.1.2).

In this section, my discussion focuses on morphological causativisation, given in §9.2.1, as it is the most productive causative construction in Puyuma. In the morphological causative, the verb denoting the resultant event is derived by prefixing a causative morpheme. In Puyuma, there are also analytic causatives, which will be discussed in §9.2.2.

1 Transitive clauses that have three arguments (two cores and one oblique) are applicative-like, as they bring an adjunct into the undergoer position, and are thus core-argument adjusting operations. They are not treated here but are described in §6.2 and §8.3.

2 This table only summarises those operations that utilise a morphological device to express re-encoding of arguments. Reflexive constructions are not listed here because there is no morpheme devoted to expressing a reflexive meaning.

Table 9.1: Re-encoding of arguments

Verb types	Transitive clause	Intransitive clause	
Dynamic	<i>Root-TR:</i> NOM: Undergoer GEN: Actor	monovalent intransitive and extended intransitive	<i>ITR-Root:</i> NOM: Actor (OBL: Undergoer)
	—	anticausative	<i>mu-Root:</i> NOM: Undergoer (OBL: Actor)
	—	passive	<i>ki-Root:</i> NOM: Undergoer (OBL: Actor)
	—	reciprocal	<i>ma-RED-Root:</i> NOM: Actor/undergoer
(Cognitive) + Stative	<i>ka-Root-TR:</i> NOM: Experiencer GEN: Actor	reciprocal	<i>mar-(ka-)Root:</i> NOM: Experiencer
		monovalent intransitive	<i>ITR-Root:</i> NOM: Experiencer
Causative	<i>pa-(ka-)Root-TR:</i> NOM: Undergoer/actor of the caused event GEN: Actor of the causative event	extended intransitive	<i>pa-Root:</i> NOM: Actor of the causative event
		reciprocal	<i>mar-pa-Root:</i> NOM: Actor/undergoer

9.2.1 Morphological causatives

9.2.1.1 Derivation of causative verbs

In this type of causativisation, causative verbs are derived by affixing a causative morpheme *pa-*,³ *p-*, or *pu-* to a non-causative stem.^{4/5} For example:

3 There are two homophonous prefixes *pa-* in Puyuma. One is causative. The other *pa-*, together with *Ca-* reduplication, signals plurality of relations (§9.3.2). Note also that while the *pa-ka-Root* construction discussed in this section is the causative derivation of some verbs, there is another derivational form *paka-Root* involving no causative meaning (§6.3.2.3).

4 It is suggested by Blust (1999a) that there was an alternation between *pa-* and *paka-* marking causative verbs in PAN. According to his reconstruction of PAN, *pa-* attached to more dynamic verbs, and *paka-* to more stative verbs. While Zeitoun (2000) and Zeitoun and Huang (2000) agree with Blust's claim that *pa-* attaches to dynamic verbs and *paka-* attaches stative verbs, they analyse *paka-* as a bimorphemic prefix *pa-ka-* and reconstruct *ka-* as a stative marker in PAN. The Puyuma examples favour Zeitoun and Huang's analysis. However, in Puyuma the semantic distinction between *pa-* and *pa-ka-* is not as clear-cut as in the account of other Formosan languages given by these authors. The function of *ka-* is discussed in §6.6.

Non-causative

kasu 'bring'
trekelr 'drink'

Causative

pa-kasu 'to make s.b. bring'
pa-trekelr 'to make s.b. drink'

Non-causative stems are not restricted to verbs. Sometimes the stem is a noun. Causative verbs and their formation are initially subcategorised according to whether the stem which the causative marker attaches to is a noun or a verb.

Verbs in this category are formed by prefixing *pa-* to nominal stems.

bali 'shadow'
balri 'wind'
seber 'bud'
kadaw 'sun'
trepa 'goal'

pa-bali 'to put in the shadow'
pa-balri 'to cause wind'
pa-seber 'to make buds'
pa-kadaw 'to spread out in the sun'
pa-trepa 'to aim at the goal'

Most causative verbs are formed by prefixing the causative marker *pa-* to the verb forms used in imperative sentences. We can divide such verbs into two categories; those with *ka-* in imperative/irrealis constructions, and those without *ka-* (§6.5). Verbs with *ka-* in the imperative/irrealis constructions are affixed with *ma-* (or \emptyset) in the corresponding intransitive construction. I first show examples of verbs with *ka-* together with their causative counterparts, and then examples of verbs without *ka-*. Examples of causatives which do not follow this pattern are given at the end.

(i) Causatives with *ka-* in the imperative/irrealis form.

Imperative form

ka-trina 'be big'
ka-keser 'be strong'
ka-'itu 'be wounded (by spirits)'
ka-inaba 'be good'
ka-asatr 'be tall'
ka-uringetr 'be brave'
ka-bulray 'be clean/beautiful'
k-ingdan 'be afraid'
ka-kualreng 'be sick'
ka-bekalr 'be new'

Causative form

pa-ka-trina 'to make s.th./s.b. big'
pa-ka-keser 'to make s.b. strong'
pa-ka-'itu 'to cause s.b. to be wounded by spirits'
pa-ka-inaba 'to make s.th./s.b. good'
pa-ka-asatr 'to make s.th./s.b. tall'
pa-ka-uringetr 'to make s.b. brave'
pa-ka-bulray 'to make s.th./s.b. clean/beautiful'
pa-ka-ingdan 'to cause s.b. to be afraid'
pa-ka-kualreng 'to cause s.b. to be sick'
pa-ka-bekalr 'to renew'

(ii) Causatives without *ka-* in the imperative form.

Imperative form

'aw'aw 'call'
kilengaw 'listen'
karun 'work'

Causative form

pa-'aw'aw 'to make s.b. call'
pa-kilengaw 'to make s.b. listen'
pa-karun 'to make s.b. work'

5 The forms *pa-* and *p-* are allomorphs: *p-* attaches to stems that begin with /a/, and *pa-* elsewhere. The occurrence of *pu-* is more restricted and needs more research. However, this *pu-* should not be confused with *p-u-* (causative plus motion, e.g. *p-u-sabak* 'make s.b. go inside'). In the case of the *pu-* causative, *pu-* attaches to a verbal or a nominal stem and the prefix *pu-* cannot be further analysed into *p-u-* (e.g. *pu-ngalrad* 'to give a name to' < *ngalrad* 'name', **u-ngalrad*); whereas in the case of *p-u-*, the causative *p-* prefixes to a stem that contains *u-* and a locative noun, meaning 'go to N'.

<i>drua</i> ‘come’	<i>pa-drua</i> ‘to make s.b. come’
<i>dirus</i> ‘wash’	<i>pa-dirus</i> ‘to make s.b. wash’
<i>trekelr</i> ‘drink’	<i>pa-trekelr</i> ‘to make s.b. drink’
<i>u-sabak</i> ‘get into’	<i>p-u-sabak</i> ‘to make s.b. get into’
<i>alrak</i> ‘take’	<i>pa-alrak</i> ‘to make s.b. take’

(iii) Causatives not formed from imperative forms.

Imperative form	Causative form
<i>ka-lriay</i> ‘be drunk’	<i>pa-lriay</i> ‘to make s.b. drunk’
<i>ka-dawak</i> ‘be poisoned’	<i>pa-dawak</i> ‘to poison s.b.’
<i>ka-risan</i> ‘be identical’	<i>pa-risan</i> ‘to make s.th./s.b. identical’
<i>ka-’udal</i> ‘rain’	<i>pa-’udal</i> ‘to make rain’
	<i>pa-ka-’udal</i> ‘to pray for rain’
<i>ka-ladram</i> ‘know’	<i>pa-ladram</i> ‘to teach s.b.’
	<i>pa-ka-ladram</i> ‘to present, to show’
<i>ka-tia</i> ‘dream’	<i>pa-tia</i> ‘to send message through dreams’
	<i>pa-ka-tia</i> ‘to cause s.b. to dream’
<i>k-alupe</i> ‘sleep’ ⁶	<i>p-alupe</i> ‘to pamper s.b.’
	<i>pa-k-alupe</i> ‘to cause s.b. to sleep well’
<i>ka-litek</i> ‘be cold’	<i>pa-litek</i> ‘to make s.th. cold’

How can the irregular forms in (iii) be explained? One possibility is that some roots historically had two sets of derivations, one stative and one dynamic, and that from these were derived two causative forms with different meanings. For example, *-lriay* ‘drunk’ or *dawak* ‘poison’ may have had two sets of derivations, a dynamic and a stative, as shown in Table 9.2 and Table 9.3 (the asterisk indicates a hypothetical form).

Table 9.2: (Possible) derivations of *-lriay*

<i>-lriay</i>	Dynamic	Stative
Intransitive	* <i>me-lriay</i>	<i>ma-lriay</i>
Imperative	* <i>lriay</i>	<i>ka-lriay</i>
Irrealis	* <i>lra-lriay</i>	<i>ka-lra-lriay</i>
Causative	<i>pa-lriay</i>	* <i>pa-ka-lriay</i>

Table 9.3: (Possible) derivations of *dawak*

<i>dawak</i>	Dynamic	Stative
Intransitive	* <i>dawak</i>	<i>ma-dawak</i>
Imperative	* <i>dawak</i>	<i>ka-dawak</i>
Irrealis	* <i>da-dawak</i>	<i>ka-da-dawak</i>
Causative	<i>pa-dawak</i>	* <i>pa-ka-dawak</i>

6 The word is analysed as *k-alupe* instead of *ka-lupe* because from the example *alupe=la* ‘He’s slept’ we know the root is *alupe*.

As time went by, one form was lost, and thus the irregularity arose. This hypothesis is supported by the derivations of *bu'utr* 'stop' and *sanan* 'stray, get lost' given in Table 9.4 and Table 9.5.

Table 9.4: Verbal derivations of *bu'utr*

<i>bu'utr</i>	Dynamic	Stative
Intransitive	<i>bu'utr</i> 'to stop s.th.'	<i>ma-bu'utr</i> 'cease'
Imperative	<i>bu'utr</i> 'to stop'	<i>ka-bu'utr</i> 'to cease'
Irrealis	<i>ba-bu'utr</i> 'will stop'	<i>ka-ba-bu'utr</i> 'will cease'
Causative	<i>pa-bu'utr</i> 'cause s.b. to stop'	<i>pa-ka-bu'utr</i> 'cause s.th. to cease'

Table 9.5: Verbal derivations of *sanan*

<i>sanan</i>	Dynamic	Stative
Intransitive	<i>sanan</i> 'stray'	<i>ma-sanan</i> 'get lost'
Imperative	<i>sanan</i>	<i>ka-sanan</i>
Irrealis	<i>sa-sanan</i>	<i>ka-sa-sanan</i>
Causative	<i>pa-sanan</i> 'make s.b. get lost'	<i>pa-ka-sanan</i> 'cause s.b. to get lost'

Examples of *sanan* and its derivations are given in (3)–(6).

- (3) *an sanan=yu dra dakran i tralrun ...*
 when <ITR>stray=2S.NOM ID.OBL road LOC grass
 'If you lost your way in the field ...'
- (4) *ka-sa-sanan dra dalran*
ka-RED-stray ID.OBL road
 'He will get lost.'
- (5) *tu=pa-sanan-aw=ku*
 3.GEN=CAUS-stray-TR1=1S.NOM
 'He made me get lost.'
- (6) *ku=asalr-aw na pinutungan pa-ka-sa-sanan*
 1S.GEN=move-TR1 DF.NOM knot CAUS-ka-RED-stray
dra ala'-ala'
 ID.OBL RED-enemy
 'I moved the knots to cause the enemy to get lost.'

From the translations of (5) and (6), it seems that when a root has two causative derivations (with and without *ka-*), the one with *ka-* denotes indirect causation, while the one without *ka-* indicates direct causation. Further investigation of this matter is needed.

At this point, one thing needs to be mentioned. Like non-causative verbs, causative verbs also take transitive affixes, as shown in (5). However, there is no intransitive marker. In other words, while transitive affixes, *-aw* (TR1), *-ay* (TR2), and *-anay* (TR3) can coexist with the causative marker *pa-*, the intransitive marker *ma-* (or *m-*, **, *me-*) is incompatible

with the causative marker *pa-*.⁷ The four subject choice alternations of the verb *talam* ‘to try’ and their causative counterparts are shown below.

	Non-causative	Causative
ITR	<i>talam</i>	<i>pa-talam</i>
TR1	<i>talam-aw</i>	<i>pa-talam-aw</i>
TR2	<i>talam-ay</i>	<i>pa-talam-ay</i>
TR3	<i>talam-anay</i>	<i>pa-talam-anay</i>

Note that there is no **pa-talam*.

9.2.1.2 Subject choice and case marking of arguments

There are at least two arguments in a causative construction: the causer, which is the agent of cause, and the causee, which is the agent or experiencer of the caused event. Syntactically, a causative construction is usually manifested as transitive, i.e. in an undergoer voice, except in certain cases where the causee is an indefinite NP, or where there are other syntactic restrictions, such as in a serial verb construction (Chapter 13). The definiteness of the causee, which is the PL, is an important factor in determining subject choice in Puyuma in non-causative independent clauses (§8.4.1.7). If the PL is definite, it must be chosen as the subject and is marked nominative (and the clause is thus transitive). However, in all the examples examined, the undergoer of the caused event is always marked with oblique case, whether definite or indefinite.

In most cases, the assignment of case to the arguments is as follows:

Causer (the actor of the causative event): genitive case

Causee (the actor of the caused event) : nominative case

Others (the undergoers of the caused event) : oblique case

In the following discussion, I will give a schema after each example to better illustrate the relationships between the arguments and the causative/caused events. A causative construction can be symbolised as:

CAUSE (X, P) = X causes P

So,

CAUSE (John, drink (Mary, wine)) = John caused Mary to drink wine.

For example:

- (7) *tu=pa-trekelr-ay=mu dra enay i, ...*
 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL water TOP
 ‘If she made you drink water, ...’
CAUSE (she_{GEN}, drink (you_{NOM}, water_{OBL}))

⁷ There are only two examples in my data which show *pa-* cooccurring with an actor voice marker; *pa-ka-ma-keser* ‘make strong’, and *pa-ka-sangalr* ‘to make happy, to award’. I have no explanation for these.

- (8) *tu=p-uka-anay=ku kana palriangalrungan*
 3.GEN=CAUS-go-TR3=1S.NOM DF.OBL band
 ‘They sent me to the band.’
CAUSE (they_{GEN}, go (I_{NOM}, the band_{OBL}))

As mentioned earlier, the definiteness of the causee plays an important role in determining subject choice. In cases where actor voice is chosen, the causee is always indefinite. For instance:

- (9) *pa-ra-ragan=yu dra manay dra belretrenganan*
 CAUS-RED-up=2S.NOM ID.OBL what ID.OBL ancient
 ‘Can you build something ancient?’
CAUSE (you_{NOM}, up (something_{OBL}))
- (10) *p-u-patrarán dra tulru-a ki<a>umal-an*
 CAUS-go-out ID.OBL three-NPRS <RED>ask-NMZ
 ‘He brought out three questions.’
CAUSE (he_{NOM}, out (three questions_{OBL}))
- (11) *pa-ragan dra trakuban*
 CAUS-up ID.OBL boys’.house
 ‘They built a boys’ house.’
CAUSE (they_{NOM}, up (boys’ house_{OBL}))
- (12) *pa-karun dra bangsaran sanga dra trabak*
 CAUS-work ID.OBL young.man <ITR>make ID.OBL box
i tinataw
 SG.NOM her.mother
 ‘Her mother had some young men make a box.’
CAUSE (her mother_{NOM}, work (young man_{OBL}))

However, an indefinite causee does not always cause a sentence to be manifested in actor voice. In some examples, an undergoer voice is used even when the causee, the actor of the caused event, is indefinite. For example:

- (13) *tu=pa-talam-ay a suan i,*
 3.GEN=CAUS-try-TR2 ID.NOM dog TOP
 ‘He made a dog try.’
CAUSE (he_{GEN}, try (a dog_{NOM}))
- (14) *tu=p-u-sabak-aw a tidrul kana patrungtrungan*
 3.GEN=CAUS-go-inside-TR1 ID.NOM wasp DF.OBL drum
 ‘He put a wasp into the drum.’
CAUSE (he_{GEN}, go inside (a wasp_{NOM}))
- (15) *adri tu=pa-ka-ladram-i a trau*
 NEG 3.GEN=CAUS-ka-know-TR2 ID.NOM person
 ‘She didn’t let others know.’
CAUSE (she_{GEN}, know (others_{NOM}))

So, we can say that for a causative clause to appear in actor voice, the causee must be indefinite. But the converse is not true: an indefinite causee will not necessarily result in an actor voice sentence with a causative verb.

Our next concern is with undergoer voice causative constructions and with the question of when and why a particular undergoer voice is chosen. All three undergoer voices are found in the examples, as shown below:

- (16) *tu=p-inatray-aw idru na bangsaran*
 3.GEN=CAUS-die-TR1 that.NOM DF.NOM young.man
 ‘He killed that young man.’

CAUSE (he_{GEN}, die (that young man_{NOM}))

- (17) *tu=pa-treke-tr-ay dra kadepu’*
 3.GEN=CAUS-stick-TR2 ID.OBL paper
 ‘He stuck a paper on it.’

CAUSE (he_{GEN}, stick (it_{NOM}, paper_{OBL}))

- (18) *ta=pa-la’udr-anay i kali*
 1P.GEN=CAUS-float-TR3 LOC river
 ‘We let it float in the river.’

CAUSE (we_{GEN}, float (it_{NOM}))

From the above examples, it seems that a particular subject choice is determined by the affectedness of the causee in the action denoted by the causative verb. In (16), the causee is the patient of the action, in (17), the goal or location, and in (18), the theme. However, it is not always this clear, and sometimes we cannot easily find a reason for the choice of undergoer subject. For instance, in the following examples, the same verb, *-uka* ‘go’ in (19) and (20), and *talam* ‘try’ in (21) and (22), is manifested in different undergoer choices.

- (19) *tu=p-uka-aw=ku kana palriangalrungan*
 3.GEN=CAUS-go-TR1=1S.NOM DF.OBL band
 ‘They sent me to the band.’

CAUSE (they_{GEN}, go (I_{NOM}))

- (20) *tu=p-uka-anay=ku kana ising*
 3.GEN=CAUS-go-TR3=1S.NOM DF.OBL doctor
 ‘They caused me to be taken to the doctor.’

CAUSE (they_{GEN}, go (I_{NOM}))

- (21) *tu=pa-talam-anay=driya dra basikaw*
 3.GEN=CAUS-try-TR3=IMPF ID.OBL bamboo
 ‘He made them try again with a bamboo.’

CAUSE (he_{GEN}, try (they_{NOM}, bamboo_{OBL}))

- (22) *tu=pa-tala-talam-aw tu=wadi*
 3.GEN=CAUS-RED-try-TR1 3.PSR=younger.sibling
 ‘He made his younger brother try again and again.’

CAUSE (he_{GEN}, try (his younger brother_{NOM}))

Sentences (19) and (20) are taken from the same text. Although in both sentences the informant was sent to the band and to the doctor, respectively, in (19) the informant went to

the band himself, but in (20) he is in the theme role to be moved to the hospital because he is paralysed. Examples (21) and (22) are from different texts, and I have no explanation for the different subject choices in the two sentences.

To sum up, there are two factors affecting subject choice: the definiteness of the causee, and its semantic role or its affectedness by the given action. The first factor influences the choice between actor voice or undergoer voice, and the second factor determines which undergoer subject is chosen.

9.2.2 Analytic causatives

An analytic causative is defined by Payne (1997:181) as a construction ‘consisting of a matrix verb (expressing the notion of cause) whose sentential complement refers to the caused event’. In a Puyuma analytic causative construction, very often, but not always, the verb denoting the caused event is prefixed with *pa-*. For instance:

(23) *tu=pasisi-ay=ku pa-karun*
3.GEN=force-TR2=1S.NOM CAUS-work
‘She forced me to work.’

(24) *tu=aiselr-aw pa-trekelr dra eraw*
3.GEN=force-TR1 CAUS-drink ID.OBL wine
‘They forced him to drink wine.’

But the verb denoting the caused event is not prefixed with *pa-* in (25).

(25) *tu=bau-bau-aw=ku m-uka i takesi-an*
3.GEN=RED-push-TR1=1S.NOM ITR-go LOC study-NMZ
‘She kept pushing me to go to the school.’

As the analytic causative construction is a subtype of serial verb construction, this construction is discussed further in §13.4.7.

9.3 Reciprocal constructions

In a reciprocal construction, two participants equally act upon one another; both are the actor and the undergoer at the same time. In Puyuma a reciprocal construction is marked by prefixing one of the reciprocal markers, *mar(e)-* or *ma-RED-*, to the stem. Which one occurs depends mainly on the stativity/dynamicity of the verb. A stative verbal stem carries *mare-* to form a reciprocal verb and a dynamic stem *ma-RED-*. For example:

<i>laman</i>	‘pity’	<i>mare-ka-laman</i>	‘have pity on each other’
<i>turus</i>	‘follow’	<i>ma-ta-turus</i>	‘follow each other’

9.3.1 The range of situations marked by reciprocal markers

Lichtenberk (2000:31) has pointed out that in languages of the Oceanic subgroup of Austronesian, the morphological markers that are used to encode reciprocal are also used to encode certain other situations. Other situations the reciprocal markers may also refer to are: collective, chaining, distributed, repetitive, converse, and depatientive. He suggests that ‘there is one notion that underlies the great majority of the functions: plurality of relations’,

by which ‘two or more instances are ultimately linked, either because they are of the same kind, or because the relations are converse of each other’ (Lichtenberk 2000:33). In addition to the notion of ‘plurality of relations’, he also mentions that these situations all involve a ‘low degree of elaboration of situations’, and in particular a ‘low degree of distinguishability of the participants’ (Lichtenberk 2000:34).

In Zeitoun’s (2002b) study of reciprocals from eleven Formosan languages,⁸ she claims that the reciprocal markers do not mark other meanings as they do in Oceanic languages studied by Lichtenberk (2000). However, in the Puyuma data the markers marking reciprocals are also used in other situations, such as chaining and the collective relation, and graduality. In the following discussion I follow Lichtenberk and gloss the markers used in these situations as PR, meaning ‘plurality of relations’.

9.3.2 Reciprocal markers

First, consider the following examples.

- (26) *ma-da-da’ul=mu?*
ma-Ca-inform=2P.NOM
 ‘Did you inform each other?’
- (27) *adri pa-dra-drulrun dranemu kiruan*
 NEG *pa-Ca-change* ID.OBL/2P.PSR clothes
 ‘Don’t exchange your clothes!’

There are two possible analyses of the reciprocal markers. One may analyse the PR markers as bimorphemic *ma-Ca-* and *pa-Ca-*, or as monomorphemic *maCa-* and *paCa-*. Let us first look at the bimorphemic analysis. The form *ma-Ca-Root* is the progressive form for some verbs, as shown in Table 9.6. Furthermore, the prefix *pa-* in the reciprocal form *pa-Ca-* has nothing to do with causatives, and if the marker is analysed as *pa-Ca-*, it is identical with the progressive form of some causative verbs.⁹

Table 9.6: Formations of reciprocals/plurality of relations (PR)

Root	Intransitive Imperative	Intransitive Unmark	Intransitive Progressive	Intransitive Reciprocal/PR
<i>be’elr</i> ‘to bite’	<i>be’elr</i>	<i>b<en>e’elr</i>	<i>b<en>a-be’elr</i>	<i>ma-ba-be’elr</i>
<i>se’er</i> ‘to stare’	<i>se’er</i>	<i>se’er</i>	<i>sa-se’er</i>	<i>ma-sa-se’er</i>
<i>sangalr</i> ‘to be happy’	<i>sangalr</i>	<i>sangalr</i>	<i>sa-sangalr</i>	<i>ma-sa-sangalr</i>
<i>da’ul</i> ‘to inform’	<i>da’ul</i>	<i>da’ul</i>	<i>da-da’ul</i>	<i>ma-da-da’ul</i>
<i>-dreki</i> ‘to scold’	<i>ka-dreki</i>	<i>ma-dreki</i>	<i>ma-dra-dreki</i>	<i>mar-ka-dreki</i>
<i>-lringay</i> ‘to play’	<i>ka-lringay</i>	<i>ma-lringay</i>	<i>ma-lra-lringay</i>	—
<i>-supeng</i> ‘to miss’	<i>ka-supeng</i>	<i>ma-supeng</i>	<i>ma-sa-supeng</i>	<i>mar-ka-supeng</i>
<i>-trangis</i> ‘to cry’	<i>ka-trangis</i>	<i>ma-trangis</i>	<i>ma-tra-trangis</i>	<i>mar-ka-trangis</i>

8 These languages are: Paiwan (Mudan), Puyuma (Nanwang), Saisiyat (Tungho), Pazeh, Atayal (Mayrinax), Amis (Changpin), Thao, Tsou, Kavalan, and Yami.

9 For example: *ragan* ‘get up’, *pa-ragan* ‘build’, *pa-ra-ragan* ‘building’. (The reciprocal form for this verb is *mar-paragan*.) However, not all causative verb forms have a progressive derivation.

From Table 9.6, it seems that which reciprocal marking a verb takes depends on the intransitive marker the verb takes. So, those verbs taking ** in the intransitive unmarked and progressive construction will take *ma-Ca-* in the reciprocal construction; those verbs that take *ma-* in the intransitive unmarked and progressive construction, whether dynamic or stative, will take *mar-* in the reciprocal construction.

On the other hand, we may treat the reciprocal marker as a single morpheme, *maCa-*, to avoid the confusion that results from the bimorphemic analysis. The major problem this analysis will cause is when the verb represents a reciprocal event composed of a number of equivalent subevents. In such cases, the reciprocal is marked by *maCVCV-*. Compare the reciprocal markings in the following examples.

- (28) *mapa-pingitr*
PR-scratch
'They scratched each other.'
- (29) *ma-pingi-pingitr*
ma-CVCV-scratch
'They were fighting each other.'
- (30) *masa-salraw*
PR-pass
'They passed by each other.'
- (31) *ma-salra-salraw*
ma-CVCV-pass
'They chased each other.'

This will then suggest that for dynamic reciprocal verbs, there is always reduplication involved, either *Ca-* or *CVCV-* reduplication. This in turn indicates that the PR marker should be analysed as *ma-RED-*.

It seems that both analyses have their drawbacks. The polysemies of the markers suggest that there is no one-to-one correspondence between form and function. To avoid the dilemma, it is necessary to distinguish between construction and marking. Thus, the same form *ma-RED-* may occur in different constructions with different functions. In other words, *ma-Ca-*, when it cooccurs with certain verb roots, denotes a plurality of relations in a reciprocal construction, and with certain other verb roots, it indicates progressive aspect. In order not to confuse the reader, in this chapter I gloss *ma-Ca-* and *pa-Ca-* as *ma.Ca-* and *pa.Ca-*, meaning PR 'plurality of relations', and treating them as portmanteaux.

9.3.3 Dynamic vs stative

Zeitoun (2002b) proposes that reciprocals provide further evidence for positing a dynamic/stative and finite/non-finite distinction in PAn verbs (see also Zeitoun and Huang 2000). The reciprocal prefixes she proposes for PAn are (cf. Zeitoun 2002b:6):

	finite	non-finite ¹⁰
Dynamic verbs	* <i>ma-Ca</i> - ¹¹	* <i>pa-Ca</i> -
Causativised verbs	* <i>mar(e</i> ¹²)- <i>pa</i> -	* <i>par(e)</i> - <i>pa</i> -
Stative verbs	* <i>mar(e)</i> -(<i>ka</i> -)	* <i>par(e)</i> -(<i>ka</i> -)

While my findings are mostly the same as Zeitoun's, it needs to be mentioned again that the dynamic/stative distinction in Puyuma is not always clear (see also §6.6 and §7.3.3). Examples (32)–(34) illustrate the dynamic/causative/stative distinction in Puyuma.

(32) Dynamic verbs:

- a. *ma.da-dikes dra kawi*
 PR-hold ID.OBL wood
 'They held the wood together.'
- b. *pa.sa-se'er muymu, ala pamau taytaw nay*
 PR-stare 2P.NEU maybe correct 3.NEU or
 'Look at each other and see if the other one is doing right.'

(33) Causativised verbs:

marayas mar-pa-talam dratu uringetr-an
 often PR-CAUS-try ID.OBL/3.PSR brave-NMZ
 'They often try each other's bravery.'

(34) Stative verbs:

- a. *kaimayay i lrikudran i, mar-ka-inaba=ta ...*
 if.by.any.chance LOC behind TOP PR-ka-good=1P.NOM
 'If by any chance we reconcile in the future ...'
- b. *adri=ta par-ka-inaba*
 NEG=1P.NOM PR-ka-good
 'We won't reconcile.'

Sometimes a semantically dynamic verb may take a marking that belongs to the stative category, or vice versa, and sometimes different informants may use different forms. For instance, *dalep* 'close' is semantically rather stative, but the marker it takes groups it together with more dynamic verbs; *baretuk* 'pitch' is semantically dynamic, but the marker it takes falls into the stative category; *salraw* 'pass' is dynamic as well, and both dynamic and stative markings are used by different informants.

(35) *ma.da-dalep a turak*
 PR-close ID.NOM pillar
 'The pillars are close to each other.'

10 Zeitoun's term 'finite' is paralleled by a Puyuma construction that is indicative, realis, and intransitive, while 'non-finite' is paralleled to constructions other than indicative realis intransitive, such as imperatives, irrealis and transitive constructions.

11 The reciprocal form of *salpit* 'beat' is *ma-salpit* rather than **ma-sa-salpit*. This is the only example found to have only *ma-* as the reciprocal marker.

12 If the root begins with a vowel, *mare-* is prefixed, and if the root begins with a consonant, *mar-* is attached. However, some informants insert a schwa automatically to avoid the consonant cluster.

- (36) *mar-baretuk*
PR-pitch
'They pitched at each other.'
- (37) *mar-salraw=ta kadrini*
PR-pass=1P.NOM here
'We passed by each other here.'
- (38) *ma.sa-salraw*
PR-pass
'They passed by each other.'

9.3.4 Other situations marked by a PR marker

There are a number of other situations besides reciprocity that are marked by a PR marker. The first one is the repetitive function, in which the marker signals the repeated occurrences of a situation. According to Lichtenberk (2000:41), the repeated occurrences of a situation can be 'iterative within one time frame and with the same Initiator involved, or over multiple time frames with the same Initiator or the same type of Initiator involved'. As can be seen from the following examples, in Puyuma the repetitive function is mainly used to signal situation where successive events are undertaken by the same type of Initiator. For instance:

- (39) *mar-ka-la-la'udr a trau*
PR-ka-RED-drown ID.NOM person
'People kept getting drowned.'
- (40) *mar-pa-raga-ragan=la dra palrakuan*
PR-CAUS-RED-erect=PERF ID.OBL men's.house
'(People) kept building men's houses.'

The second function is to refer to a collective situation, in which two or more participants are together involved. For example:

- (41) *ma.sa-sangal=ta dratu in-u-ruma' kan namali*
PR-glad-1P.NOM ID.OBL/3.PSR PERF-go-house SG.OBL my.father
'Let's celebrate the coming home of our father!'
- (42) *wa-ruma'=ta=la mar-p-alup i*
go-home=1P.NOM=PERF PR-CAUS-hunt TOP
'After hunting together, we went home.'

However, there is another marker *kara-*, used to indicate collective situations, and it seems to be more commonly used.

- kara-ekan* 'eat together'
kara-na'u 'watch together'
kara-uarak 'dance together'
kara-basak 'carry on the shoulder together'

The third function is to indicate an increasing degree, 'more and more'. For example:

(43) *mar-ka-sadru tu=trau=la*
 PR-ka-many 3.PSR=person=PERF
 ‘There are more and more people.’

(44) *mar-ka-supen=ku*
 PR-ka-miss=1S.NOM
 ‘I miss (someone) more and more.’

The fourth function is to signal a chaining situation, in which ‘participant A stands in a certain relation to participant B, B stands in the same relation to participant C, C to D, etc.’ (Lichtenberk 2000:35). Thus, in the following example, the piling up of bamboos represents a chaining situation.

(45) *tu=par-ta-tadrar-aw na basikaw*
 3.GEN=PR-RED-pile.up-TR1 DF.NOM bamboo
 ‘They piled up the bamboos.’

The fifth function is to indicate a distributed situation. According to Lichtenberk (2000:39), in a distributed situation, ‘the overall situation comprises a plurality of localities or different directionalities: the locality or directionality of one subevent is not the same as that of another subevent’. There are two subtypes of distributive situation: dispersive, which involves dispersion of subevents from a common origin, and reversive, which involves reverse directionality of subevents. Only the reversive type is found in Puyuma.

(46) *payas mar-belriyas m-uka m-aya-a kantu wadi*
 right.away PR-turn ITR-go ITR-find-PJ DF.OBL/3.PSR younger.sibling
 ‘They returned right away to go find their younger sister.’

(47) *ta=par-belriyas-aw i 'ine-'ine'*
 1P.GEN=PR-turn-TR1 LOC RED-sea
 ‘Let us bring her back to the sea.’

9.3.5 Argument structure of reciprocals

In a typical reciprocal situation, the two (or more) participants act upon each other and thus the participants are at the same time the actor and the patient. In spite of the dual roles the participants play, they are encoded as subject and are manifested once. The verb is almost always marked for actor voice, only occasionally for undergoer voice. Of all the examples taking a PR marker that were examined (about 50 tokens), only three are in undergoer voice, and none of these three denotes reciprocal meaning. Sentence (48) is a distributive situation, (49) a chaining situation, and (50) is a collective situation.

(48) *ta=par-belriyas-aw i 'ine-'ine'*
 1P.GEN=PR-turn-TR1 LOC RED-sea
 ‘Let us bring her back to the sea.’

(49) *tu=par-ta-tadrar-aw na basikaw*
 3.GEN=PR-RED-pile.up-TR1 DF.NOM bamboo
 ‘They piled up the bamboos.’

- (50) *tu=par-ka-drua-aw m-inatray kaniem trau i ruma'*
 3.GEN=PR-ka-two-TR1 ITR-die DF.OBL/1P.PSR person LOC house
 'They (the different diseases) caused half of our family members to die.'

9.3.6 Noun-based derivations

The reciprocal prefixes can also be used with nouns. The nouns used in this category mostly involve kinship terms, and expressions such as 'spouse', 'friend'. They refer to two or more participants that are in converse relations to each other, and the base noun indicates the relation of one member of the set to the other(s). Examples are shown below.

<i>wadi</i>	'younger siblings'	<i>malru-wadi</i>	'be brother and sister'
<i>temama</i>	'(your) father, uncle'	<i>mar-temama</i>	'be father and son'
<i>taina</i>	'(your) mother, aunt'	<i>mar-taina</i>	'be mother and daughter'
<i>temuwan</i>	'grandparent, grandchild'	<i>mar-temuwan</i>	'be grandparent and grandchild'
<i>kataguin</i>	'spouse'	<i>mar-kataguin</i>	'be husband and wife'
<i>'alri</i>	'male friend'	<i>mare-'alri</i>	'be male friends'
<i>anay</i>	'female friend'	<i>mare-anay</i>	'be female friends'

- (51) *m-asal=driya m-a-uka i puyuma nadru na*
 ITR-again=IMPF ITR-RED-go LOC Puyuma those.NOM DF.NOM

malru-wadi

RECIP-younger.sibling

'The two brothers wanted to go to Puyuma again.'

- (52) *ma-dra-drayar nadru na mar-kataguin ...*
 ITR-RED-discuss those.NOM DF.NOM RECIP-spouse
 'The couple was discussing ...'

9.4 Reflexive constructions

While a prototypical reciprocal clause is one in which two participants equally act upon each other, in a reflexive clause, the actor performs an act upon himself/herself. A number of linguists, e.g. Kemmer (1993), among others, have observed that in some languages reflexive and reciprocal relations are expressed identically, with the same morphosyntactic means serving two functions. In Puyuma these two functions are not expressed by the same morphosyntactic means. A prototypical reflexive construction is one in which subject and object are the same entity. Typically, the reflexive marker denotes an object that is coreferential with the subject noun phrase. Like causative constructions, reflexives can be expressed lexically, morphologically, or analytically (cf. Payne 1997:198).

Payne (1997:200) mentions that analytic reflexives are often based on body parts, usually 'head' or 'soul/self', or other parts. Puyuma has analytic reflexives, which are signaled by the use of *dradrek* 'body'. Examples are:

- (53) *salraw ma-sime' dratu dradrek*
 very ITR-careful ID.OBL/3.PSR body
 'He's taking good care of himself.'

- (54) *sime-sime'-u nu=dradrek*
 RED-careful-TR1.IMP 2S.PSR =body
 'Take care of yourself.'
- (55) *tu=iaruna'-aw tu=dradrek dra puatremelr*
 3.GEN=hurt-TR1 3.PSR =body ID.OBL medicine
 'He took medicine to kill himself.'

Another way of expressing reflexive meaning is to use a neutral pronoun (§4.5.1.2), as in (56). However, this sentence is ambiguous because a neutral pronoun may either coreference the actor or denote the undergoer. When the neutral pronoun coreferences the actor, an emphatic meaning is obtained; when it denotes the undergoer, a reflexive meaning is obtained.

- (56) *ku=na'u-ay kuiku*
 1S.GEN=look-TR2 1S.NEU
 'I looked at myself.' (Reflexive)
 'I myself looked at it.' (Emphatic)

9.5 Anticausatives¹³

An anticausative verb is prefixed with *mu-* in Puyuma. Like a transitive clause an anticausative clause has the undergoer as its subject. Unlike the actor of a transitive clause, which is manifested as a genitive pronoun procliticised to the verb, the actor or the causer (if any) of an anticausative verb is marked as oblique, as shown in (57) and (58).

- (57) *mu-la'udr na kawi*
 ACAUS-float ID.OBL timber
 'The timber is floating (on the water).'
- (58) *mu-puar na suan dra paletrutrukan*
 ACAUS-escape DF.NOM dog ID.OBL firecracker
 'The dog was frightened away because of firecrackers.'

In Puyuma there are two different *mu-* prefixes, which behave differently morphosyntactically, although they have been treated as the same morpheme/formative in earlier studies.¹⁴ The first *mu-* is bimorphemic, consisting of *m-* 'intransitive marker' plus *u-* 'motion prefix'.¹⁵ The second *mu-* is an anticausative prefix.¹⁶ The differences between the two categories of prefixes can be summarised as follows.

13 This term was first introduced by Nedjalkov and Sil'nickij (1969). See Haspelmath (1987) for more details on anticausatives.

14 Starosta (1995) reconstructs PAn **mu-* as 'actor focus' and **u-* derived motion verbs 'go to N' from place nouns. Blust (2003b:451), on the other hand, reconstructs PAn **mu-* 'motion prefix'. Blust's discussion of **mu-* is mainly based on examples from Thao (Blust 2003a) and Puyuma (Cauquelin 1991a and Tsuchida 1980).

15 Although the examples in §9.5.2 confirm Starosta's reconstruction of **u-*, Blust's observation that *mu-* is different from actor voice marker **um-* is also true.

16 Verbs that are prefixed with anticausative *mu-* do not have modal and aspectual forms.

1. Stems taking *m-u-* are usually place names, deictic expressions, and other words which refer to spatial relationships, as was mentioned earlier. On the other hand, stems taking *mu-* usually have a counterpart taking **.
2. Semantically, motion verbs derived by affixing *m-u-* have a very clear sense of motion. Verbs taking *mu-* have a passive-like sense.
3. In intransitive sentences, the subject of *m-u-* motion verbs is always the actor; on the contrary, the subject of anticausative *mu-* verbs is always the patient.

9.5.1 *mu-* as an anticausative marker

From the data collected, about 60 out of 400 verbs in the corpus take both *mu-* and **, with a semantic and syntactic contrast.

A pair of examples showing the anticausative *mu-* verbs and their ** counterparts derived from the same stem are given below:

- (59) a. *mu-bu'utr=la* *na* *lawlaw*
 ACAUS-stop=PERF DF.NOM lamp
 'The lamp went out.'
- b. *karuwa b<en>u'utr* *dra* *aru* *a-araw* *kanta* *drekal*
 can <ITR>stop COMP will RED-rob DF.OBL/1P.PSR village
 'It can stop our village being robbed.'

Compare the marking of the actor and undergoer in (60) and (61). Example (60) is an anticausative clause, while (61) is a transitive clause. In both sentences, the undergoer *tralrun* 'grass' is marked nominative. In (61) there is also a genitive actor, but in (60), there is no actor. If there is an actor in an anticausative clause, it is marked as oblique, like the oblique marked *paletrutkan* 'firecracker' in (58).

- (60) *mu-ba'itr* *na* *tralrun*
 ACAUS-burn DF.NOM grass
 'The grass was burned.'
- (61) *nu=ba'itr-aw=la* *na* *tralrun?*
 2S.GEN=burn-TR1=PERF DF.NOM grass
 'Have you burned the grass'

What then is the factor that triggers the speakers to use the anticausative construction instead of a transitive clause? The importance of volitionality can be observed from the following elicited sentences. In sentence (62), which is a *mu-* construction, the agent *gung* 'ox' carried out the action incidentally; in (63), which is a transitive clause, the agent carried out the action on purpose.

- (62) *ku=s<in>alrem* *na* *'aputr i, mu-dupa'* *dra* *gung*
 1S.PSR=<PERF>plant DF.NOM flower TOP ACAUS-step ID.OBL ox
 'The flowers I planted, they were stepped on by an ox.'
- (63) *ku=alradr-aw* *na* *'aputr i, tu=dupa'-aw* *dra* *gung*
 1S.GEN=surround-TR1 DF.NOM flower TOP 3.GEN=step-TR1 ID.OBL ox
 'Although I fenced in the flowers, they were still stepped on by an ox.'

Readers may wonder if topicality plays any role in the choice between an anticausative construction like (62) and a transitive construction like (63). In other words, if the actor or the causer of an event is topical (i.e. mentioned very recently), will the speaker still choose an anticausative construction instead of a transitive construction? The answer is ‘no’. In (64), the actor of the anticausative verb *mu-subuk* ‘covered’ is *dawa* ‘millet’, which has been mentioned more recently than the undergoer/subject *tu=asaua* ‘her daughter-in-law’. Here the anticausative construction is chosen because the actor *dawa* ‘millet’ performs the action *mu-subuk* ‘cover’ non-volitionally.

- (64) *tu=asaua* *i,* *kadru i* *saninin kana* *apuy, ala*
 3S.PSR=child.in.law TOP there LOC side DF.OBL fire maybe
atungtung, *kadru aw,* *na* *dawa na* *ni-resyuk i,*
 dizzy <ITR>there and DF.NOM millet DF.NOM PERF-cook TOP
mar-semak aw mu-ipang. *aw mar-sa-semak=driya aw*
 PR-inflate and ACAUS-pour.out and PR-RED-inflate=IMPF and
mu-subuk=la *kandru kana dawa*
 ACAUS-cover=PERF that.OBL DF.OBL millet
 ‘Her daughter-in-law, she was beside the fire, and maybe she was dizzy, and the millet that was cooked became inflated and then was overflowing. It became more and more inflated and then she (the daughter-in-law) was covered by the millet.’

9.5.2 *m-u-* as a bimorphemic intransitive motion marker

Blust (2003b:452) mentions that *mu-* often derives verbs of motion when it prefixes to ‘place names, deictic expressions, and other words which refer to spatial relationships’. For instance: *dare* ‘earth’ : *mu-dare* ‘descend’; *isatr* ‘up, above’ : *mu-isatr* ‘ascend’. Evidence for treating *mu-* as bimorphemic *m-u-* can be seen when the motion verbs are used in imperative or undergoer voice constructions. In those cases, it is clear that *mu-* involves two morphological processes and should be analysed as *m-u-*.

- (65) *an m-u-sabak i ruma' i,* ...
 when ITR-go-inside LOC house TOP
 ‘When he went into the house, ...’
- (66) *tu=u-sabak-ay dra unan tu=ruma'*
 3.GEN=go-inside-TR2 ID.OBL snake 3.PSR=house
 ‘A snake went into their house.’
- (67) *adri u-sabak i drekal*
 NEG go-inside LOC village
 ‘Don’t go into the village.’
- (68) *i lrikudran i, m-u-ngesal idru na kia-dra'ing*
 LOC behind TOP ITR-go-start.point that.NOM DF.NOM get-tax
 ‘Afterwards, the tax collection began.’
- (69) *u-ngesal=la*
 go-start.point=PERF
 ‘Let’s begin!’

In sentences (65) and (68), the motion verbs *musabak* ‘go inside’ and *mungesal* ‘start’ are used in an intransitive actor voice construction. In the transitive undergoer voice construction in (66), it is clear that *m-* is replaced by the undergoer voice marker *-ay*, but *u-* is still kept. Similarly, in (67) and (69), *u-* is kept in the imperative construction.

9.6 *ki-* passive

There is a frequently occurring marker *ki-*, which can prefix to nominal or verbal stems to derive verbs. The derivations of *ki-* verbs in different aspects and moods are described in §6.5.7, and its use as a verb-deriving affix in §7.2. In this section, we focus mainly on the subcategories of verbs occurring with *ki-* and their functional and morphosyntactic characteristics. Because [*ki-* + nominal stem] ‘get N’ is reconstructable in PAn (Zeitoun and Teng 2006), but [*ki-* + verbal stem] only occurs in Paiwan, Rukai and Puyuma to denote a passive meaning, it seems that passive *ki-* is grammaticalised from [*ki-* + nominal stem] ‘get N’. For this reason I will describe [*ki-* + nominal stem] first in §9.6.1 and then passive *ki-* in §9.6.2.

9.6.1 *ki-* verbs derived from nominal stems

When *ki-* attaches to a nominal stem, it means ‘to get or to obtain something’. Examples below show that *ki-* verbs derived from nominal stems can be further divided into three subclasses.

	Nominal stems	Derived verbs
I.	<i>'aputr</i> ‘flower’ <i>kawi</i> ‘wood’ <i>kuraw</i> ‘fish’ <i>paisu</i> ‘money’	<i>ki-'aputr</i> ‘to pick flowers’ <i>ki-kawi</i> ‘to hack wood’ <i>ki-kuraw</i> ‘to fish’ <i>ki-paisu</i> ‘to get/extort money’
II.	<i>lengaw</i> ‘sound’ <i>tranguru</i> ‘head’	<i>ki-lengaw</i> ‘to listen’ <i>ki-tranguru</i> ‘to behead’
III.	<i>anger</i> ‘mind; thought’ <i>rami</i> ‘root’	<i>ki-anger</i> ‘to think’ <i>ki-rami</i> ‘to start’

Verbs in the first category only appear in intransitive sentences, and the same forms are used in imperative and declarative sentences.

(70) *ki-'aputr=ku=la*
get-flower=1S.NOM=PERF
‘I’ve picked flowers.’

(71) *ki-'aputr*
get-flower
‘Pick some flowers!’

Verbs in the second and third category have intransitive/transitive alternations. For example: *ki-lengaw* ‘listen; ITR’, *ki-lengaw-ay* ‘listen, TR2’, *ki-lengaw-anay* ‘listen, TR3’; *ki-anger* ‘think about, want; ITR’, *ki-anger-aw* ‘TR1’. Examples of transitive forms are given below.

- (72) *tu=ki-lengaw-ay i tinataw*
 3.GEN=*ki*-sound-TR2 SG.NOM his.mother
 ‘He listened to his mother.’
- (73) *tu=ki-anger-aw tu=pi-amanay-an*
 3.GEN=*ki*-thought-TR1 3.PSR=have-what-NMZ
 ‘He (only) thought about his getting rich.’

While those in the second category have the same form in imperative and declarative intransitive sentences, those in the third category take in declarative intransitive sentences. Compare (72) and (73) with (74) and (75).

- (74) *ki-lengaw=ku kandrunu kana ma-'idrang-an*
ki-sound=1S.NOM those.OBL DF.OBL ITR-old-NMZ
 ‘I heard from those elders.’
- (75) *an ki-anger=ta i, ...*
 when <ITR>*ki*-thought=1P.ICL.NOM TOP
 ‘When we thought about it, ...’

The subject is always the actor in a [*ki*- + nominal stem] construction.

Table 9.7 summarises the above observations about the subcategories of *ki*- verbs derived from nominal stems.

Table 9.7: Categories of *ki*- verbs derived from nominal stems

	I	II	III
can take in ITR	No	No	Yes
have ITR/TR alternations	No	Yes	Yes

9.6.2 *ki*- verbs derived from verbal stems

When *ki*- attaches to a verbal stem it conveys a passive meaning. For instance:

Verbal stem	Derived verbs
<i>bekas</i> ‘interrogate’	<i>ki-bekas</i> ‘be interrogated’
<i>tenges</i> ‘tie up’	<i>ki-tenges</i> ‘be tied up’
<i>tarama</i> ‘bully’	<i>ki-tarama</i> ‘be bullied’
<i>baluk</i> ‘wake’	<i>ki-baluk</i> ‘be woken up’
<i>ba'aw</i> ‘alive’	<i>ki-ba'aw</i> ‘to ask for help’
<i>da'ul</i> ‘inform’	<i>ki-da'ul</i> ‘be informed’

- (76) *drua b<en>ekas-a i tugi*
 come <ITR>interrogate-PJ SG.NOM Tugi
 ‘Tugi came to interrogate.’
- (77) *m-uka i trau-trau, m-uka ki-bekas-a*
 ITR-go LOC RED-person ITR-go PASS-interrogate-PJ
 ‘He went to others; he went to get interrogated.’

- (78) *tenges dra arebu'*
 <ITR>tie.up ID.OBL hair
 'She tied up her hair.'
- (79) *belakas tu=arebu', ki-tenges dra trau*
 long 3.PSR=hair PASS-tie.up ID.OBL person
 'Her hair is long; she had it tied up by others.'

The sentences above are all intransitive. In (76) and (78), the subject is the actor; in (77) and (79), the subject is the patient (or the possessor of the patient if the patient is not an animate participant).

The two constructions, [*ki-* + verbal stem] and [*ki-* + nominal stem], have different argument structures. Recall that the subject in a [*ki-* + nominal] intransitive construction is the actor (§9.6.1). But here, the subject is the patient.

In terms of argument structure, the *ki-* passive construction is similar to the *mu-* anticausative construction (§9.5.1), as both demote the actor to the oblique position. The difference between the two involves the volition/intention of the patient. In a *mu-* anticausative construction, neither the actor nor the undergoer has control of the action, while in a *ki-* passive construction, the patient, or the possessor of the patient, intends the event to occur. The following sentences are examples of *sulud* 'push' in the *ki-* passive construction, in the *mu-* anticausative construction, and in the transitive construction.

- (80) *ki-sulu-sulud=ku dra trau*
 PASS-RED-push=1S.NOM ID.OBL person
 'I got pushed by others.'
- (81) *tu='etr'etr-anay i, mu-sulud na katengadraw-an*
 3.GEN=jostle-TR3 TOP ACAUS-push DF.NOM sit-NMZ
 'He jostled, and so the chair was pushed away.'
- (82) *ku=sulud-aw na katengadraw-an*
 1S.GEN=push-TR1 DF.NOM sit-NMZ
 'I pushed the chair away.'

The control/volitionality of the participants in the above sentences can be summarised as follows.

	Transitive	<i>ki-</i> passive	<i>mu-</i> anticausative
actor	+	-	-
patient	-	+	-

Another difference between the *mu-* construction and the *ki-* construction is that the subject (the patient) in the *ki-* construction is usually animate.¹⁷

17 The only exception found is given below, where the patient is an inanimate object *kawi* 'timber'. However, according to the informant, there is a personifying flavour in the sentence.

adri muai ki-la'udr na kawi
 NEG willing.to PASS-wash.away DF.NOM timber
 'The timber can't be washed away.'

The fact that there is a volitional patient in a *ki-* construction can be observed from the following sentences. In these examples, *ki-* verbs follow another verb to form a serial verb construction. The verbs preceding *ki-* verbs in the two examples are a desiderative verb *maranger* ‘want’ in (83) and a motion verb *muka* ‘go’ in (84), both of which denote a strong sense of volition.

(83) *ma-ranger ki-da’ul dra trau*
 ITR-want PASS-informed ID.OBL person
 ‘He wanted to be informed by others.’ (He wouldn’t take
 action until being informed.)

(84) *m-uka=ku ki-pespes-a*
 ITR-go=1S.NOM PASS-massage-PJ
 ‘I went to get massaged.’

There are also some examples showing *ki-* being used to mark a middle construction, as in (85).

(85) *ki-lasedr=ku kantaw*
ki-hide=1S.NOM 3.OBL
 ‘I hide at his place.’

Finally, for verbs denoting ‘giving/receiving’, *ki-* changes the direction of the action. For instance:

<i>beray</i>	‘give’	<i>ki-beray</i>	‘get; beg’
<i>pa-bulras</i>	‘lend’	<i>ki-bulras</i>	‘borrow’
<i>tulrudr</i>	‘pass something to’	<i>ki-tulrudr</i>	‘catch’

The subject of these verbs is the recipient, the participant that a theme is given to. In a sentence without *ki-*, it is the giver that initiates and controls the happening of the action; in a sentence marked by *ki-*, it is the recipient that initiates and controls the event. Compare the argument structure of the sentences below.

(86) *an tu=beray-ay=mu=la dra la’ub ...*
 if 3.GEN=give-TR2=2P.NOM=PERF ID.OBL ladle
 ‘If she gives you a ladle ...’
 (Giver: Gen ; Receiver: Nom)

(87) *beray=ku=la dra paisu*
 give=1S.NOM=PERF ID.OBL money
 ‘I’ve given money.’
 (Giver: Nom ; Receiver: ---)

(88) *an ki-a-beray=ku dra pa-ka-sagar-an i, ...*
 if PASS-a-give=1S.NOM ID.OBL CAUS-ka-like-NMZ TOP
 ‘If I can ask for a prize, ...’
 (Giver: --- ; Receiver: Nom)

- (89) *idri na adri ki-beray kan tayban dra bini ...*
this.NOM DF.NOM NEG PASS-give SG.OBL Tayban ID.OBL seed
'This (person) that didn't get seeds from Tayban ...'
(Giver: Obl ; Receiver: Nom)

Again, from the English translation, we find that when *ki-* is used, the receiver (instead of the giver) exercises his/her will to make the action be carried out.

10 *Clause types*

10.1 Introduction

In this chapter, clause types are described in terms of their internal structure, with reference to different formal categories of predicate. Two major types of clause can be distinguished in terms of whether the predicate is verbal or nonverbal. Clauses with verbal predicates fall into three subtypes according to the number of core arguments a predicate has: transitive, intransitive and ambient. Intransitive clauses divide into several categories, depending on the argument structure of the verb. Some are simple intransitive clauses with a monovalent verb (§4.3.1.3), some are extended intransitives (AV) with a bivalent verb (§4.3.1.3, §8.4.2.2), and some have either an anticausative or a passive verb derived from a bivalent verb (§9.5 and §9.6).

Puyuma only has two types of nonverbal predicate: nominal predicates and existential/possessive/locative predicates. These utilise different copula verbs or no copula at all. A third type of nonverbal predicate, the adjectival predicate, is often distinguished cross-linguistically, but there is no adjective word class in Puyuma (§4.4), and accordingly no adjectival predicates.

Subtypes of verbal clauses are described in §10.2. Nominal clauses are dealt with in §10.3, followed by a description of existential/possessive/locative clauses in §10.4.

10.2 Verbal clauses

10.2.1 The main types of verbal clauses

More detailed discussion of verbal predicates occurs in Chapter 8 and Chapter 9. In this chapter, I summarise the basic types and present some illustrative examples.

Figure 10.1 presents a classification of verbal clause types in Puyuma. The basic distinction among verbal predicates is between transitive, intransitive, and ambient predicates, with two, one and no core arguments respectively. Transitive and intransitive verbs behave differently in terms of both argument structure and morphological marking (§8.4). Many verb stems can appear in both transitive and intransitive clauses when they are affixed with transitive or intransitive markers.

Within the intransitive category, monovalent verbs require only one argument semantically, while other intransitives require more than one. The distinction among extended intransitive, anticausative, and *ki*-passive is that the extended intransitive downgrades the patient to an oblique, while the anticausative and the passive downgrade the actor to an

oblique. While the patient subject of an anticausative is non-volitional, the patient subject of a passive at least exercises a degree of intention. Verbs in ambient, monovalent and extended intransitive clauses (marked in bold) carry the same intransitive affix.

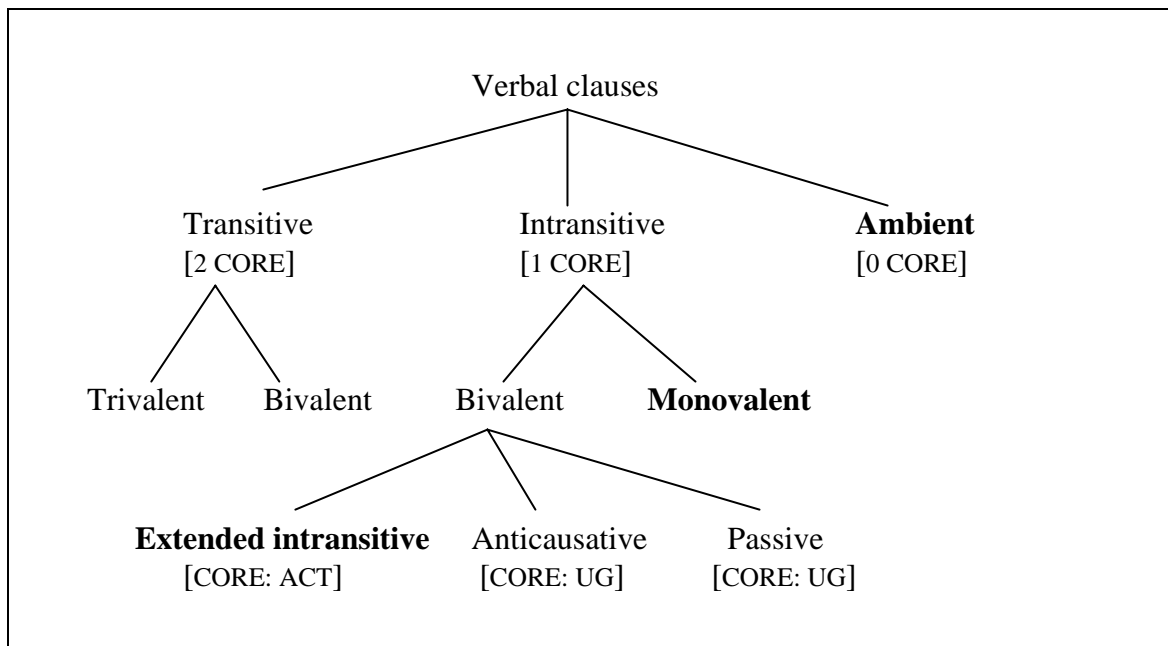


Figure 10.1: Puyuma verbal clause types

10.2.2 Transitive clauses

The verb of a transitive clause always carries a transitive suffix, and there is always a genitive pronoun attached to the predicate. A transitive clause may either be bivalent, as in (1), or trivalent, as in (2). A transitive clause with a trivalent predicate is an extended transitive clause (§8.4.2.2). The two core arguments of a transitive clause are the genitive actor (*tu=*) and the nominative undergoer (*=ku* in (1) and *nantu sarekudran* in (2)).

- (1) *tu=sapana'-aw=ku*
3.GEN=fake-TR1=1S.NOM
'He fooled me.'
- (2) *tu=truri-anay nantu sarekudran dra dalran*
3.GEN=draw-TR3 DF.NOM/3.PSR walking.stick ID.OBL road
'He drew a road with his walking stick.'

10.2.3 Intransitive clauses

The verb in an intransitive clause usually carries an intransitive prefix or infix, but there are two subcategories of verb that do not take an intransitive affix (§6.5). Intransitive predicates include those that take only one argument (monovalent), and those that take more than one argument (bivalent or trivalent), i.e. extended intransitive, passive, anticausative. Syntactically, there is always one core argument, which is marked nominative, in these constructions.

10.2.3.1 Clauses with a monovalent predicate

Monovalent predicates include predicates denoting both stative and dynamic events. These two kinds of predicate have the same argument structure and are both always marked by an intransitive marker. Stative predicates are often, but not always (§6.6), prefixed by a marker *ka-* to mark irrealis. Sentences (3) and (4) are examples of clauses with a stative predicate in realis and irrealis moods respectively; sentences (5) and (6) are examples of clauses with a dynamic predicate.

- (3) *ma-lriay i baeli*
 ITR-drunken SG.NOM my.older.sibling
 ‘My brother was drunk.’
- (4) *ka-lra-lriay=yu*
 ka-RED-drunken=2S.NOM
 ‘You will be drunk.’
- (5) *ma-ragan i nanali i, ...*
 ITR-move.up SG.NOM my.mother TOP
 ‘When my mother got up, ...’
- (6) *ra-ragan=ku*
 RED-move.up=1S.NOM
 ‘I will get up.’

10.2.3.2 Extended intransitive clauses

The verb of an extended intransitive clause (§8.4.2.2) is bivalent, as in (7) and (8). It has an actor subject and a patient. The patient is indefinite and thus is downgraded to oblique status or is not overtly expressed when the meaning can be inferred from the context.

- (7) *m-alrak dra dinun na babayan*
 <ITR>take ID.OBL tub DF.NOM woman
 ‘The woman took a tub.’
- (8) *trakaw dra paisu i isaw*
 <ITR>steal ID.OBL money SG.NOM Isaw
 ‘Isaw stole money.’

Morphosyntactically speaking, the only distinction between an extended intransitive and a clause with a monovalent predicate is the optional occurrence of the oblique-marked patient in the extended intransitive clause. An extended intransitive clause has a transitive counterpart with an undergoer subject when the patient is definite, as shown below:

- (9) *tu=alrak-aw na dinun*
 3.GEN=take-TR1 DF.NOM tub
 ‘She took the tub.’
- (10) *tu=trakaw-aw na paisu kan isaw*
 3.GEN=steal-TR1 DF.NOM money SG.OBL Isaw
 ‘Isaw stole the money.’

10.2.3.3 Anticausative clauses

Like a transitive predicate, an anticausative predicate (§9.5) has the undergoer as its subject. Unlike the actor of a transitive predicate, which is manifested as a genitive pronoun procliticised to the verb, the actor (if any) of an anticausative predicate is marked as oblique, as shown in (12) below.

- (11) *mu-sapana'*=*ku*
 ACAUS-fake=1S.NOM
 'I was fooled.'
- (12) *mu-sede'* *dra* *dalran* *tu=dare'*
 ACAUS-interval ID.OBL road 3.PSR=earth
 'His land was separated by a road.'

10.2.3.4 Passive clauses

Like anticausative and transitive predicates, the subject of a passive clause is the undergoer. However, while there is always a genitive actor in a transitive clause, the actor of a passive clause is usually unmentioned. When it is mentioned, it is marked as oblique. The difference between an anticausative construction and a passive construction is that the undergoer in a passive construction intends the event to occur. More discussion of passives is given in §9.6.

- (13) *ki-pespes*=*ku*
ki-massage=1S.NOM
 'I was massaged.'
- (14) *ki-sulu-sulud*=*ku* *dra* *trau*
ki-RED-push=1S.NOM ID.OBL person
 'I was pushed by others.'

10.2.4 Ambient clauses

Ambient clauses are clauses with no arguments. They typically refer to weather conditions. For instance:

- (15) *an ka-'udal* *i*, *ta=betbet-anay kadriyu*
 when *ka*-rain TOP 1P.GEN=tie-TR3 there
 'When it rained, we tied it there.'
- (16) *aremeng=driya* *i*, *tu=pi-tre'ep-aw=ta*
 dark=IMPF TOP 3.GEN=have-company-TR1=1P.NOM
 'When it was dark, they (our parents) put us to sleep together with others.'

10.3 Nominal clauses

10.3.1 An overview

A nominal clause consists of two noun phrases: a predicate NP and a subject. Two types of nominal clauses can be distinguished in terms of whether the predicate NP is non-referential (classifying), as in (17), or referential (identifying), as in (18).

- (17) *Nancy is a lawyer.*
 (18) *Sally Smith is the head of this department.*

Both types of nominal clause are often referred to as ‘equational’ clauses in the literature, but various linguists have argued that separate terms should be applied to them and I refer to them as ‘classifying’ and ‘identifying’.

In a Puyuma nominal clause, the predicate NP always occupies the clause-initial position. For example:

- (19) *a k-i<a>ndang-an idri*
 ID.NOM k-<a>afraid-NMZ this.NOM
 ‘This (person) is a dangerous person.’

As can be seen from the above sentence, the predicate NP *a kiandangan* ‘dangerous thing’ and the subject *idri* ‘this’ are simply juxtaposed. The nominal predicate in a Puyuma nominal clause is marked with nominative case, as is the subject NP.

When the subject is manifested as a bound pronoun, it cliticises to the predicate NP, for example:

- (20) *a tipul=ku*
 ID.NOM Tipul=1S.NOM
 ‘I am a Tipul.’ (I am from Tipul.)

A nominal predicate may be a noun, like *tipul* in (20), or a nominalised verb, like *kiandangan* in (19).

10.3.2 Classifying clauses

A classifying clause consists of an indefinite NP predicate and a subject noun phrase. The predicate NP denotes a class to which the subject referent belongs.

- (21) *a redean na barasa*
 ID.NOM foundation DF.NOM stone
 ‘The stone is a foundation.’

Classifying clauses do not need a copula verb in affirmative sentences. However, a copula verb *ameli* (§11.3) precedes the nominal predicate when the clause is negated. For example:

- (22) *ameli a seneng ina unan*
 NEG.COP ID.NOM <ITR>special DF.NOM snake
 ‘The snake was not a special one.’

When the subject is manifested as a bound pronoun, it encliticises to the copula *ameli*, as in (23).

- (23) *ameli=ta a payran*
 NEG.COP=1P.NOM ID.NOM Taiwanese
 ‘We are not Taiwanese.’

A classifying predicate can have an aspectual marker following it to indicate perfective or imperfective aspect. For example:

(24) *a bulra-bulray-an=la na walak*
 ID.NOM RED-beautiful-NMZ=PERF DF.NOM child
 ‘The child became a young woman.’

(25) *a lalak=ku=driya*
 ID.NOM child=1S.NOM=IMPF
 ‘I was still a child.’

Very often, the subject is placed in the topic position. For example:

(26) *na mara-'idra-'idrang i, a ma'inayan*
 DF.NOM SUP-RED-old TOP ID.NOM male
 ‘The eldest, he is a boy.’

(27) *idru i, a drekal*
 that.NOM TOP ID.NOM village
 ‘That, it is a village.’

10.3.3 Identifying clauses

The predicate in an identifying clause is a definite NP, and the subject referent is equated with the referent of the predicate NP, as shown in (28).

(28) *amau tu=bangsaran kana barubaru nadru*
 COP 3.PSR=young.man DF.OBL Barubaru those.NOM
 ‘Those are Barubaru’s young men.’

Identifying clauses are usually introduced by a copula verb *amau*.¹ For instance:

(29) *amau idri na unan na m-ekan*
 COP this.NOM DF.NOM snake DF.NOM ITR-eat
 ‘The one that ate is this snake.’

It is very rare for clauses introduced by *amau* to have a subject manifested as a full noun phrase following the predicate, as in (29). More often, the subject is manifested as a topic, as in (30), or is mentioned in the previous discourse, as in (31).

(30) *na pu-ka-lrikudran m-inatray i, amau i namali*
 DF.NOM CAUS-ka-behind ITR-die TOP COP SG.NOM my.father
 ‘The one who died last, he was my father.’

(31) *masa-se'er dratu kiruan kadri maka-satr kana*
 RECIP-come.across ID.OBL/3.PSR clothes here along-high DF.OBL
barasa, amau tu=kiruwan kantu wadi
 stone COP 3.PSR=clothes DF.OBL/3.PSR younger.sibling
 ‘They came across her clothes here above the stone, it was their younger sister’s clothes.’

In other words, *amau* often only has a definite predicate NP following it. When there is no noun phrase denoting the subject, we know that it is a third person participant.

1 The word *amau* has an irrealis form *kamau*, and *ameli* has an irrealis form *kameli*. This seems to be the only evidence for treating these words as copula verbs.

When the subject is manifested as a full noun phrase, or is in topic position, the copula verb can be omitted, although this is rare. For example:

- (32) *ku=sa-sede-an idrini*
 1S.PSR=RED-interval-NMZ this.NOM
 ‘This, is my holidays.’
- (33) *idrunu i, nanku ruma’*
 that.NOM TOP DF.NOM/1S.PSR house
 ‘That, it is my house.’

When the subject is not manifested as a full NP, *amau* can never be omitted.

Unlike the negative copula verb *ameli*, *amau* does not attract pronominal clitics. That is, if the predicate or the subject is a pronoun, it must be manifested as a free pronoun, as shown below:

- (34) *amau kuiku na sa-senay*
 COP 1S.NEU DF.NOM <ITR>RED-sing
 ‘The one who was singing is me.’
- (35) **amau=ku na sa-senay*

10.4 Locative/existential/possessive² clauses

10.4.1 An overview

The second set of major nonverbal clauses is those that employ a copula verb *ulaya/uliya*.³ The same copula verb introduces locative, possessive, and existential clauses. Lyons (1967:390) indicates that these three types of construction are closely related to each other. He notes, ‘in many, and perhaps in all, languages existential and possessive constructions derive (both synchronically and diachronically) from locatives’.⁴

Tan (1997:78) says that these three Puyuma constructions share many properties. While her analyses are based on a large amount of data, because the data are elicited sentences, she fails to grasp some important facts about real usage.

To begin with, let us briefly examine existential, possessive, and locative constructions in Puyuma.⁵ As the following sentences show, the affirmative sentences are introduced by *ulaya*, and the negative sentences by *unian*.

2 Possessive relations can be expressed predicatively or adnominally. In this section we are only concerned with predicative possession. Adnominal possession is discussed in §5.3.

3 These two forms seem to be in free variation; certain speakers favour one, and some other speakers favour the other.

4 Similar observations are also made by Kuno (1971), Clark (1978) and Freeze (1992). They each claim that the three named constructions are all locative in origin. For example, Clark (1978) examines word order, definiteness, and verb agreement from a typological perspective, and she distinguishes four locational constructions accordingly.

5 Zeitoun et al. (1999) compare in detail these three constructions in several Formosan languages, looking at structural variations, morphological properties and the syntactic behaviour of the copula verb, the syntactic and semantic characteristics of their arguments, and the word order of these constructions.

- (36) *ulaya a ma'idrang i puyuma*
 exist ID.NOM old LOC Puyuma
 'There was an old man in Puyuma.'
(Existential construction)
- (37) *ulaya ku=idrus a kadri*
 exist 1S.PSR=spoon ID.OBL <ITR>here
 'I have such kinds of spoons.'
(Possessive construction)
- (38) *ulaya i temuu i puyuma*
 exist SG.NOM your.grandparent LOC Puyuma
 'Your grandmother is in Puyuma.'
(Locative construction)
- (39) *na'u-i tu=ruma' i, unian dra ruma'*
 look.at-TR2 3.PSR=house TOP not.exist ID.OBL house
dra mi-puran
 ID.OBL have-betelnut
 'Look at their houses, there is no house that has betelnut trees.'
(Negative existential construction)
- (40) *unian=ku dra walak*
 not.exist=1S.NOM ID.OBL child
 'I don't have children.'
(Negative possessive construction)
- (41) *m-u-ruma'=la i, unian tu=walak ka*
 ITR-go-house=PERF TOP not.exist 3.PSR =child ITR-say
 'When he went home, his children were not there.'
(Negative locative construction)

Are *ulaya* and *unian* verbs in Puyuma? Zeitoun et al. (1999:16–24, 40) argue that the elements introducing existential/possessive/locative sentences in the Formosan languages should be treated as verbs. Their reasons are: first, that in some languages, these elements can be marked for voice; and second, that in languages where they are not marked for voice, they may occur in imperative constructions, attract pronominal clitics/suffixes, and cooccur with temporal/aspectual markers, and that the reduplication of the stem yields a future, progressive, or iterative reading. No imperative examples are found in my data, but Puyuma existential/possessive/locative sentences manifest the other verbal features they propose. For example, in (42) the clitic pronoun =*yu* is attached to *unian*. In (43) and (44) the imperfective aspectual marker =*driya* and the perfective aspectual marker =*la* cooccur with *ulaya* and *unian*, respectively. In (45) *unian* undergoes partial reduplication to denote an irrealis meaning.

- (42) *an unian=yu dra angadr-an, ...*
 when not.exist=2S.NOM ID.OBL breathe-NMZ
 'When you have no breath, ...'

- (43) *laba ma-ladram-a dra ulaya=driya mu-ba'aw tu=walak*
 so.that ITR-know-PJ ID.OBL exist=IMPF ACAUS-live 3.PSR =child
 'So that she can know that her child is still alive.'
- (44) *unian=la dra kedrang ki-karun*
 not.exist=PERF ID.OBL strength get-job
 'They don't have strength to work.'
- (45) *adri=mi u<na>nian dra akan-an*
 NEG=1P.NOM <RED>not.exist ID.OBL eat-NMZ
 'We won't be short of food.'

Although I do not object in principle to the suggestion that existential words should be treated as verbs, I argue that whether or not an element is a verb in a particular language should be determined by the grammatical criteria of that language. Thus while *ulaya* and *unian* do possess the characteristics cited by Zeitoun et al. (1999), these characteristics are not necessarily diagnostic of verbhood in Puyuma. For example, in Puyuma, aspectual markers can cooccur not only with verbs, but also with nouns and negators; similarly, not only verbs attract pronominal clitics but also nouns, and sometimes negators. The reduplication of the stem to indicate a future, progressive, or iterative reading also applies to both nouns and verbs (see §3.3.3 and §3.4.2).

So, it seems that the criteria Zeitoun et al. propose are not sufficient to qualify *ulaya* and *unian* as verbs in Puyuma. More persuasive evidence for treating *ulaya* and *unian* as verbs is that *unian* can be negated by *adri*, the negator used to negate a verbal predicate (see §4.3.1.1), as exemplified in (45) and (46). Thus the status of *ulaya* and *unian* as copula verbs can be confirmed.

- (46) *adri u<na>nian idri na barasa*
 NEG <RED>not.exist this.NOM DF.NOM stone
 'This stone has never disappeared.'

In the following discussion, I first examine the existential, possessive, and locative constructions in turn with respect to the order of the argument and the nominal predicate, and with respect to definiteness/case. I also discuss the verb *kadru* 'there/live' and verbs begin with *mi-*, meaning 'have'. They are not nominal predicates, but are discussed here because they resemble existential/possessive/locative constructions semantically.

10.4.2 Existential clauses

Pragmatically, the basic function of an existential construction is to assert the existence of an entity or to introduce an entity into the discourse. Syntactically, two properties are often considered to be universal in existential constructions: the indefiniteness restriction and the underlying obligatory locative element (cf. Lyon 1967; Kuno 1971; Clark 1978; Ziv 1982; Freeze 1992). For example, Clark (1978:91) noted that existential constructions usually introduce new information, so they normally contain indefinite nominals. Ziv (1982:73) similarly points out that it would be absurd to assert the existence of an entity that is already presupposed to exist.

Existential clauses in Puyuma usually consist of the copula verb *ulaya* and two nominals; one is the argument whose existence is asserted (*a ma'idrang* in (47)), and the other refers to a location (*i puyuma* in (47)). The locative NP is optional.

10.4.2.1 Marking of case and definiteness

In existential clauses, the location is always marked by the locative marker *i*, whereas the entity asserted to exist is marked as an indefinite nominative in an affirmative clause (47) and an indefinite *oblique* in a negative clause (48).

(47) *ulaya a ma'idrang i puyuma*
 exist ID.NOM old LOC Puyuma
 'There's an old man in Puyuma.'

(48) *unian dra akan-an*
 not.exist ID.OBL eat-NMZ
 'There's no food.'

Both Zeitoun et al. (1999:33,40) and Tan (1997:81–83) say that the definiteness restriction does not account for the data in most of the languages they observed. For example, Tan (1997:81) asserts that personal proper nouns are allowed to occur in an existential construction. Consider the following Puyuma sentences:

(49) *ulaya i ukak*
 exist SG.NOM Ukak
 'Ukak is here/there.' OR: 'Ukak exists/is alive.'

(50) *unian i ukak*
 not.exist SG.NOM Ukak
 'Ukak is not here/there.' OR: 'Ukak does not exist/is dead.'
 (From Tan 1997:84)

Tan says that each of the above two sentences may have two readings; it may indicate the location of the entity, or the existence of the entity. She does not tell the reader whether she considers these sentences to be existential or locative. I would argue that these examples represent the locative construction and that the existential reading is a metaphoric usage.

Tan (1997:81–83) distinguishes two subtypes of existential sentence in Puyuma. One asserts/negates the existence of a genus in the world (e.g. (51)–(52)); the other indicates the existence/non-existence of some indefinite subset of a genus in a specified location (e.g. (53)–(54)). In the examples she provides, the basic difference between them is the use of a different noun phrase marker in negative sentences. In the one type, the nominative noun phrase marker *a* is used in negatives as in (52); in the other type, the oblique noun phrase marker *dra* is used, as in (54).

(51) *ulaya a ariwanes*
 exist ID.NOM rainbow
 'Rainbows exist.' (There is such a thing as a rainbow.)

- (52) *?unian a ariwanes*⁶
 not.exist ID.NOM rainbow
 ‘There is no such thing as a ‘rainbow’.’
- (53) *ulaya a kuraw i kali*
 exist ID.NOM fish LOC river
 ‘There are fish in the river.’
- (54) *unian dra kuraw i kali*
 not.exist ID.OBL fish LOC river
 ‘There are no fish in the river.’

According to Tan, *ariwanes* ‘rainbow’ in (51) is non-referential, whereas *kuraw* ‘fish’ in (53) is referential but indefinite. Because the locative frame of sentence (51) is the whole world, the NP *ariwanes* ‘rainbow’ cannot designate any specific token but has to denote a generic element. On the other hand, in (53), the locative frame is overtly specified, the NP *kuraw* ‘fish’ cannot denote the whole class, so it is referential. Tan gives another example where *a* is used in a negative existential sentence.

- (55) *?unian a kuraw i kali*
 not.exist ID.NOM fish LOC river
 ‘There is not a single fish in the river.’

She explains that a sentence like (55) is seldom used but that it conveys an emphatic overtone. However, in both (52) and (55), *a* instead of *dra* is considered unacceptable by some informants, and unnatural by others. What we can be sure of is that in natural speech, only *dra* is used in negative sentences.

To sum up, the definiteness restriction does hold in Puyuma text. The NP denoting the location is always marked by *i*, and the NP denoting the entity is always marked by *a* (indefinite nominative) in the affirmative, and *dra* (indefinite oblique) in the negative.

10.4.2.2 Word order

Clark (1978:92–94) writes that ‘word order appears to vary predictably with the definiteness of the subject nominal in existential and locative constructions across different languages’. According to her work, the definiteness of the theme and word order are two major characteristics that distinguish an existential construction from a locative one. She generalises that there is a preference for the location to precede the theme. However, Zeitoun et al. (1999:34–36) and Tan (1997:84) state that the noun denoting an entity must always precede the location in an existential construction in Puyuma. While in most cases it is true that new information (the asserted entity) precedes the old information (the location), I do find several examples in texts which show that the location may acceptably precede the theme. For example:

- (56) *uliya kadri i ami a salraw bulray*
 exist here LOC north ID.NOM very beautiful
 ‘There is a very beautiful girl in the north.’

6 The question mark indicates that it is acceptable to some informants but is a bad sentence.

- (57) *uliya kadru a malru-wadi*
 exist here ID.NOM RECIP-younger.sibling
 ‘There were two brothers there.’

Thus word order is not crucial in distinguishing existential sentences from locative sentences.

10.4.2.3 Pragmatic function

In natural speech most affirmative existential sentences introduce a new participant to the discourse, especially at the beginning of a story. In such situations, no location is mentioned. According to Tan (1997), if no location is overtly specified or implied, the locative frame referred to is the whole world, and the NP in such clauses refers to a generic element. However, in the following sentences the NP does not encode a generic element.

- (58) *asuwa=driyan i, ulaya a saya a drekal.*
 when=IMPF TOP exist ID.NOM one ID.NOM village
kire-k-ameli tu=kakuwayanan
kire-ka-NEG 3.PSR=custom
 ‘Once upon a time, there was a village. Its customs were different.’
- (59) *ulaya a mare-temuwan. i temutaw=la i,*
 exist ID.NOM RECIP-grandchild SG.NOM grandparent=PERF TOP
unian=la dra kedrang, idru na walak i,
 not.exist=PERF ID.OBL strength that DF.NOM child TOP
tu=padrek-aw i temutaw m-a-uka=la
 3.GEN=carry.on.back-TR1 SG.NOM grandparent ITR-RED-go=PERF
m-atel-a i drenan
 ITR-throw-PJ LOC mountain
 ‘There was a grandmother and a grandson. The grandmother had no strength (to work), so the grandson carried her on his back and went to throw her away in the mountains.’

10.4.3 Locative clauses

A locative clause specifies the location of a certain entity. Like many existential sentences, a locative sentence has three elements: the existential verb *ulaya/unian*, the theme, and the location.

10.4.3.1 Marking of case and definiteness

Unlike existential sentences, in a locative clause the theme is definite and is marked as nominative. For example, in (60), the theme *temuu* ‘your grandparent’ is definite and takes the nominative phrase marker *i*.

- (60) *ulaya i temuu i puyuma*
 exist SG.NOM your.grandparent LOC Puyuma
 ‘Your grandmother is in Puyuma.’

- (61) *m-u-ruma'=la i, unian tu=walak*
 ITR-go-house=PERF TOP not.exist 3.PSR=child
 'When he went home, his children were not there.'

Of about 60 tokens with *ulaya/unian*, only five occur in a locative construction. Speakers prefer to use another verb, *kadru* 'there, live' (§10.4.6.1), to express the location of a certain entity.

10.4.3.2 Word order

Clark's (1978:94–95) typological study of locative constructions shows that there is a strong tendency for a definite theme to precede the location. Although example (60) is consistent with this observation, there are not enough examples from text to draw a firm conclusion. From elicited examples, however, it emerges that the order of the theme and the location is conditioned by what is old and new information in the discourse. For example, in the following elicited examples, only (63) and (64) are acceptable answers to (62). Sentence (65) is an answer to the question 'Where is your brother?' So, basically, the new information, underlined below, goes before the old information.

- (62) *ulaya i _____ manay i sabak?*
 exist SG.NOM who LOC inside
 'Who's inside?'
- (63) *(ulaya) i _____ baeli*
 exist SG.NOM my.older.sibling
 'My brother.'
- (64) *ulaya i _____ baeli i sabak*
 exist SG.NOM my.older.sibling LOC inside
 'My brother is inside.'
- (65) *ulaya i _____ sabak i baeli*
 exist LOC inside SG.NOM my.older.sibling
 'My brother is inside.'

However, when the location is manifested by the interrogative pronoun *isuwa* 'where', the word order is *ulaya, isuwa*, and then the nominative argument. For instance:

- (66) *ulaya isuwa tu=kiaedrengan kana yawan*
 exist where 3.PSR=bed DF.OBL leader
 'Where is the leader's bed?'
- (67) *ulaya isuwa nadru na lalak?*
 exist where those.NOM DF.NOM child
 'Where are those kids?'

10.4.4 Possessive clauses

Clark (1978:87) distinguishes two types of predicative possessive construction: the 'have' possessive (e.g. Tom has a book) and the 'be' possessive (e.g. The book is Tom's). The difference between the two lies in the definiteness of the theme. In Puyuma, too, the two

possessives are manifested by different constructions. The Puyuma equivalent of ‘be’ possessive is expressed as an equational sentence, as in (68).

- (68) *nanku ruma' idrunu*
 DF.NOM/1S.PSR house that.NOM
 ‘That is my house.’ OR: ‘That house is mine.’

The Puyuma equivalent of the ‘have’ possessive construction resembles the existential construction, but unlike the existential construction, the possessive construction also contains a possessor. The possessor is manifested as a nominative proclitic pronoun (denoting the possessor) in an affirmative clause (69), but as a nominative enclitic pronoun in a negative clause (70).

- (69) *ulaya ku=idrus a kadri*
 exist 1S.PSR=spoon ID.NOM <ITR>here
 ‘I have this kind of spoon.’
- (70) *unian=ku dra dalran m-uka i taywan*
 not.exist=1S.NOM ID.OBL road ITR-go LOC Taiwan
 ‘I have no way to go to Taiwan.’

From (69) and (70), we see that the possessum is definite in an affirmative sentence (i.e. *idrus* ‘spoon’ is preceded by *ku=*, a definite nominative possessor), and is indefinite in a negative sentence (i.e. *dalran* ‘road’ is marked by an indefinite oblique noun phrase marker).

Clark (1978:89) argues that the possessor in possessive constructions is an ‘animate place’. In possessive constructions, the place happens to be an animate being. However, in Puyuma, an inanimate possessor is possible. For example:

- (71) *ulaya nantu pauwayan*
 exist DF.NOM/3.PSR regulation
 ‘It has its regulations.’
- (72) *uliya tu=legian dra masalak kema?*
 exist 3.PSR=taboo ID.OBL hunting.festival say
 ‘Does the hunting festival have its taboos?’

While the definiteness of the theme can serve to distinguish existentials from locatives, sometimes it is not easy to distinguish a possessive construction from an existential or a locative construction. For example, when the possessor is a third person argument, there is no syntactic property to distinguish a possessive from an existential. In those cases, we have to seek for the meaning from the context. Compare (73) and (74).

- (73) *an ma'idrang=la a trau aw unian=la dra*
 when old=PERF ID.NOM person and not.exist=PERF ID.OBL
kedrang ki-karun i, tu=atel-anay i drena-drenan
 strength get-job TOP 3.GEN=throw-TR3 LOC RED-mountain
 ‘When people got old and without strength to work, they were thrown away in the mountains.’
- (74) *saya a dalran kemay i timulr, ba<sika>sikaw*
 one ID.NOM road from LOC south <RED>bamboo

idru na dalran, unian dra dalran da druma
 that.NOM DF.NOM road not.exist ID.OBL road ID.OBL other
 ‘There’s one road from south, and the road was full of bamboos, there’s no other road.’

From the context, it is clear that there is a possessor in (73). But because it is not overtly manifested the construction looks the same as the one in (74). Furthermore, even if a pronoun is explicitly expressed, sometimes it is still not easy to determine which category a given construction belongs to. Consider the following sentence.

- (75) *ta=tilril kandru kana yawan, ulaya tu=ngalrad*
 1P.PSR=book that.OBL DF.OBL leader exist 3.PSR=name
kandru kana tayban?
 that.OBL DF.OBL Tayban
 ‘In our records about the leaders, is there Tayban’s name?’

This sentence can be interpreted as locative or possessive. The third person pronoun *tu=* may refer to *ta=tilril* ‘our record’ or to *tayban*.

10.4.5 A comparison of existential, possessive and locative clauses

Examples (76)–(81) exemplify existential, possessive and locative constructions, in both affirmative and negative forms. We see that the affirmative possessive sentence looks exactly the same as its locative counterpart.

- (76) *ulaya a paisu i papadraran*
 exist ID.NOM money LOC table
 ‘There is money on the table.’ (Existential)
- (77) *unian dra paysu i papadraran*
 not.exist ID.OBL money LOC table
 ‘There is no money on the table.’ (Existential)
- (78) *ulaya ku=paysu*
 exist 1S.PSR=money
 ‘I have money.’ (Possessive)
- (79) *unian=ku dra paysu*
 not.exist=1S.NOM ID.OBL money
 ‘I don’t have money.’ (Possessive)
- (80) *ulaya ku=paysu (i papadraran)*
 exist 1S.PSR=money LOC table
 ‘My money is there (on the table).’ (Locative)
- (81) *unian ku=paysu (i papadraran)*
 not.exist 1S.PSR=money LOC table
 ‘My money is not there (on the table).’ (Locative)

A summary of the case and definiteness of the theme in the three constructions is given in Table 10.1.

Table 10.1: The case and definiteness of the theme

	Existential		Locative		Possessive	
	affirmative	negative	affirmative	negative	affirmative	negative
case	NOM	OBL	NOM	NOM	NOM	OBL
definiteness	ID	ID	DF	DF	DF	ID

10.4.6 Two more possessive/existential/locative predicates

10.4.6.1 *kadru* ‘there’

The spatial deictic (§4.5.3.3) *kadru* ‘there’ has a similar function to ‘there’ in the English existential construction. In (82) *kadru* is used as a demonstrative.

- (82) *m-alarak=ta kadru dra ki-a-beray-an dra bini*
 ITR-take=1P.NOM there ID.OBL PASS-a-lend-NMZ ID.OBL seed
 ‘We took there the seeds that we asked for.’

In (83) *kadru* appears twice. The first *kadru* is a verb, meaning ‘live’ or ‘be there’. The second *kadru* is a locative.

- (83) *kadru=mi=la kadru*
 there=1P.NOM=PERF there
 ‘We then stayed/lived there.’

A similar usage is seen in (84).

- (84) *kadru=ku i saninin i, ...*
 there=1S.NOM LOC neighbouring TOP
 ‘I was next to it, ...’

Zeitoun et al. (1999:21), following Tan (1997), say that *kadru* only occurs in a locative construction. This claim is contradicted by the following sentences. In (85) *kadru* introduces new information to the discourse, and in (86) it asserts the occurrence of a saying.

- (85) *kadru a miadrua a malru-wadi*
 there ID.NOM two ID.NOM RECIP-younger.sibling
 ‘There were two brothers.’

- (86) *kadru=la a ngai “tengedr=ta dra kadrini*
 there=PERF ID.OBL word <ITR>kill=1P.NOM ID.OBL <ITR>here
na unan i, ma-legi m-u-drekal”
 DF.NOM snake TOP ITR-taboo ITR-go-village
 ‘There is a saying, “We killed the snake, so it is a taboo for us to enter the village”.’

Like *ulaya/unian*, when *kadru* asserts the existence of a theme, the theme is indefinite; when it indicates the location of a theme, the theme is marked definite.

- (87) *adru i, kadru=la na palrakuan na ne-nem-a?*
 then TOP there=PERF DF.NOM men's.house DF.NOM RED-six-NPRS
 'At that time, were the six men's houses already there?'
- (88) *kadru=la a ma'idrang me-na'u dra maka-tralru-tralrun*
 there=PERF ID.NOM old ITR-see ID.OBL along-RED-grass
 'There's an old man who saw their wandering around.'

However, *kadru* seldom expresses possessive meaning, and it may only express abstract and inanimate possession. Only a few examples are found in the corpus.

- (89) *an kadru naniam ka-kualreng-an*
 if there DF.NOM/1P.PSR ka-sick-NMZ
 'If we have difficulties.' (If our difficulties are there.)

When *kadru* has a possessive meaning, the sentence structure is similar to the locative construction introduced by *ulaya/unian*, in which the theme is definite, and the possessive meaning is an extension of the locative.

The corpus contains a single example in which *kemadrini* 'here' expresses a possessive meaning. In this example the theme is marked as indefinite oblique. More examples are needed to clarify the status of *kemadrini* as an existential predicate.

- (90) *kadrini=mi=driya dra ka-kualreng-an*
 <ITR>here=1P.NOM=IMPF ID.OBL ka-sick-NMZ
 'We still have difficulties.'

10.4.6.2 *mi-* 'have'

There is a class of construction in which the verb is formed by prefixing *mi-* to the nominal stem to mean 'have N'. Unlike *kadru*, which is used in existential/locative/possessive constructions, *mi-* verbs carry possessive/existential but not locative meaning. For example:

- (91) *mi-walak dra mia-pat dra walak*
 have-child ID.OBL PRS-four ID.OBL child
 'She had four children.'
- (92) *an mi-asuwa=ku ...*
 when have-child.in.law=1S.NOM
 'When I have a son/daughter-in-law ...'
- (93) *maumau tu=ruma' a mi-a-puran*
 only 3.PSR=house ID.NOM have-a-betelnut
 'Only in her house, there are betelnut trees.'

Unlike *ulaya/unian* and *kadru*, verbs with *mi-* can have a voice alternation, as shown in (94) and (95). In transitive clauses *mi-* is changed to *pi-*. However, when it occurs in a transitive sentence, a *mi-* verb does not carry possessive meaning.

- (94) *adri mi-kataguin i, ...*
 NEG have-spouse TOP
 'She didn't have a spouse, ...'

- (95) *tu=pi-kataguin-ay* *kan* *lregelrege*
 3.GEN=have-spouse-TR2 SG.OBL Lregelrege
 ‘He was married to Lregelrege.’

Verbs prefixed with *mi-* to express ‘have N’ may be infixated with <a> (§6.4.1 and §6.5.6) to indicate ‘many, plentifulness’.

- (96) *mi-a-ruma’=ku*
 have-a-house=1S.NOM
 ‘I have lots of houses.’

When a possessive *mi-a-* construction is negated, it is the meaning of ‘many’ that is negated, not the possessum.

- (97) *adri mi-a-kuraw idri na kali*
 NEG have-a-fish this.NOM DF.NOM brook
 ‘There are not many fish in the brook.’

In addition to the usages discussed above, *mi-* verbs can denote instruments. This example contains a serial verb construction.

- (98) *mi-idrus=ku* *m-ekan*
 have-spoon=1S.NOM ITR-eat
 ‘I eat with a spoon.’

Other meanings carried by *mi-* verbs include: ‘wearing’, ‘growing (body parts)’, ‘keeping (a pet)’, and ‘having a kinship relation’. Some examples are given below.

<i>mi-kiping</i>	‘to wear clothes’
<i>mi-kabung</i>	‘to wear a hat’
<i>mi-seki</i>	‘to grow nails’
<i>mi-su’ang</i>	‘to grow horns’
<i>mi-suan</i>	‘to keep a dog’
<i>mi-walak</i>	‘to have a child, to bear a child’
<i>mi-kataguin</i>	‘to have a spouse, to be married’

11 *Negative constructions*

11.1 Introduction

This chapter deals with negative constructions. Payne (1997:282) distinguishes three types of negation: lexical, morphological, and analytic. In lexical negation the concept of negation is part of the lexical semantics of a particular verb. In morphological negation a morpheme is attached to verbs to express clausal negation. Finally, analytic negation may be marked by a negative particle, or a finite negative verb. In Puyuma, no morphological negation is found. Instead, various forms of analytic and lexical negation occur.

Miestamo (2003) distinguishes two types of relationship between negative and non-negative clauses. He calls them symmetric and asymmetric, according to whether there is a structural difference between the negative and its non-negative counterpart. In symmetric negation, negatives do not differ structurally from affirmatives except for the presence of the negator, and the correspondences between the members of affirmative and negative paradigms are one-to-one. In asymmetric negation, there are structural differences between affirmatives and negatives in addition to the presence of the negator, and the correspondences between the members of affirmative and negative paradigms are not one-to-one; very often grammatical distinctions in asymmetric paradigms are neutralised. In Puyuma, constructions with the negators *adri* and *unian* are asymmetric, as shown in (1) and (3). The structural differences are in clitic order, verb form, case marking and definiteness of the theme.

The four negators discussed in this chapter are exemplified below.

- (1) a. *inaba*
good
'It's good.'
- b. *adri inaba*
NEG good
'It's not good.'
- c. *trekelr*
drink
'Drink!'

- d. *adri tra-trekelr*
NEG RED-drink
'Don't drink!'
- (2) a. *a trau a inaba*
ID.NOM person ID.NOM good
'He is a good person.'
- b. *ameli a trau a inaba*
NEG ID.NOM person ID.NOM good
'He is not a good person.'
- (3) a. *ulaya a akan-an*
exist ID.NOM eat-NMZ
'There's food.'
- b. *unian dra akan-an*
not.exist ID.OBL eat-NMZ
'There's no food.'
- (4) a. *ma-ladram=mi dratu ngalrad kandru kana suan*
ITR-know=1P.NOM ID.OBL/3.PSR name that.OBL DF.OBL dog
'We knew that dog's name.'
- b. *ma-ulrid=mi dratu ngalrad*
ITR-don't.know=1P.NOM ID.OBL/3.PSR name
'We didn't know its name.'

As can be observed from the above sentences, of the four negators discussed in this chapter, *adri* and *ameli* are instances of analytic negation, whereas *unian* and *maulrid*, which are the negative counterparts of *ulaya* 'exist' and *maladram* 'know', are examples of lexical negation.

In Chapter 10, three clause types are distinguished (verbal clauses, nominal clauses, and existential/possessive/locative clauses). The above sentences show that different negators are used in different clause types: *adri* is used in verbal clauses; *unian* is used to introduce a negative existential/possessive/locative sentence; and in sentences with a nominal predicate, *ameli* is used. Because negative constructions with *ameli* and *unian* are also discussed in §10.3 and §10.4, in this chapter the focus will be on the constructions introduced by *adri*.

In the following sections, §11.2 deals with the negator *adri* in verbal clauses, and §11.3 treats the negator *ameli* in nominal clauses. The use of the lexical negators *unian* and *maulrid* is described in §11.4 and §11.5 respectively.

11.2 Negative verbal clauses

Negative verbal clauses differ from their non-negative counterparts in two ways besides the presence or absence of a negator: in the order of pronominal clitics and in their verbal morphology.

While different orders of pronominal clitics are related to whether a given clause is transitive or intransitive (§11.2.1), the different sets of verbal affixes in negative clauses have to do with the indicative/non-indicative and realis/irrealis distinctions (§11.2.2).

11.2.1 Negation and transitivity

In §8.3 it was shown that while a transitive verb has a genitive proclitic and a nominative enclitic,¹ an intransitive verb only has a nominative enclitic. This contrast can be represented as in (5a) and (5b).

- (5) a. VERB^{ITR}(=PRO^{NOM}) **Intransitive**
 b. PRO^{GEN}=VERB^{TR}(=PRO^{NOM}) **Transitive**

In the negative intransitive construction, the negator *adri* precedes the verb, as shown in (6). If there is a nominative proclitic, it is attached to the negator, not the verb, as shown in (7).

- (6) a. *ingdan dra suan*
 afraid ID.OBL dog
 ‘He is afraid of dogs.’
 b. *adri ingdan dra suan*
 NEG afraid ID.OBL dog
 ‘He is not afraid of dogs.’
- (7) a. *ingdan=ku dra suan*
 afraid=1S.NOM ID.OBL dog
 ‘I am afraid of dogs.’
 b. *adri=ku ingdan dra suan*
 NEG=1S.NOM afraid ID.OBL dog
 ‘I am not afraid of dogs.’

In the negative transitive construction, however, the nominative enclitic does not attach to the negator *adri* but remains encliticised to the verb, as in (8b) and (9b).

- (8) a. *tu=pa-ka-ladram-aw=ku*
 3.GEN=CAUS-ka-know-TR1=1S.NOM
 ‘She let me know.’
 b. *adri tu=pa-ka-ladram-i=ku*
 NEG 3.GEN=CAUS-ka-know-TR2=1S.NOM
 ‘She didn’t let me know.’
- (9) a. *tu=beray-ay=ku dra paisu kan nanali*
 3.GEN=give-TR2=1S.NOM ID.OBL money SG.OBL my.mother
 ‘My mother gave me some money.’
 b. *adri tu=beray-i=ku dra paisu*
 NEG 3.GEN=give-TR2=1S.NOM ID.OBL money
 ‘She didn’t give me money.’

The negative verbal clauses can be summarised by the following templates:

- (10) a. *adri*(=PRO^{NOM}) VERB^{ITR} **Negative intransitive**

1 There is no third person nominative enclitic pronoun.

- b. *adri* PRO^{GEN}=VERB^{TR}(=PRO^{NOM}) **Negative transitive**

11.2.2 Negation and mood

The negative verbal construction is also different from the affirmative construction in terms of verbal morphology.

In §6.3 it was shown that a basic distinction between indicative and non-indicative can be made, and within the indicative category, there is a realis/irrealis distinction. A summary of the morphology of verbs in affirmative clauses was given in Table 6.1 and is repeated (with the omission of the aspectual and hortative paradigms) in Table 11.1. Table 11.2, a list of verb forms in negative constructions, is given below for a comparison.

Table 11.1: Puyuma verbal morphology (affirmative clauses)

		ITR	TR1	TR2	TR3
Indicative	Realis (Neutral)	<i>M-V</i>	<i>V-aw</i>	<i>V-ay</i>	<i>V-anay</i>
	Irrealis	<i>Ca-V</i>	<i>Ca-V-i</i>		<i>Ca-V-an</i>
Non-indicative (Imperative)		<i>V</i>	<i>V-u</i>	<i>V-i</i>	<i>V-an</i>

Table 11.2: Puyuma verbal morphology (negative clauses)

		ITR	TR1	TR2	TR3
Indicative	Realis (Neutral)	<i>M-V</i>	<i>V-i</i>		<i>V-an</i>
	Irrealis	<i>Ca-V</i>	<i>Ca-V-i</i>		<i>Ca-V-an</i>
Non-indicative (Imperative)		<i>Ca-V</i>	<i>Ca-V-i</i>		<i>Ca-V-an</i>

Comparing Table 11.1 with Table 11.2, we find that verb forms used in negative constructions are very different from those in affirmatives.

Realis constructions were exemplified in (6) to (9). In intransitive clauses the verb forms are the same in affirmative and negative sentences, as in (7a) and (7b). In transitive clauses, however, different transitive affixes are used. As shown in (8), the same verb *pakaladram* ‘let somebody know’ takes *-aw* in an affirmative clause but *-i* in a negative clause. In (9) *beray* ‘give’ takes the affix *-ay* in an affirmative clause, but *-i* in a negative sentence. Examples (8) and (9) also show that the morphological distinction between TR1 and TR2 collapses in the negative construction.

Examples of irrealis constructions are given in (11) and (12). Unlike the realis, irrealis verb forms do not change when negated.

- (11) a. *pa-pulang*=*ku*
 RED-help=1S.NOM
 ‘I will help.’
- b. *adri*=*ku* *pa-pulang*
 NEG=1S.NOM RED-help
 ‘I am not going to help.’

- (12) a. *tu=pa-padrek-i=ku*
 3.GEN=RED-carry.on.back-TR2=1S.NOM
 ‘He will carry me on his back.’
- b. *adri tu=pa-padrek-i=ku*
 NEG 3.GEN=RED-carry.on.back-TR2=1S.NOM
 ‘He will not carry me on his back.’

Examples (13) and (14) are imperative clauses. In negative clauses, verbs undergo *Ca*-reduplication, as shown in (13b) and (14b). As in the realis construction, the distinction between TR1 and TR2 collapses in the negative construction.

- (13) a. *an tu=pa-trekelr-ay=mu dra enay i, trekelr*
 if 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL water TOP drink
 ‘If she makes you drink water, drink it.’
- b. *adri tra-trekelr*
 NEG RED-drink
 ‘Don’t drink.’
- (14) a. *pilang-u m-u-ruma’*
 bring-TR1 ITR-go-house
 ‘Bring her home.’
- b. *adri pa-pilang-i m-u-ruma’*
 NEG RED-bring-TR2 ITR-go-house
 ‘Don’t bring her home.’

It was observed in §6.2 and §8.4.4 that TR1 is used when the nominative argument is more affected by the action. This explains why TR1 is missing from negative and irrealis sentences, since a nominative argument in negative or irrealis sentences is less affected than one in an affirmative realis sentence.

It is not clear if *Ca*-reduplication in negative imperatives is obligatory, or whether it brings a change of meaning. Verbs in negative imperative sentences usually undergo *Ca*-reduplication, as in (13) and (14) above. However, in some cases, such verbs are not prefixed by a reduplicated affix, as in (15) and (16).

- (15) *adri bangabang-i=ku*
 NEG bother-TR2=1S.NOM
 ‘Don’t bother me.’
- (16) *adri p-u-k-isatr-an=ku*
 NEG CAUS-go-ka-up-TR3=1S.NOM
 ‘Don’t lift me up.’

11.2.3 The lexical category of *adri*

This section addresses the lexical categorisation of the negator *adri*. Is *adri* a noun, a verb, or an adverb? I will show that *adri* does not fit into any of these categories.

The negator *adri* cannot be a noun, because a noun must be preceded by a noun phrase marker or a pronominal element to indicate its case role. It is never preceded by such an element.

On the other hand, *adri* is not a verb either, as is shown by the following two pieces of evidence. First, unlike verbs, *adri* does not change its form for different aspects or moods. In a negative clause realis or irrealis mood is manifested by the main verb. For instance, in (17), the form of the negator does not change, but the partial reduplication on the verb in (17a) indicates irrealis mood, and the intransitive marker on the verb in (17b) indicates realis mood.

- (17) a. *adri ra-rengay dra sadru*
 NEG RED-say ID.OBL many
 ‘He won’t say too much.’
- b. *adri ma-rengay*
 NEG ITR-say
 ‘He didn’t say.’

Second, if *adri* were a verb, then the combination of *adri* and the following verb would be a serial verb construction, and we would expect the verb following to be manifested in intransitive form (cf. §13.2). However, this is not the case, as shown in (15) and (16).

In §4.5.5 a small adverbial category is proposed, whose members differ somewhat from each other in their behaviour. Like *adri*, these adverbial elements have a constant form (they do not take affixes). They are grouped together in an adverbial category because their function is to modify the predicate or the whole clause. Functionally, *adri* would fit into this category quite well. However, *adri* can host pronominal clitics (§11.2.1) and aspectual clitics, such as =*la* ‘perfective’, =*dar* ‘frequentative’ and =*driya* ‘imperfective’, whereas none of the adverbs discussed in §4.5.5 attracts clitics.

- (18) *tu=k<in>a-rareger-an i, adri=la makeser mare-beliyas*
 3.PSR=<PERF>-frighten-NMZ TOP NEG=PERF strong RECIP-turn
m-uka i uma’
 ITR-go LOC farm
 ‘Because of her being frightened, she didn’t have the strength to return to the farm.’
- (19) *adri=driya talam me-ranak dra trau*
 NEG=IMPF <ITR>try ITR-attack ID.OBL person
 ‘It has never tried to attack people.’

The evidence indicates that *adri* is neither a noun, a verb, nor an adverb. It forms a morpheme category of its own.

11.3 Negative nominal clauses

Let us now turn to the negation of nominal clauses. In §10.3 two types of nominal clauses were distinguished according to whether the predicate NP is definite or indefinite. Although the two subtypes of nominal clause utilise the same negator, they nevertheless display two different negative construction types. (20b) is a negative classifying clause, while (21b) is a negative identifying clause.

- (20) a. *a tipul=ku*
ID.NOM Tipul=1S.NOM
'I am a Tipul.'
- b. *ameli=ku a tipul*
NEG=1S.NOM ID.NOM Tipul
'I am not a Tipul.'
- (21) a. *amau ta=ngai tu=ni-ladra-ladram-an*
COP 1P.PSR=language 3.PSR=PERF-RED-know-NMZ
'What they've learned is our language.'
- b. *ameli tu=ni-ladra-ladram-an ta=ngai*
NEG 3.PSR=PERF-RED-know-NMZ 1P.PSR=language
'Our language is not what they've learned.'

In a classifying clause, where the predicate NP is indefinite, the negator *ameli* is added to the beginning of the sentence to negate the association between the two nominals, as in (20b). In an identifying clause, which has a definite predicate NP, *ameli* replaces the copula *amau* in the corresponding negative construction, as in (21b).

In the case of identifying clauses there are no structural differences between affirmative and negative except for the replacement of the negative copula verb *amau* by *ameli*, as shown in (21a) and (21b). Thus this is symmetric negation in Miestamo's (2003) terms. On the other hand, in classifying clauses, negation is asymmetric. The clitic moves from the position after the predicate (20a) to the position after the negator *ameli* (20b).

Like *adri*, *ameli* can attract a nominative clitic. In such cases, the order of predicate and subject is rearranged, as shown in (20) and (22).

- (22) a. *a payran=ta*
ID.NOM Taiwanese=1P.NOM
'We are Taiwanese.'
- b. *ameli=ta a payran*
NEG=1P.NOM ID.NOM Taiwanese
'We are not Taiwanese.'

Furthermore, *ameli* can also be used as a negative response to a yes/no question.² Usually, there is a pause after *ameli*. For instance:

- (23) Q: *mi-walak kandri tangaw?*
have-child this.OBL Tangaw
'She had a baby with Tangaw?'

² For a positive response, *aiwa* is used. For example:

- Q: *an adri=ta=driya p-u-patrran dra bekalr-an i,*
when NEG=1P.NOM= IMPF CAUS-go-outside ID.OBL new-NMZ TOP
adri=ta m-u-ami ka?
NEG=1P.NOM ITR-go-north <ITR>say
'If we haven't taken our new rice, we can't go north?'
- A: *aiwa, adri=ta=driyan mulralriaban*
yes NEG=1P.NOM=IMPF sea.worship
'Yes, because we haven't done sea-worship.'

A: *ameli*, *mi-walak kan tangawlranges*
 NEG have-child DF.OBL Tangawlranges
 ‘No, she had a baby with Tangawlranges.’

However, sometimes informants use *adri*, and according to them both are acceptable if the question has a verbal predicate. If the question is manifested as a nominal clause, then only *ameli* is acceptable in the response.

Unlike *adri*, which does not encode mood, *ameli* may be prefixed with *ka-* to indicate irrealis.

(24) *ka-ameli a trau a inaba*
ka-NEG ID.NOM person ID.NOM good
 ‘He won’t be a good person.’

11.4 Negative existential/possessive/locative

The existential/possessive/locative construction that begins with *ulaya* ‘exist’ is described in §10.4. The negative construction introduced by *unian* is lexical negation, because the negation is part of the lexical meaning of the verb *unian* ‘not exist’. I argued in §10.4.1 that *ulaya* and *unian* are verbs, and I have also shown how we can distinguish among three constructions on the basis of asymmetries in case marking and the definiteness of the theme. These asymmetries were summarised in Table 10.1, repeated here as Table 11.3. The asymmetries are marked in grey.

Table 11.3: The asymmetries in affirmative and negative existential/possessive/locative clauses

	Existential		Possessive		Locative	
	Aff.	Neg.	Aff.	Neg.	Aff.	Neg.
Case	NOM	OBL	NOM	OBL	NOM	NOM
Definiteness	ID	ID	DF	ID	DF	DF

Here I only present examples. (25a-b) are existential constructions; (26a-b) are possessive constructions; (27a-b) are locative constructions. The reader is referred to Chapter 10 for more detailed description.

- (25) a. *ulaya a drekal*
 exist ID.NOM village
 ‘There was a village.’
- b. *unian dra akan-an*
 not.exist ID.OBL eat-NMZ
 ‘There was no food.’
- (26) a. *ulaya nantu pauayan*
 exist DF.NOM/3.PSR regulation
 ‘It has its regulations.’

- b. *unian=ta* *dra* *lawlaw*
not.exist=1P.NOM ID.OBL lamp
'We didn't have lamps.'
- (27) a. *ulaya i* *temuu* *i* *puyuma*
exist SG.NOM your.grandparent LOC Puyuma
'Your grandmother is in Puyuma.'
- b. *unian=ku* *i* *kiaedrengan*
withoutot.exist=1S.NOM LOC bed
'I wasn't in bed.'

11.5 The negative item *maulrid*

The last negative item discussed in this chapter is *maulrid* 'not know'. Like *unian* 'not exist', *maulrid* is a lexical item which incorporates negation into its meaning. In an affirmative clause, *maladram* 'know; understand' is used. For instance:

- (28) *daw ma-ladram=ku* *dra* *kemay* *isuwa*
why ITR-know=1S.NOM ID.OBL from where
'How did I know where it was from?'
- (29) *ma-ulrid=ku* *dra* *amuna* *i<suwa>suwa* *na*
ITR-don't.know=1S.NOM ID.OBL but <RED>where DF.NOM
kinguayan
before
'I didn't know which was first.'
- (30) *ma-ulrid=ta* *daway*
ITR-don't.know=1P.NOM <ITR>produce
'We didn't know how to build (a boys' house).'

The word *maulrid* has imperative/irrealis forms *ka-ulrid/ka-a-ulrid*. Like *maladram* 'know', *maulrid* can have a sentence-like complement (as in (29)) or form an SVC with the verb following it (as in (30)). Thus, *maulrid* is clearly a verb. Serial verb constructions and complementation are described respectively in Chapters 13 and 14.

Compared with the other negative items, the distribution of *maulrid* is rather restricted. Indeed, the same meaning can be expressed by the negator *adri* and *maladram* 'know', as (31) and (32) show.

- (31) *adri=mi* *ma-ladram* *dratu* *ngalrad*
NEG=1P.NOM ITR-know ID.OBL/3.PSR name
'We didn't know its name.'
- (32) *ma-ulrid=mi* *dratu* *ngalrad*
ITR-don't.know=1P.NOM ID.OBL/3.PSR name
'We didn't know its name.'

11.6 Summary

Table 11.4 is a summary of the main grammatical characteristics of the negative items discussed in this chapter.

Table 11.4: Grammatical characteristics of negative items

		Word class	Host of clitics	Lexical or analytic	Symmetric or asymmetric
<i>adri</i>	realis	particle (§11.2.3)	only nominative actor clitics and aspectual clitics	analytic	asymmetric
	irrealis				
	imperative				
<i>ameli</i>	classifying	verb (§10.3.3)	yes	lexical	asymmetric
	identifying				symmetric
<i>unian</i>	existential	verb (§10.4.1)	yes	lexical	asymmetric
	possessive				asymmetric
	locative				symmetric
<i>maulrid</i>		verb (§11.5)	yes	lexical	symmetric

12 *Non-declarative clause types*

12.1 Introduction

Speakers use sentences to perform speech acts. They use them to make an assertion or a request, to give a command or an instruction. Searle (1977) points out that ‘languages typically have different morphosyntactic devices that express what kind of speech act is being performed’. Sadock and Zwicky (1985:115) write that ‘for some of these uses of sentences a language will have specific syntactic constructions, or even specific forms, reserved for just these uses’.

One clarification is necessary. There is quite often a ‘mismatch’ between sentence type and the speech act that is performed. Speakers can and often do use a sentence type for other than its prototypical function. For instance, in both English and Chinese, interrogatives are often used in order to get something done, not to ask for information. The addressee is expected to make a pragmatic inference about the speaker’s intention. Such mismatches are largely beyond the scope of the discussion here. It is the typical uses of a given sentence type that I am discussing in this chapter.

The most frequent sentence types reflecting the grammaticalisation of speech acts are declaratives, imperatives, and interrogatives. Of the three, the declarative is often regarded as the unmarked sentence type, for example Payne (1997:294) claims that, ‘if there are special markings for speech act types, declarative is usually expressed via a zero marker’.

Imperative and interrogative constructions are discussed together in this chapter because they can be grouped together as non-declarative speech acts. In the following sections, I will discuss the general morphosyntactic characteristics of imperative constructions and interrogative constructions respectively.¹ Some minor sentence types will be discussed at the end of this chapter.

12.2 Imperative constructions

12.2.1 General characteristics

In an imperative clause, the addressee is commanded by the speaker to perform an action or is prohibited from performing it. The clause indicates the speaker’s desire to influence future events. It is used principally to give orders or instructions, and also to make requests

1 Verbal morphology of imperative constructions is also briefly mentioned in §11.2.2.

or to give suggestions. In an imperative construction, the addressee is not overtly manifested, whether in intransitive or transitive clauses, as shown in (1) and (2).

- (1) *an tu=pa-trekelr-ay=mu draku la'ub*
 when 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL/1S.PSR ladle
i, trekelr=la
 TOP drink=PERF
 'If she makes you drink with my ladle, then drink.'
- (2) *aw i sabak kana pa-trungtrung-an i, puka-i*
 and LOC inside DF.OBL CAUS-sound-NMZ TOP put-TR2:IMP
dra tidrul dra samaya, aw pa-treketr-i=la
 ID.OBL wasp ID.OBL some and CAUS-stick-TR2:IMP=PERF
dra kadepu'
 ID.OBL paper
 'And inside the drum, put some wasps, and seal it with paper.'

An imperative verb is typically not inflected for most of the grammatical categories associated with verbs, especially tense and person. Over half of the languages examined by Sadock and Zwicky (1985) have an imperative verb with fewer affixes than non-imperatives. Sadock and Zwicky (1985:173) suggest that imperatives are 'notionally future, so tense contrasts are unlikely, and the subject naturally refers to the addressee, so second person inflection of the verb becomes redundant'. They also find that languages that inflect for mood either have no mood inflection in the imperative, or, more often, a special sign for the imperative. In Puyuma, however, the manifestation of person and the verbal affixation of an imperative verb differ from Sadock and Zwicky's observations concerning the majority of the languages they discuss.

First, Sadock and Zwicky (1985:171–172) claim that all ergative languages they have studied follow a pattern whereby it is the absolutive argument that is the addressee of an imperative, whether the verb is transitive or intransitive. They give examples from Dyirbal and Eskimo, which are reputed to be among the most ergative languages in the world, and they conclude that the addressee of an imperative must be the absolutive argument (the subject). However, this is not the case in Puyuma. In a transitive clause like (3) or (4), the nominative case is reserved for the undergoer argument, not for the addressee.

- (3) *pilang-u i temuu m-uka i dre-na-dre-nan*
 take-TR1:IMP SG.NOM your.grandmother ITR-go LOC RED-mountain
 'Take your grandmother to the mountains.'
- (4) *adri ka-pa-paru-i=ku*
 NEG ka-RED-forget-TR2:IMP=1S.NOM
 'Don't forget about me.'

In an intransitive imperative, of course, the addressee is the omitted potential nominative argument, as in (1) and (5).

- (5) *adri a-uka*
 NEG RED-go
 'Don't go.'

Second, unlike most of the languages that Sadock and Zwicky studied, the number of affixes in Puyuma is not always reduced in the imperative. As indicated in Table 12.1 and Table 12.2, only in intransitive affirmative imperatives is the verb inflected with fewer affixes. In transitive affirmative constructions the declarative transitive subject-choice suffix is replaced by an imperative subject-choice suffix. Thus the number of affixes remains the same. In negative constructions (§11.2.2) imperative verbs have *Ca-* reduplication, which in negative declarative sentences occurs only in the irrealis. Thus negative imperative verbs, which have *Ca-* reduplication and transitive affixes, have more affixes than negative declarative verbs, which only take transitive affixes. Puyuma goes against the tendency observed by Sadock and Zwicky for mood not to be indicated on imperative verbs.

Table 12.1: Affirmative declarative vs affirmative imperative

	Affirmative declarative	Affirmative imperative
Intransitive	<i>dirus</i>	<i>dirus</i>
Transitive 1	<i>dirus-aw</i>	<i>dirus-u</i>
Transitive 2	<i>dirus-ay</i>	<i>dirus-i</i>
Transitive 3	<i>dirus-anay</i>	<i>dirus-an</i>

Table 12.2: Negative declarative vs negative imperative

	Negative declarative	Negative imperative
Intransitive	<i>dirus</i>	<i>da-dirus</i>
Transitive 1	<i>dirus-i</i>	<i>da-dirus-i</i>
Transitive 2	<i>dirus-i</i>	<i>da-dirus-i</i>
Transitive 3	<i>dirus-an</i>	<i>da-dirus-an</i>

12.2.2 Requests, commands and instructions: imperatives and politeness

Two things need to be mentioned about the use of imperative sentences. First, in the texts collected, affirmative imperative clauses are usually used when the speaker is in a higher social position than the addressee, but for negative imperatives, no such restriction exists. In (6) and (7), which are affirmative, the speakers are the addressee's grandmother and mother respectively; but in the negative example (8), the addressee is the leader of the village, and even though the speaker is of lower rank, the negative imperative is acceptable.

- (6) *aw i sabak kana pa-trungtrung-an i, puka-i dra*
 and LOC inside DF.OBL CAUS-sound-NMZ TOP put-TR2:IMP ID.OBL
tidrul dra samaya, aw pa-treke-tr-i=la dra kadepu'
 wasp ID.OBL some and CAUS-stick-TR2:IMP=PERF ID.OBL paper
 'And inside the drum, put some wasps, and seal it with papers.'
- (7) *ua u<tra>trangi*
 go <RED>play
 'Go visit her!'

- (8) *adri ka-dra-dreki-i=ku*
 NEG ka-RED-scold-TR2:IMP=1S.NOM
 ‘Don’t scold me.’

However, it seems that in prayers this generalisation does not hold. Speakers often use imperatives when they give their petitions.² Nevertheless, in these cases, there is usually an imperfective clitic =*driya*, as in (9) or the addressee is topicalised and marked by an addressing clitic marker =*a*, as in (10).

- (9) *beray-i=driya dranu ni-ranger-an idru*
 give-TR2=IMPF ID.OBL/2S.PSR PERF-thought-NMZ that.NOM
na kur-dikes kandri kana ki-a-karun-an
 DF.NOM kur-hold this.OBL DF.OBL get-a-work-NMZ
 ‘Give your thoughts to that person who is responsible for this business.’

- (10) *ama=a, beray-i=mi dra ma-ruwa-a=mi*
 father=VCT give-TR2:IMP=1P.NOM COMP ITR-can-PJ=1P.ECL.NOM
atrebung dra lalak dra ka-ruwa kurenang kaniem
 find ID.OBL child ID.OBL ka-can follow 1P.OBL
 ‘Father, give us (ability) to find a child who can go with us.’

When addressing a person of higher social rank, the speaker often uses a declarative sentence instead to make a request.³ For instance, in (11), the speaker is asking a senior to explain where a leader usually sleeps in a young men’s meeting house; in (12), the speaker is asking a senior to build a traditional building.

- (11) *ba-bati=yu=driya dra ulaya isuwa tu=kiaedreng-an*
 RED-tell=2S.NOM=IMPF ID.OBL exist where 3.PSR=sleep-NMZ
 ‘You tell (us) where his sleeping place is.’
- (12) *pa-ra-ragan=yu dra manay=driya dra belretrenganan*
 CAUS-Ca-up=2S.NOM ID.OBL what=IMPF ID.OBL ancient
 ‘You build something traditional.’

Unlike clauses which are formally imperative, where the addressee is omitted, in the declarative sentences in (11) and (12) the addressee, who is the potential actor, is overtly expressed. Also, the imperfective marker =*driya* ‘yet’ adds a more polite flavour to these sentences.

Another more indirect or polite way of giving instructions is to use declarative clauses with the first person inclusive pronoun *ta=* or =*ta*. For example, in a story, when the grandmother is teaching her grandson how to answer an invader’s questions, a first person inclusive pronoun is used, as in (13).

- (13) *i temutaw=la i, “idru na kawi i,*
 SG.NOM grandmother=PERF TOP that.NOM DF.NOM wood TOP

2 Christian speakers of Western languages also conventionally address God with familiar forms.

3 Sadock and Zwicky (1985:170) point out that ‘it is not logically necessary that an imperative sentence type be available in a language. The effect of an imperative sentence could be obtained by declarative sentences meaning ‘I want you to ...’ or ‘you should/must ...’, or by interrogative sentences’.

ta=pa-la'udr-anay *i kali, tu=rami i, kinguwayan=dar*
 1P.GEN=CAUS-float-TR3 LOC river 3.PSR=root TOP before=often
mu-la'udr, tu=lrudus i, kialrikudran-an=dar *ka*
 ACAUS-float 3.PSR=end TOP after=FREQ <ITR>say
i temutaw
 SG.NOM his.grandmother
 'His grandmother (said), "This timber, if we floated it down the river,
 its root would float to the front, its end to the rear," she said.'

Similarly, in a text where the speaker is giving instructions about how to make a traditional dish, the first person inclusive pronoun is used through the whole text. An excerpt is shown in (14).

- (14) *na driketran i, ta=ilrang-aw dra enay, aw*
 DF.NOM sticky.rice TOP 1P.ICL.GEN=grind-TR1 ID.OBL water and
ta=lrubuk-aw dra lrubuk, aw ta=tra-tre'el-aw
 1P.ICL.GEN=sack-TR1 ID.OBL sack and 1P.ICL.GEN=RED-press-TR1
dra barasa i, mu-teres tu=enay
 ID.OBL stone TOP ACAUS-filter 3.PSR=water
 'The sticky rice, we grind it with water, and we pack it in a sack, and we
 press it with a stone, and then the water is filtered out.'

In some contexts where we might expect imperative sentences to be used, such as in teaching the younger generation how to help their elders in (15), the speakers use the declarative construction with the actor *ta=*. For example:

- (15) *ane kir-trebung=ta dra ma-'idrang-an dra*
 when get-encounter-1P.ICL.NOM ID.OBL ITR-old-NMZ ID.OBL
ma-sangal dra basak i, ta=araw-ay,
 ITR-carry ID.OBL bag TOP 1P.ICL.GEN=grab-TR2
ta=pulang-ay
 1P.ICL.GEN=help-TR2
 'When we encounter any elders who carry bags, we take (the bags)
 from them and help them.'

In these examples, although the speaker uses the inclusive pronoun *=ta/ta=* 'we' to indicate that the actors include both the speaker and the addressees, the speaker does not intend to carry out the action with the addressees; the potential actors are the addressees alone. This *ta=* construction is not restricted to use by a speaker of a lower social rank. On the contrary, in all the examples I have, these declarative constructions with the inclusive pronoun *=ta/ta=* occur when the speaker is of higher rank than the addressee.

To sum up: true affirmative imperative sentences are used when the speaker is of a higher rank than the addressee, and two declarative clause types are often used to get the addressee to act when politeness is a consideration. No such a restriction occurs regarding negative imperatives.

12.2.3 A subtype of command: the prohibitive

The negative imperative, or prohibitive, is discussed separately because it is quite different morphosyntactically and pragmatically from an affirmative imperative. Morphosyntactically, as mentioned in §11.2.2, verbs in prohibitive sentences usually undergo *Ca*-reduplication to indicate irrealis mood, and the undergoer voice forms of such verbs are somewhat different from those in basic imperatives.

- (16) *trekelr*
 drink
 ‘Drink!’
- (17) *adri tra-trekelr*
 NEG RED-drink
 ‘Don’t drink!’
- (18) *pilang-u m-u-ruma’*
 bring-TR1:IMP ITR-go-house
 ‘Bring her home!’
- (19) *adri pa-pilang-i m-u-ruma’*
 NEG RED-bring-TR2:IMP ITR-go-house
 ‘Don’t bring her home.’

Unlike an affirmative imperative, the use of which is restricted due to politeness considerations, a prohibitive sentence does not have a politeness restriction.

12.3 Interrogative constructions

An interrogative construction is a grammatical form that is prototypically used to ask a question. Three types of question are distinguished in Puyuma: yes/no questions, alternative questions, and information or question-word questions. Their common feature is that they all have a rising-falling pattern of intonation, which makes them distinct from declarative sentences.

12.3.1 Yes/no questions

12.3.1.1 Types of yes/no speech acts

Yes/no questions are used to seek a response about the truth of the questioned proposition. For example:

- (20) Q: *nu=ruma’ i, adalep i takesi-an?*
 2S.PSR=house TOP close.to LOC study-NMZ
 ‘Is your house close to the school?’
- A: *aiwa, adalep i takesi-an*
 yes, close.to LOC study-NMZ
 ‘Yes, it is close to the school.’

Carletta et al. (1995) classify yes/no questions into three different types of speech act: ‘align’, ‘check’ and ‘query-yes/no’.

An align ‘checks the attention or agreement of the listener, or his/her readiness for the next move’, as in English *Right? Or Okay? Can you do that?* No align examples are found in my corpus, probably because little of it is conversational.

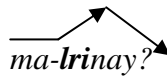
A check ‘requests the listener to confirm information the speaker has some reason to believe, but is not entirely sure about’, as in English *You do have a graveyard, don’t you?* or *You don’t have a graveyard, do you?* This is Moravcsik’s (1971) ‘biased question’, which a speaker uses to express his/her belief that a particular answer is likely to be correct and to request assurance from the addressee.

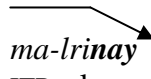
A yes/no query is any other question that requests an answer of ‘yes’ or ‘no’, as in English *Do you have a fenced meadow?* or *Are we going to go below the picket fence?* I call this type ‘neutral yes/no questions’ to distinguish them from biased yes/no questions.

12.3.1.2 Neutral yes/no questions

A neutral yes/no question is a question that expects an answer ‘yes’ or ‘no’. It is the most productive type of yes/no question.

In Puyuma, declarative sentences end with a falling contour, and the stress of the final word falls on the last syllable.⁴ The major difference between a neutral yes-no question and a declarative sentence is that in a neutral yes-no question the stress of the final word is shifted from the last syllable to the penultimate. This also brings a change of pitch pattern; there is a rise before the fall, as indicated in the following examples.

- (21) *kadru=yu i ruma' ma-lrinay?*
 live=2S.NOM LOC house ITR-play
 ‘Did you play at home?’
- 

- (22) *aiwa, kadru=ku i ruma' ma-lrinay*
 yes live=2S.NOM LOC house ITR-play
 ‘Yes, I played at home.’
- 

As can be observed from the above sentences, the structure of a neutral yes/no question is the same as that of a declarative one. The only difference between them is the pitch/stress pattern.

12.3.1.3 Biased yes/no questions

A biased yes/no question is signified by adding the copula verb *amau* (§ 10.3.3) to the end of the sentence as a question tag. I infer that the function of *amau* is to express the speaker’s

4 Typologically, a neutral yes-no question is often characterised by a special intonation pattern which is different from the intonation pattern of declarative sentences. Sadock and Zwicky write (1985:181), ‘the most striking property of yes/no questions is their characteristic rising final intonation contour’. They also indicate that in some languages, the rising final intonation is ‘the only feature that distinguishes yes/no questions from declarative sentences’.

desire for agreement.⁵ It requests the listener to confirm the information, which the speaker has some reason to believe but is not totally certain about. Phonologically, a biased yes/no question ends with rising intonation. For instance:

- (23) Q: *idru nu=ngalrad i, a kialrikudran=la*
 that.NOM 2S.PSR=name TOP ID.NOM afterwards=PERF

tu=p<in>u-ngalrad amau?
 3.PSR=put<PERF>-name COP
 ‘Your name, isn’t it given afterwards?’

- A: *a lrikudran a p<in>u-ngalrad kandru*
 ID.NOM afterwards ID.NOM put<PERF>-name that.OBL
 ‘It’s a name given after that.’

In mid-discourse a speaker may seek the addressee’s confirmation with the tag *maku* (§4.5.6), as shown in (24) and (25).

- (24) *adri=ku karuwa m-u-isatr, maku? aw,*
 NEG=1S.NOM can ITR-go-up tag and

ti=pa-karun-ay i baeli
 1S.GEN=CAUS-work-TR2 SG.NOM my.older.sibling
 ‘I cannot get up, can I? So I’ll ask my brother to do the work (for me).’

- (25) *mara-asatr na pasara’adr, maku? aw tu=alrak-aw*
 SUP-high DF.NOM Pasara’adr tag and 3.GEN=take-TR3
 ‘The Pasara’adr family is in a higher position, isn’t it, and so they took it.’

12.3.1.4 Answers to yes/no questions

Across languages there are basically three kinds of system for short answers to yes/no questions: yes/no systems, agree/disagree systems, and echo systems (Sadock and Zwicky 1985:189–191).⁶ Basically, Puyuma has a yes/no system, with *aiwa* ‘yes’ standing for a positive answer (26), and *adri* ‘not’ standing for a negative answer (27), but sometimes other material (an echo verb) is added, as shown in (26).

- (26) Q: *nadri na palrakuan i, mu<kasa>kasa m-uka?*
 these.NOM DF.NOM men’s.house TOP <RED>together ITR-go
 ‘Do people from these men’s houses go together?’

5 Huang et al. (1999:645) and Tan (1997:107) also briefly discuss this type of question. Tan indicates that ‘*amau* conveys an implication of strong doubt’, but she does not say what the differences are between a question with *amau* at the end and a question without it. The elicited examples she gives do not support the claim that *amau* conveys strong doubt. Huang et al. also do not say much about this construction, except that its intonational pattern is different from neutral yes-no questions.

6 In a yes/no system, a positive particle stands for a positive answer and a negative particle stands for a negative answer. In an agree/disagree system, a positive particle is used when the answer agrees with the question in polarity (positive vs negative), and a negative particle is used when the answer disagrees with the question in polarity. In an echo system, simple positive and negative responses to questions involve repeating the verb of the question.

A: *aiwa. an m-u-ruma' i, mukasa.*
 yes when ITR-go-house TOP together
 'Yes. When they go home, they go together.'

(27) Q: *tu=kurutr-ay=yu?*
 3.GEN=rub-TR2=2S.NOM
 'Did he rub you?'

A: *adri, tu=pa-pulri-pulrin-ay=ku*
 NEG 3.GEN=CAUS-RED-cast.out-TR2=1S.NOM
 'No, he cast (the demon) out from me.'

The situation is more complicated when a negative question is asked. In such cases, both *aiwa* 'yes' and *adri* 'no' are acceptable, but an echo answer is needed. For example:

(28) Q: *adri=yu a-uka?*
 NEG=2S.NOM RED-go
 'Won't you go?'

A1: *aiwa, a-uka=ku*
 yes RED-go=1S.NOM

A2: *adri, a-uka=ku*
 NEG RED-go=1S.NOM
 'Yes, I'll go.'

This seems to indicate that Puyuma is simultaneously a yes/no language, and an agree/disagree language. However, it is very possible that A2 in (28) is the result of interference from Mandarin Chinese, which is an agree/disagree language, and that Puyuma was originally a yes/no language.

12.3.2 Alternative questions

In an alternative question the addressee is asked to make a choice among possible alternatives. In Puyuma an alternative question is usually formed by juxtaposing two alternatives and optionally connecting them with *andri*⁷ 'if not'. The two alternatives are each marked with a rising-falling pattern, and the stress is again shifted from the last syllable to the penultimate syllable. For example:

(29) Q: *an m-uka mulralriaban nadru na*
 when ITR-go sea.worship those.NOM DF.NOM

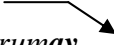
m-u-ami i, pa-pakan dra dawa?
 ITR-go-north TOP Ca-feed ID.OBL millet

andri, dra lrumay?
 if.not ID.OBL rice

'When those who do the sea-worship went north, they offered millet,
 or, was it rice?'

7 The word *andri* is evidently formed from *an adri*, 'when not'.

A: *lrumay*
 rice
 'Rice.'



12.3.3 Information questions

The purpose of information questions is to elicit a specific piece of information, and they cannot be answered with a 'yes' or 'no' alone. In Puyuma they are indicated by the use of interrogative proforms and rising-falling intonation. Other grammatical devices, such as inversion or special morphology, are not used. These interrogatives can be subgrouped into four categories on the basis of the part of speech the interrogative proform belongs to, namely, whether it is nominal, adverbial, verbal, or numeral.

12.3.3.1 Nominal interrogatives

The interrogative noun *manay* can be glossed as either 'what?' or 'who?'. It is preceded by a common or personal noun phrase marker depending on whether it denotes a common noun or a personal noun (§4.3.1.2.3). It can be the grammatical subject in a verbal sentence, as in (30), or the nominal predicate in a classifying sentence (§10.3.2), as in (31).⁸ In a classifying/nominal sentence, *manay* occurs as expected in the initial position, which is the default predicate position and usually reserved for the new information.

(30) *mi-walak i manay?*
 have-child SG.NOM who
 'Who gave birth to a child?'

(31) *a manay tu=edad kana kutrem*
 ID.NOM what 3.PSR=colour DF.OBL cloud
 'What color is the cloud?'

In information questions *manay* stays in the usual noun phrase position. For example:

(32) *'ta=pu-ngalrad-anay kan manay?' ka*
 1P.GEN=put-name-TR3 DF.OBL what <ITR>say
 'They said, 'what name should we give him?'

(33) *a lalak=ku=driyan i, ma-ladram=ku dra manay?*
 ID.NOM child=1S.NOM=IMPF TOP ITR-know=1S.NOM ID.OBL what
 'I was still a child, what did I know?'

Another interrogative noun *isuwa* can be glossed as 'which?' in some contexts. When it expresses the meaning 'which?', it must be preceded by a noun phrase marker. For instance:

(34) *amau na isuwa nu=kalipang*
 COP DF.NOM which 2S.PSR=umbrella
 'Which one is your umbrella?'

⁸ However, *manay* cannot be the genitive actor of a transitive verbal clause. The question 'Who has eaten my rice' will be a nominal clause, '*i manay na mekan draku tinalek*' — 'who's the one that has eaten my rice'.

Its use and position are very similar to that of *manay*. Both of them must be in the initial position in a nominal sentence, and after the verb in a verbal sentence. However, unlike *manay*, *isuwa* cannot take an indefinite noun phrase marker. This is predictable, because the referent has to be definite for a ‘which’ question to be asked.

The interrogative word *isuwa* also means ‘where’ in Puyuma.⁹ However, when *isuwa* means ‘where?’, it is not preceded by a noun phrase marker. I suspect that the locative noun phrase marker *i* is actually incorporated into this word, at least historically, as it contrasts with *asuwa* ‘at what time?’

(35) *ulaya=yu isuwa?*
 exist=2S.NOM where
 ‘Where are you?’

(36) *ulaya=ku i balrangaw*
 exist=1S.NOM LOC Taitung
 ‘I’m in Taitung.’

The question word used to ask about time is *asuwa* ‘when, at what time?’. It is always preceded by the subordinating conjunction *an* ‘when’ (§15.2.1), as illustrated below.

(37) *u-a-ruma’ an asuwa?*
 go-a-house when what.time
 ‘When will he come home?’

It seems that *asuwa* consists historically of a noun phrase marker *a* and a noun *suwa*.

12.3.3.2 Adverbial interrogative

The adverbial question word *daw* ‘why?’ is used to ask for a reason. The criteria that single it out as an adverb are that, unlike verbs, it has a constant form, and it does not attract pronominal clitics as verbs do. In addition, the verb following it is not necessarily an intransitive one, as it would be if this were a serial verb construction (§13.2.2.1). For example:

(38) *daw tu=pu-ngalrad-ay=ku dra lruba’ib?*
 why 3.GEN=put-name-TR2=1S.NOM ID.OBL Lruba’ib
 ‘Why did they give me the name Lruba’ib?’

12.3.3.3 Verbal interrogatives

Puyuma has two verbal interrogatives: *kuda* ‘how?’ and *muama* ‘why?’.

Like an ordinary verb, *kuda* occurs in sentence-initial position, has a voice alternation, and takes aspectual and modal inflections. In Puyuma, manner-adverbial concepts are typically expressed with a verb in an SVC (§13.4.3), and *kuda* occurs in the interrogative version of that construction, as in (39).

9 It is noted by Huang et al. (1999:663) that in many other Formosan languages, the interrogative word ‘which’ also means ‘where’.

- (39) *kuda-kuda=mu trungul?*
 <ITR>RED-how=2P.NOM <ITR>connect
 ‘How do you connect?’

In (39) the root is reduplicated to indicate repetition of action, and is marked by the intransitive infix . In (40) *kuda* undergoes reduplication to express the irrealis meaning, and in (41) it is marked by the undergoer subject-choice suffix *-aw*.

- (40) *ka-kuda=ku=la an kemadru*
 RED-how=1S.NOM=PERF if such
 ‘If such things happen, what shall I do?’
- (41) *ta=kuda-aw na balri na makeser*
 1P.GEN=how-TR1 DF.NOM wind DF.NOM strong
 ‘How can we stand the strong wind?’

The stative/dynamic distinction is also indicated by different intransitive markers. For example, in (39) it is , which conveys the more dynamic meaning, while in (42) the verb is prefixed by *ma-*, which indicates a stative meaning.

- (42) *ma-kuda=yu?*
 ITR-how=2S.NOM
 ‘How are you? (Are you alright?)’

The question word *kuda* is not always used to ask about the way of dealing with something. Sometimes its dynamic form is used to ask about degree (as in (43)) or about kinds (as in (44)).

- (43) *kuda-kuda tu=alrudran-an na barasa?*
 <ITR>RED-how 3.PSR=heavy-NMZ DF.NOM stone
 ‘How heavy is the stone?’
- (44) *sagar=yu dra kuda-kuda dra uaduan*
 like=2S.NOM ID.OBL <ITR>RED-how ID.OBL exercise
 ‘What kind of exercise do you like?’

The verbal interrogative *muama* ‘why’ differs in syntactic behaviour from the question word *daw* ‘why’, discussed in §12.3.3.2. First, while *daw* has a constant form, *muama* can undergo reduplication to indicate iterative aspect, as in (45). Second, whereas *daw* cannot attract clitics, *muama* can, as shown in (46). Third, the verb following *muama* is always intransitive (as in (46)), but there is no such restriction on verbs following *daw*. Thus, *muama*, like *kuda*, is clearly a verb, whereas *daw* is an adverb.

- (45) *mu<ama>ama idri na bangsaran?*
 <RED>why this.NOM DF.NOM man
 ‘Why is this man always here?’
- (46) *muama=yu=la drua kire<trupu>trupung-a*
 why=2S.NOM=PERF come <RED>meet.and.greet-PJ
 ‘Why did you come to meet and greet?’

12.3.3.4 Interrogative numeral

In §4.5.4.2 it was pointed out that a distinction is made between modifiers of personal and non-personal nouns in the Puyuma numeral system. This distinction also applies to interrogative numerals. Different question words are used to ask ‘how many’ of personal and non-personal nouns, respectively. For nouns denoting humans *miasama* is used, as in (47); for non-human nouns *munuma* is used, as in (48).

- (47) *miasama nu=wadi na babayan?*
 how.many 2S.PSR=younger.sibling DF.NOM female
 ‘How many sisters do you have?’
- (48) *munuma a basikaw-an*
 how.many ID.NOM bamboo-COL
 ‘How many bamboos are there?’

Questions like ‘how old’ and ‘what time’ also utilise *munuma*. For instance:

- (49) *munuma=la nu=ami garem?*
 how.many=PERF 2S.PSR=year now
 ‘How old are you?’
- (50) *munuma tuki=la garem?*
 how.many clock=PERF now
 ‘What time is it now?’

The question word *munuma* can also be used to ask about degree, as illustrated in (51).

- (51) *munuma bekas ina basikaw?*
 how.many long this.NOM bamboo
 ‘How long is this bamboo?’

The word *samaya*, otherwise ‘some’, is sometimes used in the sense of ‘how many’ to ask about number as well.

- (52) *samaya tu=dapal dra garang?*
 some 3.PSR=foot ID.OBL crab
 ‘How many feet does a crab have?’
- (53) *samaya wari-an an sa-lriyus-an*
 some day-COL when one-circle-NMZ
 ‘How many days are there in a week?’

12.4 A minor sentence type: the hortative

A hortative sentence expresses an exhortation (e.g. ‘let me/let’s’) or a strong wish to perform an action (e.g. ‘I/we want to’). In Puyuma, the hortative is encoded by a subcategory of non-indicative mood (§6.3.2). Hortative sentences are usually formed by suffixing *-a* ‘projective’ (§6.3.2.1), as in (54), (55) and (57), or by cliticising the first person inclusive pronoun *ta=*/*=ta*, as in (54), (55) and (56), or by both. For example:

- (54) *mare-babulras-a=ta*
 RECIP-borrow-PJ=1P.ICL.NOM
 ‘Let’s exchange!’

- (55) *trekelr-a=ta*
 <ITR>drink-PJ=1P.ICL.NOM
 'Let's drink!'
- (56) *ta=bilrin-aw* *ka*
 1P.ICL.GEN=leave-TR1 <ITR>say
 'They said, "let's leave him".'
- (57) *ka-a=ku=driya* *pa-ka-ladram* *kanmu*
 ITR-tell-PJ=1S.NOM=IMPF CAUS-ka-know 2P.OBL
 'I want to say (something) to inform you.'

The verb in a negative hortative sentence undergoes *Ca-* reduplication, as in sentence (58). However, the form is not the same as the one that occurs in an irrealis sentence, as in (59). In (59) no intransitive affix is attached to the verb, but in sentence (58) the verb *ma-ra-rengay* 'tell' is affixed with the intransitive affix *ma-*. Furthermore, the negative sentences and the transitive sentences can have two different readings. For example, in addition to the hortative meanings provided, (56) can also denote 'We left him', and (58) can also denote 'We are not saying anything'. Thus the interpretation of these sentences is based on the context and on intonation.

- (58) *adri=ta* *ma-ra-rengay*
 NEG=1P.ICL.NOM ITR-RED-tell
 'Let's not tell.'
- (59) *adri=ta* *ra-rengay*
 NEG=1S.ICL.NOM RED-tell
 'We won't tell.'

13 *Serial verb constructions*

13.1 Introduction

This chapter deals with serial verb constructions (SVCs). While there is much literature on SVCs, many linguists, e.g. Sebba (1987:1), Lord (1993:11–20), and Crowley (2002:10), have pointed out that there is a lack of consistency among different scholars' definitions of serial verbs. The inconsistencies can be summarised as follows: first, different names have been used by different writers to describe similar phenomena; second, while some authors give a relatively loose definition and simply treat any verb-verb sequence as serialised verbs, some authors are more strict about what counts as an SVC.¹

In my analysis, not all verb-verb sequences are SVCs. As a starting point, I adopt Crowley's (2002:10) definition and take SVCs to be 'syntactic constructions involving what can be analysed at the surface level as single clauses, but which are nevertheless expressed by means of multiple predicates'. Such a definition helps us to distinguish SVCs from constructions in which verbs belong to separate clauses. Accordingly, some criteria for qualifying a multiple predicate construction as an SVC are given below.²

- (i) There is no overt marker of coordination, subordination, or syntactic dependency of any sort;³ in other words, no verb in the verb-verb sequence is subordinate/coordinate to another verb.⁴
- (ii) The verbs share one or more arguments.
- (iii) The verbs together have just one tense, aspect, mood and polarity value.

1 In Huang (1995), Huang et al. (1997a), Wu (1995) and Teng (1997), SVCs are verb-verb sequences in which verbs share the same subject, which is obligatorily the actor. If the shared argument is the actor of one verb and the undergoer of the other, the construction does not count as an SVC, but is said to be a 'pivotal construction', but for most other scholars these are also SVCs.

2 These criteria are also the most often mentioned characteristics of SVCs in the literature (Foley and Olson 1985, Sebba 1987, Durie 1997, Crowley 2002, Bril and Ozanne-Rivierre 2004, Aikhenvald 1999, 2006).

3 In Paiwan (a neighbouring Austronesian language), SVCs have a linker *a*, but they are otherwise formally and functionally similar to Puyuma SVCs. Because there is no evidence that the linker *a* signals coordination, subordination or modification, I would not wish to exclude Paiwan SVCs under my definition.

4 One of Y.L. Chang's (2006b, 2006c) defining properties of an SVC is the 'subordination condition', by which he states that 'the structural relationship between component verbs or verb phrases is one of subordination rather than coordination'. This defining feature runs counter to most linguists' definitions of an SVC (Crowley 2002:12, Bril and Ozanne-Rivierre 2004:2, Durie 1997:291, Aikhenvald 1999:470).

- (iv) All the verbs must be lexical verbs, i.e. they must be able to function as verbs in their own right.

These features differentiate an SVC from other constructions on the basis of its morphosyntactic properties. Phonological/intonational features that distinguish SVCs from other multi-clausal constructions are touched on in §13.3.

The number of verbs that can be serialised is not restricted to two. If one verbal slot in one SVC is occupied by a second SVC, a three-verb serialisation will occur. In the corpus, the maximum number of serialised verbs is four. Examples of three-verb serialisation and four-verb serialisation are given in (1) and (2).

- (1) *kabekas paanun m-u-dare'*
run decline ITR-go-earth
'She ran downhill.'
- (2) *kabekas=ta m-uka pulang-a m-asal*
run=1P.ICL.NOM ITR-go help-PJ ITR-again
'We ran to help again.'

In §13.2, I will describe how features (i) to (iv) are realised in Puyuma SVCs, and in §13.3, I will show how SVCs can be distinguished from multi-clausal verb-verb sequences, such as complement clauses, adverbial clauses, and coordinate clauses. In §13.4, I investigate different subtypes of SVCs.

13.2 Argument sharing and verbal categories in SVCs

Features (i) and (iv) in §13.1 are straightforward, and so this section deals with (ii), argument-sharing, and (iii), sharing of tense, aspect, mood and polarity value.

13.2.1 Argument sharing in SVCs

This section concerns the argument sharing in SVCs, subclassifying SVCs according to the syntactic/semantic role of the shared argument and its position in the clause.

As we will see in §13.2.2, non-initial verbs in an SVC are always intransitive, and so the shared argument must be their subject/actor. This shared argument is either the subject (actor or undergoer) or the non-subject actor of the first verb. In other words, the shared argument is either the nominative or the genitive argument of the first verb. SVCs can be subcategorised into three types according to the relationship of the shared NP with each of the verbs in the SVC. The subtypes of SVCs are summarised in Table 13.1.

Table 13.1: The manifestation of the shared argument in SVCs

Type		role/case in V1	role/case in V2	Example
same-subject	I	ACT/NOM	ACT/NOM	3
	II	UG/NOM	ACT/NOM	4
switch-subject		ACT/GEN	ACT/NOM	5
inclusory		ACT and UG	ACT/NOM	6

In a same-subject I SVC, the shared argument is a nominative NP and is the actor of both V1 and V2, as shown in (3). In a same-subject II SVC, the shared argument is the undergoer/nominative NP and the actor of V2, as in (4). In a switch-subject SVC, the shared argument is the actor of V1 and V2, but it receives the genitive case from V1, and is by implication in a nominative relation to V2. An example of switch-subject SVC is given in (5). Finally, in an inclusory SVC, the undergoer and the actor of V1 are both the actor of V2, as exemplified in (6). Note that each non-initial verb in the three subtypes takes an actor subject.

- (3) *m-u-ami=ta pa-kan*
 ITR-go-north=1P.NOM CAUS-eat⁵
 ‘We went north to worship.’
- (4) *lriyus-u=ku pia-lraudr*
 turn-TR1:IMP=1S.NOM face-east
 ‘Turn me to face the east.’
- (5) *tu=tra-trual-ay me-na’u i sabak*
 3.GEN=RED-open-TR2 ITR-see LOC inside
 ‘They open it to look inside.’
- (6) *tu=pilang-aw i temutaw m-u-ruma’*
 3.GEN=bring-TR1 SG.NOM his.grandparent ITR-go-home
 ‘He brought his grandmother home.’

The shared argument can be manifested as a clitic pronoun (as in (3)–(6)) or a full NP. If the shared argument is expressed as a clitic pronoun, nominative or genitive, it attaches only to the first verb.

- (7) a. *kurerutung=ku m-iedreng kana tutuy*
 be.next.to=1S.NOM ITR-sleep DF.OBL puppy
 ‘I leant against the puppy to sleep.’
 b. **kurerutung m-iedreng=ku kana tutuy*
- (8) a. *tu=udalep-ay me-na’u i, ...*
 3.GEN=close.to-TR2 ITR-see TOP
 ‘He went close to see, ...’
 b. **udalep tu=na’u-ay i*

As shown in (7) and (8), the pronominal enclitic =*ku/tu*= can only attach to the first verb. If it is manifested twice, as in (9), the construction is not an SVC and has a different meaning.

- (9) a. *kurerutung=ku, m-iedreng=ku kana tutuy*
 ‘I leant, and I slept with the puppy.’
 b. *tu=udalep-ay, tu=na’u-ay*
 ‘He went close to it, and he saw it.’

5 The word *pakan* means ‘feed’, but it has the sense of ‘worship’ in this context.

The different translations given in (7)–(8) as opposed to (9) show that the single pronominal clitic marking of SVC indicates that the verb-verb sequence is coded as monoclausal.

If the shared argument is manifested as a full noun phrase, the position of the shared argument differs from construction to construction. In most cases, the subject of a same-subject I SVC can appear either between the two verbs or after V2. For instance:

- (10) a. *drua-drua me-na'u-a a trau*
 RED-come ITR-see-PJ ID.NOM person
 'Many people come to see.'
- b. *drua-drua a trau me-na'u-a*

However, while both sentences in (10) are acceptable, in the corpus, the subject more often occurs after V2. The only situation in which the shared argument is not allowed to intervene between the verbs is when V1 acts as an intensifier and expresses the meaning 'very'. For instance:

- (11) a. *pakameli ma-sepel na walak kandru*
 very ITR-sorry DF.NOM child that.OBL
 'The child is very sorry about that.'
- b. **pakameli na walak ma-sepel kandru*

In a same-subject II SVC, the shared arguments can appear either between two verbs or after V2, as shown in (12).

- (12) a. *tu='etr'etr-anay mu-sulrud na katengadrawan*
 3.GEN=jostle-TR3 ACAUS-push DF.NOM chair
 'The chair was jostled and pushed away.'
- b. *tu='etr'etr-anay na katengadrawan mu-sulrud*

In a switch-subject SVC, the shared argument (the oblique-marked actor) must appear before V2, otherwise the SVC has a different reading. Compare (13a) and (13b).

- (13) a. *tu=tra-trual-ay kana walak me-na'u i sabak*
 3.GEN=RED-open-TR2 DF.OBL child ITR-see LOC inside
 'The child was opening it to look inside.'
- b. *tu=tra-trual-ay me-na'u kana walak i sabak*
 3.GEN=RED-open-TR2 ITR-see DF.OBL child LOC inside
 'S/he was opening it to see the child inside.'

In (13a) the oblique NP *kana walak* 'the child' is the actor of both events and is crossreferenced by the clitic pronoun *tu=*, but in (13b) *kana walak* is the undergoer of V2. Again, in (14), if the shared argument (the actor of V1) moves to the position after the verb-verb sequence, the SVC has another meaning.

- (14) a. *tu=kibulras-aw dra trau i pabulu m-uka m-alup-a*
 3.GEN=borrow-TR1 ID.OBL person LOC Pabulu ITR-go ITR-hunt-PJ
 'People from Pabulu borrow it (the dog) to go hunting.'

- b. *tu=kibulras-aw m-uka m-alup-a dra trau i pabulu*
 ‘They borrowed it to go and hunt people from Pabulu.’

However, not all oblique-marked actors of V1 must appear before V2. In an inclusory SVC, the actor seems to be able to move to the position after V2, as shown in (15) and (16). Notice that the case marking of NPs does not change when the NPs appear after V2, and the noun phrase markers show that the case role is assigned by V1.

- (15) a. *tu=pilang-aw i temutaw kana walak*
 3.GEN=bring-TR1 SG.NOM his.grandparent DF.OBL child
drua i timulr
 ITR.come LOC south
 ‘The child brought his grandmother here to the south.’
- b. *tu=pilang-aw kana walak drua i timulr i temutaw*
- c. *tu=pilang-aw i temutaw drua i timulr kana walak*
- (16) a. *tu=pulang-ay i nanali kan pilay b<en>ase*
 3.GEN=help-TR1 SG.NOM my.mother SG.OBL Pilay <ITR>wash
 ‘Pilay helped my mother wash clothes.’
- b. *tu=pulang-ay b<en>ase kan pilay i nanali*
- c. *tu=pulang-ay i nanali b<en>ase kan pilay*

Arguments not shared by the verbs cannot be moved around. For instance, in (17), *enay* ‘water’ is the argument of the second verb *ki-pa-trekelr-a*, not of the first verb, and it must remain in its normal position after the verb. The sentence becomes ungrammatical if *enay* moves before the second verb, as shown in (17b). In (18), *tubil* ‘skirt’ is not a shared argument, and its appearance in different positions gives different readings.

- (17) a. *m-uka ki-pa-trekelr-a dra enay*
 ITR-go get-CAUS-drink-PJ ID.OBL water
 ‘They went to ask for water to drink.’
- b. **m-uka dra enay ki-pa-trekelr-a*
- (18) a. *tu=lugas-ay dratu tubil me-na’u*
 3.GEN=lift-TR2 ID.OBL/3.PSR skirt ITR-see
 ‘She lifted **her skirt** to see.’
- b. *tu=lugas-ay me-na’u dratu tubil*
 ‘She lifted it up to see **her skirt**.’

13.2.2 Manifestation of verbal categories

This section describes the manifestation of verbal categories in SVCs, such as transitivity, aspect, mood, and negation. The main findings are summarised in Table 13.2.

Table 13.2: The manifestation of verbal categories in SVCs

	Transitivity		Mood				Aspect		NEG
	TR	ITR	Indicative		Non-indicative		PROG	DUR	
			Realis	Irrealis	IMP	PJ			
V1	✓	✓	✓	✓	✓	✓	✓	✓	
V2	×	✓	✓	×	×	✓	✓	×	

13.2.2.1 Transitivity

The most striking feature of Puyuma SVCs is that non-initial verbs are always in the intransitive (AV) form.⁶

In sentence (19), there is a definite undergoer *unan* ‘snake’. In an independent clause with a simple verb phrase, the verb *barsa* ‘to slash’ would be manifested as transitive (undergoer voice) and *unan* ‘snake’ would be its subject, as exemplified in (20). But in the SVC in (19), *unan* is marked as a definite oblique and *barsa* is in the intransitive form.

- (19) *ka-ruwa=ta=la b<en>arsa kana unan*
ka-can=1P.NOM=PERF <ITR>slash DF.OBL snake
 ‘We can slash the snake.’

- (20) *ta=barsa-aw na unan*
1P.GEN=slash-TR1 DF.NOM snake
 ‘We slashed the snake.’

Aikhenvald (2006:80) notes that all serial verbs operate on a nominative-accusative principle, and never on an ergative-absolutive principle. This is an interesting observation, and it seems that Puyuma SVCs follow this principle. Thus, only actor voice (or intransitive, in the case of Puyuma) is allowed for V2, and the implicational actor of V2, which is also the shared argument, is always either S or A, but never O. Hence, the construction patterns accusatively in this sense.

13.2.2.2 Mood

Irrealis mood may not be marked on the second verb, as shown in the following sentences. In (21), *Ca*-reduplication marks V1 as irrealis, and (22) is ungrammatical because of the irrealis marking *a-* on V2.

- (21) *dra-drua=mu ki-pa-ladram-a dra kakuayanan*
RED-come=2P.NOM PASS-CAUS-know-PJ ID.OBL tradition
 ‘You will come to get knowledge about traditions.’

6 The same feature (that the non-initial verbs must be in AV form) has also been reported in other Formosan languages, for instance, Amis (Wu 2000:126), Atayal (Huang 2000c:143), Thao (Huang 2000d:124), Kavalan (Y.L. Chang 2004) and Saisiyat (Yeh 2000a:134). However, contrary to Huang’s observation concerning Thao, Wang (2004:293), citing examples from Blust (2003a:907, 952), finds that in Thao verbs in the V2 slot are not restricted to actor voice verbs.

- (22) **dra-drua ki-a-pa-ladram-a*
RED-come PASS-a-CAUS-know-PJ

In the imperative construction, only V1 appears in the imperative form, as shown in (23) and (24).

- (23) *lriyus-u piya-lraudr*
turn-TR1:IMP face-east
'Turn it to the east!'
- (24) *adri pa-pilang-i m-u-ruma'*
NEG CAUS-lead-TR1:IMP ITR-go-house
'Don't bring her home.'

V2 in an SVC denoting 'come/go' is always affixed with the projective marker *-a*, as in (25).

- (25) *m-uka=dar trakaw-a dra asepan*
ITR-go=FREQ <ITR>steal-PJ ID.OBL sugarcane
'They often went to steal sugarcane.'

13.2.2.3 Aspect

Huang (2000b:164–165) and Teng (1997:26) state that in Puyuma aspectual and modal frames in SVCs are indicated via V1 exclusively. However, I have found quite a few examples in which V2 is marked with either durative or progressive aspect (§6.4.1.2 and §6.4.1.3). In (26), V2 'walk' is in the progressive aspect (marked by *Ca-* and the ITR marker), and in (27), a repetitive meaning is signalled by *CVCV-* reduplication.

- (26) *puari ka-kawang tu=wadi*
slow <ITR>RED-walk 3.PSR=younger.sibling
'Their younger sister was walking slowly.'
- (27) *gilgil m-u-ngwaya-ngwayan*
<ITR>slow.run ITR-go-RED-front
'They slowly run forward.'

Aspectual markers generally appear after V1. However, the perfective marker *=la* is sometimes attached to V2, as shown in (28) and (29).

- (28) *aw sa<'eru>'eru mi-sasa=la taytaw*
and <RED>laugh ITR.have-one=PERF 3S.NEU
'And she laughed and laughed by herself.'
- (29) *karuwa m-ubii=la*
can ITR-fly=PERF
'He can fly already.'

13.2.2.4 Negation

The negator *adri* never precedes the second verb in an SVC. In other words, it is impossible for V2 to be negated separately.

- (30) *adri=ta ka-kasu dra bekalr-an m-u-ami*
 NEG=1P.NOM <ITR>RED-take ID.OBL new-NMZ ITR-go-north
 ‘We are not bringing new (rice) to the north.’

13.3 SVCs vs multi-clausal constructions

In this section, the differences between SVCs and multi-clausal constructions are discussed. Verbs in the examples are underlined.

13.3.1 SVCs vs complement clauses

Complementation is discussed in Chapter 14. Differences between a complement clause and an SVC are that: (i) a complement clause is always introduced by the complementiser *dra*, as shown in (31), but there is no marker of subordination/coordination in an SVC; (ii) unlike V2 of an SVC, the verb in a complement clause does not necessarily share any argument with the verb in the matrix clause, and it can attract pronominal clitics, as shown in (31) and (32); (iii) unlike V2 of an SVC, there is no restriction on subject choice, mood/aspect, and negation for the verb in a complement clause, as shown in (32)–(34).

- (31) *ma-ladram [dra ala m-inatray tu=walak]*
 ITR-know COMP maybe ITR-die 3.PSR=child
 ‘She knew that maybe her child was dead.’
- (32) *tu=pa-lradam-aw nadru na lalak [dra*
 3.GEN=CAUS-know-TR1 those.NOM DF.NOM child COMP
tu=pa-trekelr-ay=mu dra enay i, adri tra-trekelr]
 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL water TOP NEG RED-drink
 ‘She (the mother) reminded those children that “if she (the grandmother) has you drink water, don’t drink”.’
- (33) *pakameli ma-sepel kan temutaw [dra aru*
 very ITR-sorry SG.OBL his.grandparent COMP will
ki<a>natray=la i, ma-ulrep kiyanger]
 <a>die=PERF TOP ITR-tired <ITR>think
 ‘He was very sorry for his grandmother that she still worried about him when she was going to die.’
- (34) *igelra=ku=dar [dra adri=ku maruwa b<en>a’aw]*
 embarrassed=1S.NOM=FREQ COMP NEG=1S.NOM can <ITR>save
 ‘I often felt embarrassed that I couldn’t save it.’

13.3.2 SVCs vs adverbial clauses

Adverbial clauses are discussed in Chapter 15. An adverbial clause is usually signalled by its occupying the topic position and being followed by the topic marker *i*. It is often introduced by the subordinator *an* ‘when, if’. Like complement clauses, there is no restriction on the manifestation of the verb in an adverbial clause.

- (35) *an sayma=ta i, ta=ka-kiteng-aw*
 when few=1P.NOM TOP 1P.GEN=*ka*-small-TR1
 ‘If we are small in number, we make it small.’

13.3.3 SVCs vs coordinate clauses

Coordinate clauses are conjoined with or without the coordinator *aw* ‘and’. When there is no coordinator, the main distinctions between a coordinate construction and an SVC are that in a coordinate construction the verbs can belong to two separate intonation contours, with (or without) an intervening pause, and clitic pronouns (if any) appear obligatorily on each verb. In (36) and (37), a pause can occur between the two verbs, regardless of whether there is a coordinator or not. The second verb in a coordinate construction has a pronominal clitic attached to it, and there is no restriction on subject choice and mood.

- (36) *tu=tikus-ay, (aw) tu=keret-ay tu=pa’a*
 3.GEN=tie-TR2 and 3.GEN=cut-TR2 3.PSR=leg
 ‘They (the Puyuma) tied them (the Tipul), and they (the Puyuma) cut their (the Tipul’s) legs.’
- (37) *ka-si<a>kasik=mi=la, p<en>a-padan=mi=la*
ka-<a>set.off=1P.ECL.NOM <ITR>RED-prepare=1P.NOM=PERF
draniam a-uka-an
 ID.OBL/1P.PSR RED-go-NMZ
 ‘We are setting off, and we are preparing for our journey.’

13.4 Functional types of SVCs

In this section different types of SVC are distinguished on the basis of the semantic/functional relationship between the verbs in the series. There may be further subtypes not discussed here. There are some instances where it is difficult to determine which category an SVC belongs to.

13.4.1 Modal SVCs

In this type of SVC V1 encodes a modal meaning, expressing intention, attempt, or ability to do the action denoted by the following verb. In many languages similar functions are carried out by an auxiliary, but in Puyuma such words are not distinguished morphosyntactically from other verbs. For example:

- (38) *adri m-ua’i m-iedreng*
 NEG ITR-willing.to ITR-sleep
 ‘It (the dog) was not willing to lie down.’
- (39) *adri=driya talam karatr dra lalak*
 NEG=IMPF <ITR>try <ITR>bite ID.OBL child
naniem suan
 DF.NOM/1P.PSR dog
 ‘Our dog has never tried to bite kids.’

- (40) *karuwa b<en>u'utr dra aru a-araw kanta drekal*
 can <ITR>stop COMP will RED-rob DF.OBL/1P.PSR village
 'It can stop them robbing our village.'

As mentioned above, while there is no restriction on mood for the first verb, the second verb can only appear in realis mood, but it can be marked with different aspects, such as durative (41), and progressive in (42).

- (41) *adri m-ua'i mu-pesi-pesik dratu*
 NEG ITR-willing.to ACAUS-RED-apart ID.OBL/3.PSR
k<in>abekas-an kan nanali
 <PERF>run-NMZ SG.OBL my.mother
 'It (the dog) didn't want to be away from the road my mother ran along.'
- (42) *adri=driyan i, maruwa=la ka-kawang*
 NEG=IMPF TOP can=PERF <ITR>RED-walk
 'Some time later, she could walk.'

13.4.2 Phasal SVCs

In phasal SVCs V1 codes the inception or termination of the state/event of V2. For example:

- (43) *p<en>iya⁷=ta pa-ragan*
 <ITR>finish=1P.NOM CAUS-up
 'We finish building it up.'
- (44) *m-ungsal=la pu-rawak*
 ITR-start=PERF CAUS-cultivate
 'They started to make them cultivate the wasteland.'

There are no examples showing progressive or durative/repetitive aspect in V2.

13.4.3 Modificational SVCs⁸

SVCs in this category have one common feature: one of the verbs (usually V1) is used to modify the other verb that expresses the action.

It has been observed by a number of linguists (Starosta 1988; Huang 1995; and Chang 2006a, 2006b) that concepts that would be encoded as adverbial modifiers in other languages are often encoded as verbs in Formosan languages. Usually these verbs occur as

7 The word *peniya* in (43) is also used as a floating quantifier, meaning 'all' (§8.4.1.4). In those cases, it does not occur in the clause-initial position; it can either precede or follow the NP it modifies.

- a. *karuwa tubang na lalak peniya*
 can <ITR>answer DF.NOM child all
 'All the children can answer.'
- b. *ta=kan-aw=la peniya na kuraw*
 1P.GEN=eat-TR1=PERF all DF.NOM fish
 'We have eaten all the fish.'

8 Van Klinken (1999:250) says that SVCs are not modification constructions in Tetun (an Austronesian language of West Timor), but in Puyuma modification of events is often expressed by SVCs.

part of an SVC in which V2 denotes the main event and V1 the modifying concept. In §4.5.5, a closed word class, ‘adverbs’, is distinguished. I have demonstrated how these adverbs are syntactically different from verbs because they do not attract clitics, they have constant forms, the verb following them can be transitive, and they cannot stand in their own right.

Although the lexical items discussed in this section are semantically parallel to adverbs in other languages (e.g. English), they are nevertheless verbs from a morphosyntactic perspective; i.e. they can attract clitic pronouns, some can have a voice alternation, they can be affixed for aspect and/or mood, and the verb following them is obligatorily intransitive, as expected in an SVC.

The modificational category of SVCs is the most heterogeneous. It can be subdivided into several subtypes on semantic grounds, but even within the same subtype there may be constructional properties associated with individual ‘adverbial’ verbs.

‘Adverbial’ V1s encode: the degree to which V2 is true, e.g. *salraw* ‘very’ in (45) and *pulabus* ‘almost’ in (46); or the internal temporal structure of the event denoted by V2, e.g. *marayas* ‘often’ in (47), *payas* ‘immediately’ in (48), *masal* ‘again’ in (49), and *paetreng* ‘for a long time’ in (50); or the actor’s attitude towards the action of V2, e.g. *pasiesi* ‘reluctantly’ in (51) and *paseket* ‘seriously’ in (52).

- (45) *salraw*⁹=*ta ma-ulrep*
 very=1P.NOM ITR-tired
 ‘We were very tired.’
- (46) *pula-pulabus*=*ku m-inatray*
 RED-almost=1S.NOM ITR-die
 ‘I almost died.’
- (47) *marayas*=*ku tengedr dra dripung*
 often=1S.NOM <ITR>attack ID.OBL Japanese
 ‘I often attacked the Japanese.’
- (48) *pa-payas*=*yu m-inatray*
 RED-immediately=2S.NOM ITR-die
 ‘You will die immediately.’
- (49) *m-asal*¹⁰=*la drua i, ku<a>renang=ku*
 ITR-again=PERF ITR.come TOP <a>follow=1S.NOM
 ‘When they come again, I will follow.’

9 The root *salraw* has two meanings; in addition to conveying the meaning ‘very’, it also means ‘surpass, overtake’. For example:

salraw-i na palridrin
 overtake-TR2.IMP DF.NOM car
 ‘Overtake the car!’

10 The root *asal* also has two meanings. In addition to meaning ‘again’, it can also mean ‘move, change’. For instance:

tu=asal-aw nanku ngalrad kan namali
 3GEN=change-TR1 DF.NOM/1S.PSR name SG.OBL my.father
 ‘My father changed my name.’

- (50) *paetreng kiumal kanku*
a.long.time ITR.ask 1S.OBL
'He asked me for a long time.'
- (51) *pasiesi=ta m-ekan*
reluctantly=1P.NOM ITR-eat
'We ate reluctantly.'
- (52) *paseket ki-karun*
seriously ITR.get-job
'He worked seriously.'

Notice that if the subject of a sentence such as (46) is manifested as a free NP, as in (53), this NP cannot intervene between *salraw* and V2 (see also §13.2.1).

- (53) a. *salraw ma-ulrep i nanali*
very ITR-tired SG.NOM my.mother
'My mother was very tired.'

b. **salraw i nanali ma-ulrep*

The order of *masal* 'again' and the event verb seems to be flexible, as shown in (49) and (54). Similarly, *paseket* 'seriously, completely, carefully' can also occur as a non-initial verb, as shown in (55) and (56). The ability of these two items to move around makes them exceptional among the other modificational SVCs, and indicates that they are possibly (becoming) adverbs.¹¹

- (54) *an kur-panana=yu=driya m-asal i, ...*
if get-hurt=2S.NOM=IMPF ITR-again TOP
'If you get hurt again, ...'
- (55) *adri m-utu-trau paseket*
NEG ITR-become-person completely
'It has not been completely shaped.'
- (56) *adri tu=na'u-i na walak paseket*
NEG 3.GEN=see-TR2 DF.NOM child carefully
'She didn't look after the child carefully.'

However, given that *masal* has both transitive/intransitive forms (*asal-aw* vs *m-asal*) and has all the other characteristics of SVCs (the verb following it must be intransitive and realis, and this V2 does not attract a pronominal clitic), I treat it as a verb. Likewise, *paseket* is different from the adverbs in that it can undergo reduplication to indicate irrealis, as in (57); can be used transitively, as in (58); can attract clitics, as in (57); and can stand on its own.

11 While the data show that *masal* and *paseket* are verbs when they occur in the first position or stand independently (because they can be used transitively and can occur in an irrealis situation), I cannot exclude the possibility of them being grammaticalised as adverbs when they occur in a non-initial position, because they must be intransitive in that case (like an SVC), and therefore there is no way to tell whether the construction is an SVC or a verb with an adverbial modifier.

- (57) *pa<sa>seket=ku dra ruma'*
 <RED>seriously=1S.NOM ID.OBL house
 'I will concentrate on (building) the house.'
- (58) *tu=paseket-ay nantu kiakarunan*
 3.GEN=seriously-TR2 DF.NOM/3.PSR job
 'He concentrated on his job.'

In fact, all the V1s in this section have irrealis forms, as shown below, and all of them can be used as independent verbs. Some examples are given in (58), (59) and (60).

Realis	Irrealis
<i>salraw</i> 'very'	<i>sasalraw</i>
<i>pulrabus</i> 'almost'	<i>pulralrabus</i>
<i>marayas</i> 'often'	<i>kararayas</i>
<i>payas</i> 'right away'	<i>papayas</i>
<i>masal</i> 'again'	<i>aasal</i>
<i>paetreng</i> 'for a long time'	<i>paaetreng</i>
<i>paseket</i> 'completely, seriously'	<i>pasaseket</i>

- (59) *tu=asal-aw=driya*
 3.GEN=again-TR1=IMPF
 'He did/tried it again.'
- (60) *adri=ta p<en>a<a>etreng*
 NEG=1P.NOM <ITR><a>a.long.time
 'Let's not stay for a long time.'

In addition to *paseket* 'seriously' in (58) and *asal* 'again' in (59), *paetreng* 'for a long time' in (61) and *pulabus* 'almost' in (62) can take transitive forms.

- (61) *tu=paetreng-ay=ku kiumal*
 3.GEN=a.long.time-TR2=1S.NOM ITR.ask
 'I was asked (by him/her/them) for a long time.'
- (62) *ku=pulabus-aw p-inatray*
 1S.GEN=almost-TR1 CAUS-die
 'I almost killed him.'

In the above sentences, we see that the action is expressed by V2. V1 only denotes its length or degree. However, subject choice, mood, and even the arguments are marked on V1. Sometimes, when the context is clear, V2 can be left out. Compare the following two sentences.

- (63) a. *ku=paetreng-ay na kiruan mi-kiruan*
 1S.GEN=a.long.time-TR2 DF.NOM clothes have-clothes
 'I have worn the clothes for a long time.'
- b. *ku=paetreng-ay na kiruan*
 1S.GEN=long.time-TR2 DF.NOM clothes
 'I have worn the clothes for a long time.'
 'I have owned the clothes for a long time.'

Sometimes V1 can be either transitive or intransitive without causing much difference in meaning. For example, in (64) and (65) the same translation is provided, but according to the informant there are different emphases in these two sentences. In (64) the attitude is emphasised; in (65) the job is emphasised.

- (64) *paseket ki-karun*
seriously get-job
'He worked seriously.'
- (65) *tu=paseket-ay ki-karun*
3.GEN=seriously-TR2 get-job
'He worked at it seriously.'

13.4.4 Directional SVCs

In a directional SVC, the verb denoting the direction typically occurs as V2. These verbs can be divided into two subcategories: one denotes static direction and the other motion.

13.4.4.1 Static direction

The static directional verbs are formed by a bound morpheme *piya-* 'to face' and a morpheme denoting either a cardinal compass point or a direction relative to the actor, for example *piya-draya* 'face west', *piya-isatr* 'face up', and *piya-traran* 'face out'. Examples are shown in (66) and (67).

- (66) *tu=riap-anay piya-timulr i, m-utu-kekeng*
3.GEN=scatter-TR2 face-south TOP ITR-become-plain
'He scattered it to the south, and it became a plain.'
- (67) *lriyus-u piya-lraudr*
turn-TR1:IMP face-east
'Turn it to the east!'

13.4.4.2 Motion

Motion directional verbs are formed with a motional affix *u-* 'go', and a root denoting the destination (§6.5.1). For example, *ruma* 'house', and *u-ruma* 'go home'; *sabak* 'inside', and *u-sabak* 'get into'; *ami* 'north', and *u-ami* 'go north'; *dare* 'earth', and *u-dare* 'get down'. Examples are given in (68) and (69).

- (68) *adri=ta ka-kasu dra bekalr-an m-u-ami*
NEG=1P.NOM <ITR>RED-bring ID.OBL new-NMZ ITR-go-north
'We are not bringing new (rice) to the north.'
- (69) *tu=padrek-aw tu=wadi m-u-ruma'*
3.GEN=carry.on.back-TR1 3.PSR=younger.sibling ITR-go-house
'He (the elder) carried his younger brother on his back and went home.'

13.4.5 Purposive SVCs

There are three subtypes of purposive SVCs: directional, postural, and instrumental.

13.4.5.1 Directional-purposive

In a directional-purposive SVC, V1 expresses the motion, and V2 expresses the purpose. The verbs that occur as V1 here are all directional, and include verbs of static direction and directed motion. For instance:

- (70) *p<en>angutr dra dare', aw piya-draya me-riap i, ...*
 <ITR>grab ID.OBL earth and face-west ITR-scatter TOP
 'He grabbed some earth, and faced the west to scatter it, ...'
- (71) *m-u-ami=ta pa-ekan*
 ITR-go-north=1P.NOM CAUS-eat
 'We went north to worship.'
- (72) *m-u-ruma'=ku i ruma' kirungutr kan nanali*
 ITR-go-home=1S.NOM LOC home <ITR>take.care SG.OBL my.mother
 'I went home to take care of my mother.'

The two verbs *muka* 'go' and *drua* 'come' behave differently from the other directional purposive SVCs in that V2 takes a projective marker *-a* (§6.3.2.1).

- (73) *aw adri=ku karuwa m-uka b<en>a'aw-a i, ...*
 and NEG=1S.NOM can ITR-go <ITR>-save-PJ TOP
 'And I couldn't go to save it, ...'
- (74) *dra-drua=mu ki-pa-ladram-a dra kakuayanan*
 RED-come=2P.NOM get-CAUS-know-PJ ID.OBL tradition
 'You will come to get knowledge about traditions.'

Like English 'go' and 'come', *muka* 'go' and *drua* 'come' also denote deictic meaning, indicating the action is to be carried out 'away from' or 'toward' the speaker.

- (75) *payas mar-belrias m-uka m-aya-a kantu*
 immediately RECIPIENT-turn ITR-go ITR-find-PJ DF.OBL/3.PSR
wadi
 younger.sibling
 'They returned immediately to go find their sister.'
- (76) *drua=dar i takesi-an m-aya-a kanku*
 come=FREQ LOC study-NMZ ITR-look-PJ 1S.OBL
 'It often came to the school to look for me.'

Durative aspect may occur in V2, but the projective marker *-a* still cannot be omitted. For example:

- (77) *muama=yu=la drua kire-trepu-trupung-a*
 why=2S.NOM=PERF come get-RED-meet-PJ
 'Why do you come to welcome us?'

13.4.5.2 Postural-purposive

In the second subtype of purposive SVCs, V1 expresses posture.

- (78) *gerelepan na gung m-ekan dra tralrun*
 lower.the.head DF.NOM ox ITR-eat ID.OBL grass
 ‘The ox lowered its head to eat grass.’
- (79) *kurudung=ku m-iedreng kana tutuy*
 lean.against=1S.NOM ITR-sleep DF.OBL puppy
 ‘I leant against the puppy to sleep.’

13.4.5.3 Instrumental-purposive

In this subtype of purposive SVC, V1 indicates the instrument of carrying out the purpose denoted by V2.

- (80) *tu=tara-payran-anay=ta tubang*
 3.GEN=use-Taiwanese-TR3=1P.NOM <ITR>answer
 ‘They use Taiwanese to answer us.’
- (81) *mi-tratringalr=ku m-ekan*
 have-chopstick=1S.NOM ITR-eat
 ‘I ate with chopsticks.’

13.4.6 Simultaneous action SVCs

In the SVCs discussed hitherto, one of the verbs comes from a restricted class. In simultaneous SVCs, both verbs come from an open class.

A simultaneous SVC denotes two actions happening simultaneously to make a single event. For example:

- (82) *idru na walak=la i, kurenang=la sanga*
 that.NOM DF.NOM child=PERF TOP follow=PERF <ITR>make
 ‘That child did as she said.’
- (83) *ti=pa-matra’-ay=yu ma-rengay*
 1S.GEN=CAUS-eye-TR2=2S.NOM ITR-tell
 ‘I (want to) tell you face to face.’

13.4.7 Causative SVCs

Aikhenvald (2006) points out that in many languages there is no clear-cut boundary between cause-effect SVCs and causative SVCs. According to her study, cause-effect SVCs tend to be symmetrical (both verbs come from an open class) while causative SVCs tend to be asymmetrical (one of the verbs comes from a closed class).

Morphologically, two types of causative verbs can be distinguished in Puyuma. The first type comes from a closed class; this is marked by a causative affix *pa-/p-/pu-* (§9.2), as in (84) and (85). Semantically, this type encodes simple causation. The second type comes from an open class and has a lexical meaning which includes information about manner of causation, as in (86) and (87). Morphosyntactically, in both types, V1 is coded with an undergoer subject, which is also the subject of V2.

- (84) *tu=pu-lawad-aw mu-la'udr kana enay kadri ami*
 3.GEN=CAUS-flood-TR1 ACAUS-drown DF.OBL water here north
 'They drowned her in the water here in the north.'
- (85) *tu=pa-ladram-aw dra lrangetri pa-karun*
 3.GEN=CAUS-know-TR1 ID.OBL stick CAUS-work
 'They used the stick to teach them to work.'
- (86) *tu=gingaging-aw mu-trereb*
 3.GEN=shake-TR1 ACAUS-fall
 'It (the wind) shook (the tree) down.'
- (87) *tu=bau-bau-aw=ku m-uka i takesi-an*
 3.GEN=RED-push-TR1=1S.NOM ITR-go LOC study-NMZ
 'She kept pushing me to go to school.'

13.4.8 SVCs instead of complements

Complementation is discussed in Chapter 14. An SVC replaces complementation with certain complement-taking verbs such as psych verbs (88) knowledge verbs (89) and desiderative verbs (90) when both verbs share the same subject, mood, and polarity value. In such constructions the complement-taking verb occurs as V1.

- (88) *sagar m-ekan drata b<in>eray dra akan-an*
 like ITR-eat ID.OBL/1P.PSR <PERF>give ID.OBL eat-NMZ
 'They like to eat the food we gave.'
- (89) *ka-ulrid=mu kirelabak kana ala'*
 ka-don't.know=2P.NOM confront DF.OBL enemy
 'You will not know how to confront the enemy.'
- (90) *maranger=ku m-uka i katipul*
 want=1S.NOM ITR-go LOC Katipul
 'I want to go to Katipul.'

13.4.9 Idiomatic and lexical uses of SVCs

It is apparently common across languages to find idiomatic and lexical uses of SVCs, but I have found only a single instance of each in Puyuma.

Example (91) shows how *mi-trepa* 'have an aim' is used in its non-idiomatic (purposive) sense. However, it is also used productively in an idiomatic SVC meaning 'work in a certain occupation'. When it is used in this way the verb following it is usually marked for repetitive aspect, as shown in (92) and (93).

- (91) *mi-trepa pa-kan kandru kan drarungaw*
 have-aim CAUS-eat that.OBL SG.OBL Drarungaw
 'It was aiming to worship Drarungaw.'
- (92) *payas=ku m-uka i taybak ki-karun-a dra*
 right.away=1S.NOM ITR-go LOC Taipei get-job-PJ ID.OBL

mi-trepa *kuru-kurutr* *dra* *seikitan*
 have-aim <ITR>RED-dig ID.OBL coal
 ‘I went to Taipei right away to work as a mineworker.’

- (93) *a* *mi-trepa* *b<en>a-base* *i* *nanali*
 ID.NOM have-aim <ITR>RED-wash SG.NOM my.mother
 ‘My mother worked as a cleaner.’

Durie (1997:322) mentions that ‘verb serialisation is universally characterised by heavy lexicalisation of particular verb combinations’. However, lexicalisation seems not to be very productive in Puyuma, and (94) is the only idiomatic lexicalisation I have found. Here the sequence of *ma-ulrep* ‘tired’ and *ki-anger* ‘have a thought’ has been lexicalised in the sense of ‘worry (that something might happen)’.

- (94) *ma-ulrep=driya* *ki-anger* *dratu* *kasanan-an*
 ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR *ka-stray-NMZ*
 ‘She’s still worrying that he might get lost.’

14 *Complement clauses*

14.1 Subordination

Subordinate clauses are usually divided into three types according to their propositional function: the adverbial clause (as in (1)), which acts as a modifier of a main clause predicate; the relative clause (as in (2)), which functions as a modifier of a noun phrase; and the complement clause (as in (3)), which functions as an argument of a predicate. The subordinate clauses are underlined in the following sentences.

- (1) *an unian=yu dra angadr-an i, getilr kadrini*
if not.exist=2S.NOM ID.OBL breathe-NMZ TOP pinch here
'If you are out of breath, pinch here.'
- (2) *ala m-inatray tu=walak na mi-a-wali nantaw*
maybe ITR-die 3.PSR=child DF.NOM have-a-tooth DF.NOM/3.PSR
'Maybe (one of) her children who has teeth in her (pudendum) was dead.'
- (3) *ma-ladram dra ala m-inatray tu=walak*
ITR-know COMP maybe ITR-die 3.PSR=child
'She knew that maybe her child was dead.'

Adverbial clauses are described in Chapter 15 and relative clauses are discussed in §5.6. This chapter deals with Puyuma complement clauses. A standard definition of 'complementation' is given by Noonan (1985:42), who defines it as 'the syntactic situation that arises when a notional sentence or predication is an argument of a predicate'.

14.2 Types of complementation strategy

Noonan (1985:42) subcategorises complementation by syntactic behaviour into sentence-like complement types, paratactic complements, infinitival complements, participle complements, and nominalised complements.

Dixon (2004) distinguishes between complement clauses (or 'sentence-like complements' in Noonan's terms) and complement strategies (which includes Noonan's other kinds of complement). He says that in every language, there is a restricted set of verbs (complement-taking verbs), and each of its members may or must have another verb as one of its arguments. If this verb is the predicate of a clause which functions as an argument of

the complement-taking verb, then this clause is a complement clause;¹ on the other hand, if a verb relates in some other way to an argument of a complement-taking verb, this is a complementation strategy. The most common complementation strategies include nominalisations, relative clauses, and serial verb constructions. While complement clauses can only function as complements, complementation strategies are characterised by the fact that they can have other functions.

In Puyuma, there are three ways of expressing complementation. The first is the complement clause (as in (4)), and the other two are, in Dixon's terms, complementation strategies: nominalisation (as in (5)), and SVC (as in (6)).

- (4) *ma-ladram dra ala m-inatray tu=walak*
 ITR-know COMP maybe ITR-die 3.PSR=child
 'She knew that maybe her child was dead.'
- (5) *ma-ulrep=driya ki-anger dratu ka-sanan-an*
 ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR ka-stray-NMZ
 'She's still worrying about his possibly getting lost.'
- (6) *ma-ranger m-araw kandru kana drekal*
 ITR-want ITR-rob that.OBL DF.OBL village
 'They wanted to rob that village.'

Of the three, SVCs and nominalisations are lower in frequency and more restricted in distribution than complement clauses. For instance, the SVC strategy is used only when the complement predicate and the main predicate share the same subject, mood, aspect, and polarity value (§13.4.8).

It must be emphasised that structurally the nominalisation strategy is not different from other types of nominalisation, and the SVC complementation strategy is not different from other SVCs; they are mentioned here because they are used in situations where many languages would use a dedicated complement construction. Nominalisations and SVCs are treated in Chapter 7 and Chapter 13 respectively.

I will first describe the syntactic structure of complement clauses in §14.2.1, then in §14.2.2 and §14.2.3 I will discuss the two less productive strategies of nominalisation and SVCs. Section 14.3 discusses types of complement-taking verb.

14.2.1 Complement clauses

14.2.1.1 Complementiser *dra*

A complementiser is usually a word, particle, affix, or clitic, the function of which is to help identify as a complement the construction it associates with.² A sentence-like complement is always introduced by *dra* in Puyuma, which is also an indefinite oblique

1 Dixon (2004) gives two criteria for a constituent to be recognised as a complement clause: it must have the internal constituent structure of a clause, and it must function as an argument of the main clause, typically in O function, sometimes also in A and/or S functions. A complement clause may sometimes also function as E (extension to core), but may never have a non-core function.

2 Noonan (1985:47) points out that complementisers are often derived from pronouns, conjunctions, adpositions or case markers.

noun phrase marker (§4.3.1.2.2).³ Compare the uses of *dra* in the following sentences. In (7) *dra* precedes a noun, and in (8) it precedes a clause. It is glossed as ‘ID.OBL’ when it precedes a noun, and ‘COMP’ when it precedes a clause.

- (7) *kurudr dra buwang i sabak kantu ruma’*
 <ITR>dig ID.OBL hole LOC inside DF.OBL/3.PSR house
 ‘He dug a hole inside his house.’
- (8) *ma-ladram dra ala m-inatray tu=walak*
 ITR-know COMP maybe ITR-die 3.PSR=child
 ‘She knew that maybe her child was dead.’

Unlike the traditional definition of complement clauses, which requires the complement to be a subject or object argument of the predicate (or S, A, O functions in Dixon’s terminology), in Puyuma a sentence-like complement is never an S, A, or O argument. In other words, the complement clause is an argument but not a core argument of the complement-taking verb. The truth of this statement can be demonstrated from the voice marking of the complement-taking verb and the case marking of the complement. For example, in (7) and (8) both verbs are intransitive; the only core argument in each sentence is the actor, and thus the elements marked by *dra* in both sentences are oblique. This is not to say that the matrix verb has to be intransitive; if the matrix verb is manifested as a transitive verb, there must be an argument other than the actor and the oblique complement. For instance:

- (9) *tu=sulrud-anay=ta dra kurenang=la dra trau matrina*
 3.GEN=push-TR3=1P.NOM COMP follow=PERF ID.OBL person big
 ‘They pushed us to grow up with others.’

In this sentence the verb is transitive, and the two core arguments are the genitive actor *tu=* and the nominative undergoer *=ta*; the complement clause introduced by *dra* is oblique.

14.2.1.2 The behaviour of verbs in complement clauses

There is no restriction on the voice of the verb in a complement clause, unlike the second verb of an SVC. As in an independent clause, the verb in a sentence-like complement is manifested intransitively if there is no definite undergoer, and is manifested transitively if the undergoer is definite. Compare the transitivity of the verbs in the complements in the following two sentences.

- (10) *ma-dra-drayar nadru na miadrua na mar-kataguin*
 ITR-RED-discuss those.NOM DF.NOM two DF.NOM RECIPIENT-marry
 [*dra m-u-dawil-a=ta=la kadrini*]
 COMP ITR-go-far-PJ=1P.NOM=PERF here
 ‘The couple were saying to each other, “Let’s get away from here”.’
- (11) *tu=pa-lradam-aw nadru nantu lalak [dra*
 3.GEN=CAUS-know-TR1 those.NOM DF.NOM/3.PSR child COMP

3 As well as Puyuma a number of other Formosan languages, such as Paiwan (A.H. Chang 2006, Tang 1999), Mayrinax Atayal (Huang 1995), Labuan Rukai (Zeitoun pers.comm.), and Kavalan (Liao 2004) also use the oblique noun phrase marker as the complementiser.

tu=pa-trekelr-ay=mu dra enay i, adri tra-trekelr]
 3GEN=CAUS-drink-TR2=2P.NOM ID.OBL water TOP NEG RED-drink
 ‘She reminded her children, “If she asks you to drink water, don’t drink”.’

In (10) both the matrix verb *madradrayar* ‘discuss’ and the verb in the complement *mudawil* ‘go away’ are intransitive. The complement is introduced by an indefinite noun phrase marker and it has no undergoer. However, in (11) both the matrix verb *palradamaw* ‘to let know’ and the verb in the complement clause *patrekelray* ‘to let drink’ are manifested as transitive because both of them have a definite undergoer (*walak* ‘child’ in the matrix clause, and *=mu* ‘you’ in the complement clause).

As for the manifestation of aspect and modality, from the examples below it is clear that verbs in the complements are free to have their own aspect and mood. Thus, even when the matrix verb is manifested as realis mood, a verb in the complement can be manifested as irrealis.

(12) *idru na walak=la i, pameli ma-sepel kan*
 that.NOM DF.NOM child=PERF TOP very ITR-sorry SG.OBL
temutaw dra aru k-i<a>natray=la i, ma-ulrep=driya
 his.grandma COMP will ka-<a>die=PERF TOP ITR-tired=IMPF
ki-anger dratu ka-san-an
 <ITR>get-thought ID.OBL/3.PSR ka-stray-NMZ
 ‘That child, he was very sorry for his grandma that she was going to die,
 but she was still worrying that he might get lost.’

(13) *tu=kiumal-ay dra wa-wa’i=yu mi-kataguin kanku?*
 3GEN=ask-TR2 COMP RED-willing.to=2S.NOM have-spouse 1S.OBL
 ‘He asked (her), “Are you willing to marry me?”’

Negation is also allowed in a sentence-like complement,⁴ as illustrated in (14):

(14) *adri ka-a-ulrep ki-anger dra adri=yu*
 NEG ka-RED-tired <ITR>get-thought COMP NEG=2S.NOM
ka-ruwa ki-kadru kandru kana ruma’
 ka-can get-live that.OBL DF.OBL house
 ‘Don’t worry that you cannot live in the house.’

Examples (12) to (14) illustrate the fact that the form of sentence-like complements is like that of independent clauses when the complementiser is removed. In Givon’s (1980) terms, they are less bound than other complement types by their main predicate.

14.2.1.3 Equi-deletion, raising and clitic climbing

Equi-deletion deletes subjects of complements when they are coreferential with some argument in the main clause. Noonan (1985:68) points out that equi-deletion is especially

4 However, not all verbs can take a negative sentence-like complement; for example, semantically speaking, it will be more difficult for perception verbs such as ‘see’ or ‘hear’ and desiderative verbs like ‘want’ and ‘hope’ to take a negative sentence-like complement than utterance verbs ‘say’ and ‘tell’, or acknowledgement verbs ‘know’ and ‘understand’.

common when it is conditioned by the coreference of the complement subject with the main clause agent or experiencer, and when it occurs, it is usually obligatory. However he does not discuss how this process works in an ergatively aligned language.

In Puyuma, equi-deletion is only applicable to bound pronouns, because they are the only NPs that need to be overtly expressed. If the shared argument is a full NP it is difficult to tell whether there is equi-deletion. For example, in (15) *suan* ‘dog’ is both the subject of the main predicate *na’u* ‘see’ and the complement predicate *pinatray* ‘kill’. Recall that there is no third person nominative bound pronoun, and thus there is no relevant deletion for us to detect.

- (15) *ku=na’u-na’u-ay na suan [dra tu=p-inatray-aw*
 1S.GEN=RED-see-TR2 DF.NOM dog COMP 3.GEN=CAUS-die-TR1
dra ki-a-suan]
 ID.OBL get-a-dog
 ‘I watched the dog being killed by dog-hunters.’

In order to describe how these syntactic processes apply to Puyuma, it is useful to distinguish four types of argument encoding: nominative actor, nominative undergoer, oblique-marked actor, and oblique-marked undergoer.

Only a few examples of equi-deletion are found in the corpus, and it is always the nominative actor of the complement clause that is deleted. In (16) the bound pronoun =*ta* is both an argument in the matrix clause and in the complement clause.

- (16) *tu=sulrud-anay=ta [dra kurenang=la dra trau ma-trina]*
 3.GEN=push-TR3=1P.NOM COMP follow=PERF ID.OBL person ITR-big
 ‘They pushed us to grow up with others.’

Noonan (1985:66) says that the application of equi-deletion always results in a non-sentence-like complement type, but the complement in (16) is still sentence-like. As an independent clause it would mean ‘They/she/he followed others in growing up’.⁵

Puyuma equi-deletion is not obligatory. For instance in (17) the shared nominative NP appears both in the matrix and the complement clause. The second =*ku* can be omitted.

- (17) *igelra=ku=dar kandri kana suan [dra*
 embarrassed=1S.NOM=FREQ this.OBL DF.OBL dog COMP
adri=ku ma-ruwa b<en>a’aw]
 NEG=1S.NOM ITR-can <ITR>save
 ‘I often felt embarrassed that I couldn’t save this dog.’

The syntactic process of raising is much more common than equi-deletion in Puyuma. Unlike equi-deletion, where the deleted NP is a shared argument, raising is a phenomenon whereby an argument of the complement clause is raised to the main clause, and the NP involved is not a shared argument. A nominative NP, whether actor or undergoer, may optionally be raised to the main clause, where it is oblique. For example, in (18) *pilay* is the nominative actor of the complement clause, and in (19) *kuraw* ‘fish’ is the nominative undergoer of the complement clause.

5 This is the case because of the lack of third person nominative bound pronouns.

- (18) *ma-ladram=ku kan pilay_i [dra m-ekan dra kuraw \emptyset_i^{NOM}]*
 ITR-know=1S.NOM SG.OBL Pilay COMP ITR-eat ID.OBL fish
 ‘I know that Pilay eats fish.’
- (19) *ma-ladram=ku kana kuraw_i [dra tu=lriputr-aw \emptyset_i^{NOM}]*
 ITR-know=1S.NOM DF.OBL fish COMP 3.GEN=wrap-TR1
dra bira’]
 ID.OBL leaf
 ‘I know that the fish was wrapped in a leaf.’

An oblique-marked NP cannot be raised to the main clause unless it is the actor and has a clitic pronoun coreferential with it (i.e. is a core argument). Thus, while the oblique-marked argument *nanali* ‘my mother’ can be raised to the main clause in (20), in (21), the oblique-marked undergoer *kuraw* ‘fish’ cannot be raised.

- (20) *ma-ladram=ku kan nanali_i [dra tu_i=lriputr-aw=la]*
 ITR-know=1S.NOM SG.OBL my.mother COMP 3.GEN=wrap-TR1=PERF
na kuraw \emptyset_i^{OBL}]
 DF.NOM fish
 ‘I know that my mother has wrapped the fish.’
- (21) **ma-ladram=ku dra kuraw_i [dra tu=lriputr-anay]*
 ITR-know=1S.NOM ID.OBL fish COMP 3.GEN=wrap-TR3
na bira’ \emptyset_i^{OBL}]
 DF.NOM leaf
 ‘I know that fish is wrapped in the leaf.’

Another syntactic process which looks similar to raising is clitic climbing. Clitic climbing occurs when a clitic appears in a higher clause than the one in which it is an argument. Again not many examples are found in the corpus.

- (22) *palu=ku [dra me-retra \emptyset i takesian]*
 until=1S.NOM COMP ITR-put.down LOC school
 ‘until I finished my study’

In (22) the nominative clitic *=ku* is not an argument in the matrix clause, but is an argument to the predicate *meretra* ‘put down’ in the complement clause.

Table 14.1 is a summary of the above discussion.

Table 14.1: Syntactic processes in complementation

	ACT ^{NOM}	ACT ^{OBL}	UG ^{NOM}	UG ^{OBL}
Equi-deletion	✓	✗	✗	✗
Raising	✓	✓	✓	✗
Clitic climbing	✓	✗	✗	✗

14.2.2 Nominalisation as a complementation strategy

Only certain complement-taking verbs can use the complementation strategy of nominalisation (cf. Table 14.2 in §14.3), and these verbs can always also take a complement clause. Very few examples are found in the corpus. Notice that nominalisation complements are all oblique.

- (23) *ma-ulrep=driya ki-anger dratu ka-sanan-an*
 ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR *ka-stray-NMZ*
 ‘She’s still worrying about his getting lost.’

- (24) *ma-ulri-ulrid=ta [dra ka-kuda-an drata*
 ITR-RED-don’t.know=1P.NOM ID.OBL RED-how-NMZ ID.OBL/1P.PSR
ki-a-ma-drayar-an dra trau]
 get-a-ITR-talk-NMZ ID.OBL person
 ‘We don’t know how to make a conversation with others.’

The only verbal category that nominalised complementation retains is mood/aspect/voice.⁶ For example, in (23) the complement is prefixed by *ka-* (§6.6), which is usually associated with irrealis mood; in (24) the affixation of <a> in *kiamadrayaran* ‘make a conversation’ also gives an irrealis reading. In (25) the infix <in> (§7.3.1) and *Ca-* reduplication (§3.4.2) give a perfective and irrealis reading respectively.

- (25) *pakumau dratu s<in>a-salrem aw dratu*
 confirm ID.OBL/3.PSR RED<PERF>sow and ID.OBL/3.PSR
ika-u<ira>lrane
ika-<RED>fat
 ‘They (the women) confirmed how the seeds are being sown and how they will grow.’

Negative nominalised complementation is rare. A pair of examples are given in (26) and (27). When we compare these two sentences, we see that when a nominalised complement is negated it is the negator that is nominalised, and then the verb following it is manifested as an intransitive verb, not a nominalised form.

- (26) *tu=rengarengay-aw=ku dra (pa-)tra-trekelr-an dra eraw*
 3.GEN=persuade-TR1=1S.NOM ID.OBL CAUS-RED-drink-NMZ ID.OBL wine
 ‘He persuaded me to drink wine.’

- (27) *tu=rengarengay-aw=ku dra pa-ka-adri-an⁷ trekelr*
 3.GEN=persuade-TR1=1S.NOM ID.OBL CAUS-ka-NEG-NMZ <ITR>drink
dra eraw
 ID.OBL wine
 ‘He persuaded me not to drink wine.’

6 Unlike a verbal construction, in which there are four voices, in a nominalisation construction there is only an alternation between actor voice and undergoer voice (which is also signalled by <in>). For a discussion of mood and aspect in nominalisation, see §7.3.3.

7 In §11.2.3 I have shown that morphosyntactically *adri* is neither a verb nor a noun when it appears in a negative verbal construction. In (27), *adri* takes a nominaliser *-an*, and is also marked by *ka-* and *pa-*. From the corpus, it seems that *adri* only takes *-an* when it is also marked by *ka-*. There is no **ka-adri* nor **adri-an*.

The actor of a nominalised complement is usually manifested as a possessive pronoun (§4.5.1), as shown in (28) and (29). The patient of a nominalised predicate is usually marked by an oblique noun phrase marker but without a genitive pronoun, as shown in (30).

- (28) *me-nga-ngara draku ka-inaba-an*
 ITR-RED-wait ID.OBL/1S.PSR *ka-good-NMZ*
 ‘He was waiting for **my** getting well.’
- (29) *me-nga-ngara=ku dratu ka-inaba-an kan pilay*
 ITR-RED-wait=1S.NOM ID.OBL/3.PSR *ka-good-NMZ SG.OBL Pilay*
 ‘I was waiting for **Pilay’s** getting well.’
- (30) *ma-rengay-a=ku=driya dra tua-abay-an dra*
 ITR-tell-PJ=1S.NOM=IMPF ID.OBL *make-rice.cake-NMZ ID.OBL*
binariyaw
 sticky.rice.cake
 ‘I’ll tell about the making of *binariyaw* sticky rice cake.’

In (28), the actor of the nominalised complement is ‘I’, and is manifested as an oblique possessive pronoun *draku* ‘my’; in (29) the actor is ‘Pilay’, and in addition to an oblique possessive pronoun *dratu* ‘her/his/their’, the NP *kan pilay* follows the nominalised complement. The patient of the nominalised predicate in (30) is *binariyaw*, which is marked by the oblique noun phrase marker *dra*.

14.2.3 The SVC complementation strategy

Characteristics and types of SVCs are discussed in Chapter 13. Dixon (2004) notes that SVCs typically provide a complementation strategy for verbs denoting intention, such as ‘want’, ‘plan’, ‘intend’, or verbs denoting manipulation, such as ‘make’, ‘force’, or ‘help’. Those complement-taking verbs that can appear as the first verb of an SVC can always also take a *dra* clause complement. For instance:

- (31) *ma-ranger m-araw kandru kana drekal*
 ITR-want ITR-rob that.OBL DF.OBL village
 ‘They wanted to rob that village.’
- (32) *ma-ranger=ku dra tu=pukpuk-aw na walak*
 ITR-want=1S.NOM COMP 3.GEN=beat-TR1 DF.NOM child
 ‘I wanted him to beat the child.’

I mentioned earlier that for some complement-taking verbs (such as knowledge verbs, desiderative verbs and psych verbs), the SVC strategy is used when both predicates share the same subject, mood, aspect, and polarity value. Thus, in (31), the verb *maranger* ‘want’ appears in an SVC and the two predicates *maranger* ‘want’ and *maraw* ‘rob’ share the same subject. In (32), the same verb *maranger* takes a complement clause; the subject of *maranger* is =*ku*, and the subject of *pukpuk-aw* ‘beat’ is *na walak* ‘the child’.

In the corpus, there are no cases where a complement clause is used when the subject of both clauses is the same. Informants accept the use of a complement clause even when the subject of both clauses is the same, but they also think it is redundant.

14.3 Types of complement-taking verb

Since it is almost impossible to include all types of complement-taking-verb in this discussion, only those types that are more productive in Puyuma and have been thoroughly discussed in the literature are examined. Table 14.2 is a summary of types of complement-taking verbs, following Noonan (1985), and their types of complementation strategy.

Table 14.2: Types of complement-taking verbs

		<i>dra</i> clause	NMZ strategy	SVC strategy
Perception verbs		✓		
Utterance verbs		✓	✓	
Propositional attitude verbs	overt subject	✓		
	covert subject	✓	✓	
Phasal verbs	non-volitional	✓		
	volitional			✓
Knowledge verbs	different actor	✓		
	same actor			✓
Desiderative verbs	different actor	✓		
	same actor	✓		
Psych verbs	different actor	✓	✓	
	same actor			✓
Manipulative verbs		✓	✓	✓

14.3.1 Perception verbs

Perception verbs, such as ‘see’, ‘watch’, ‘hear’ etc., describe the sensory situation where the actor perceives the event denoted by the complement. If a verb of this type takes a complement it is always a *dra* clause.

- (33) *me-na'u dra ma-la-lemes=la nadru na lalak*
 ITR-see COMP ITR-RED-disappear=PERF those.NOM DF.NOM child
 ‘She saw the children were going to disappear.’

- (34) *ku=na'u-na'u-ay na suan dra tu=p-inatray-aw*
 1S.GEN-RED-see-TR2 DF.NOM dog COMP 3.GEN=CAUS-die-TR2
dra ki-a-suan
 ID.OBL get-a-dog
 ‘I watched the dog being killed by dog-hunters.’

The perceived events must be existing facts, and so irrealis and negation are not coded in the complements of these verbs.

14.3.2 Utterance verbs

Utterance verbs normally take a complement clause, but unlike other complement-taking verbs the complement is usually manifested as a direct quotation of the utterance.⁸ Notice the personal pronouns in the complement clauses in the following two sentences:

- (35) *tu=kiumal-ay dra wa-wa'i=yu mi-kataguin kanku*
 3.GEN=ask-TR2 COMP RED-willing.to=2S.NOM have-spouse 1S.OBL
 'He asked her, "Will you marry me?"'
- (36) *ma-dra-drayar nadru na miadrua na mar-kataguin*
 ITR-RED-discuss those.NOM DF.NOM two DF.NOM RECIP-marry
dra m-u-dawil-a=ta=la kadrini
 COMP ITR-go-far-PJ=1P.NOM=PERF here
 'The couple were discussing (and saying), "Let's get away from here".'

In (35) and (36), the addressees are third person arguments of the matrix verb, but in the complement clauses, the addressees are denoted by the second person pronoun =*yu*, and first person inclusive pronoun =*ta* respectively.

The only utterance verbs found to take a nominalised complement are *bati* 'tell (a story)' and *marengay* 'tell, recount'. For example:

- (37) *b<en>a-bati=ku=driya draku k<in>a-ba'aw-an*
 <ITR>RED-tell=1S.NOM=IMPF ID.OBL/1S.PSR <PERF>ka-live-NMZ
 'I'm telling about my life.'
- (38) *ma-rengay-a=ku=driya dra tua-abay-an dra*
 ITR-tell-PJ=1S.NOM=IMPF ID.OBL make-rice.cake-NMZ ID.OBL
binariyaw
 sticky.rice.cake
 'I'll tell about the making of *binariyaw* sticky rice cake.'

The verb *kema* 'say' is a very productive utterance verb. It either denotes hearsay, as in (39), or a direct quotation, as in (40).

- (39) *indang i sigasigaw, aw tu=pa-talam-anay a*
 afraid SG.NOM Sigasigaw and 3GEN=CAUS-try-TR3 ID.NOM
suan i, payas m-inatray idru na suan ka
 dog TOP right.away ITR-die that.NOM DF.NOM dog <ITR>say
 'Sigasigaw was afraid, and he made a dog try it, and it was said that the dog died right away.'
- (40) *'idri i, nu=ka-la-ladram-an m-u-ruma'*
 this.NOM TOP 2S.PSR=ka-RED-know-NMZ ITR-go-house

8 There are some cases in which the complement clauses are not like a direct quote of the speech. For example:

ma-dra-drayar a ma'inayan dra m-uka ma-salak-a
 ITR-RED-discuss ID.NOM male ID.OBL ITR-go ITR-celebrate-PJ
 'Males were discussing going to celebrate.'

i ruma'' tu=ka-aw i, ...
 LOC house 3.GEN=tell-TR1 TOP

‘‘These, are these your signs for going home?’’ he said to her, ...’

Unlike verbs taking complements, the verb *kema* ‘say’ is always put in the clause final position, and it seems that the verb and the direct quotation are in a juxtaposed relation, rather than a matrix-embedded relation.

14.3.3 Propositional attitude verbs

According to Noonan (1985:113–114), propositional attitude verbs express an attitude toward the truth value of the proposition denoted by the complement. The attitude may be positive, such as ‘believe’ or ‘think’, or it can be negative, such as ‘doubt’ or ‘deny’. In Puyuma, two types of verb can be distinguished within this category depending on whether there is an actor contributing the attitude. When there is, a complement clause is used, as in (41).

- (41) *pakupana'an=ku dra amau a trau a inaba*
 believe=1S.NOM COMP COP ID.NOM person ID.NOM good
 ‘I believe that he is a good man.’

Sometimes there is no overt human actor contributing the attitude, and the complement can be manifested as a clause, as in (42) and (43), or as a nominalised construction, as in (44).

- (42) *pana'an dra sagar senay aw m-uarak*
 true COMP like <ITR>sing and ITR-dance
 ‘It’s true that she likes to sing and dance.’

- (43) *kamawan dra tu=pa-ka-drua-aw m-inatray kaniam*
 resemble COMP 3.GEN=CAUS-ka-two-TR1 ITR-die DF.OBL/1P.PSR
trau i ruma'
 person LOC house
 ‘It’s like it caused half of my family to die.’

- (44) *kamawan dra p<in>a-lrada-lradam*
 resemble ID.OBL <PERF>CAUS-RED-learn
 ‘It’s like having been trained.’

14.3.4 Phasal verbs

According to Noonan (1985:129), phasal verbs refer to ‘the phase of an act or state; its inception, continuation, or termination’. All Puyuma phasal verbs, except *palu* ‘demarcate’, use only an SVC strategy. Compare:

- (45) *p<en>iya⁹=ta pa-ragan*
 <ITR>finish=1P.NOM CAUS-erect
 ‘We finished building (a building).’
- (46) *na adri pu<a>raket i, palu dra ma-'idrang,*
 DF.NOM NEG <a>concentrate TOP demarcate COMP ITR-old

9 The verb *peniya* is also used as a floating quantifier. See also § 13.4.2.

adri=driya ma-ladram

NEG=IMPF ITR-know

‘Those who don’t concentrate, until they are old, they still don’t know (how do to it).’

The complement taking-verb *palu* ‘demarcate’ is different from the other phasal verbs semantically and syntactically. For other phasal verbs, the inception or termination of an action is initiated by a volitional animate/human actor, but *palu* is used to describe a termination/initiation of an event due to the intervention of another event when it is used intransitively,¹⁰ and there is no volitional actor.

The reader may suspect that *palu* is not a verb but a subordinator, but it can take pronominal clitics and voice/transitive markers, as shown in (47) and (48). Notice that in (47) there is clitic climbing, and the pronoun =*ku* is an argument of *meretra* ‘put down; finish’.

(47) *palu=ku dra me-retra i takesian*
demarcate=1S.NOM COMP ITR-put.down LOC school
‘until I finished my study’

(48) *ku=palu-anay=driya kadri ku=ngai*
1S.GEN= demarcate-TR3=IMPF here 1S.PSR=word
‘This is what I want to say at this moment.’ (lit. ‘I let my words stop here.’)

14.3.5 Knowledge verbs

Knowledge predicates (Noonan 1985:118–119) describe a state of knowledge or a process of acquisition of knowledge concerning propositional content. Knowledge verbs, desiderative verbs, and psych verbs can take either the complement clause or the SVC strategy. Different morphosyntactic devices are used depending on whether the actors of the complement predicate and the main predicate are the same, as shown in (49) and (50).

(49) *ma-ladram dra ala m-inatray tu=walak*
ITR-know COMP maybe ITR-die 3.PSR=child
‘She knew that maybe her child was dead.’

(50) *ma-ladram=ta ki-karun*
ITR-know=1P.NOM get-job
‘We know how to work.’

14.3.6 Desiderative verbs

Noonan (1985:121) characterises a desiderative verb as a verb that has an experiencer argument expressing a desire that the complement proposition be realised. He subclassifies desiderative verbs into three categories: the *hope*-class, the *wish*-class, and the *want*-class. He argues that all languages share the three-way classification, but do not all make the same formal distinctions. However, in Puyuma, ‘hope’ and ‘want’ are expressed by the same verb *maranger* ‘want’, with either the complement clause or the SVC strategy.

10 If there is a volitional actor, *palu* has to be used transitively, as in (48).

- (51) *ma-ranger dra pa-ku<a>renang dra trau*
 ITR-want COMP CAUS-<a>follow ID.OBL person
 ‘They hope that they can catch up with others.’
- (52) *ma-ranger m-araw kandru kana drekal*
 ITR-want ITR-rob that.OBL DF.OBL village
 ‘They wanted to rob that village.’

A very different device is used to encode wishes. Normally they are manifested as a direct quotation which denotes the proposition that is wished, and the verb is suffixed with a projective marker (§6.3.2.1) to convey the non-indicative mood. There is no complement-taking verb, as the wish is encoded by the projective marker on the main verb.

- (53) *ma-ruwa-a=ku m-ulra’esi*
 ITR-can-PJ=1S.NOM ITR-succeed
 ‘(I wish) I can succeed.’
- (54) *adri-a drua na ala’*
 NEG-PJ come DF.NOM enemy
 ‘(I/We/They wish) The enemies won’t come.’

14.3.7 Psych verbs

Psych verbs express the experiencer’s psychological attitude towards the events described by the complements. All three complementation strategies are used with these verbs. When the actor of the complement predicate is identical with the actor in the main predicate the SVC strategy is used, as shown in (55). When the actor of the complement predicate is different from the actor in the main predicate, the complement clause or nominalisation strategy is chosen, as in (56) and (57).

- (55) *sagar ku<rena>renang kantu wadi*
 like <RED>follow DF.OBL/3.PSR younger.sibling
 ‘She liked going along with her brothers.’
- (56) *pameli ma-sepel kan temutaw dra aru*
 very ITR-sorry DF.OBL his.grandmother COMP will
ki<a>natray=la i, ma-ulrep ki-anger
 <a>die=PERF TOP ITR-tired <ITR>get-thought
 ‘He was very sorry for his grandmother that she was going to die,
 but was still worrying (about him).’
- (57) *ma-ulrep=driya ki-anger dratu ka-sanan-an*
 ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR ka-stray-NMZ
 ‘She was still worrying that he might get lost.’

14.3.8 Manipulative/causative verbs

Manipulative or causative verbs usually denote situations in which the agent manipulates the undergoer into performing some action or causes the undergoer to perform it. As Noonan (1985:126) has pointed out, manipulative verbs may encode simple cause or they may in

addition denote information about the manner of causation (force, make, persuade, threaten, let) which may be an illocutionary act (command, order, request, ask).

In Puyuma, simple causation is expressed by prefixing a causative affix *pa-* (cf. §9.2.1) to the verb, such as in (58). There is also a range of manipulative verbs that have a lexical meaning, as in (59). All three complementation strategies can be used with a manipulative verb: a full clause, an SVC or a nominalisation. An example of the SVC strategy is given in (59). The manipulative complement-taking verb is always transitive when it appears in an SVC.

(58) *ta=pa-drua-aw kanta ruma'*
 1P.GEN=CAUS-come-TR1 DF.OBL/1P.PSR house
 'We let them come to our house.'

(59) *tu=bau-bau-aw=ku m-uka i takesi-an*
 3.GEN=RED-push-TR1=1S.NOM ITR-go LOC study-NMZ
 'She kept pushing me to go to school.'

Sentence (60) is an example of the nominalisation complementation strategy.

(60) *pa-ladram-u=ku dra ta-tilril-an*
 CAUS-know-TR1:IMP=1S.NOM ID.OBL RED-write-NMZ
 'Teach me to write.'

Sentence (61) and (62) exemplify full clause complements. As in an SVC, the main verb is transitive. In (61) the complement is a direct quotation, as the actual words uttered by the speaker are given in the complement. Thus (61) denotes an illocutionary act. In (62) there is equi-deletion, as described in §14.2.1.3.

(61) *tu=pa-kradam-aw nadru nantu lalak dra*
 3.GEN=CAUS-know-TR1 those.NOM DF.NOM/3.PSR child COMP
tu=pa-trekelr-ay=mu dra enay i, adri tra-trekelr
 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL water TOP NEG RED-drink
 'She reminded her children , "If she asks you to drink water, don't drink".'

(62) *tu=sulrud-anay=ta dra kurenang=la dra trau matrina*
 3.GEN=push-TR3=1P.NOM COMP follow=PERF ID.OBL person big
 'They pushed us to grow up with others.'

15 *Adverbial clauses*

15.1 Introduction

According to Thompson and Longacre (1985:171), an adverbial clause is used to ‘modify another clause in a way similar to the way in which an adverb modifies a proposition’. Cristofaro (2003:155) defines an adverbial clause as one that encodes the circumstances under which the main clause event takes place. In Puyuma both adverbial and coordinate constructions can code causal, conditional, temporal, and sequential relations between two events, so it is important to distinguish adverbial and coordinate clauses on the basis of formal and not simply semantic features.

In Puyuma, coordinate clauses are usually conjoined by the coordinator *aw*, which also coordinates two noun phrases (Chapter 16). Adverbial clauses are often signalled by the subordinator *an* and often occupy the topic position, being followed by the topic marker *i*. The following examples serve to illustrate coordinate (1) and adverbial clauses (2)–(3) in Puyuma.

- (1) *mara-asatr na pasara’adr, aw, tu=alrak-aw na barasa*
more-high DF.NOM Pasara’adr and 3.GEN=take-TR1 DF.NOM stone
‘The Pasara’adr family has a higher status, so, they took the stone.’
- (2) *an adri=driya ma-ladram, sagar m-ekan drata*
when NEG=IMPF ITR-know like ITR-eat ID.OBL/1P.PSR
b<in>eray dra akan-an i, m-ekan
<PERF>give ID.OBL eat-NMZ TOP ITR-eat
‘When they didn’t know and they liked the food we gave them, they ate.’
- (3) a. *ka-a<ra>re’etr=ta an kadruwan=ta*
ka-<RED>crowded=1P.NOM when many=1P.NOM
‘It is very crowded for us if we are large in number.’
- b. *an kadruwan=ta i, ka-a<ra>re’etr=ta*
when many=1P.NOM TOP *ka-<RED>crowded=1P.NOM*
‘If we are large in number, it is very crowded.’

Two features are said to be universal to all coordinate constructions and can be used as means to differentiate adverbial clauses from coordinate clauses. First, coordinate constructions are always tense-iconic when they are used to denote temporal or clausal relations. Thus in (1) the order of the two clauses is fixed; the clause which denotes the cause

precedes the clause which denotes the result. Second, the position of the coordinator is always between the two clauses it conjoins. The fact that the subordinator is not always between the two clauses and that adverbial clauses are not always tense-iconic is shown in (2) and (3). Sentence (3) shows that the order of the adverbial clause and the main clause is reversible. However, these two features are not used as diagnostics for distinguishing coordination from subordination in Puyuma. The occurrence of the subordinator or the topic marker (or both) in adverbial clauses plays a more important role.

In the following sections, I will first investigate the general characteristics of adverbial clauses in Puyuma and then discuss their different types. The verb forms and the word order of adverbial and main clauses will also be compared. The interclausal relations discussed include temporal, causal, and conditional relations.

15.2 General characteristics

Of the three devices listed by Thompson and Longacre (1985:172–173) as marking subordinate clauses,¹ two of them, namely subordinating morphemes and word order, are frequently found in adverbial clauses in Puyuma.

15.2.1 Subordinating morphemes

The free morpheme *an* seems to be the only subordinator in Puyuma, and it signals temporal, causal, and conditional relations. In (4)–(6) an adverbial clause introduced by *an* stands in a relationship of subordination to the main clause. Basically, *an* codes a temporal relationship as in (4), and cause (5) and condition (6) are inferred from context.²

- (4) *an* *sa-sanga=ta* *dra* *dere**deran* *i*,
 when <ITR>RED-produce=1P.NOM ID.OBL spear TOP
m-iwa-iway
 ITR-RED-hunger.strike
 ‘When we were making spears, they started a hunger strike.’
- (5) *an* *tu=balri-anay* *i*, *mu-trereb*
 when 3.GEN=wind-TR3 TOP ACAUS-fall
 ‘The wind blew, (so) it fell.’
- (6) *an* *sayma=ta* *i*, *ta=ka-kiteng-aw*
 when small=1P.NOM TOP 1P.GEN=*ka*-small-TR1
 ‘If we are small in number, we make it (a boys’ house) small.’

1 The three devices are: subordinating morphemes, word order, and a special verb form used in subordinate clauses.

2 Cristofaro (2003:161) mentions that many languages neutralise the distinction between ‘if’ conditional and ‘when’ relations, and code the two relations with the same morphology. The semantics of the two are similar, because both imply that when a given event takes place, another event also takes place. Furthermore, she writes that the semantics of reason/cause relations partially overlap with those of ‘when’ and ‘after’ relations. Both imply that the event coded by the adverbial clause is factual, and if two events are both factual and continuous in time, they may be inferred to be causally related. Thus, the ‘when’ relation is closely related to reality condition relations on the one hand, and to reason/cause relations on the other. Thus it is not odd that the subordinator *an* codes temporal, causal, and conditional relations in Puyuma.

The subordinator *an* also has two free variants *kan* and *ane*,³ but of the three, *an* is the most common form. The form *ane* seems most often to be used when the speaker is still thinking about what to say and there is very often a pause between *ane* and the clause it is introducing. The form *kan* seems to be the least used. There are two possible reasons for this. First, it is not unusual for voiceless stops to be dropped in clause-initial position. Second, this form has the same pronunciation as a taboo word in Taiwanese, so it is possible that speakers avoid it and use *an* instead. I postulate that the original form was *kan*, grammaticalised from the noun phrase marker of the definite oblique case. Discussion of *kan* as a noun phrase marker is found in §4.3.1.2.2.

Not all adverbial clauses are introduced by *an*. In some cases, an adverbial clause is marked by the topic marker *i* alone, and its relation with the main clause is implied by the context. For example, the sentences below are all marked by *i* alone, but they have respectively a temporal (7), causal (8), and conditional (9) relation to the event in the main clause.

- (7) *m-u-ruma'=la i, unian tu=walak*
 ITR-go-house=PERF TOP not.exist 3.PSR=child
 'When he went home, his children were not there.'
- (8) *ta=ka-asatr-aw i, indang=ta dra apuy*
 1P.GEN=ka-high-TR1 TOP afraid=1P.NOM ID.OBL fire
 'We made it high because we were afraid of fire.'
- (9) *unian=driya dra trau dra mangusi ki-karun=ta*
 not.exist=IMPF ID.OBL person ID.OBL sneeze get-job=1P.NOM
i, i lrikudran kadru=la a mangusi i,
 TOP LOC behind there=PERF ID.NOM sneeze TOP
adri=ta=la m-indang
 NEG=1P.NOM=PERF ITR-afraid
 'If we go to work under the condition that no one sneezes, then in the future, if there is a sneeze, we are not afraid of it anymore.'

The majority of adverbial clauses are marked by the topic marker only. In a sample of six different texts, 100 out of 149 adverbial clauses (67.1%) are marked with the topic marker alone; 38 out of 149 (25.5%) are marked by both *an* and *i*; and only 11 out of 149 (7.4%) are marked by *an* alone. About 92.6% of the adverbial clauses are marked by *i*, which outnumbers the clauses marked by *an* (32.9%).

15.2.2 Word order

Diessel (2001:433) points out that the ordering of main and adverbial clauses correlates with the position of the subordinator in the subordinate clause. He finds that in languages in which adverbial clauses have a final subordinator, the adverbial clause tends to precede the main clause, whereas in languages in which adverbial clauses are marked by an initial subordinator, adverbial clauses commonly occur sentence-initially or -finally. Concerning

3 Teng (1997:96–97) mentions that there is another subordinating morpheme *a*, which has a similar function to *an*; however, this morpheme does not occur in my text corpus.

languages in which adverbial clauses occur in both sentence-initial and sentence-final positions, he claims that conditional clauses precede the main clause more often than temporal clauses, which in turn precede the main clause more often than causal, result, and purpose clauses.

Puyuma has an initial subordinator, and in accordance with Diessel's prediction, adverbial clauses occur in both sentence-initial and -final position. However, of the 149 tokens examined, only four adverbial clauses (around 2.7%) follow the main clause. Furthermore, when the adverbial clause follows the main clause, it usually denotes a temporal or conditional relation. For instance:

- (10) *ma-trangis=ku an ma-rengay=ku kandru*
 ITR-cry=1S.NOM when ITR-tell=1S.NOM that.OBL
 'I cried whenever I talked about this.'
- (11) *ka-a<ra>re'etr=ta an kadruwan=ta*
 ka-<RED>crowded=1P.NOM when many=1P.NOM
 'It is very crowded for us when we are many in number.'
- (12) *na balrakenitr i, m-u-patrarán kan ka-'udal pa-ka-nguayan*
 DF.NOM bat TOP ITR-go-outside when ka-rain CAUS-ka-front
 'The bat, it shows up before it rains.'

Givón (1990:844) also notes that when both preposed and postposed adverbial clauses are allowed, their properties are different. In addition to the different semantic relations they have with main clauses, the preposed adverbial clauses in Puyuma possess more topical status, as indicated by the frequent occurrence of the topic marker *i*. There is always a pause between a preposed adverbial clause and the main clause, but there is no intonational break before a postposed clause. In this sense, postposed adverbial clauses appear to be more integrated into the main clause.

15.3 Types of adverbial clause

As we have seen, most adverbial clauses in the Puyuma corpus code one of three types of semantic relations, namely temporal, causal, and conditional.⁴

15.3.1 Clauses denoting temporal relations

Adverbial clauses that denote temporal relations can be subcategorised into several classes in terms of the kinds of temporal relations they express. Different verbs and different aspect/mood markers are used to express different kinds of temporal relation. The four temporal relations discussed below are based on Cristofaro's (2003:156) classification, which includes temporal posteriority, temporal anteriority, temporal boundary and temporal overlap.

4 When linguists discuss types of adverbial clauses, they often include purpose clauses (see, for example, Thompson and Longacre (1985) and Cristofaro (2003)). However, in Puyuma the purpose relation is manifested as an SVC (§13.4.5).

15.3.1.1 Temporal posteriority ('before' clauses)

Relations of temporal posteriority involve two events occurring in a sequence. The event denoted by the adverbial clause follows in time the event denoted by the main clause, and serves as a temporal reference point for the event in the main clause. Zeitoun⁵ (1997b) mentions that three morphosyntactic devices are found in Formosan languages to indicate the relation of temporal posteriority: the occurrence of a particle, the use of a locative phrase 'in front', or the presence of a negator. In Puyuma such a relation is indicated either by a spatial expression, *pakanguayan* 'to put it in the front', as in (13) and (14), or by negation, as in (15).

Notice that the adverbial clause in (13) is introduced by *kan*, and it is an SVC construction, while in (14) the adverbial clause is in the topic position, and the event in the adverbial clause is expressed by *pakanguayan* plus a nominalisation construction.

(13) *na balrakenitr i, m-u-patrararan kan ka-'udal pa-ka-nguayan*
 DF.NOM bat TOP ITR-go-out when ka-rain CAUS-ka-front
 'The bats, they show up before it rains.'

(14) *pa-ka-nguayan dratu ba-burek-an kan nanali*
 CAUS-ka-front ID.OBL/3.PSR RED-return-NMZ SG.OBL my.mother
i, b<en>ase=ku=driya draku kiruan
 TOP <ITR>wash=1S.NOM=IMPF ID.OBL/1S.PSR clothes
 'Before my mother's return (home), I still have to wash my own clothes.'

It is always the case that the event in the adverbial clause has not happened by the time of the event manifested in the main clause. In (13) and (14), the verbs in the 'before' clauses are marked as irrealis, as indicated by the prefix *ka-* or reduplication of verb stem. In (13) the sentence conveys a habitual meaning, and in (14) it depicts an event that has not yet happened. However, if both the events in the 'before' clause and the main clause have happened, irrealis mood is unacceptable in the 'before' clause. In those cases, both predicates are marked realis.

Negation is another way of expressing the 'before' relation. For example:

(15) *adri=ku=driyan m-uka i balaka i, pa-takesi=ku*
 NEG=1S.NOM=IMPF ITR-go LOC overseas TOP CAUS-study=1S.NOM
dra tilrin
 ID.OBL book
 'Before I went overseas, I was a teacher.'

Thompson and Longacre (1985:183) point out that 'the semantic fact that the event in the 'before' clause is always incomplete with respect to the main clause event is reflected in many languages in the way negation shows up in the 'before' clause'. Puyuma exemplifies their assertion.

5 Zeitoun's (1997b) relation of posteriority refers to the 'after' clauses, while the relation of anteriority corresponds to the 'before' clauses in the present study.

15.3.1.2 Temporal anteriority ('after' clauses)

Like relations of temporal posteriority, relations of temporal anteriority also involve two events occurring in a sequence. There are several ways of indicating relations of temporal posteriority. First, a spatial noun *lrikudran* expressing 'behind' is utilised to indicate 'after', as in (16).

- (16) *m-uarak=ta=driya kadru, aw m-u-ruma'=ta,*
 ITR-dance=1P.NOM=IMPF there and ITR-go-home=1P.NOM
i lrikudran=la i, me-nga-ngara=ta dratu
 LOC behind=PERF TOP ITR-RED-wait=1P.NOM ID.OBL/3.PSR
itatubang kana makasatr
 answer DF.OBL above
 'We danced there, and we went home, and after that we waited for answers from above (God).'

Another method is to use an SVC beginning with *peniya* 'finish' (§13.4.2).

- (17) *p<en>iya=la pa-ragan i maka-dare' i,*
 <ITR>finish=PERF CAUS-up LOC along-earth TOP
pa-ragan=la i makasatr
 CAUS-up=PERF LOC above
 'After they built (the thing) below, they built (the thing) above.'

Sometimes, speakers use the same verb, *piya*, but without the intransitive infix, as in (18). It is not clear whether the different forms of the verb cause any difference in meaning.

- (18) *piya⁶ gatri na pasara'adr i, payas gatri*
 finish <ITR>pick PL.NOM Pasara'adr TOP right.away <ITR>pick
na raera'
 PL.NOM Raera'
 'After the Pasara'adr family pick (the plant), the Raera' family pick right away.'

Sometimes, the sequence of two successive events is not overtly specified. In the texts, such sequences are often conjoined by the coordinator *aw* or are simply juxtaposed. In a few examples, the successive events are linked by the topic marker *i*. For example:

- (19) *m-aya-aya i, tu=atrubung-ay=ku*
 ITR-RED-search TOP 3.GEN=meet-TR2=1S.NOM
 'She searched everywhere, and then she found me.'

15.3.1.3 Temporal boundary ('since' and 'until' clauses)

Relations of temporal boundary involve two events in which the event in the adverbial clause specifies the initiation or termination of the event in the main clause. The clause denoting the temporal boundary is usually indicated by *palu* 'demarcate' (see also §14.3.4).

6 There is a homophonous prefix *piya-* indicating 'to face towards' (§13.4.5.1), which attaches only to direction/location nouns, and appears not to be associated with *piya* 'finish'. For example, *piya-draya* 'to turn to the west; to face the west'.

Whether a *palu* clause denotes an initiation or a termination of an event seems to depend on the context. In (20) the *palu* clause specifies the initiation of the event in the main clause, while in (21) it expresses the termination. The adverbial clause in both (20) and (21) consists of *palu* and its complement, and is marked as topic.

- (20) *palu=ku dra me-retra i takesi-an kana*
 demarcate =1S.NOM COMP ITR-give.up LOC study-NMZ DF.OBL
palibak i, ma-ulrep ki-anger i nanali
 first TOP ITR-tired <ITR>get-thought SG.NOM my.mother
 ‘At the time I graduated from primary school, my mother started to be very worried.’
- (21) *palu=ku dra m-uka i takesi-an i,*
 demarcate=1S.NOM COMP ITR-go LOC study-NMZ TOP
adri=ku m-a-uka isuwa
 NEG=1S.NOM ITR-RED-go where
 ‘Until I went to school, I didn’t go out much.’

Notice that raising (§14.2.1.3) occurs in the *palu* clauses; the subject =*ku* is raised from the complement clause to attach to *palu* in (20) and (21).

Not all clauses denoting an initial boundary are marked by *palu*. In the following examples the perfective marker =*la* indicates sequence.

- (22) *m-u-asal=mi drua i puyuma=la i,*
 ITR-go-change=1P.NOM come LOC Puyuma=PERF TOP
adri=mi=la mar-pa-na’u
 NEG=1P.NOM=PERF RECIP-CAUS-see
 ‘Since we moved to Puyuma, we’ve never seen each other again.’
- (23) *tu=dr<in>ua-an=la na mar-kataguin i, mu-basuk*
 3.PSR=<PERF>come-NMZ=PERF DF.NOM RECIP-spouse TOP ACAUS-happen
a mar-ka-meni-meni dra manay=driya
 ID.NOM RECIP-ka-RED-different ID.OBL what=IMPF
 ‘Since the couple came, a lot of strange things happened.’

15.3.1.4 Temporal overlap (‘when’ and ‘while’ clauses)

Relations of temporal overlap involve two events which happen simultaneously or overlap for a certain period of time.

‘When’ clauses denoting temporal overlap are marked in the same way as ‘if’ clauses denoting conditions (§15.3.3); both of them are introduced by the subordinator *an/kan/ane* (§15.2.1). The difference between a ‘when’ clause and an ‘if’ clause lies in the manifestation of realis/irrealis mood in the main clause. In a ‘when’ clause depicting temporal overlap, the event in the main clause is in realis mood. Conditional clauses are further divided into clauses denoting a past/habitual (realis) event and clauses expressing a future/counterfactual (irrealis) event.

If the two events happen simultaneously/habitually, the verb in the ‘when’ clause is marked by progressive aspect, as shown in (24) and (25); on the other hand, if the two events

only overlap at a certain point of time, the verb in the ‘when’ clause is in non-progressive aspect, as in (26) and (27).

- (24) *an ki<a>bulras dra manay i, salraw ma-'itrilr pabulras*
 when <a>borrow ID.OBL what TOP very ITR-stingy lend
dra trau
 ID.OBL person
 ‘Whenever they were borrowing whatever things, people were very stingy in lending money.’
- (25) *an m-a-ekan nadru na sa-ra'ip-an i,*
 when ITR-RED-eat those.NOM DF.NOM one-work-NMZ TOP
tu=kasu-aw tu=padrekan m-u-lasedr i tralru-tralrun
 3.GEN=take-TR1 3.PSR=backpack ITR-go-hide LOC RED-grass
 ‘While those colleagues were eating, she took her backpack to hide it in the field.’
- (26) *idri na barasa i, an m-u-asal a*
 this.NOM DF.NOM stone TOP when ITR-go-change ID.NOM
trau, tu=adras-aw, tu=kasu-aw i saninin
 person 3.GEN=lift-TR1 3.GEN=take-TR1 LOC neighbouring
 ‘This stone, when people moved, they lifted it and took it to another place.’
- (27) *ane adalep=ta=la kia-lrutung dra basibasi i,*
 when close=1P.NOM=PERF hunt-monkey ID.OBL festival TOP
adri m-ua'i m-ekan na lrutung
 NEG ITR-willing ITR-eat DF.NOM monkey
 ‘When we are near the monkey-hunting festival, the monkeys are not willing to eat.’

15.3.2 Reason and result clauses

Reason and result relations involve two events, one of which represents the reason for the other. In Puyuma the relations of reason and result are more often expressed by a coordinate construction (Chapter 16) than a subordinate construction, exemplified in (28). The clause expressing the reason always precedes the clause expressing the result.

- (28) *mara-ma'idrang na tipul, aw pa-sa-sata=ta*
 more-old DF.NOM Tipul and CAUS-RED-tax=1P.NOM
 ‘Tipul is older, so we will pay them tax.’

Sometimes the reason/result relation is marked by the topic marker *i*, and in those cases the adverbial may convey a reason or a result depending on the context. For example, in sentences (29) and (30) the adverbial clauses denote the result; but in (31) the adverbial clause denotes the reason.

- (29) *ta=ka-asatr-aw i, indang=ta dra apuy*
 1P.GEN=ka-high-TR1 TOP afraid=1P.NOM ID.OBL fire
 ‘We lifted it, because we are afraid of fire.’

- (30) *daw ma-kiteng i timulr i, adri=ta kadruwan*
 why ITR-small LOC south TOP NEG=1P.NOM many
 ‘Why it is small in the south, is because we are not many (in number).’
- (31) *ka<druwa>druwan=ta na m-a-akan i,*
 <RED>many=1P.NOM DF.NOM ITR-RED-eat TOP
ma-ara-araw=ta=la m-ekan
 ITR-RED-rob=1P.NOM=PERF ITR-eat
 ‘Because we, the people eating, were many in number, we scrambled to eat.’

15.3.3 Conditional clauses

Conditional relations involve two events, one of which is the condition for the occurrence of the other. Thompson and Longacre (1985:190) divide conditional clauses into two major categories in terms of the events depicted being real or unreal. Basically, all conditional clauses in Puyuma must be introduced by the general subordinator *an/kan/ane*, described in §15.2.1, which I will gloss ‘when’ (for real events) or ‘if’ (for unreal events).

15.3.3.1 Clauses denoting real events

Conditionals that denote real events are those that refer to ‘real’ present, habitual/generic, or past situations. For example, in (32) an elder is teaching the young ones about the traditions, which can be regarded as either past or habitual/generic situations. Sentence (33) also depicts a habitual/generic situation. Example (34) on the other hand expresses a ‘real’ present. As can be seen from the examples, the events are coded as realis.

- (32) *ane kirtrebung=ta dra ma-'idrang-an dra ma-sangal*
 when come.across=1P.NOM ID.OBL ITR-old-COL ID.OBL ITR-carry
dra basak i, ta=araw-ay, ta=pulang-ay
 ID.OBL luggage TOP 1P.GEN=rob-TR2 1P.GEN=help-TR2
 ‘When we come across a senior carrying luggage, we take it over from him and help him.’
- (33) *an ma-trina i, sadru*
 when ITR-big TOP many
 ‘If (the boys’ house) is big, (the bamboos we need) are many.’
- (34) *an unian=yu dra angadr-an i, getilr kadrini*
 when not.exist=2S.NOM ID.OBL breath-NMZ TOP pinch here
 ‘If you are out of breath, pinch here.’

15.3.3.2 Clauses denoting unreal events

Thompson and Longacre (1985:191) distinguish various subtypes of unreal events, but Puyuma does not distinguish these morphosyntactically. All unreal events are indicated by an irrealis marker (usually *Ca-* reduplication (§3.4.2), *ka-* marking (§6.6), or affixation of <*a*> (§3.4.2.3)) on the verb.

- (35) *an maranger=yu mi-temuwan i, a manay ka-kua=ta*
 if want=2S.NOM have-grandchild TOP ID.NOM what RED-say=1P.NOM
 ‘If you want to have (adopt) a grandson, what can we say?’
- (36) *an ku<a>renang dra a-uka-an i tipul i, adri*
 if <a>follow ID.OBL RED-go-NMZ LOC Tipul TOP NEG
pa-pilang-i m-u-ruma’
 RED-bring-TR2 ITR-go-house
 ‘If she wants to follow to go to Tipul, don’t bring her home.’
- (37) *an adri ta=trakra-trakraw-i i, ka-ulrid=ta*
 if NEG 1P.GEN=RED-frame-TR2:IMP TOP ka-don’t.know=1P.NOM
m-u-sabak
 ITR-go-inside
 ‘If we don’t make a frame, we won’t be able to get in.’
- (38) *ka-a<ra>re’etr=ta an kadruwan=ta*
 ka-<RED>crowded=1P.NOM when many=1P.NOM
 ‘It is very crowded for us when we are many in number.’

16 *Coordination*

16.1 Introduction

This chapter deals with coordinate constructions. Coordination constructions are defined by Haspelmath (2004) as ‘syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements’. This discussion of coordination is not confined to coordination of clauses, but also includes that of noun phrases. I will first present the general characteristics of coordination in Puyuma, and then explore how coordination is employed in different syntactic structures.

16.2 General characteristics of coordination

16.2.1 The intonation patterns

Mithun (1988:331–333) points out that, cross-linguistically, coordination is signalled intonationally in one of two ways: (i) the coordinate constituents may be combined with no intonation break, or, (ii) they may be separated by a pause and a special non-final pitch contour. In the case of Puyuma, the second strategy is employed. There is a pause between coordinated constituents, and all the non-final constituents in a coordinate sequence have a rising contour. If there is a conjunction, there may be a pause before it, and must be a pause after it. The constituent before the conjunction ends in a pitch rise. Both the conjunction and the final constituent end in pitch falls. Sentence (1) is an example of coordinate NPs, and (2) is an example of coordinate clauses.

- (1) *kirami mar-balriu kana balaka, aw, kana Irutiya*
 <ITR>start RECIP-contact DF.OBL Westerner and DF.OBL Chin.dynasty
 ‘They started to have contact with the Westerners and the Chin government.’
- (2) *tu=drimutr-aw, tu=pisakuri’-aw, tu=pa’epitau-aw,*
 3.GEN=catch-TR1 3.GEN=slave-TR1 3.GEN=slap.in.the.face-TR1
tu=pa-karun-ay, tu=pa-trekeb-aw
 3.GEN=CAUS-job-TR2 3.GEN=CAUS-cleave.bamboo-TR1
 ‘They caught them, made them slaves, slapped them in the face, made them work hard, and made them cleave bamboo.’

As can be seen from the examples, only the last constituent in a coordinate construction is marked by the final contour. The comma between the coordinate constituents indicates there is a pause between them.

16.2.2 Types and position of coordinators

Coordinate constructions may or may not have an overt coordinator. Those without one are termed asyndetic coordination, while those that have some overt marking are syndetic coordination.

16.2.2.1 Asyndetic coordination

According to Stassen (2000:8) and Mithun (1988:332), when a coordinate construction has no overt coordinator, it often indicates a ‘list-like’ enumeration, as in (3), or encodes pairs which habitually go together and can be said to form a conventionalised whole or a conceptual unit, as in (4).

- (3) *ta=puka-ay dra palrubelrub i sabak dra kalang,*
 1P.GEN=put-TR2 ID.OBL filling LOC inside ID.OBL crab
dra patraka, dra in-iyam-an, dra ni-rames
 ID.OBL meat ID.OBL PERF-salt-NMZ ID.OBL PERF-pickled
 ‘We put filling inside (made of) crab meat, meat, or pickled vegetables.’

- (4) *na ni-reput-an tu=lrudus, tu=rami*
 DF.NOM PERF-cut-NMZ 3.PSR=tail 3.PSR=root
 ‘Both ends are cut.’

Asyndetic coordination not only occurs in noun phrase coordination, but also in clausal coordination.

Both Stassen (2000:10) and Mithun (1988:353–357) also say that zero-marked coordination tends to be marginalised into specific functions or becomes replaced by an overt marking strategy. Mithun suggests that this is due to increase in literacy. Zero-marked coordination, marked by intonation alone, is functionally well adapted to spoken language, but written language, which does not have the aid of intonation, requires a more overt marking.

In Puyuma the need for overt marking in written language is important also because of the difficulty of differentiating a modifying construction from a coordinate noun phrase construction without an overt coordinator. Compare (5) and (6).

- (5) *na sa-sunan na dawa na ni-resiyuk*
 DF.NOM RED-offer DF.NOM millet DF.NOM PERF-cook
 ‘the cooked millet for offering’
- (6) *maumau na pasara’adr, na raera’, na miasama*
 only DF.NOM Pasara’adr DF.NOM Raera DF.NOM one
na temaramaw
 DF.NOM witch
 ‘only the Pasara’adr family, the Raera’ family, and some witches’

In the modifying construction in (5) all three (small) noun phrases are marked by the same case marker, but there is no pause between them, as they do not refer to three different entities but to one. Sentence (6) is a coordinate construction with three (large) noun phrases conjoined, and the first and second are separated by pauses, as is indicated by the commas. The last conjoined constituent is a (large) noun phrase consisting of two (small) noun phrases: a modifier *miasama*, and a PIBU *temaramaw*, and there is no pause between them.

Perhaps speakers are also aware of the possibility of ambiguity, since in the Puyuma textbook that a group of Puyuma people have edited, the editors tend to use an overt coordinator more often than most Puyuma speakers do in speech. For example, in the following sentence, from the textbook, the coordinator is used heavily.

- (7) *na puran i, tu=ale'el-an dra mumu-an, aw*
 DF.NOM betelnut TOP 3.PSR=chew-NMZ ID.OBL grandparent-COL and
tu=kalalegi dra trangkangkar, aw dra temaramaw, aw
 3.PSR=offering ID.OBL priest and ID.OBL witch and
tu=pa-ra-redek kana baeba-an na ma'inayan
 3.PSR=CAUS-RED-arrive ID.OBL older.sibling-COL DF.NOM male
an aru pu<a>ruma'
 when will <a>marry
 'The betelnuts, they are grandparents' chewing gum, priests' and witches'
 sacrificial offering, and the elder brothers' gifts to be sent to the brides when
 they get married.'

Although we come across zero-marked coordination often in speech, inserting a coordinator is always acceptable.

16.2.2.2 Syndetic coordination

There are two coordinators in Puyuma: *aw* 'and' and *amuna* 'but'. While *aw* can be used in both nominal and clausal coordination, *amuna* occurs only in clausal coordination. For example, in (8) *aw* conjoins two locative noun phrases, and in (9) it coordinates two clauses. In (10), *amuna* conjoins two clauses. Both coordinators go between the constituents that are connected. The elements conjoined in the following sentences are underlined.

- (8) *adri=ku ra-rengay kandru kana ni-rebuwa-an*
 NEG=1S.NOM RED-tell those.OBL DF.OBL PERF-origin-NMZ
kadri i panapanayan *aw* *kadri i ma'idrang*
 here LOC Panapanayan and here LOC Ma'idrang
 'I won't talk about the origin in Panapanayan and in Ma'idrang.'
- (9) *tu=ka-ladram-aw=la* *aw* *tu=kiumal-ay i temutaw*
 3.GEN=*ka*-know-TR1=PERF and 3.GEN=ask-TR2 SG.NOM his.grandparent
 'He knew about it, and he asked his grandmother.'
- (10) *uliy a kadri i ami a salraw bulray,* *amuna*
 exist here LOC north ID.NOM very beautiful but

mi-a-wali nantaw ka
 have-a-teeth DF.NOM/3.PSR <ITR>say
 ‘It was said that here in the north, there is a very beautiful (woman)
 but she has teeth (in her private parts).’

Haspelmath (2004:7) distinguishes two patterns of monosyndetic coordination where the coordinator occurs between constituents: A co-B, A-co B. That is, if languages employ a medial connective, the medial connective has greater structural cohesion either with the second constituent or with the first constituent. The two types can be distinguished by intonation, pauses, discontinuous order, or phonological alternations. In Puyuma, both *aw* and *amuna* have a greater cohesion with the second constituent. Although a pause may occur after *aw/amuna*, a pause before *aw/amuna* is obligatory.

When there are more than two coordinands, often only the last coordinator is retained. For example:

(11) *pakumau dratu s<in>a-salrem, dratu teliu,*
 confirm ID.OBL/3.PSR <PERF>RED-sow ID.OBL/3.PSR bud
aw dratu ika-u<lra>lrane kana tralrun
 and ID.OBL/3.PSR ika-<RED>fat DF.OBL grass
 ‘Check its sowing, its buds, and how the weeds grow.’

(12) *pu-a-bini, me-la-latudr, aw me-re<a>ani’*
 put-a-seed ITR-RED-weed and ITR-<RED>reap
 ‘They are sowing, weeding, and reaping.’

In addition to functioning as a formal marker of syntactic coordination, *aw* can also serve as a pause filler to indicate that the sentence is not yet over. For example:

(13) *ma-dra-drayar nadru na miadrua na mar-kataguin*
 ITR-RED-discuss those.NOM DF.NOM two DF.NOM RECIP-marry
dra m-u-dawil-a=ta=la kadrini ka, aw,
 ID.OBL ITR-go-far-PJ=1P.NOM=PERF here <ITR>say and
tu=u-isatr-ay tu=in-u-isatr-an na taleb
 3.GEN=go-up-TR2 ID.OBL/3.PSR=PERF-go-up-NMZ DF.NOM raft
 ‘The couple were discussing it (and saying), “Lets get away from here”
 they said, and ..., they went on the raft that they had come on.’

The coordinator also often follows the demonstrative verb *kemadru* (§4.5.3.5) and together they form a fixed expression. In this case, the pause is after *aw*, not before it.

(14) *kadru=la aw, mi-walak=la i, adri*
 <ITR>there=PERF and have-child=PERF TOP NEG
tu=pa-ka-ladram-i a trau
 3.GEN=CAUS-ka-know-TR2 ID.NOM person
 ‘So it was, and she had a child, she didn’t let others know.’

Mithun (1988:356) and Chafe (1985) point out that in the usage of English, speakers use more sentence-initial coordinators than writers do to link new sentences to previous discourse. This seems to be true in the case of Puyuma too.

16.3 Types of coordination

Two types of coordination are distinguished: noun phrase coordination and clausal coordination.

16.3.1 Coordination of noun phrases

In most cases, coordinate noun phrases are marked by the same case, which may be indicated by an identical noun phrase marker (as in (15)–(18)) or by pronouns of the same case (as in (19)).

- (15) *idru* *na m-u-ami*, *aw* *na m-u-timulr*
 those.NOM DF.NOM ITR-go-north and DF.NOM ITR-go-south
i, mukasa m-uka?
 TOP together ITR-go
 ‘Those who go north and those who go south, do they go together?’
- (16) *i namali*, *aw* *i baeli*
 SG.NOM my.father and SG.NOM my.older.sibling
 ‘my father and my brother’
- (17) *kasu=ta* *dra eraw, dra irupan*
 <ITR>bring=1P.NOM ID.OBL wine ID.OBL dishes
 ‘We brought some wine and some dishes.’
- (18) *kadri i panapanayan*, *aw* *kadri i ma'idrang*
 here LOC Panapanayan and here LOC Ma'idrang
 ‘here in Panapanayan and in Ma'idrang’
- (19) *ta=bakbak-aw* *nantu are'etr-an, tu=sepal-an,*
 1P.GEN=disentangle-TR1 DF.NOM/3.PSR squeeze-NMZ 3.PSR=sad-NMZ
nantu k<in>a-unian-an dratu trau i sabak
 DF.NOM/3.PSR <PERF>ka-not.exist-NMZ ID.OBL/3.PSR person LOC inside
 ‘We relieve (disentangle) their aching hearts, their sadness, and their loss of their family.’

Free pronouns can also be coordinated, and they too have the same case. For example:

- (20) *kuiku* *aw* *taytaw* *i, mare-kataguin*
 1S.NEU and 3.NEU TOP RECIPI-spouse
 ‘He and I are husband and wife.’

However, I have found one example where *aw* does not connect two coordinands with the same case. Consider:

- (21) *m-u-a-ruma'=mi* *kay nanali*, *aw* *i baeli*
 ITR-go-a-house=1P.ECL.NOM KAY my.mother and SG.NOM my.elder.sibling
 ‘We went home with my mother and my elder sister.’

In this example, there are three coordinands, *=mi*, *nanali*, and *baeli*. While *=mi* and *baeli* are nominative, *nanali* is preceded by the marker *kay*.

The marker *kay* only precedes personal nouns. It is hard to decide whether *kay* is a linker conjoining two non-case-marked noun phrases or a comitative marker assigning oblique case to the noun phrase following it, like ‘with’ in English.¹

First, it could be a linker, which conjoins two nouns (XPs, in the terms of Chapter 5), as represented in (22). That is, the case role is assigned to the pair of coordinands by the noun phrase marker preceding the first coordinand. This hypothesis is reasonable when the coordinands are preceded by the noun phrase marker *na*, which indicates the personal noun is plural (§4.3.1.2.2). For example:

- (22) *tu=pu-’aputr-ay,* *tu=pu-kiping-ay,* *tu=pu-dare-ay*
 3.GEN=CAUS-flower-TR2 3.GEN=CAUS-clothes-TR2 3.GEN=CAUS-earth-TR2
- dra* *akan-an na* [*namali kay baeli*]
 ID.OBL eat-NMZ PL.NOM my.father KAY my.elder.sibling
 ‘They offered my father and my brother flowers, put clothes on them, and put food on the ground for them.’

However, in some cases the first noun phrase is preceded by *i* (which marks a personal noun as singular) instead of *na*, as in (23), and this in turn suggests that *kay* is more like a comitative marker. For example:

- (23) *ta=temuwamuwan i* *adulrumaw kay adulusaw*
 1P.PSR=ancestor SG.NOM Adulrumaw KAY Adulusaw
 ‘our ancestors Adulrumaw and Adulusaw’

In fact, even in the same text, the speaker sometimes uses *na* and *i* interchangeably in a *kay*-construction. For example, the following two sentences are taken from the same text; in (24) the first noun phrase is preceded by *na*, but in (25) the first noun phrase is preceded by *i*.

- (24) *na* *demalasaw kay tayban mi-anger ...*
 PL.NOM Demalasaw KAY Tayban have-thought
 ‘Demalasaw and Tayban thought ...’
- (25) *i* *tayban kay demalasaw tu=ki-anger-aw*
 SG.NOM Tayban KAY Demalasaw 3.GEN=get-thought-TR1
- idrini na lemak*
 this.NOM DF.NOM thing
 ‘Tayban and Demalasaw remembered this thing.’

As well as being an additive conjunction, *aw* can connect two noun phrases to express alternation.² In such cases, the meaning is inferred from the context, as in (26). Notice that although the noun phrase marker *na* occurs three times, there are only two noun phrases. The

1 There is one example suggesting that *kay* might be a verb. In this sentence, it appears in clause-initial position, and it attracts a pronominal clitic and an aspectual clitic, and expresses a comitative meaning.

andaman i, kay=ta=driya pa-ka-ladram-a
 days.later TOP with=1P.NOM=IMPF CAUS-ka-know-PJ
 ‘A few days later, we all went together to let people know (about this).’

2 There are two other ways of indicating ‘or’. *Andri* ‘if not’ is typically used in alternative questions (§12.3.2), and the tag *nay* ‘or’ (§4.5.6) often cooccurs with *ala* ‘maybe’ to express uncertainty.

first coordinand is an NP with a modifier (in which there is no pause between the NP and the modifier).

- (26) *driyama* *na ni-reani na dawa*, *aw na lrumay* ...
 so DF.NOM PERF-reap DF.NOM millet and DF.NOM rice
 ‘So, the reaped millet or rice ...’

16.3.2 Coordination of clauses

Unlike the coordination of noun phrases, in which the linear order of the coordinands is irrelevant in interpreting the meaning, coordination of clauses is of two types: (i) symmetrical, in which the reversing of the linear order of the coordinands has no semantic significance, and (ii) asymmetrical, in which reversing their order will cause a change in meaning.

16.3.2.1 Symmetrical coordination

This type of coordination is usually used to give list-like enumerations (as in (27)) or to describe simultaneous events (as in (28) and (29)). Sometimes the coordinands are simply synonyms, as in (30). In (27), there are four coordinands. The last three clauses do not involve ordered temporal or causal relationships.

- (27) *mi-ka-kuwang-an=driyan a trau, aw tu=kuwang-aw*
 have-RED-shoot-NMZ=IMPF ID.NOM person and 3.GEN=shoot-TR1
a trau, aw tu=patrepel-aw a trau, aw
 ID.NOM person and 3.GEN=mistake-TR1 ID.NOM person and
tu=patrepel-aw takis a trau
 3.GEN=mistake-TR1 <ITR>chop ID.NOM person
 ‘People still owned guns, and they shot people, and they mistook people,
 and they chopped people mistakenly.’
- (28) *ina leap i, tralintrin, aw ulingul*
 DF.NOM straw.mat TOP cool and fragrant
 ‘The straw mat is cool and fragrant.’
- (29) *ama=a, nu=na’u-ay=mi, nu=kilengaw-ay*
 father=VCT 2S.GEN=see-TR2=1P.NOM 2S.GEN=listen-TR2
naniem kia’anum
 DF.NOM/1P.PSR petition
 ‘Father, you look after us, and you listen to our petitions.’
- (30) *ta=banban-aw, ta=bakbak-aw nantu*
 1P.GEN=release-TR1 1P.GEN=disentangle-TR1 DF.NOM/3.PSR
are’etr-an
 squeeze-NMZ
 ‘We release and disentangle their aching hearts.’

16.3.2.2 Asymmetrical coordination

In asymmetrical coordination the order of the coordinands is fixed; reversing the order will alter the meaning.

The most common type of relationship between coordinate clauses in narrative is one of sequence. For example:

- (31) *tu=pilang-aw m-u-ruma' aw tu=pa-lriya-aw*
 3.GEN=bring-TR1 ITR-go-house and 3.GEN=CAUS-drunk-TR1
 'He brought her home and made her drunk.'
- (32) *m-ekun aw tu=wadi kurenang i lrikudran*
 ITR-jump and 3.PSR=younger.brother follow LOC behind
 'He jumped, and then his younger brother followed behind.'

Also very frequent is implied consequence, as in (33) and (34).

- (33) *mu-trepa tu=drekal aw mar-ka-la-la'udr a trau*
 ACAUS-aim 3.PSR=village and RECIP-ka-RED-drown ID.NOM person
 'The village was targeted (by a typhoon), and people were drowned one by one (as a result).'
- (34) *salraw igelra pa-ka-la-ladram dra trau, aw*
 very embarrassed CAUS-ka-RED-know ID.OBL person and
tu=lase-lasedr-aw tu=tiyal=dar
 3.GEN=RED-hide-TR1 3.PSR=belly=FREQ
 'She is very embarrassed to let others know (that she's pregnant),
 so she often hides her belly (from others).'

16.3.2.3 Ellipsis in clausal coordination

Ellipsis happens when there are identical elements in the clausal coordinands. There are two kinds of ellipsis: nominal and verbal. Nominal ellipsis is restricted to free NPs; clitic pronouns cannot be omitted, as shown in (37). In (35) and (36), the NP underlined can appear either in the first clause or in the second clause. Notice that in (36) the NP plays different roles in the two clauses and is marked for different cases. (37) shows that clitic pronouns cannot be ellipsed or a different meaning will emerge.

- (35) *tu=alru-aw idru na bulrabulrayan, tu=abak-aw*
 3.GEN=lift-TR1 that.NOM DF.NOM girl 3.GEN=pack-TR1
 [] *kana trabak*
 [that girl] DF.OBL box
 'They lifted up the girl and packed her into the box.'
- (36) a. *tu=pukpuk-aw=ku, aw p<en>uwar i pilay*
 3.GEN=beat-TR1=1S.NOM and <ITR>run.away SG.NOM Pilay
 'Pilay beat me and then ran away.'
- b. *tu=pukpuk-aw=ku kan pilay, aw p<en>uwar*
 3.GEN=beat-TR1=1S.NOM SG.OBL Pilay and <ITR>run.away
 'Pilay beat me and then ran away.'

- (37) a. *ku=pukpuk-aw i pilay, aw p<en>uwar=ku*
 1S.GEN=beat-TR1 SG.NOM Pilay and <ITR>run.away=1S.NOM
 ‘I beat Pilay and then ran away.’
- b. *ku=pukpuk-aw i pilay, aw p<en>uwar*
 1S.GEN=beat-TR1 SG.NOM Pilay and <ITR>run.away
 ‘I beat Pilay and then she ran away.’

If the coordinands are two SVCs and the first verb of each is identical, that verb can be omitted from the second clause. For example, in (38) the verb phrase *sagar=ku* ‘I like’ is omitted in the second clause, and in (39) and (40) *muka* is omitted in the second clause.

- (38) *paru-ma-trina=ku=la i, sagar=ku senay*
 gradual-ITR-big=1S.NOM=PERF TOP like=1S.NOM <ITR>sing
aw [] m-uarak
 and ITR-dance
 ‘When I grew up, I liked singing and (I liked) dancing.’
- (39) *tu=daul-aw=ku=la dra kemay maka-satr dra*
 3.GEN=call.on-TR1=PERF ID.OBL from along-above ID.OBL
seihu m-uka b<en>a-bati-a, [] pa-sena-senay-a
 government ITR-go <ITR>RED-tell-PJ CAUS-RED-sing-PJ
 ‘The government called on me to go making speeches and (go making) singing performances.’
- (40) *m-uka m-u-sabak-a aw [] mi-walak-a=la i, ...*
 ITR-go ITR-go-inside-PJ and have-child-PJ=PERF TOP
 ‘They got married and had a baby, ...’

16.3.3 Adversative coordination

Adversative coordination is expressed by *amuna* ‘but’. This element only connects clauses, as in (41).

- (41) *uliya kadri i ami a salraw bulray **amuna***
 exist here LOC north ID.NOM very beautiful but
mi-a-wali nantaw ka
 have-a-teeth DF.NOM/3.PSR <ITR>say
 ‘It was said that here in the north, there is a very beautiful (woman) but she has teeth (in her private parts).’

Appendix I

A list of transcribed texts used in the grammar¹

	Title	Speakers	Genre	Length (approx.)
1	A prayer to the ancestors	Chen, De-fu	prayer	1 min
2	Monkey ritual	Chen, De-fu	narrative	10 min
3	How to build a <i>trakuban</i> (boys' house)	Chen, De-fu and Lin, Zhi-mei and a male	procedure + conversation	33 min
4	A tale of two brothers	Chen, Guang-rueng	folktale	15 min
5	The teaching of the elders	Chen, Guang-rueng	teaching	4 min
6	The origin of our tribe	Chen, Guang-rueng	narrative	5 min
7	A tale of <i>Dradrengaw</i>	Chen, Guang-rueng	folktale	35 min
8	The history of Puyuma	Chen, Guang-rueng	narrative	25 min
9	The duties of Puyuma women	Chen, Guang-rueng	narrative	13 min
10	Isaw's story	Lin, Hao-xun	narrative	22 min
11	<i>Kuma</i> (Isaw's pet)	Lin, Hao-xun	narrative	12 min
12	A smart grandmother	Lin, Hao-xun	folktale	17 min
13	How to make <i>binariyaw</i> sticky rice cake (a traditional dish)	Lin, Hao-xun	procedure	5 min
14	Isaw's dream	Lin, Hao-xun	narrative	2 min
15	The convention of <i>puadrangi</i> (a ritual)	Lin, Qing-mei	procedure	3 min
16	A prayer for Isaw	Lin, Qing-mei	prayer	13 min
17	The origin of millet	Lin, Qing-mei	folktale	6 min
18	A tale of two brothers	Lin, Qing-mei	folktale	8 min
19	The girl and the deer	Lin, Qing-mei	folktale	7 min

¹ The titles are named by myself according to the content of the texts.

	Title	Speakers	Genre	Length (approx.)
20	The origin of wasps	Lin, Qing-mei	folktale	8 min
21	The change in the river's course	Lin, Qing-mei	narrative	10 min
22	A conversation	Lin, Qing-mei and her husband and visitors	conversation	4 min
23	The training in a (boys' house) <i>trakuban</i>	Lin, Zhi-cheng	narrative	15 min
24	A heartless mother	Tseng, Xiou-hua	folktale	13 min
25	Sea worship	Zhou, Xi-shu and Lin, Hao-xun	conversation	48 min
26	A sermon	Wu, Xian-ming and Cheng, Yu-chiao	sermon	32 min

Appendix II

A: Prefixation

Prefixation is the most productive affixation process in Puyuma. Some frequently appearing prefixes and examples are given below.

ika- ‘the shape of; forming; shaping’ (§7.3.4.1)

ika-ta-tigir ‘the forming of a building’, < *tigir* ‘to build’

ika-ulrane-an ‘one’s fat figure’, < *ulrane* ‘fat’

ka- ‘stative marker’ (§6.6)

kara- ‘collective; to do something together’

kara-ekan ‘to eat together’, < *ekan* ‘to eat’

kara-na’u ‘to watch together’, < *na’u* ‘to watch’

kare- ‘the number of times’

kare-pa-pat ‘four times’, < *pat* ‘four’

kare-la-luwatr ‘five times’, < *luwatr* ‘five’

ki- ‘to get something’; ‘to be V-ed (volitionally)’ (§9.6)

ki-’aputr ‘to pick flowers’, < *’aputr* ‘flower’

ki-abak ‘to be loaded’, < *abak* ‘to contain’

ki-beray ‘to be given’, < *beray* ‘to give’

ki-kawi ‘to hack wood’, < *kawi* ‘tree; timber’

ki-lengaw ‘to listen’, < *lengaw* ‘sound’

kir- ‘to go against (volitionally)’

kir-trubung ‘to bump into, to meet unexpectedly’, < *trubung* ‘meet’

kir-’etreb ‘to be equal to’, < *’etreb* ‘companion’

kir-ngitra ‘to be shoulder to shoulder’, < *ngitra* ‘shoulder’

kir-balribalri ‘to face the wind’, < *balri* ‘wind’

kitu- ‘to become’

kitu-bulray ‘to dress up; to become a young lady’, < *bulray* ‘beautiful’

kitu-bangsar ‘to become a matured young man’, < *bangsar* ‘handsome’

kur- ‘be exposed to; be together (passively)’

kur-turus ‘to be followed closely’, < *turus* ‘follow’

kur-panana ‘to get hurt’, < *panana* ‘hurt’

kur-abak ‘to be trapped’, < *abak* ‘to contain, to pack’

kur-na’u ‘obvious’, < *na’u* ‘to see’

- m-** ‘actor voice affix/intransitive affix’ (§6.2 and §8.4.4)
- ma-** ‘actor voice affix/intransitive affix’ (§6.2 and §8.4.4)
- maka-** ‘along; to face against’
maka-dare ‘lower levels; underside’, < *dare* ‘earth; dirt’
maka-lingidan ‘along the edge’, < *lingidan* ‘edge’
maka-biruwa-ruwa ‘face the spirits/ghosts’, < *biruwa* ‘ghost’
- mara-** ‘comparative /superlative marker’¹
mara-’idrang ‘older’, < -’*idrang* ‘old’
- mar(e)-** ‘reciprocal; plurality of relations’ (§9.3)
- mi-** ‘to have; to use’ (§10.4.6.2)
- mu-** ‘anticausative marker’ (§9.5)
- mutu-** ‘to become, to transform into’
mutu-yawan ‘become a chief’, < *yawan* ‘chief’
mutu-suan ‘become a dog’, < *suan* ‘dog’
- pa-/p-** ‘causative marker’ (§9.2.1)
- pu-** ‘put’
pu-bini ‘sow’ < *bini* ‘seed’
pu-kiping ‘put clothes on s.b.’ < *kiping* ‘clothes’
pu-ngalrad ‘give a name to s.b.’ < *ngalrad* ‘name’
- puka-** ‘ordinal numeral marker’ (§4.5.4.3)
puka-enem ‘the sixth’, < *enem* ‘six’
- piya-** ‘to face a certain direction’
piya-ami ‘to face the north’, < *ami* ‘north’
- si-** ‘to pretend to’
si-alra-alrak ‘to pretend to take something’, < *alrak* ‘to take’
si-ulri-ulrid ‘to pretend not to understand’, < -*ulrid* ‘to not know’
- tara-** ‘to use (an instrument), to speak (a language)’
tara-puyuma ‘speak Puyuma’
- tinu-** ‘to simulate’
tinu-ma’idrang ‘the ones who imitate the elders’, < *ma’idrang* ‘old’
tinu-yawan ‘the one who imitate the chief’, < *yawan* ‘chief’
- tua-** ‘to make; to form’
tua-eraw ‘to make wine’, < *eraw* ‘wine’
tua-abay ‘to make sticky rice cake’, < *abay* ‘sticky rice cake’
tua-drekal ‘to form a village’, < *drekal* ‘village’
- u-** ‘to go’
u-sabak ‘go inside’, < *sabak* ‘inside’
u-isatr ‘go up’, < *isatr* ‘above’

1 Whether the affix denotes comparative or superlative meaning depends on intonation.

- ya-* ‘to belong to’
ya-timulr ‘belong to the south’, < *timulr* ‘south’
ya- ‘nominaliser’ (§7.3.4.2)

B: Suffixation

Puyuma has ten suffixes, half of them marking the transitivity of a given clause. A list of suffixes is given below.

- a* ‘projective marker’ (§6.3.2.1)
-a ‘numeral classifier’ (§4.5.4.2)
-an ‘nominaliser’ (§7.3)
asatr-an ‘height’, < *asatr* ‘high’
akan-an ‘food’, < *akan* ‘eat’
sa-sede-an ‘holiday’, < *sede* ‘interrupt’
-an ‘collective/plural marker’
ma’idrang-an ‘old people’, < *ma’idrang* ‘old’
wari-an ‘days’, < *wari* ‘day’
-anay ‘conveyance voice affix/transitive affix’ (§6.2 and §8.4.4)
-aw ‘patient voice affix/transitive affix’ (§6.2 and §8.4.4)
-ay ‘locative voice affix/transitive affix’ (§6.2 and §8.4.4)
-i ‘imperative transitive marker’ (§12.2)
-u ‘imperative transitive marker’ (§12.2)

C: Infixation

Only three infixes are found, and they are given below.

- <*in*> ‘perfective marker’ (§7.3.1)
<*em*> ‘actor voice affix/intransitive affix’ (§6.2 and §8.4.4)

D: Circumfixation

There are six circumfixes found in the corpus. In some cases, it is difficult to decide if a given circumfix should be decomposed into a prefix and a suffix.

- <*in*>-*anan* ‘the members of’
dr<in>ekal-anan ‘the whole villagers’, < *drekal* ‘village’
ka--an ‘a period of time’
ka-salrem-an ‘the cultivating season’, < *salrem* ‘to plant; to cultivate’
muri--an ‘the way one is doing something; the way something was done’
muri-sa’eru-an ‘the way one laughs’, < *sa’eru* ‘laugh’
muri-ami-an ‘the way various age groups were formed’ < *ami* ‘year’
muri-trau-an ‘the way families were formed; society’, < *trau* ‘person’

sa--an ‘people doing things together’

sa-ra’ip-an ‘people sowing together’ < *ra’ip* ‘sow’

sa--enan ‘people belonging to the same community’

sa-ruma’-enan ‘relatives’, < *ruma* ‘house; home’

sa-drekal-enan ‘villagers’, < *drekal* ‘village’

si--an ‘nominaliser’ (§7.3.4.3)

si-druma-an ‘nonlocal’, < *druma* ‘other’

Ca--an ‘collectivity, plurality’ (or *CVCV—an*)

wa-wadi-an ‘brothers and sisters’, < *wadi* ‘younger sibling’

ma-’idra-’idrang-an ‘old persons’, < *ma-’idrang* ‘old’

Appendix III

1 The grandmother and the grandson (Narrative)

- (1) *asuwa=driyan i, ulaya a saya a drekal*
when=IMPF TOP exist ID.OBL one ID.OBL village
'Long ago, there was a village.
- (2) *kirekameli tu=kakuwayanan*
different 3.PSR=custom
Their customs were different.
- (3) *an ma'idrang=la a trau aw unian=la dra*
when old=PERF ID.NOM person and not.exist=PERF ID.OBL
kedrang ki-karun i,
strength get-job TOP
When a person got old and without the strength to work,
- (4) *tu=atel-anay i drena-drenan aw tu=paka<lawa>lawa-aw*
3.GEN=throw-TR3 LOC RED-mountain and 3.GEN=<RED>give.up-TR1
palu dra¹ m-inatray
until COMP ITR-die
they were thrown out into the mountains and left until they died.
- (5) *idru na drekal i, amuna unian dra*
that.NOM DF.NOM village TOP but not.exist ID.OBL
akan-an aw
eat-NMZ and
That village, they were short of food.
- (6) *salraw unian dra akan-an*
very not.exist ID.OBL eat-NMZ
They were very short of food.
- (7) *driyama=la na sa-drekal-an i, kiri-kirim*
so=PERF DF.NOM whole-village TOP <ITR>RED-be.sparing.with

1 In this sentence, *dra* functions as a complementiser and introduces the complement clause of the verb *palu*. See §14.3.4.

dra akan-an

ID.OBL eat-NMZ

So, the whole village was sparing with food.

- (8) *driyama=la na unian=driya dra kedrang ki-karun i,*
so=PERF DF.NOM not.exist=IMPF ID.OBL strength get-job TOP
tu=atel-anay i drena-drenan
3.GEN=throw-TR3 LOC RED-mountain
So, those who didn't have strength to work where thrown out into the mountains.
- (9) *ulaya a saya ruma' mare-temuwan*
exist ID.NOM one house RECIPIENT-grandchild
There was a family that had a grandmother and a grandson.
- (10) *i temutaw=la, unian=la dra kedrang*
SG.NOM his.grandparent=PERF not.exist=PERF ID.OBL strength
The grandmother had no strength.
- (11) *idru na walak i, tu=padrek-aw i*
that.NOM DF.NOM child TOP 3.GEN=carry-TR1 SG.NOM
temutaw m-a-uka=la m-atel-a i drenan
his.grandmother ITR-RED-go=PERF ITR-throw-PJ LOC mountain
That child carried his grandmother on his back and went to throw her out into the mountains.
- (12) *ma-sikasik aw adri=driyan i, trikelr dra sa'adr*
ITR-start.off and NEG=IMPF TOP <ITR>pick ID.OBL branch
dra kawi
ID.OBL tree
They started off, and not for a long time, she picked branches from trees.
- (13) *aw adri=driyan i, trukulr dra tralrun i dalran*
and NEG=IMPF TOP <ITR>pluck ID.OBL grass LOC road
And, not for a long time, she plucked grasses off on the road.
- (14) *tu=ka-ladram-an dra dalran*
3.PSR=ka-know-NMZ ID.OBL road
It was her way of knowing the route.
- (15) *idru na walak i, tu=ka-ladram-aw=la aw*
that.NOM DF.NOM child TOP 3.GEN=ka-know-TR1=PERF and
tu=kiumal-ay i temutaw
3.GEN=ask-TR2 SG.NOM his.grandmother
That child, he realised, and he asked his grandmother,
- (16) *"idri i, nu=ka-la-ladram-an m-u-ruma'*
this.NOM TOP 2S.PSR=ka-RED-know-NMZ ITR-go-house
i ruma'" tu=ka-aw i,
LOC house 3.GEN=ask-TR1 TOP
"These, are these your way of knowing the way home?" he asked,

- (17) *“ameli, kaimayay an a pawpaw=yu i tralrun,*
 NEG if.by.any.chance when ID.NOM astray=2S.NOMLOC grass
an sanan=yu i tralrun
 when <ITR>stray=2S.NOM LOC grass
 “No, in case you go astray or lose your way in the wild,
- (18) *driyama=la trikelr=ku dra sa’adr dranu*
 so=PERF <ITR>pick=1S.NOM ID.OBL branch ID.OBL/2S.PSR
ka-la-ladram-an
 ka-RED-know-NMZ
 that’s why I picked up branches for you so that you would know (the way).”
- (19) *idru na walak=la i, pameli ma-sepel kan*
 that.NOM DF.NOM child=PERF TOP very ITR-sorry SG.OBL
temutaw dra aru k-i<a>natray=la i, ma-ulrep=driya
 his.grandmother COMP will k-<a>die=PERF TOP ITR-tired=IMPF
ki-anger dratu ka-sanan-an
 <ITR>get-thought ID.OBL/3.PSR ka-stray-NMZ
 That child, he was very sorry that his grandmother was going to die,
 but she was still worrying that he might get lost.
- (20) *idru na walak=la i, laman=la kan temutaw*
 that.NOM DF.NOM child=PERF TOP pity=PERF SG.OBL his.grandmother
aw tu=padrek-aw mare-belriyas m-u-ruma’
 and 3.GEN=carry-TR1 RECIP-turn ITR-go-house
 That child, because he had pity on his grandmother, he carried her on his
 back and returned home,
- (21) *aw kurutr dra buwang i sabak kantu ruma’*
 and <ITR>dig ID.OBL hole LOC inside ID.OBL/3.PSR house
 and he dug a hole inside their house,
- (22) *aw tu=lasedr-aw kana buwang i temutaw*
 and 3.GEN=hide-TR1 DF.OBL hole SG.NOM grandmother
 and he hid his grandmother in the hole.
- (23) *na wa-wari-wari traka-trakaw beray dra*
 DF.NOM RED-RED-day <ITR>RED-steal give ID.OBL
akan-an idru na walak
 eat-NMZ that.NOM DF.NOM child
 Every day, that child gave (her) food secretly.
- (24) *kadru aw, ulaya a druma a drekal*
 <ITR>there and exist ID.NOM other ID.NOM village
 So it was, and there was another village,
- (25) *ma-ranger m-araw kandru kana drekal aw p-u-patrararan*
 ITR-want ITR-rob that.OBL DF.OBL village and CAUS-go-outside

- dra telru-a ki<a>umal-an*
ID.OBL three-NPRS <a>ask-NMZ
that wanted to rob that village, and they announced three questions.
- (26) *“an maruwa=mu tubang kandri ku=ki<a>umal-an*
if can=2P.NOM <ITR>answer this.OBL 1S.PSR=<a>ask-NMZ
i, adri=ku=la ta-tengedr=la kanmu” tu=ka-aw
TOP NEG=1S.NOM=PERF RED-invade=PERF 2P.OBL 3.GEN=say-TR1
(Their leader) told them, “If you can answer my questions, I won’t invade you”.
- (27) *aw, na sa-sa-a tu=ki<a>umal-an i, amau na*
and DF.NOM RED-one-NPRS 3.PSR=<a>ask-NMZ TOP COP DF.NOM
kawi na katrebe, na ni-reput-an tu=lrudus
wood DF.NOM thick DF.NOM PERF-cut-NMZ 3.PSR=end
tu=rami i, “ka-karuwa=mu ma-ladram na isuwa
3.PSR=root TOP ka-can=2P.NOM ITR-know DF.NOM which
tu=lrudus tu=rami” tu=ka-aw
3.PSR=end 3.PSR=root 3.GEN=say
And their first question was, “A big timber, both its ends are cut, can you tell which is the top and which is the root?” he asked.
- (28) *idru na kawi i, ma-risan katrebe tu=lrudus tu=rami*
that.NOM DF.NOM wood TOP ITR-same thick 3.PSR=end 3.PSR=root
That timber, both ends are the same thickness.
- (29) *unian dra mi<sasa>sasa karuwa tubang*
not.exist ID.OBL <RED>one can <ITR>answer
kandru kana sa<drekal>an
that.OBL DF.OBL whole-village
In the whole village, there was one who could answer.
- (30) *idru na walak=la i, tu=kiumal-ay=la i*
that.NOM DF.NOM child=PERF TOP 3.GEN=ask-TR2=PERF SG.NOM
temutaw
his.grandmother
That child, he asked his grandmother.
- (31) *i temutaw=la i, “idru na kawi i,*
SG.NOM his.grandmother=PERF TOP that.NOM DF.NOM wood TOP
ta=pa-la’udr-anay i kali, tu=rami i, kinguwayan=dar
1P.GEN=CAUS-float-TR3 LOC river 3.PSR=root TOP before=FREQ
mu-la’udr, tu=lrudus i, ki-a-lrikudran-an=dar” ka
ACAUS-float 3.PSR=end TOP get-a-back-NMZ=FREQ <ITR>say
i temutaw
SG.NOM his.grandmother
His grandmother, she said, “This timber, if we floated it in the river, its root would float to the front, its end to the rear”.

- (32) *idru na walak=la i, tu=rengay-aw=la na*
 that.NOM DF.NOM child=PERF TOP 3.GEN=tell-TR1=PERF DF.NOM
ma'idrang i drekal
 old LOC village
 That child, he told the elder in the village,
- (33) *aw tu=tubang-aw nadru na ma-ranger m-araw*
 and 3.GEN=answer-TR1 those.NOM DF.NOM ITR-want ITR-rob
dra drekal i, "pamaul!" ka
 ID.OBL village TOP correct <ITR>say
 and he answered those who wanted to rob the village, "Correct!" they said.
- (34) *aw salraw sangal idru na ma'idrang*
 and very <ITR>happy that.NOM DF.NOM old
i drekal
 LOC village
 And the elder in the village was very pleased.
- (35) *aw p-u-patrararan=la na puka-dra-drua na*
 and CAUS-go-outside=PERF DF.NOM ORD-RED-two DF.NOM
ki<a>umal-an i, "na pa-trungtrung-an i, an
 <a>ask-NMZ TOP DF.NOM CAUS-sound-NMZ TOP when
ta=kuda-kuda-aw i, karuwa ma-runi pa-trungtrung
 1P.GEN=RED-how-TR1 TOP can ITR-make.sound CAUS-sound
taytaw idru na pa-trungtrung-an" tu=ka-aw
 3.NEU that.NOM DF.NOM CAUS-sound-NMZ 3.GEN=say-TR1
 And, (the leader) announced the second question, "The drum, how can we make it make a sound by itself?" he said.
- (36) *aw na sa<drekal>an i, unian dra*
 and DF.NOM whole-village TOP not.exist ID.OBL
mi<sasa>sasa karuwa tubang
 <RED>one can <ITR>answer
 And there was no one in the whole village that could answer,
- (37) *aw, idru na walak=la i, m-uka kiumal-a*
 and that.NOM DF.NOM child=PERF TOP ITR-go ask-PJ
kan temutaw
 SG.OBL his.grandmother
 and so, that child, he went to ask his grandmother.
- (38) *'kadru kadru ka, tu=ka-aw i*
 <ITR>there <ITR>there <ITR>say 3.GEN=say-TR1 SG.NOM
temutaw ...
 his.grandmother
 He told his grandmother, "They said such and such ..."

- (39) *i temutaw=la i, “wa alrak dra pa-trungtung-an*
 SG.NOM his.grandmother=PERF TOP go take ID.OBL CAUS-sound-NMZ
dra adri=driya b<in>arekep-an dra kalritr
 ID.OBL NEG=IMPF <PERF>assemble-NMZ ID.OBL skin
 His grandmother said, “Go and take a drum that hasn’t has the skin put on it.
- (40) *aw i sabak kana pa-trungtung-an i, puka-i dra*
 and LOC inside DF.OBL CAUS-sound-NMZ TOP put-TR2:IMP ID.OBL
tidrul dra samaya, aw pa-treke-tr-i=la dra kadepu’
 wasp ID.OBL some and CAUS-stick-TR2:IMP=PERF ID.OBL paper
 And inside the drum, put some wasps, and seal it with paper”.
- (41) *idru na walak=la i, kurenang=la sanga*
 that.NOM DF.NOM child=PERF TOP follow=PERF <ITR>make
 That child, he did what she said.
- (42) *tu=p-u-sabak-aw a tidrul kana pa-trungtung-an*
 3.GEN=CAUS-go-inside-TR1 ID.NOM wasp DF.OBL CAUS-sound-NMZ
i sabak
 LOC inside
 He put some wasps inside the drum.
- (43) *aw tu=pa-treke-tr-ay dra kadepu’*
 and 3.GEN=CAUS-stick-TR2 ID.OBL paper
 And he sealed the drum with paper.
- (44) *idru na tidrul=la i, trepa m-ubii*
 that.NOM DF.NOM wasp=PERF TOP <ITR>aim.at ITR-fly
kana idenan aw salretrap-a kana kadepu’ i
 DF.OBL light and <ITR>hit-PJ DF.OBL paper TOP
 Those wasps, they flew towards the light and hit the paper.
- (45) *kamawan dra pa-trung<angu>trung na pa-trungtung-an*
 similar ID.OBL CAUS-<RED>sound DF.NOM CAUS-sound-NMZ
 The sound was like the drum beating.
- (46) *aw tu=ka-aw idru nantu ma’idrang i drekal*
 and 3.GEN=say-TR1 that.NOM DF.NOM/3.PSR old LOC village
 And he told their elder in the village.
- (47) *aw tu=tubang-aw nadru na trau i,*
 and 3.GEN=answer-TR1 those.NOM DF.NOM person TOP
“pamau” ka
 correct <ITR>say
 And he answered those people, “Correct!” they said.
- (48) *salraw sangal idru na ma’idrang*
 very <ITR>happy that.NOM DF.NOM old
 The elder was very pleased.

- (49) *na puka-telru na ki<a>umal-an i, ulaya a*
 DF.NOM ORD-three DF.NOM <a>ask-NMZ TOP exist ID.NOM
drua-a a ba', ma-risan ma-trina tu=pinudradrekan,
 two-NPRS ID.NOM horse ITR-same ITR-big 3.PSR=body
ulaya a saya i, lalak tu=ami-an
 exist ID.NOM one TOP young 3.PSR=year-NMZ
 As for the third question, there were two horses, their bodies were the same size, one of them is younger.
- (50) “*kudakudayaw i, ka-la-ladram=ta na isuwa*
 how TOP ka-RED-know=1P.NOM DF.NOM which
na lalak, na ma'idrang” tu=ka-aw i,
 DF.NOM young DF.NOM old 3.GEN=say-TR1 TOP
 He asked, “How do we know which is young and which is old?”
- (51) *unian dra trau dra karuwa tubang*
 not.exist ID.OBL person ID.OBL can <ITR>answer
 No one could answer.
- (52) *amau=la idru na walak m-uka=driya kiumal-a*
 COP=PERF that.NOM DF.NOM child ITR-go=IMPF ask-PJ
kan temutaw
 SG.OBL his.grandmother
 That child went to ask his grandmother.
- (53) *aw i temutaw “i, na kinuwayan m-ekan*
 and SG.NOM grandmother TOP DF.NOM before ITR-eat
dra tralrun i, amau tu=walak
 ID.OBL grass TOP COP 3.PSR=child
 And his grandmother said, “The one that eats grass first is the child.
- (54) *idru na mara-'idrang i, me-ngara kana*
 that.NOM DF.NOM more-old TOP ITR-wait DF.OBL
ma-kiteng m-ekan dra tralrun aw m-ekan
 ITR-small ITR-eat ID.OBL grass and ITR-eat
 The older one, it waits for the younger one to eat grass and then it eats”.
- (55) *aw m-uka=la tubang-a i, “pamau” ka*
 and ITR-go=PERF <ITR>answer-PJ TOP correct <ITR>say
 And he went and answered, “Correct!” they said.
- (56) *aw saygu tubang kandri kana telru-a ki<a>umal-an*
 and can <ITR>answer these.OBL DF.OBL three-NPRS <a>ask-NMZ
 And he was able to answer those three questions.
- (57) *aw “adri-a=ku=la tengedr kanmu”*
 and NEG-PJ=1S.NOM=PERF <ITR>invade 2P.OBL
 And (the leader) said, “I will never invade you”.

- (58) *aw na ma'idrang kadri drekal i, salraw sangal*
 and DF.NOM old here village TOP very <ITR>happy
kandru kana walak dra karuwa tubang peniya
 that.OBL DF.OBL child ID.OBL can <ITR>answer all
 The elder in the village, he was very pleased that the child could answer everything.
- (59) *aw tu=kiual-ay idru na walak "sagar=yu*
 and 3.GEN=ask-TR2 that.NOM DF.NOM child like=2S.NOM
dra kuda-kuda dra pa-ka-sagar ti=beray-ay=yu"
 ID.OBL <ITR>RED-how ID.OBL CAUS-ka-like 1S.GEN=give-TR2=2S.NOM
tu=ka-aw
 3.GEN=say-TR1
 And he asked that child, "I will give you whatever kind of reward you like",
 he said.
- (60) *idru na walak i, "ulaya ku=ra-rengay-an*
 that.NOM DF.NOM child TOP exist 1S.PSR=RED-say-NMZ
a saya
 ID.NOM one
 The child said, "I have something to say.
- (61) *idri ku=t<in>ubang-an i, amau*
 this.NOM 1S.PSR=<PERF>answer-NMZ TOP COP
tu=p<in>a-ladram kan muli
 3.PSR=CAUS<PERF>-know SG.OBL my.grandparent
 My answers were told (to me) by my grandmother.
- (62) *i muli i, ku=lasedr-aw i ruma'*
 SG.NOM my.grandparent TOP 1S.GEN=hide-TR1 LOC house
 My grandmother, I hid her in the house.
- (63) *an ki-a-beray=ku dra pa-ka-sagar i, adri*
 if get-a-give=1S.NOM ID.OBL CAUS-ka-like TOP NEG
ka-dra-dreki-i=ku
 ka-RED-scold-TR2:IMP=1S.NOM
 If I can ask for a reward, it is that you don't scold me
- (64) *ku=b<in>a-betra'-an kanmu"*
 1S.PSR=RED<PERF>-lie-NMZ 2P.OBL
 for lying to you".
- (65) *aw na ma'idrang=la i, "muama=ta ma-dreki kanu*
 and DF.NOM old=PERF TOP where=1P.NOM ITR-scold 2S.OBL
 And the elder said, "How would we scold you?"
- (66) *nu=t<in>ubang-an i, karuwa b<en>u'utr dra*
 2S.PSR=<PERF>answer-NMZ TOP can <ITR>stop COMP

- aru a-araw kanta drekal*
will RED-rob DF.OBL/1P.PSR village
Your answers were able to stop them robbing our village.
- (67) *an kadru i, adri ti=ta-tengedr=yu*
when <ITR>there TOP NEG 1S.GEN=RED-attack=2S.NOM
dranu b<in>a-betra'-an
ID.OBL/2S.PSR RED<PERF>-lie-NMZ
So I won't punish you for your lies.
- (68) *i temuu i, inaba tu=tranguru'*
SG.NOM your.grandparent TOP good 3.PSR=head
Your grandmother, her brain is good.
- (69) *karuwa b<en>a'aw kanta drekal*
can <ITR>save DF.OBL/1P.PSR village
She was able to save our village.
- (70) *adri atel-an i drenan=la'' ka*
NEG throw-TR3:IMP LOC mountain=PERF <ITR>say
Don't throw her out into the mountains." he said.
- (71) *aw adri tu=atel-an i drenan=la*
and NEG 3.GEN=throw-TR3 LOC mountain=PERF
And she wasn't thrown out into the mountains.'

2 The process of making sticky rice cakes (Instructions)

- (1) *ma-rengay-a=ku=driya dra tua-abay-an dra binariyaw*
ITR-tell-PJ=1S.NOM=IMPF ID.OBL make-rice.cake-NMZ ID.OBL sticky.rice.cake
'I'll tell about the making of binariyaw sticky rice cake.
- (2) *na binariyaw i, a s<in>anga dra dikedran*
DF.NOM sticky.rice.cake TOP ID.NOM <PERF>produce ID.OBL sticky.rice
The *binariyaw*, it is a kind of sticky rice product.
- (3) *aw na dikedran i, ta=ilrang-aw dra enay, aw*
and DF.NOM sticky.rice TOP 1P.GEN=grind-TR1 ID.OBL water and
ta=lrubuk-aw dra lrubuk, aw ta=tra-tre'el-aw dra
1P.GEN=sack-TR1 ID.OBL sack and 1P.GEN=RED-press-TR1 ID.OBL
barasa i, mu-teres tu=enay
stone TOP ACAUS-filter 3.PSR=water
The sticky rice, we grind it with water, and we pack it in a sack, and we
press it with a stone, and then the water is filtered out.
- (4) *an tua-abay=ta i, kepelr=ta*
when make-rice.cake=1P.NOM TOP <ITR>handful=1P.NOM
dra sa-kepelr, aw ta=tua-emu-aw dra
ID.OBL one-handful and 1P.GEN=make-shape-TR1 ID.OBL

du<*runi*>*runi=la i, ta=puka-ay dra pa-lrubelrub*
 <RED>mud=PERF TOP 1P.GEN=add-TR2 ID.OBL CAUS-mix

i sabak dra kalang dra patraka, dra in-iyam-an,
 LOC inside ID.OBL crab ID.OBL meat ID.OBL PERF-salt-NMZ

dra ni-ramas
 ID.OBL PERF-pickled

When we make rice cake, we grab a handful (of sticky rice), and we make it squishy like mud, and then we add a filling of crab, meat, preserved vegetable inside it.

- (5) *an pa-puka=ta dra kalang i, m-a-aya=ta*
 when RED-add=1P.NOM ID.OBL crab TOP ITR-RED-find=1P.NOM

dra kalaayan pa-lrubelrub dratu ika-tra-trina-an
 ID.OBL suitable CAUS-mix ID.OBL/3.PSR ika-RED-big-NMZ

mu-lributr
 ACAUS-wrap

If we are adding crabs, we have to find a suitable size as (filling) mixture for the wrapping.

- (6) *aw, ta=ringring-aw na pa-ka-lrabeni na kalang,*
 and 1P.GEN=stir.fry-TR1 DF.NOM CAUS-ka-salty DF.NOM crab

aw, ta=pa-lrubelrub-anay kana binariyaw
 and 1P.GEN=CAUS-mix-TR3 DF.OBL sticky.rice.cake

And we stir-fry the crab to make it salty, and we make it the filling for the *binariyaw*.

- (7) *na binariyaw i, ta=lributr-anay dra lrabilu*
 DF.NOM sticky.rice.cake TOP 1P.GEN=wrap-TR3 ID.OBL *lrabilu*²

dra mangede'
 ID.OBL tender

The *binariyaw*, we wrap it with tender *lrabilu* leaves.

- (8) *na p<in>a-lributr-an dra lrabilu i,*
 DF.NOM <PERF>CAUS-wrap-NMZ ID.OBL *lrabilu* TOP

tu=ka-adri-an treketr kana bira' kana rengas
 3.GEN=ka-NEG-NMZ <ITR>stick DF.OBL leaf DF.OBL *rengas*⁴
 The thing wrapped in *lrabilu* won't stick to the *rengas* leaf.

- (9) *aw i patraran i, ta=lributr-aw=la dra bira'*
 and LOC outside TOP 1P.GEN=wrap-TR1=PERF ID.OBL leaf

dra rengas aw ta=betbet-aw
 ID.OBL *rengas* and 1P.GEN=tie-TR1

And on the outside, we wrap it with a *rengas* leaf and then tie it.

2 A kind of plant.

3 A kind of plant.

- (10) *tu=ka-adri-an mu-testes an ta=deru-aw dra enay*
 3.GEN=*ka*-NEG-TR3 ACAUS-melt when 1P.GEN=cook-TR1 ID.OBL water
 It won't melt when we boil it in water.
- (11) *an aru pa-puka=ta dra pa-lrubelrub dra*
 when will RED-add=1P.NOM ID.OBL CAUS-mix ID.OBL
patraka dra lrabeni i,
 meat ID.OBL salty TOP
 Before we add in salted meat filling,
- (12) *na patraka i, ta=iyam-ay=driya dra saya dra*
 DF.NOM meat TOP 1P.GEN=salt-TR2=IMPF ID.OBL one ID.OBL
wari-an, aw, ta=keteket-aw dra ma-ra-ruwa-an pa-lrubulrub
 day-NMZ and 1P.GEN=cut-TR1 ID.OBL ITR-RED-can-NMZ CAUS-mix
kana binariyaw
 DF.OBL sticky.rice.cake
 we preserve the meat with salt for one day, and we cut it to a suitable (size)
 for the filling of the *binariyaw*.
- (13) *aw tu=ika-tra-trina-an kana binariyaw i,*
 and 3.PSR=*ika*-RED-big-NMZ DF.OBL sticky.rice.cake TOP
ta=na'u-ay tu=bira' kana rengas dra
 1P.GEN=see-TR2 3.PSR=leaf DF.OBL *rengas* ID.OBL
kuda-kuda tu=ika-tra-trina-an
 <ITR>RED-how 3.PSR=*ika*-RED-big-NMZ
 And about the size of the *binariyaw*, we have to see how big the size of
 the leaf of the *rengas* is.
- (14) *na rengas i, ulingul tu=balri kir-pauwa dra*
 DF.NOM *rengas* TOP fragrant 3.PSR=smell get-right ID.OBL
abay dra binariyaw
 rice.cake ID.OBL sticky.rice.cake
 The smell of the *rengas* is sweet: it is right for *binariyaw* sticky rice cake.
- (15) *an m-ekan=ta dra binariyaw=la i, ulingul*
 when ITR-eat=1P.NOM ID.OBL sticky.rice.cake=PERF TOP fragrant
tu=balri
 3.PSR=smell
 When we eat *binariyaw*, its smell is fragrant.
- (16) *idrini i, tu=pauwa-an dra tua-abay-an*
 this.NOM TOP 3.PSR=right-NMZ ID.OBL make-rice.cake-NMZ
dra binariyaw
 ID.OBL sticky.rice.cake
 This is the recipe for making *binariyaw* sticky rice cake.'

3 Part of a prayer

- (1) *ki-a-anun=mi=driya kanu, ama=a, kandru*
 get-a-bless=1P.ECL.NOM=IMPF 2S.OBL father=VCT that.OBL
kananu ya-beray kaniem kana wa-wari-wari
 DF.OBL/2S.PSR NMZ-give 1P.OBL DF.OBL RED-RED-day
 ‘Father, we praise you for what you give us every day;
- (2) *nu=ya-beray kaniem na ka-ametrek-an*
 2S.PSR=NMZ-give 1P.OBL DF.NOM ka-peaceful-NMZ
 (For) the peace you give us,
- (3) *nu=ya-beray kaniem na ka-la-ladram-an dra*
 2S.PSR=NMZ-give 1P.OBL DF.NOM ka-RED-know-NMZ ID.OBL
manay kema=mi i,
 what say=1P.NOM TOP
 the wisdom you give us,
- (4) *sa-sungalr=mi kanu, ama=a*
 RED-worship=1P.ECL.NOM 2S.OBL father=VCT
 we will worship you, Father.
- (5) *garem i, uliya naniem ki<a>ami-an kanu ama=a*
 now TOP exist DF.NOM/1P.PSR <a>petition-NMZ 2S.OBL father=VCT
 Now we have some petitions to make to you, Father.
- (6) *i isaw, tu=k<in>irami-an miedreng kadri*
 SG.NOM Isaw 3.PSR=<PERF>begin-NMZ lie here
i kiaedrengan, palu garem,
 LOC bed until now
 Isaw, since his starting to lie on the bed until now,
- (7) *nu=ya-’alraw kan isaw, nu=ya-laman*
 2S.PSR=NMZ-protect SG.OBL Isaw 2S.PSR=NMZ-sympathise
kan isaw i, unian=mi dra palu-an
 SG.OBL Isaw TOP not.exist=1P.NOM ID.OBL demarcate-NMZ
dra sangalr-an kanu
 ID.OBL <ITR>appreciate-NMZ 2S.OBL
 (Because of) your protection over Isaw, your sympathy for Isaw,
 our appreciation to you is boundless.
- (8) *sangalr-a=mi=driya kanu, ama,*
 <ITR>appreciate-PJ=1P.NOM=IMPF 2S.OBL father
 Father, we want to thank you.
- (9) *amau na mara-mi-lama-laman-an=yu*
 COP DF.NOM most-have-RED-sympathise-NMZ=2S.NOM
 You are the one who has the most sympathy.

- (10) *an kadru naniem ka-kualreng-an, ki-a-anun=mi*
 if there DF.NOM/1P.PSR ka-sick-NMZ get-a-bless=1P.NOM
kanu, ama=a
 2S.OBL father=VCT
 If we have difficulties, we pray to you, Father.
- (11) *ulaya a ma-trina niam=bangabang-an, ama=a,*
 exist ID.NOM ITR-big 1P.PSR=busy-NMZ father=VCT
 (Now) Father, we have a big event.
- (12) *i isaw i, mu-alrak=la kemay i maka-satr*
 SG.NOM Isaw TOP ACAUS-get=PERF from LOC along-above
na ka-ra-ruwa pasekadr kanantu k<in>i-anger-an
 DF.NOM ka-RED-can achieve DF.OBL/3.PSR <PERF>get-thought-NMZ
dratu a-uka-an m-u-isatr dra sasudang
 ID.OBL/3.PSR RED-go-NMZ ITR-go-above ID.OBL boat
 Isaw has received permission to achieve his dream to travel (lit. to get onto a boat).
- (13) *aru ka-si<a>kasik=mi=la, p<en>a-padan=mi=la*
 will ka-<a>start =1P.NOM=PERF <ITR>RED-prepare=1P.NOM=PERF
draniem a-uka-an
 ID.OBL/1P.PSR RED-go-NMZ
 We will start off soon, and we are preparing for our journey.
- (14) *kadrini=mi=driya dra ka-kualreng-an=driya*
 <ITR>here=1P.NOM=IMPF ID.OBL ka-sick-NMZ=IMPF
 But we still have some difficulties.
- (15) *adri p<en>auwa naniem paisu*
 NEG <ITR>enough DF.NOM/1P.PSR money
 We don't have enough money.
- (16) *karuwa misasa m-uka taytaw amau?*
 can alone ITR-go 3S.NEU tag
 Can he go alone, can he?
- (17) *ka<a>dru=driya nantu lang na pa-pulang*
 <a>there=IMPF DF.NOM/3.PSR company DF.NOM RED-help
na aru ka-keser 'adras na aru pa-padrek
 DF.NOM will RED-strong <ITR>lift DF.NOM will RED-carry
kan isaw
 SG.OBL Isaw
 There must be (a person) that can help him and who is strong enough to lift Isaw up and to carry him on his back.
- (18) *m-a-aya=mi=driya dra ka-ra-ruwa i manay*
 ITR-RED-find=1P.NOM=IMPF ID.OBL ka-RED-can SG.NOM who
 We are still looking for a person who can do that.

- (19) *ama=a, pulang-i=mi*
 father=VCT help-TR2:IMP=1P.NOM
 Father, help us.
- (20) *beray-i=mi dra maruwa-a=mi atrebung dra*
 give-TR2:IMP=1P.NOM ID.OBL can-PJ=1P.NOM meet ID.OBL
lalak dra karuwa kurenang kaniem
 child COMP can follow 1P.OBL
 Help us that we can find someone who can go with us.
- (21) *aw, ki-a-ami=mi kanu, ama=a*
 and get-a-bless=1P.NOM 2S.OBL father=VCT
 And, father, we ask for your blessing.
naniem ka-ka-kawang-an na paisu i,
 DF.NOM/1P.PSR ka-RED-walk-NMZ DF.NOM money TOP
adri=mi=driya ma-ladram dra ulaya i isuwa
 NEG=1P.NOM=IMPF ITR-know COMP exist LOC where
 Our travel monies, we still don't know where they are.
- (22) *adri p<en>auwa=driya naniem paisu*
 NEG <ITR>enough=IMPF DF.NOM/1P.PSR money
 We don't have enough money ...'

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